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THE IMPLICATIONS OF TRADE LIBERALIZATION ON THE AGRICULTURAL SECTOR IN GRENADA

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INTRODUCTION

The original General Agreements on Tariffs and Trade (GATT) applied to agricultural trade, but it contained loopholes. For example it allowed countries to use non-tariff barriers such as import quotas and to use subsidize. Agricultural trade became highly distorted, especially with the use of export subsidies, which would not normally have been allowed for industrial products

The creation of the World Trade Organization (WTO) represented a fundamental transformation of international economic relations. It "closed" the loopholes of the GATT and purports to make world trade fairer and freer.

This paper analyses the effects of trade liberalization on the agricultural sector in Grenada since the WTO. Its focus of analysis is the banana issue.

Section 1 presents an overview of the general characteristics of the sector. Agriculture in Grenada's national

economy is presented at section 2. Section 3 looks at the WTO and trade liberalization, while section 4 analyses the EU market environment as regards the banana industry. Section 5 looks at the impact of trade liberalization on the agriculture sector in Grenada.

The challenges, constraints and opportunities for the sector in the face of trade liberalization are addressed in sections 6 and 7 respectively. National food security considerations are addressed in section 8 while section 9 identifies the strategies for agricultural sector reforms in Grenada.

Finally the paper provides some concluding remarks in section 10.

1. GENERAL CHARACTERISTICS OF THE AGRICULTURAL SECTOR OF GRENADA

The 1995 Agricultural Census shows the agricultural sector in Grenada is dominated by small land holdings, with 51 percent of the farms less than one acre. The country's agricultural base is

diversified, with the main traditional crops banana, cocoa, sugar cane and nutmegs and the non traditional products, consisting of fresh fruit and vegetables as well as fishing and livestock production. The farming population is relatively old; over 50 percent of the farmers are above fifty years old. The level of formal education is relatively low with 80 percent of the farmers completing primary school, while only 8 percent having had a complete secondary education. Two thirds of the farmers are males. Farm management practices are generally poor and working conditions act as a disincentive for involvement in the sector. Wages are relatively low compared to other sectors of the economy. Average daily wage is about 20 XCD compared to 35 XCD for unskilled road labour.

2. AGRICULTURE IN GRENADA'S NATIONAL ECONOMY

The agriculture sector has been, and continues to be, an important sector within the economy of Grenada. It is a major contributor to Gross Domestic Product (GDP), domestic income, employment, foreign exchange and food security. It has been the basis for development of the rural economy and is critical to the determination of the standard of living of the rural community and of rural poverty.

2.1 Gross Domestic Product

Data from the Central Statistical Office show that real GDP has increased from XCD 494.38m in 1993 to 655.2m in 1999; growth of 35.2 per cent. Agricultural output during this period has declined slightly from XCD 58.3m in 1993 to XCD 58.08m. The agriculture sector's contribution to GDP fell from 10.6 percent in 1993, to 8.5 percent in 1999. The sector has been experiencing negative real growth during this period.

The traditional crops of bananas, cocoa, nutmeg and sugar, continue to be the main contributors to output in the sector. Their contribution has however fallen consistently, from 73.5 percent in 1993 to 71.9 percent in 1999. This is a result of declines in the production of cocoa and bananas.

The main reasons for the decline in production in the sector may be attributed to pest and disease, (particularly the Pink Mealybug) export price instability, increasing cost of production and increasing cost of domestic labour.

The contribution of the non-traditional sector to total agricultural output in the period of analysis has increased slightly.

2.2 Foreign Exchange/Balance of Payments

Exports

Agriculture has been, and continues to be, the main source of foreign exchange for Grenada. Table 1 shows the balance of trade and selected agricultural exports. The contribution of agricultural exports to total export revenues has been falling. Data from the Central Statistical Office show agriculture's contribution to export revenues fell from 66.8 percent in 1995 to 46.9 percent in 1999.

The traditional sectors, cocoa, nutmegs and bananas, accounted for 84.4 percent of agricultural exports in 1999, compared to 66.9 percent in 1995. Growth in export in that period was due solely to the good performance of nutmeg and mace earnings. Export revenues from bananas and cocoa have fallen consistently during this period, as have revenues from exports of non-traditional crops of fresh fruit and vegetables and fish.

Imports

Grenada's imports increased by 49.5 percent, from XCD 416.1m in 1996 to XCD 622m in 1999. Imports of food in 1996 was XCD 98.6m, and accounted

for 23.7 percent of total imports. In 1999 food imports increased to XCD 122m or 23.8 percent over 1996. The contribution of food imports to total imports has fallen from 23.7 percent in 1996 to 19.6 percent in 1999, but is projected to increase to 21.3 percent in 2000. This proportion of food imports in total imports can be considered relatively high. The effect of this can be a reduction in the resources available to the country to purchase the equipment and machinery needed to provide the necessary infrastructure to advance the country's economic and social development. Table 2 shows selected food imports from 1993 to 1998.

2.3 Direction of Trade/ Main Trading Partners

Grenada's main trading partners are Caricom, NAFTA, and the European Union. Tables 3 and 4 show that in the period 1996 to 1999, over 90 percent of exports went to these regions, while Grenada purchased over 80 percent of its imports from these regions.

The data show a decline in the share of exports to the Caricom region, not matched by the increase in imports from the region. Grenada has, however, increased its share of exports to NAFTA.

Table 1. Balance of Trade and Selected Agricultural Exports, XCD'000

	1995 (1)	1996 (2)	1997 (3)	1998 (4)	1999 (5)	(5)/ (4) %	(4)/ (3) %	(3)/ (2) %	(2)/ (1) %
Balance of Trade		- 360169.7	- 385362.6	- 437840.0	- 487742.6	11.4	13.6	7.0	
Total Imports		416114.2	365753.5	550095.9	622037.6	13.1	18.1	11.9	
Total Exports		55944.5	80390.9	112255.9	134295.0	19.6	39.6	43.7	
Re-Exports		3777.8	6211.6	7746.0	8959.8	15.7	24.7	64.4	
Total Recorded Domestic Exports	56559.3	52166.7	74179.3	104509.9	125335.2	19.9	40.9	42.2	-7.4
Agric. Exports	37756.4	31906.3	37619.4	42864.3	58771.5	37.1	13.9	17.9	-14.8
Bananas	4925.3	1478.3	1.4	77.3	356.3	360.9	5421.4	-99.9	-70.0
Cocoa	8953.3	6995.2	5047.8	5575.8	3807.7	-31.7	10.5	-27.8	-21.9
Nutmegs	9434.8	11274.2	18715.0	23386.5	40319.9	72.4	25.0	66.0	19.5
Mace	1642.3	2082.2	3153.8	3729.3	5129.0	37.5	18.2	51.5	26.8
Fresh Fruits and Vegetables	2708.4	1539.2	936.3	833.6	775.4	-7.0	-11.0	-39.2	-43.2
Fish	9793.3	8537.2	9765.1	9261.8	8383.2	-9.5	-5.2	14.4	-12.8

Source: Central Statistical Office, Ministry of Finance.

2.4 Employment and Income

The agricultural sector has been, and continues to be, a very important source of employment in Grenada. Preliminary results of the 1998 Labour Force Survey (LFS) show that 13.8 percent of total employed persons in the economy worked in the agricultural sector

compared to 10 percent in 1996. The sector accounted for 16.5 percent of total employed males and 9.7 percent of total employed females in the economy.

Of the 4,794 workers employed in the industry in 1998, 71.5 percent were males, compared to 66 percent in 1996 (1996 LFS), reflecting a growing male domination of the sector.

Table 2. Selected Agricultural Imports, XCD'000

Commodities	1993	1994	1995	1996	1997	1998
Meat and meat Products	15759.7	18549.5	20790.6	21976.3	25592.1	22992.7
Fish and fish Products	4701.7	4752.6	4682.4	5835.7	5643.8	6312.0
Milk and milk Products	13427.5	12965.4	14427.7	15337.2	15592.4	14291.4
Rice	4146.6	2238.5	3760.2	3173.7	4086.1	5229.6
Sugar	2629.4	3067.3	2810.0	2949.7	3188.3	6935.3
Flour	1791.9	1606.9	1815.3	1416.4	1549.0	2195.3

Source: Central Statistical Office, Ministry of Finance.

Table 3. Main Trading Partners Share of Domestic Exports, (%) 1996-2000

Country	1996	1997	1998	1999 (Est.)	2000 (Proj.)
Caricom	31.7	27.4	23.2	16.3	20.9
European Union	35.0	34.6	31.2	31.4	33.0
NAFTA	24.7	33.0	38.4	39.7	39.3

Source: Central Statistical Office, Ministry of Finance.

Table 4. Main Trading Partners Share of Domestic Imports (%)1996-2000

Country	1996	1997	1998	1999 (Est.)	2000 (Prog.)
Caricom	26.6	27.2	28.0	31.9	33.5
European Union	15.1	13.4	14.2	14.0	14.1
NAFTA	42.7	43.3	42.5	39.5	37.7

Source: Central Statistical Office, Ministry of Finance.

3. WTO AND TRADE LIBERALIZATION

The creation of the World Trade Organization (WTO) in January 1995 marked the biggest reform of international trade since the General Agreements on Tariff and Trade (GATT). It was born out of the Uruguay Round and its agreements cover trade in goods, services and intellectual property.

The principles of the WTO agreements include non-discrimination in 'favoured nations' treatment and national treatment, free trade, predictable policies encouraging competition and extra provision for less developed countries.

The three main objectives of WTO agreements are to help trade flow as freely as possible, to achieve trade liberalization¹ through negotiation and to set up an impartial system of settling disputes.

The WTO agreements are legal ground rules for international commerce and bind signatory governments to keep their trade policies within agreed limits. The WTO therefore constituted a fundamental challenge to the system of preferential trading arrangements. We will briefly look at the two main agreements of the WTO.

¹Trade liberalization refers to the removal of obstacles to trade, such as quotas, non-tariff barriers, nominal and effective rates of protection, and exchange controls.

3.1 Agreement on Agriculture (AoA)

The objective of the Agreement on Agriculture (AoA) is to reform trade in the sector and to make policies more market-oriented. This would improve predictability and security for importing and exporting countries alike. Grenada, like several other CARICOM countries, is not required to notify during the implementation period considered (Antoine 1999).

The new rules and commitments under this agreement apply to market access, domestic support and export subsidies.

Market Access

This essentially removes various trade restrictions confronting imports. The new rule for market access in agricultural products is 'tariffs only'.

Domestic Support

These refer to subsidies and other programmes including those that raise or guarantee farmgate prices and farmers income. The main complaint about policies which support domestic prices, or subsidize production in some other way, is that they encourage over-production. This squeezes out imports or leads to export subsidies and low-priced dumping on world markets.

The AoA distinguishes between support programmes that stimulate

production directly, and those that are considered to have no direct effect. Domestic policies that do have a direct effect on production and trade have to be cut back. Grenada did not undertake reduction commitment on domestic support. By so doing, Grenada indicated that it was not engaging in 'trade distorting'² domestic support measures. The domestic support given to the sector in Grenada falls within the so-called 'green box'³ policies; that is, they have minimal impact on trade and can be used freely.

To the best of our knowledge, the Government of Grenada has not notified the WTO of the use of any domestic support measures.

Export Subsidies

The AoA prohibits export subsidies on agricultural products unless the subsidies are specified in a member's lists of commitments. Where they are

listed, the Agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of exports that receive subsidies. During the six-year implementation period, developing countries are allowed certain conditions to use subsidies to reduce costs of marketing and transporting exports. The Government of Grenada did not notify the WTO of the use of export subsidies. This implies a de facto binding of export subsidy to zero.

3.2 Agreement on Sanitary and Phytosanitary Measures (SPS)

The Agreement on Sanitary and Phytosanitary Measures (SPS) is an agreement on food safety, and animal and plant health standards. It allows countries to set their own standards. But it also stipulates that regulations must be based on science. The regulations should be applied only to the extent necessary to protect human, animal or plant life or health and should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail.

The Agreement allows countries to use different standards and different methods of inspecting products and includes provisions on control, inspection and approval procedures. Governments must provide advance notice of new or changed SPS

²The concept of 'distortion' is used a lot when agricultural trade is discussed. Essentially trade is distorted if prices are higher or lower than normal and if quantities produced, bought and sold are also higher or lower than normal.

³These are measures permitted by the WTO. They include government services such as research, disease control, infrastructure and food security. They also include payments to farmers that do not stimulate production, such as direct income support, assistance to help farmers restructure agriculture and direct payments under environmental and regional assistance programmes.

regulations, and establish a national enquiry point to provide information.

Grenada has not notified the WTO of its SPS measures. With regard to SPS legislation, only plant quarantine legislation exists, but no regulations.

Standards for pesticides are established under the Pesticide Act, which is administered by the Pesticide Control Board. With regard to the existence of a diagnostic laboratory for conducting scientific survey of pests and disease, four laboratories are available; two for animal health and one each for plant health and animal pesticide residue.

Concerning capabilities to undertake risk analysis, Grenada has a number of trained persons in plant and animal health.

These resources are however insufficient for Grenada to adequately satisfy its obligations under the agreement.

4. MARKET ENVIRONMENT

The Caribbean, including Grenada, relies on the EU market as the sole outlet for their banana exports. The EU market offers the Caribbean and other ACP states preferential access.

The introduction of a new EU banana import regime in July 1993, while continuing preferential access for ACP bananas, increased access to the UK market for lower cost, higher quality 'dollar' bananas from Latin America.

This, together with practical management problems in the early implementation of the new regulations, led to an initial period of greater price volatility and lower average prices in the marketplace.

Under these arrangements, the ACP producers, including producers in Grenada are allowed to export duty free a quantity equivalent to their highest exports up to 1990. The quota for Grenada under the 1993 arrangement was 14,000 metric tonnes.

Since the new EU banana regime and rules were implemented in 1993, they have been subjected to continuing legal challenges brought mainly by countries having interests in the production and/or marketing of "dollar bananas". This regime was found to be incompatible in some aspects with WTO rules.

A new banana marketing regime was introduced from January 1st 1999 when a tariff rate quota system was introduced. The WTO ruled against certain aspects of the regime and the EU is committed to reforming the system to be WTO compatible.

The Commission has proposed a tariff-only system to be implemented no later than January 1, 2006 and a transitional tariff rate quota system consisting of:

- Quota 'A' which would maintain both the current GATT bound quota of 2.2 million tonnes and a tariff rate of EUR 75/tonne

- Quota 'B' autonomous quota of 353,000 tonnes with a tariff rate of EUR75/tonne
- Quota 'C' a new third autonomous quota of 850,000 tonnes.

All quotas will be opened to all suppliers. ACP bananas would have a tariff preference of EUR275/tonne both under and outside of the tariff quotas.

The Commission has been exploring the possibility of maintaining the quota regime with the quota allocated based on past trade. There has been no agreement among the parties on that formula. Because of the ambiguities of the WTO ruling, it is impossible to proceed without agreement.

4.1 First Come, First Served

The European Commission proposed to the Council on October 4th 2000 the allocation of tariff rate quotas on a first come, first served basis (FCFS). This system grants import rights to operators on the basis of applications made at the opening of the weekly or fortnightly quota periods from vessels already at sea. If the sub-quota were over-subscribed, every application would be scaled down pro rata.

FCFS system would place Caribbean banana producers at a significant disadvantage in competing

for access to the EU market with the dominant companies trading in dollar bananas.

Given the structural surplus in world production of bananas, there will be intense competition for the available quotas, which is bound to result in Caribbean and Grenada bananas failing to secure access, in spite of the tariff preference proposed.

The United States has deemed that FCFS is incompatible with WTO and has urged the resumption of talks on a historical system.

4.2 Tariff Only System

The Commission proposes that if the FCFS is not acceptable, then a flat tariff with no other restriction on imports will be instituted. They anticipate that a tariff could be imposed that would provide protection equivalent to that provided by tariff quotas. However assessments from WIBDECO conclude that Caribbean bananas will not survive under a tariff only system unless growers receive some form of support that ensured them a viable return.

According to these officials, only a tariff quota that ensures continued access to the EU market by a license allocation based on past trade could save the industry.

5. EFFECTS OF TRADE LIBERALIZATION ON THE AGRICULTURAL SECTOR IN GRENADA

The clearest effect of trade liberalization on the economies of Grenada and the Windward Islands is manifested in the banana issue.

The European Union (EU) preferential banana regime was challenged by the United States (US) before the WTO panel as being contrary to free trade rules. The rulings of the WTO in favour of the US, and subsequent sanctions by the US against the EU, was the clearest manifestation of the impact of trade liberalization on the economy of small agriculturally based developing countries like Grenada.

The impact of the WTO ruling sent shock waves through the Windward Islands in particular and developing countries in general and constituted the first real threat to the banana industry in the Windward Islands and the aggravation of rural poverty.

In Grenada, changes in the international market environment and subsequent changes in the EU market regime led to the collapse of the banana industry and the increase in rural poverty.

The collapse of the industry was manifested in huge losses of foreign exchange earnings from bananas since Grenada was disqualified from the exportation of the fruit because of poor

quality (see Table 1). The effect of this disqualification was a reduction in potential foreign exchange to the country and significant reduction of income to the rural economy. The industry and the country are to date suffering the effects of that measure.

The Poverty Assessment Report for Grenada (1999) estimated 32.1 per cent of Grenadians and 28 per cent of Grenadian households were poor.⁴ That report revealed that 13 per cent of the population was indigent. The data showed the parishes of St. Patrick's, St. George's, St. Mark's, St. Andrew's and St. David's were the poorest in the country with headcount indices⁵ of 35.4, 34.4, 33.5, 32.1, and 31.3 percent respectively. The study thus showed that rural poverty was relatively high in Grenada.

With regards to gender and age, the study showed that female headed households and children under 16 are the most vulnerable.

The report identified, among a number of structural factors contributing to poverty, the undiversified nature of the Grenadian economy, and its inheritance as a small plantation economy inserted into the international system during the colonial system.

The general causes of poverty identified included:

⁴The poverty line was established at EC\$3,262.00 per month.

⁵The 'headcount index' measures the prevalence of poverty.

- The secular decline in the banana industry and the failure to modernize banana production and post-harvest techniques
- Limited diversification of the economy especially in down stream processing of existing primary production
- Unavailability of skilled knowledgeable workers at internationally competitive rates.

While bananas have been most affected by the WTO because of the preferential market access situation, other agricultural sectors such as cocoa, nutmeg and non-traditional crops will have to be competitive and efficient if these industries are to survive. It means therefore that the effects of the AoA and SPS will be felt throughout the entire sector. In fact, Grenada has already received several inspection visits from importers of nutmegs and fish to ascertain whether the required health and food safety standards have been met.

6. CHALLENGES FACING THE AGRICULTURAL SECTOR IN GRENADA RESULTING FROM TRADE LIBERALIZATION

“By all indications, developments in the world economy in the 21st century will be dominated by trade liberalization, as well as further improvements in the field of science and technology. Both developments will continue to have

profound permanent effects on our domestic economy and ultimately our standard of living and quality of life”. (Anthony Boatwain, Minister of Finance, 2000 Budget Speech.)

The fundamental challenge facing the agricultural sector in Grenada in light of trade liberalization is that it will have to become internationally competitive in price and quality and find new market niches that provide a competitive edge.

Another challenge is that some of the major developed and developing countries apply science and technology to agriculture in a way that Grenada does not understand. The application of science and technology provides a competitive advantage to those countries that can adequately use those methods.

The application of science to production of food will result in quality improvements, while technological improvements will lead to productivity gains both in terms of labour employed and land utilization. The biogenetic revolution manifested in the production and commercialization of genetically engineered food is a classic example of the application of science and technology to agriculture.

Trade liberalization means that Grenada will have to compete with North America, Israel, Ireland, Europe and the world in the trading of agricultural products on an even playing field.

One of the fundamental constraints and perhaps the greatest challenge to Grenada's ability to compete in the area of science and technology and to face the challenges of liberalization, is the quality of the agricultural workforce as well as the small size of the holdings. According to the 1995 agricultural census, 80 per cent of the farmers had completed only primary education while only 8 per cent, had completed secondary education. Average farm size in 1995 was 2.6 acres and farm sizes of 5 acres or less constituted 83 per cent of the farm pool.

Two points are important here:

- If the agricultural sector should be transformed through diversification to non-traditional crops, poultry and fish, with private sector sponsored projects (as the 2000 Budget Speech suggests), then the land tenure structure serves as an impediment to a successful transformation process because of economies of scale considerations.
- On the other hand, Grenadian farmers, because of low levels of education, will be unprepared to adopt the advances of science and technology in agriculture compared to their counterparts in North America, Europe, Ireland, where the levels of education of the farmers are higher and the farm sizes larger.

There is a need, therefore, to invest in education to bring the farming community in line with the requirements

of 21st century agriculture and to develop a scientific based agricultural production in Grenada.

The best opportunity is to encourage young people into farming and equip these young farmers with the scientific and technical training needed to transform land use policy that will provide the natural resource base for the expansion of the agricultural sector and to make it competitive. A farming community with 42 per cent part time farmers and over 50 per cent of the farmers over 50 years old (1995 Agricultural Census) will not be able to make that transformation!

Another challenge Grenada faces is the creation of the human, financial and institutional capability needed to implement the AoA and SPS measures.

7. OPPORTUNITIES TO GRENADA FROM TRADE LIBERALIZATION

The existence of a free global market space presents an opportunity for Grenada to increase trade, with emphasis on the export market. The free trade in services also represents an opportunity to diversify the economy and to create market niches. Trade liberalization may also present opportunities for increased foreign direct investment.

These opportunities could lead, ultimately, to an increase in national output, employment and income and a

general improvement in the well being of the population.

8. TRADE LIBERALIZATION AND NATIONAL FOOD SECURITY

Food security at the national level is a major policy decision of the Government of Grenada. This has been emphasized in the 1998-2000 Medium Term Economic Strategy Paper as well as the Ministry of Agriculture draft Food Policy.

National Food Security⁶ may be defined as a satisfactory balance between aggregate food demand and food supply at prices that do not exclude poor households from access to food.

The achievement of national food self-sufficiency pre-supposes both adequate and stable supplies obtained through an appropriate combination of domestic production and trade, and sufficient demand or purchasing power to guarantee adequate access to food.

The WTO Agreement on Agriculture aims to eliminate distortions in agricultural trade resulting from actions by governments to protect the industry. Governments on the other hand, usually provided subsidies to their farmers as a mechanism for increasing agricultural production and to ensure

that enough food is produced to meet the country's needs.

In this context the question of domestic support, in so far as the AoA is concerned, may have repercussions for the food security of Grenada after the ten-year 'grace' period.

Potential problems may arise under the SPS with regard to the export of agricultural goods from Grenada. This may arise because some of Grenada's exports may not meet the required standards set by the importing country because Grenada does not have the physical infrastructure necessary for efficient implementation of this Agreement.

The effect could be a reduction in agricultural exports and erosion in relative terms, of Grenada's ability to import food which is necessary for maintaining our food security.

Data from the 1995 Agricultural Census suggest that Grenada has enough available land that can be used efficiently to eliminate the threat to its food security that may result from trade liberalization.

9. STRATEGIES FOR AGRICULTURAL SECTOR REFORM IN GRENADA

The Government of Grenada, to mitigate the challenges of trade liberalization, has developed a number of strategies. The objectives of these strategies are:

⁶Eele, Hay and Hoddinot. "Household Food Security and Nutrition" in "Understanding the Social Effects of Policy Reform." The World Bank 1993.

- To rationalize the agricultural sector to achieve long-term efficiency and viability.
- To promote the sustainable growth of the agricultural sector, thereby increasing the foreign exchange earnings from traditional and non-traditional crops.
- To improve national food and nutrition security.
- To reduce rural poverty.

The following strategies have been developed:

- 1) Coordination of greater linkages between agricultural production and marketing. In this regard a Marketing Unit has been developed in the Ministry of Agriculture to conduct marketing studies for non-traditional agriculture, as well as conduct research of marketing alternatives for traditional agricultural exports. The aim is to assist farmers to become more commercially oriented and viable.
- 2) Liberalization and commercialization of the banana, cocoa and nutmeg industries. The banana industry has already been liberalized as a condition of the Windward Islands Action Plan. The post-harvest operations of the cocoa industry will be liberalized. This action is expected to result in the upgrading of the processing and drying facilities owned by the private sector, the reduction of the operating costs of the post-harvest

operations and an increase in price to farmers.

- 3) Review incentives for private sector investments in the agriculture sector.
- 4) Diversification around traditional exports.

Banana Sector: The present strategy is to concentrate efforts in the banana industry to production for the domestic market, while exploring possibilities for regional export markets.

Consideration is also being given to exploring opportunities for processing of bananas for niche markets.

Cocoa Sector: Creation of value added. In this regard, consideration should be given to the establishment of joint ventures in the area of cocoa processing.

Nutmeg Sector: Creation of a quality assurance laboratory that would ensure that the quality of nutmegs and other agricultural exports meets the required international standard. The nutmeg industry will also expand its nutmeg reconditioning plant to include the production and export of ground nutmegs. Additionally, the sub-sector is working to create value-added products such as nutmeg soap and nutmeg butter, from residue from its nutmeg oil distillation plant.

- 5) Development of a proper agricultural and land use policy for

the orderly and efficient use of fertile arable lands.

- 6) Implementation of a national irrigation programme to ensure year round production of selected crops. This will facilitate increased production and improved quality of selected crops, leading to increased farmers' income and expansion of the agriculture sector.
- 7) Creation of additional infrastructure for the fishing industry. This will be through construction of a state-of-the-art fish market in St. George's and Grenville.
- 8) Adoption of a food and nutrition policy. The strategy of the agricultural sector to achieve food security will have to be to increase domestic production of food in order to reduce the high food import bill and increase exports, so that the country's food security is not threatened.

10. CONCLUSIONS

The agricultural sector has been and continues to be an important sector within the economy of Grenada, notwithstanding its declining share of GDP.

The advent of the World Trade Organization and the new trading arrangements have led to the collapse of the banana industry due to the industry's inability to satisfy market requirements in terms of quantity and quality of fruit.

This in turn has led to an increase in rural poverty.

The fundamental challenge facing the agricultural sector in Grenada in light of trade liberalization is that it will have to become internationally competitive in price and quality and find new market niches that provide a competitive edge.

The low level of education of the agricultural labour force and small farm size are important constraints to Grenada's achievement of a competitive agricultural sector.

Grenada lacks sufficient institutional capability to effectively implement the WTO Agreements (AoA and SPS). As a result, human, financial and material assistance will be required.

While the effect of trade liberalization on Grenada's food security cannot yet be assessed, there is a potential threat to the country's food security. The liberalization of trade does present opportunities for the development of the agricultural sector and the economy in general. The agricultural reforms strategies outlined in the Medium-Term Strategy Paper constitute a necessary first step to preparing the sector to face the many challenges ahead.

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