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**United Nations Trust Fund
for Human Security**



GENDER RESPONSIVE EVALUATION OF THE IMPACT OF RELEVANT NATIONAL POLICIES ON SMALL HOLDER FARMERS, FISHER-FOLK AND SMALL BUSINESS ENTREPRENEURS IN FIVE (5) CARIBBEAN ISLANDS



ANTIGUA & BARBUDA



BARBADOS



COMMONWEALTH OF
DOMINICA




GRENADE



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programme 'Building Effective Resilience for
Human Security in the Caribbean Countries: The
Imperative of Gender Equality and Women
Empowerment in a Strengthened Agriculture and
related Agri/Fisheries Small Business Sector.'**

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1. ACRONYMS

BADMC	Barbados Agricultural Development and Marketing Company
BAMC	Barbados Agricultural Management Company
BARNUFO	Barbados National Union of Fisher folk Organizations
BCIC	Barbados Cane Industry Corporation
BGFA	Barbados Game Fishing Association
Biffa	Beijing Platform for Action
CARICOM	Caribbean Community
CAS	Country Assistance Strategy
CCRT	Catastrophe Containment and Relief Trust
CDB	Caribbean Development Bank
CDEMA	Caribbean Disaster Emergency Management Agency
CDF	Comprehensive Development Framework
CET	Common External Tariff
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CGA	Country Gender Assessment
CIA	Central Intelligence Agency
CNFO	Caribbean Network of Fisheries Organizations
CPA	Country Poverty Assessment
CRFM	Caribbean Regional Fisheries Mechanism
CSE	Consumer Support Estimate
CSOs	Civil Society Organizations
DOGA	Directorate of Gender Affairs
EC	European Community
ECCB	Eastern Caribbean Central Bank
ECF	Extended Credit Facility
EEZ	Exclusive Economic Zone
EMDEs	Emerging Markets and Developing Economies
EPZs	Export Processing Zones
EU	European Union
FADS	Fish Aggregating Devices
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Agency
FFPI	FAO Food Price Index
FMP	Fisheries Management Plan
FNS	Food and Nutrition Security
FOB	Free On Board
FSMA	Food Safety Modernization Act
GAD	Gender and Development
GDI	Gender-related Development Index
GDP	Gross Domestic Product
GE	Gender Equality
GEPAP	Gender Equality Policy and Action Plan
GEM	Gender Empowerment Measure
GFCF	Gross Capital Formation
GII	Gender Inequality Index
GNI	Gross National Income

GOAB	Government of Antigua and Barbuda
GOCD	Government of the Commonwealth of Dominica
GOCR	Government of Grenada
GPRS	Growth and Poverty Reduction Strategy
GSSE	General Services Support Estimate
HACCP	Hazard Analysis Critical Control Points
HDI	Human Development Index
ICCAT	International Commission for the Conservation of Atlantic Tunas
IDB	Inter-American Development Bank
IFIs	International Financial Institutions
IHDI	Inequality-adjusted Human Development Index
ILO	International Labour Organization
IMF	International Monetary Fund
I-PRSPs	Interim Poverty Reduction Strategy Papers
LAC	Latin America and the Caribbean
MDA	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MPI	Multidimensional Poverty Index
MSME	Micro, Small, and Medium-sized Enterprise
MTBF	Medium Term Budget Framework
MTDS	Medium Term Development Strategy
MTGDS	Medium-Term Growth and Development Strategy
NAP	National Agricultural Plan
NDFD	National Development Foundation of Dominica
NGEC	National Gender Equality Commission
NGOs	Non-governmental Organizations
NOAA	National Oceanic and Atmospheric Administration
OECS	Organisation of Eastern Caribbean States
PDNA	Post Disaster Needs Assessment
PEIR	Public Expenditure and Institutional Review
PFPs	Policy Framework Papers
PPP	Purchasing Power Parity
PRGT	Poverty Reduction and Growth Trust
PRGF	Poverty Reduction and Growth Facility
PRS	Poverty Reduction Strategy
PRSPS	Poverty Reduction Strategy Papers
PSE	Producer Support Estimate
QRs	Quantitative Restrictions
RFNSAP	Regional Food and Nutrition Security Action Plan (CARICOM)
RFNSP	Regional Food and Nutrition Security Policy (CARICOM)
RPFGs	Recommended Population Food Goals
SAEs	Small Agro-Enterprises
SAP	Structural Adjustment Programme
SDGs	Sustainable Development Goals
SEM	Single European Market
SIDS	Small Island Developing States
SMAEs	Small and Medium-sized Agro-enterprises
SME	Small and Medium-sized Enterprise
SOLAS	Safety of Life at Sea

SPS	Sanitary Phytosanitary Standards
TSE	Total Support Estimate
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
UWI	University of the West Indies
VAT	Value Added Tax
WB	World Bank
WBG	World Bank Group
WEI	Women's Empowerment Index
WID	Women in Development

EXECUTIVE SUMMARY

I. OVERVIEW

This Report presents the results of a gender-responsive evaluation of the Impact of Relevant National Policies on **Small Holder Famers, Fisher folks and Small Business Entrepreneurs in five (5) Caribbean Islands: Antigua and Barbuda, Barbados, Dominica, Grenada, and St. Lucia**. It represents an important deliverable of a Consultancy entitled: ***Gender Responsive Evaluation of the Impact of Structural Adjustment Programmes and Relevant National Policies on Small Holder Famers, Fisher folks and Small Business Entrepreneurs in five (5) Caribbean Islands***. The Consultancy, in turn, is a critical component of the Project entitled: ***Building Effective Resilience for Human Security in the Caribbean Countries: The Imperative of Gender Equality and Women Empowerment in a Strengthened Agriculture and related Agri/Fisheries Small Business Sector***.

The report is being presented against the background of a Caribbean Region in economic decline, due particularly to a series of worldwide recessions, oil and food price shocks and natural disasters. Despite middle-income status and medium to high human development classification, the region has recently experienced poor growth performance (also because of recurrent and devastating natural disasters) resulting in the gradual build-up of unsustainable levels of debt. The high level of accumulated debt contributes to poor regional GDP performance and diverts resources to amortization and interest payments, and thus away from health, education, infrastructure, administration of justice, social protection, food and nutrition security and other areas that are drivers of growth and development and determinants of human security.

Growing poverty and income inequality also represent major challenges, with joblessness and vulnerability disproportionately affecting marginalized groups, and in particular women and youth. While the region has made significant advances in addressing gender inequality, this remains a major challenge and has cross-cutting negative impacts. Climate change adaptation, disaster risk reduction, reducing the cost of energy, strengthening sustainable agriculture, and enhancing food security represent major issues that are critical in ensuring sustainability and growth, and thus human security in the Caribbean.

The major institutional response to the crisis has been the adoption of Stabilization and Structural Adjustment Policies, advocated by the major international financial institutions (IFIs), the International Monetary Fund (IMF) and the World Bank in exchange for significant loans. The policies are designed to reduce financial imbalances in the economy, both on external accounts and in domestic resource use.

National and sectoral policies of the countries are implemented within the broader framework of Structural Adjustment Programmes (SAPs) supported by the IMF and World Bank. The principal stated objectives of these policies in the various countries are to increase productivity and production in the agriculture, fisheries and agro-processing sectors, boost product exports as a basis for national economic growth; improve the income of smallholder farmers, fisher-folks and agro-entrepreneurs and ensure food and nutrition security. The policies pursued reflected the development strategy favoured by the IMF and the World Bank. The strategy pursued by the countries includes a reduction in the role of the state to reduce government expenditure; restrictive monetary as well as fiscal policies; an expansion of the role of the private sector to promote economic growth and liberalized internal and external trade intended to allow the market, rather than the government, to direct resource allocation and determine prices of inputs and outputs.

In the Caribbean Region, only a few studies have gone beyond the analysis of quantitative, national-level data on the impact of national policies on smallholder farmers, fisher-folks and agro-entrepreneurs to consider more qualitative, locally based data, let alone examine possible differences according to gender. It is therefore against this background that the study was conducted. The Report is presented as a component of an overall Consultancy that evaluates the gender-responsive impact of Structural Adjustment Programmes and relevant National Policies on Small Holder Farmers, Fisher-folk and related Small Business Entrepreneurs in five (5) Caribbean Islands.

II Purpose, Objective and Scope

The purpose of this gender-responsive evaluation is to analyse the gender dimensions and existing inequalities in agriculture, fisheries, and small business sectors in the five selected countries in the context of the national policies that have and currently are being implemented.

III Methodology

A literature review was undertaken to better understand the issues related to a Gender Responsive Evaluation of the Impact of National Policies on Small Holder Farmers, Fisher-folk and related Small Business Entrepreneurs. The literature review provided the frame for obtaining a descriptive analysis of the gender profile of agriculture, fisheries and the related small business sector, and the impact of national policies on individuals and households operating in those sectors in the context of achieving gender equality and women empowerment.

To better understand the links between policy and practice, a comprehensive policy analysis was undertaken that specifically addresses the issues of gender equality in agriculture, fisheries, and related small business. In this context, the policy analysis focused on the elements of content, context, actors, and process in the development of the national policy instruments.

The Public Expenditure and Institutional Review (PEIR) methodology was utilized to map the Governments' policy framework(s) and the mainstreaming of gender in public investment programmes and projects, especially through the Medium-Term Budget Framework and annual budgets. In this context, the Instrument focused on policy, institutional and expenditure analyses of the relevant public bodies related to gender equality and gender empowerment.

In parallel to the desk study, stakeholder consultations were conducted with the Consultancy Steering Committee and three of the five National Task Force to triangulate information gathered during the literature review process. These consultations were aimed at obtaining the views, opinions, and aspirations of key stakeholders on structural adjustment programmes and policies in gender equality and women empowerment, especially related to agriculture, fisheries, and small business.

The availability of gender and age disaggregated statistical data for analysis was a major challenge for the study.

The analysis and findings that are provided in this report will help to identify critical gaps and support recommendations related, but not limited to:

- Augmentation of the countries' efforts to address issues related to gender equality and empowerment in agriculture, fisheries, and small business that are impacted by structural adjustment programmes.

- Facilitation of input to inform the strategic direction of the UN agencies engagement and partnership with national Governments in addressing the imperatives of gender equality and women empowerment in agriculture, fisheries, and small business sectors; and
- Development of a public awareness programme to foster a broader recognition of the priorities of gender equality and women empowerment for enhanced resilience, stronger economic growth, a more inclusive society and strengthened human security.

IV National and Sectoral Policies

In terms of the national macroeconomic policy instruments, this study looks briefly at three main policy groups:

- Fiscal;
- Monetary (and financial/banking issues);
- Trade.

The sectoral policies considered in conducting the assignment were the following:

- National Agricultural Policy;
- Fisheries Policy;
- National Food and Nutrition Policy;
- Sub-sectoral Policies;
- Gender Policy.

The impact of the national policies on the countries was evaluated from a gender perspective with a focus on the small farmers, fisher-folks, and small businesses. The findings from the evaluation are summarized below.

V Findings

Impact of National Policies on the Economies

It is important to note that there was a lack of participation in the design of the policies by the people most affected by them, which is a concern. Policy design has been the preserve of the technical experts in the Ministries of Finance, Economic Development and Planning and Agriculture (including Fisheries) and the IMF and the World Bank.

While the national macroeconomic policies implemented within a broader SAPs framework initially resulted in a reduction of macroeconomic imbalances, robust economic growth was not achieved in all countries. It is important to recognize the international economic environment at the time. In this context, the change in the global trading arrangements; the removal of preferential arrangements for the primary exports crops of the countries; the World Trade Organization's (WTO) commitments and greater trade openness; the impact of the oil shocks, several worldwide recessions, and natural disasters on the countries over the period under review should be taken into consideration in the assessment of growth achieved by the countries.

All countries recorded significant annual increases in gross international reserves between 1990 and 2015. Despite the fluctuation in reserves between 1990 and 2017, all countries, except Barbados, recorded general upward trends in their annual import ratios (reserves/imports) for the period 1980 through to 2015, with declines thereafter. Barbados international reserves position improved significantly between 2018 and 2020. The lack of progress by the countries in reducing their external current account imbalances could be partly attributed to the oil shock of the late 1990s, and the various economic recessions encountered by the countries' main trading partners of Europe and the

United States of America (USA). Except for a few years, the countries have experienced deficits in their fiscal operation during the period under review.

Impact of Sectoral Policies on Performance within Agriculture, Fisheries and Small Business

Agriculture

The agricultural sectors of the countries reviewed during the period of support provided under the various SAPs demonstrated significant declines in most of the important development indicators.

- Real growth of the agriculture sector of the countries over the period (1980 – 2019) has fluctuated with a downward trend. Contribution of Agriculture to GDP in real terms declined over the period by 53.4 percent in Antigua and Barbuda, 59.6 percent in Dominica, 7.5 percent in Grenada and 82.6 percent in Barbados, due mainly to declines in the banana and sugar industries in applicable countries.
- The contribution of agriculture to GDP declined in Barbados (the lowest range) from 7.5% in 1980 to 1.3% in 2018, and in Dominica (the highest range) from 21.5% in 1980 to 7.5% in 2018.
- Both arable and agricultural lands declined in all countries except Dominica where agricultural lands increased.
- The employed labour in agriculture ranged from lows of 4% in Antigua and Barbuda and Barbados, to highs of 21% in Dominica and St. Lucia; the employed labour of women in agriculture is very low in the countries, ranging from lows of 2% in Antigua and Barbuda and Barbados, to a high of 14% in St. Lucia.
- Of the economically inactive in all countries, 38% are involved in home duties, and 85% of those involved in home duties are women, ranging from 80% in Grenada to a high of 92% in Antigua and Barbuda.
- Capital investment in the sector represented by Agriculture Investment Ratio (Agriculture Gross Fixed Capital Formation as a share of Agriculture Value Added) declined after 2010.
- There was a significant decline in the Food Production Index for each year, due mainly to declines in production of the main export crops (sugar, banana, and nutmeg) as well as the domestic crops. However, the livestock industry showed increased production.
- The combined food import bill for the five countries has increased significantly from US\$163.4 million in 1980 to US\$307.6 million in 2000, US\$572.6 million in 2010, and surpassed the US\$774.4 million mark in 2019. Dated information showed an increase in the food dependency ratio. However, food imports when denominated by GDP exhibit downward trends for the five countries under review, especially between 1980 and 2000, and to a lesser extent between 2015 and 2019.
- Between 2003 and 2020, the prices of the main imported commodities (meat, dairy, cereals, vegetable oil and sugar) increased by 64%, 87%, 73%, 59% and 81%, respectively.
- Domestic food price inflation rates for the countries were closely aligned to the international food inflation rate, except for Barbados, where the domestic rate of food price inflation was higher than the international food price inflation.
- There were marginal changes in food availability as was observed from the trends in the average protein supply (gm per capita per day), and the average dietary energy supply adequacy (%).
- The situation with respect to food access improved as measured by GDP per capita in constant 2011 international dollar for the countries.
- While declines were observed in the countries for the measured indicator of the prevalence of anaemia among women of reproductive age of 15-49 years, a worrying upward trend was observed in all countries for the prevalence of obesity in the adult population 18 years and over.

- Most countries experienced marginal declines in food stability as measured by the average value of food production in constant dollar per person utilizing a three-year average.

Fisheries

- Captured fish and aquaculture production showed increases in Antigua and Barbuda, Grenada, and St. Lucia, while outputs in Barbados and Dominica declined during the period under review.
- The level of employment in the fishing industry increased in Antigua and Barbuda, Grenada, and St. Lucia, remained steady at about 3,000 persons in Barbados but declined in Dominica.

Small Business

Limited data and analyses of small business enterprises in the five countries were available. Notwithstanding, information gleaned from a 2015 profile of women entrepreneurs in the Caribbean region suggests that the sector's development was impacted by limited access to financing; inappropriate training and lack of business advisory services; limited access to relevant and timely business-related information (for example, regulations, trade missions, obtaining technical support, etc.); limited access to technology and equipment; and limited access to women's networks.

Small Holder Farmers, Fisher-folks, and Women

Smallholder farmers, fisher-folks and women were more negatively impacted by national and sectoral policies than the larger farmers were, as many lacked equal opportunities to enter and benefit from liberalized markets:

- They have limited resources (land, labour, and capital) to invest in business opportunities that may emerge because of the policies' implementation;
- They have limited education and technical knowledge for diversification and/or expansion into viable value chains;
- They have limited access to credit, which has become more expensive, to invest and/or purchase required more expensive inputs - with the cost of these inputs rising and governments' removing of subsidies;
- They have been hurt by cuts in government spending on rural infrastructure, as well as processing, storage, and distribution systems
- They must compete with imported foods;
- They lack access to organized markets for produce, which is now monopolized by larger producers; and
- They have suffered from the fact that liberalization did not result in higher gross income margins, as farm production costs increased, but farm prices did not. Larger farmers, who enjoyed economies of scale, as well as the exporters, may have experienced increased incomes.
- Lack of societal support in terms of caring for dependents (via, for instance, day care and flexible working) that women are enabled to put in the necessary hours to establish prosperous businesses.

VI Factors Influencing the Performance of the Sectors

Several factors have been identified as impacting the poor performance of the agriculture, fisheries, and agro-processing sectors in the countries, and therefore, the results obtained must be viewed with this context. The main challenges faced by the sectors and the opportunities that can be exploited by smallholder farmers, fisher-folks and small agro-producers operating under the various

national and sectoral policies were examined. Where available information permitted, this analysis was conducted from a gender-sensitive perspective. Because some issues are specifically related to agro-processing, a section of this report will examine those issues.

Finance/Credit Availability

Data on central government budgetary allocations to the agricultural and related sectors were obtained from examinations of the national budgets:

- In **Antigua and Barbuda**, the agricultural budget expressed as a percent of Agricultural GDP declined over the period under review, with declines in crop, livestock, fisheries, and agricultural extension allocations.
- Reduced overall allocation to agriculture, especially with respect to the allocation to stimulate increased crop production.
- Deep cuts in the budgetary allocation to the **Barbados** Agricultural Management Company (Sugar production) were observed in later years.
- The Agricultural sector in **Dominica** experienced declines in budgetary allocations, mainly in the management of the fisheries resources.
- In **Grenada**, budgetary allocation to the agricultural sector fluctuated over the period. However, in the later years, there was increased allocation to the marketing division.
- In **St. Lucia**, budgetary allocation increased significantly over the period, with increased allocations going to crop and livestock production divisions.

The limited fiscal space faced by the countries under SAPs has resulted in the reduction of funding to implement the actions proposed under the national and sectoral policies. In addition, with its burden of debt repayment, the Governments have little room for fiscal expansion in investments and social costs. Thus, the economic growth and poverty reduction programmes are being undertaken in an environment of fiscal restraint.

Cuts in government spending on extension services for crop and livestock, markets and distribution channels, rural infrastructure, as well as processing, storage and distribution systems could hurt small holders, fisher-folks and small business entrepreneurs more than larger farmers, especially those living in rural areas.

Access to credit by smallholder farmers, fisher-folks and small business entrepreneurs remains a major factor limiting the development of the sectors in the countries. This situation is exacerbated as it relates to women.

Research conducted and data obtained reveal the comparatively low numbers¹ of women accessing credit for agriculture and enterprises. Their inability to access credit and loans to develop their enterprises were primarily due to high interest rates, limited collateral to access loans, intimidating application processes and poor production and market records. Women's non-ownership of resources that could be used for collateral constrains their access to credit for agriculture and for productive work in other sectors.

Land Policy

¹ It needs to be noted that the data in Table 8.3 indicate only the numbers of males and females who accessed loans in each category and in total. It is therefore not possible to compare the EC\$ amounts allocated to males and females in each category or in total

Poor land policy, especially as it relates to land distribution and land tenure, has been recognized as a major constraint to sustainable agricultural production in the countries. Many farmers are land tenants, not landowners. Insecurity of tenure is recognized as the main factor limiting the ability of land tenants to invest in improvements to their farms. “Family land”, which is co-owned in undivided shares by the heirs and successors of the original purchasers, is very common in the countries, particularly in St. Lucia where 45 percent of all land holdings fall into this category. This affects agricultural development as all the beneficial co-owners of the land enjoy the right to live upon and cultivate the land and no individual can borrow against it. Although an application for partition may be made to subdivide the land, this is sometimes impossible. Only St. Lucia has introduced legislation to facilitate dealings with undivided family land.

Land is a strong indicator of women marginalized economic status in rural communities. Women’s persistently low land ownership undermines their integration in the agricultural development agenda.

Labour

Lack of women’s participation in the labour market has been identified as a factor impacting negatively on the performance of the sectors in the country. The study has identified several barriers as reasons for the low participation of women, and hence the slow progress on decent work for them. These include:

- Gender stereotypes, discrimination and unequal access to work;
- Gender wage gap which prevails in all countries;
- Labour market segregation – both horizontal, in which women are over-represented in a narrower range of jobs and sectors than men, and often in the more poorly paid segments; and vertical, in which women are often concentrated in lower-ranking positions and have less opportunity for promotions, access to positions of authority and management, or higher salaries; and
- Absence of key social support mechanisms, services, and safety nets for women in need, often compounded by a lack of knowledge as to where help can be obtained, even when support services exist.

Preferential Trading Arrangements

The erosion of the preferential trading arrangements for sugar and bananas markets have created difficulties for the countries and have negatively impacted the social and economic structure of the smallholder agricultural sector (primarily banana-growing), with worrying implications for rural poverty and inequality. Many women were employed in these industries in different areas of the value chains. There is no doubt that Central American banana production systems have a considerable comparative advantage over those in the banana producing countries of Dominica, Grenada and Saint Lucia. The key factors of production, land and labour, are lower in cost and more productive and the combination of those factors have enabled the Central American growers to produce the fruit at a lower free on board (FOB) price per carton than the three countries of the Windward Islands, a price that cannot sustain the industry in the islands.

High Food Import Bill

In nominal terms, countries are experiencing increased food import bills, resulting in high levels of imported food commodities in the domestic food consumption bundles. It is not surprising, therefore, that this high level of food imports has negatively impacted the development of domestic

agriculture and the agro-processing industry due to the inability of domestic sectors to compete against imports.

World Food Price Inflation

The transmission of international food price inflation through domestic food prices in the countries was observed in all countries evaluated by comparing the FAO World Food Price Index to the food price index of the countries. The comparative analysis indicates that a close relationship exists between the international food price index and the indices of Antigua, Dominica, Grenada and St. Lucia, except for the 2010-2013 period. In the case of Barbados, the domestic rate of food price inflation is higher than the international food price inflation. Because women are highly represented as the heads of households, the impact can be severe on those household families.

The influence of international food price inflation, domestic food demand and supply situation, and government taxes/and or subsidies on domestic food price inflation is an important factor that must be considered in the design of national policies and related plans for the agricultural sector.

Disasters

Disasters (hurricanes, floods, droughts - all associated with climate change and volcanic eruptions) in the countries often cause millions of dollars in losses in the infrastructure and economic and social sectors, impacting growth and development in the countries. For example, in 2017 Antigua and Barbuda and Dominica were heavily impacted by Hurricanes Irma and Maria resulting in significant destruction of properties and livelihoods. In Dominica, Hurricane Maria resulted in total damage of US\$931 million and losses of US\$380 million. The greatest losses were sustained in the agriculture sector (32%).

Pests and Diseases

The countries are beset with plant pests and diseases which are a serious constraint on agricultural growth and development.

Design of Policy and Plans

In the preparation of national policies and plans, stakeholder groups engaged by the countries included sector-related ministries, researchers, NGOs, private sector operators along the value chains (input suppliers, processors, traders, exporters, financial institutions, etc.), academia and national and regional technical level officers. The assessment was not systematic throughout the design process. In addition, there was no comprehensive gender assessment in the development of the policies and plans and therefore only some of the proposed programmes reflect the situation. Therefore, there are no targets designed to achieve gender equity. Consequently, there are no outcomes and outputs designed to achieve the goal of gender equality and the eradication of hunger and food insecurity.

Main Constraints of SAEs in the Countries

The key constraints related to SAEs development identified at the country level include issues related to suitability and availability of raw materials, research and technology and technical support for agro-industrial development, management, and finance and marketing support mechanisms. These issues have been enunciated and debated in many local and regional fora and a range of

practical recommendations advanced. However, the implementation of most of the recommendations appears to be non-existent. The absence of implementation strategies may well be the result of the lack of well thought-out, planned strategies for agro-industrial development in the five countries.

Value Chain

The countries are still unable to provide focused attention to the identification of viable value chain and development and allocation of the required resources for implementation.

VII Gender Implications and Recommendations

Summary of Gender Critical Issues

The study finds that in most countries the social and gender programmes are perceived as being a low priority in fiscally constrained economies. In addition, gender-responsive strategies are being pursued without the requisite baseline data and analysis on the insertion of men and women in the formal and informal economy, the gender segregation of occupations, and the determination of the economic value of unpaid productive work. The strategies are also being pursued without full commitment to ILO's decent work agenda regarding issues of remuneration, conditions of work, etc. to ensure that workers are not simply viewed as instruments of economic growth to their detriment. Strategies are also being pursued with limited recognition that export-led growth and liberalization of services require that attention be paid to gender differentials and inequalities in market access, and their specific impacts on men and women and on social and cultural gender norms overall. Recognition of the different perspectives of men and women both as producers and consumers of services usually will enable a better understanding of the impact of investments and infrastructure on socio-economic development and the environment.

The gender-responsive evaluation of national policies reveals some vital information that has important implications for the planning of future national and sectoral development strategies for the countries. Some of these issues as highlighted by the evaluation are:

- There is evidence of a sexual division of labour within the employed labour force: For example, in Barbados there are 4.5 or more times as many men as women employed as craft and related workers, plant and machine operators and skilled agricultural workers, emphasizing the role of men in manual labour.
- There is a strong presence of women in the public service sector, especially in the nursing and teaching professions in the countries.
- Evidence from Barbados shows that the earnings of women are below those of men.
- Women are over-represented in lower-income brackets and the 'economically inactive' population in the countries. Both contribute to higher levels of poverty among women than men.
- In examining access to and ownership of productive resources, it is necessary to look not only at people in the formal economy but also at those who operate in the informal economy.
- Women's non-ownership of resources that could be used for collateral constrains their access to credit for agriculture and for productive work in other sectors.
- Many women continue to set up businesses informally because of barriers to the factors of production (such as credit), to balance caring responsibilities with income-earning possibilities. With high dependency ratios in poor female-headed households, such women

are especially likely to be found in the informal sector as it is difficult to find formal employment that allows enough flexibility for sole carers to be able to cater to the full range of needs of their families.

- Land is the primary economic factor in the countries, with available data indicating that significantly higher numbers of males are owning and leasing land than females. Accordingly, many small landholders are women, and without an effective land titling regime in each country that gives women legal title to their land, women will be unable to convert their interest in the land into a tangible asset.
- Lack of female ownership and tenancy becomes important in matters of accessing credit and finance as more women lack the necessary documentation (land deed/title) that is needed by many lending institutions to facilitate needed loans. In this regard, more men own more agriculture equipment, inclusive of trucks/vans, water tanks, pumps, and sprinklers etc., than their female counterparts.
- Concerning entrepreneurship, women predominate in the 'informal economy' as street and market vendors, 'hucksters' in the inter-island trade in agricultural produce and other commodities, and vendors at tourism sites. They are also taking advantage of small business skills training programmes
- Women, also, predominate in agro-processing. Many rural women make their living by making and selling products such as jams, jellies, cheeses (for example, mango and guava cheese), canned fruits, fudge (for example, ginger, peanut, and chocolate fudge) and pepper sauces. This work is mainly done at the household level and most women sell in their communities and through 'word of mouth'. Many of these products cannot be expanded for greater trade due to production being done in homes and thus most operations are not meeting Hazard Analysis and Critical Control Points (HACCP)² standards for international and regional exports.
- Antigua and Barbuda does not have a National Gender Policy. However, other national policies developed for key sectors have incorporated gender considerations.
- Barbados does not have a National Gender Policy. However, the Bureau of Gender Affairs (BGA) is spearheading the development of such a policy for the country.
- The Government of Dominica has put in place a National Gender Policy, which emerged from a policy statement on Women and Development prepared in 1980.
- In Grenada, the Ministry for Social Development and Housing led the process of developing the Gender Equality Policy and Action Plan (GEPAP), with financial support from UN Women and the Caribbean Development Bank (CDB).
- St. Lucia does not have a National Gender Policy. However, gender mainstreaming and social protection is included as one of three cross-cutting thematic areas within the Medium-Term Development Strategy (MTDS) - (2020-2023).
- In those countries where National Gender Policies are in place, the process of developing other national and sectoral policies has not been adequately informed/guided by the National Gender Policy. There is the absence of the requisite national policy framework that establishes clear measures, targets, and indicators for advancing gender equality and gender mainstreaming. This is related to the lack of capacities and resources of the Bureaus of Gender Affairs in the countries to effectively lead gender mainstreaming across the public/private sectors and civil society.
- A key obstacle to the integration of gender equality in sector programmes lies in the absence of quantitative and qualitative sex-disaggregated data, and gender analysis. Examples of the absence of sex-disaggregated data in policy frameworks include those related to land

² HACCP "is a risk management system that identifies, evaluates, and controls hazards (biological, chemical and physical) related to food safety throughout the food supply chain." St. Lucia Bureau of Standards undated.

ownership as an indicator of access to productive resources and wealth; small and microenterprise/ownership; and various divisions to determine programmatic interventions.

Recommendations

Data

- Sex-disaggregated data must be collected and analyzed to effectively inform policy and programming targeted at farmers, fisher-folks and small business enterprises. Formal measurement of the participation of women and men in the informal sector should be undertaken, which leads to strategies to either include these enterprises in the formal economy or to formalize the respective informal sectors/areas. Mechanisms for the measurement of gender-related development indicators must be put in place, which includes training on the collection and analysis of sex-disaggregated data for government ministries and departments, the establishment of protocols for sharing/reporting of national statistics, and electronic database management systems which provide for crosscutting sectoral analysis.
- The availability of sex-disaggregated data to evaluate the gender impact of the economic crisis in both the private and public sectors should be ensured. This should include data on the number of women and men laid off in the process of government retrenchment and their household structure to assess effects on dependents as well, among other issues.
- Establish clear systems/protocols/guidelines for collecting, collating and analyzing gender-disaggregated data collection in all sectors.

Policy and Planning

- Integrate gender equality and social justice criteria into economic and sectoral policy design, implementation, trade negotiations and technical co-operation agreements, and poverty reduction strategies and programmes. This should be based on robust gender analyses.
- In terms of a gender-sensitive strategy for development, it is important to seek to stimulate growth in sectors that can contribute most to the employment of both women and men.
- Mainstream gender in the development and implementation of national/sector plans and the annual national budget, i.e., gender-responsive planning and budgeting.
- Establish clear systems/protocols/guidelines for gender-sensitive monitoring and evaluation in Ministries, Departments, Statutory Bodies and other agencies.
- Ensure the participation of a diverse but relevant range of stakeholders including civil society organizations in all policy-making processes and implementation at national and sectoral levels.
- Conduct gender sensitization/training for senior/middle managers in Government-owned, private sector and civil society banks and other credit institutions in Grenada, to raise their awareness of the gender dimensions of banking, savings, credit and other facilities, and lead to the adoption of gender policies/guidelines.
- Support gender-responsive initiatives to facilitate private sector development, such as technical support to male and female entrepreneurs to access regional business and commerce; a biennial expo for male and female-owned small businesses; a biennial award programme for male/female small and medium enterprises for initiative, innovation and growth.
- Integrate the unpaid “domestic economy” into macro and agricultural analysis.
- Promote the use of gender-sensitive and gender-inclusive language in legislation, government documents and educational and public awareness materials.

Finance

- Introduce gender-responsive budgeting in national budgetary planning, implementation, and monitoring and evaluation processes.
- Provide technical assistance to the countries in their fiscal-restructuring strategies to support the analysis of mid and long-term gender and development impacts, which is currently weak.
- Examine the potential impacts of trade arrangements and development strategies on men's and women's ability to access the benefits of trade and mitigate any negative differential fall-outs on men and women.
- Ensure that CDB and Government-supported banks and other credit institutions adopt gender policies/guidelines, provide 'hand-holding business support' to new entrepreneurs (males, females and youth), and produce sex-disaggregated data annually (by selection criteria, number of loans, categories of enterprise, EC\$ values of loans awarded, etc.).
- Develop gender-sensitive risk assessment procedures for access to funding based on project review, experience and motivation of applicants, rather than solely on ownership of land and other forms of collateral.
- The Ministry of Finance, in developing the medium-term national development plan, should ensure that the national gender machinery plays a key role in ensuring the uptake of policy measures from national gender policy. This should be reflected in annual gender-responsive planning, budgeting and implementation.

Trade

- Address gender-based distortions in markets which can result in inefficient resource allocations.
- Examine the potential impacts of trade arrangements and development strategies on men's and women's ability to access the benefits of trade and mitigate any negative differential fall-outs on men and women.

Land Reform

- Address the critical issue of land reform in the countries to include key issues related to land distribution and ownership, and in particular as these issues impact access to credit by farmers, fisher-folks, and small agro-entrepreneurs to facilitate their agricultural production and entrepreneurial development in related sectors.
- Encourage men, women and youths to become agricultural entrepreneurs by paying specific attention to increasing women's land ownership and access to credit.

Employment

- Promote gender equality in agriculture by (i) recognizing men's and women's complementary roles in agriculture and rural development; (ii) increasing their equitable access to productive resources; (iii) creating opportunities for entrepreneurial development linking agriculture to agri-business and tourism; and (iv) facilitating the nation's goals of agricultural diversification, food security, economic growth, poverty reduction, and sustainable development.
- Encourage innovation in the wholesale and retail sector to maintain its viability concerning employing women and men, as available data shows that the wholesale and retail sector is the top employer in the countries. However, the sector is highly import-dependent, and therefore strong support for exports to generate foreign exchange would be necessary to maintain employment levels, especially among females.

- Diversify the range of occupations with a particular focus on men given their concentration in a smaller number of fields such as construction, mining and quarrying and transport and distribution, which are highly vulnerable to international demand and therefore, external economic shocks.
- Develop policies to stimulate demand for employment in tourism products assisting tourism employees, the majority of whom are women. This may indirectly assist men's employment as construction, transport and distribution provide infrastructure and services to tourism.
- Consider gendered patterns of employment within the public service periods of government economic retrenchment, as cuts in government expenditure are likely to affect women and men differently as employees of government services.
- Create innovative gender equity policies to stimulate a shift in the entrenched gender division of labour, both in terms of occupational segregation and in terms of the balance between formal employment and the 'economically inactive' segment of the population. This segment is comprised of mostly women who are carrying out unpaid domestic work or working in the informal economy. Measures such as the development and implementation of policies to support flexible working arrangements³ and care for dependents are recommended. It is necessary to move beyond focusing on the unemployed who declare they are looking for work.
- Ensure that innovative policies created result in greater flexibility with respect to working hours, childcare and tax regimes, to increase the percentages of women and men in formal employment.
- Ensure that revised labour policy factors in support mechanisms associated with the working environment such as those related to caring for dependents (via, for instance, day-care and flexible working) so that women are enabled to put in the necessary hours to establish prosperous businesses.
- Government and private sector employers (or in partnership with labour unions) should provide facilities for childcare nursing for working mothers since increasing numbers of women in the labour force and migration have reduced the capacity of the extended family and community to provide childcare.
- Monitor the conditions of employment offered by Foreign Direct Investors and other businesses entering the economy, since women's lower labour force participation makes them more vulnerable to accepting jobs with low wages and social protection.

Poverty Reduction

- Promote gender-responsive, long-term economic growth and poverty reduction strategies that are based on the natural and human resources.
- Ensure that poverty reduction programmes are evidence-based; promote gender equity; respond to the specific needs of the poor and disabled e.g. in areas related to education, training and credit, social protection schemes including pensions for 'unemployed' women (who provide reproductive care in the home), entrepreneurship training, equitable inheritance for women in common-law relationships; etc.
- Poverty strategies should focus particularly on single women who are heads of households.

Education and Training

- Promote the widespread education and involvement of male and female farmers, fisher-folks and small agro-entrepreneurs in the restructuring of the sectors, empowering them to

³ Barbados has introduced flexible working arrangements under COVID-19 Management Protocols.

increase their productive capacities, engage in entrepreneurial activities, create linkages between agriculture, fisheries and agro-processing and tourism, and build partnerships, networks and cooperatives to advance the sector.

- Review the education curriculum, textbooks and teaching materials to eliminate gender stereotypes, and integrate gender modules/courses into teacher training (addressing issues such as gender and education, gender parity in traditional male and female-dominated subject areas, gender-based occupational segregation, health and family life skills, counselling and mediation, etc.).
- Undertake awareness-raising among the public and in key institutions (e.g., schools) to change widely held gender stereotypes that specific professions such as nursing, teaching and hospitality are ‘female professions’, and construction work and engineering are ‘male professions’.
- In partnership with the private sector, promote gender-responsive internships, apprenticeships and ICT initiatives to empower men, women and youths to achieve their full potential and contribute to national development.
- Introduce/strengthen enterprise training programmes in secondary schools, including theory, practical internships and mentoring, to build youth capacity for entrepreneurship. The State College should offer a diploma course in Agri-business, in addition to its current diploma course in Agriculture.
- Provide technical assistance, mentoring, training, small grants and micro-finance for people, especially women and young people, starting on the entrepreneurship path and to ‘top up’ resources sourced from within family and friend networks.
- Agricultural agencies should ‘incubate’ women and youth entrepreneurs, facilitate loans and markets, promote the use of new communication technologies, etc.
- Support the development of gender-responsive enterprise training courses/programmes in secondary schools and national colleges, including theory, practical internships and mentoring, to build the capacity for entrepreneurship among men, women and youths.
- Provide support to women’s groups engaged in agri-businesses to grow their enterprises and expand from supplying the local market to contributing to export trade (e.g., training, product development, access to credit, marketing, etc.).
- Technical assistance to enhance the proficiency of entrepreneurs in the Agro-processing industry should ensure the participation of women and provide for focused training to support their increased competitiveness and market responsiveness.
- Agro-Eco tourism linkages should be promoted. This will open up employment and entrepreneurship opportunities for women, men and youth in the tourism sector and further boost the agricultural sector.

1. INTRODUCTION

1.1 Background

This Report presents the results of a gender-responsive evaluation of the Impact of Relevant National Policies on **Small Holder Farmers, Fisherfolk and Small Business Entrepreneurs in five (5) Caribbean Islands: Antigua and Barbuda, Barbados, Dominica, Grenada, and St. Lucia**. It represents an important deliverable of a Consultancy entitled: *Gender Responsive Evaluation of the Impact of Structural Adjustment Programmes and Relevant National Policies on Small Holder Farmers, Fisherfolk and Small Business Entrepreneurs in five (5) Caribbean Islands*. The Consultancy, in turn, is a critical component of the Project entitled: *Building Effective Resilience for Human Security in the Caribbean Countries: The Imperative of Gender Equality and Women's Empowerment in a Strengthened Agriculture and related Agri/Fisheries Small Business Sector*.

It is presented against the background of a Caribbean region in economic decline since the late 1970s. This resulted in a major deceleration in economic growth in the early 1980s due to several related factors. Despite middle-income status and medium to high human development classification, the region has recently experienced poor growth performance (also because of recurrent and devastating natural disasters) resulting in the gradual build-up of unsustainable levels of debt. The situation has created the unavoidable requirement for structural adjustment programmes and initiatives that risk turning back the clock on recent human security gains. Additionally, the high level of accumulated debt contributes to poor regional GDP performance and diverts resources to amortization and interest payments and away from health, education, infrastructure, administration of justice, social protection, food and nutrition security and other areas that are drivers of growth and development and determinants of human security.

Growing poverty and income inequality also represent major challenges, with joblessness and vulnerability disproportionately affecting marginalized groups, in particular women and youth. While the region has made some progress in addressing gender inequality, especially in areas related to education and leadership, this remains a major challenge and has cross-cutting negative impacts. The result is that the Caribbean suffers both 'feminization' and 'juvenilization' of poverty, with the flip side of high levels of crime involving youth.

Climate change adaptation, disaster risk reduction, energy cost reduction, strengthening sustainable agriculture and enhancing food and nutrition security represent additional major challenges for governments in the region. These issues are key to the achievement of sustainable growth, and thus human security.⁴

The major institutional response has been the adoption of Stabilization and Structural Adjustment Policies, advocated by the major international financial institutions (IFIs) - the International Monetary Fund (IMF) and the World Bank - in exchange for significant loans. Countries have developed and are implementing macroeconomic and sectoral policies as frameworks to guide their economic growth and development. The countries have in place a wide range of agricultural and related policies, the principal stated objectives of which are to increase productivity and production in the agriculture, fisheries and agro-processing sectors, boost product exports as a basis for national economic growth, improve the income of small holder farmers, fisher-folks and agro-entrepreneurs and ensure food and nutrition security. The policies pursued reflected the development strategy

⁴ United Nations 2019: United Nations Trust Fund for Human Security project: Building Effective Resilience for Human Security in the Caribbean Countries: The Imperative of Gender Equality and Women Empowerment in a Strengthened Agriculture (and related Agri/Fisheries Small Business) Sector

favoured by the IMF and the World Bank. The strategy pursued by the countries includes a reduction in the role of the state to reduce government expenditure; restrictive monetary as well as fiscal policies; an expansion of the role of the private sector to promote economic growth; and liberalized internal and external trade intended to allow the market, rather than the government, to direct resource allocation and determine prices of inputs and outputs.

In the Caribbean region, only a few studies have gone beyond the analysis of quantitative, national-level data on the impact of national policies on smallholder farmers, fisher-folks and agro-entrepreneurs to consider more qualitative, locally based data, let alone examine possible differences according to gender.⁵ It is against this background that the study was conducted. The Report is presented as a component of an overall Consultancy that evaluates the gender-responsive impact of Structural Adjustment Programmes and relevant National Policies on Small Holder Farmers, Fisher-folk and Small Business Entrepreneurs in five (5) Caribbean Islands.

1.2 Purpose, Objective and Scope

The purpose of the gender-responsive evaluation is to analyse the gender dimensions and existing inequalities in the agriculture, fisheries, and small business sectors in the five selected countries in the context of the national policies that have previously been and are currently being implemented.

The **main objective** was to explore the impact of national and agricultural sector-related policies on people working in or directly influenced by the target sectors, with a focus on the different needs, opportunities and impacts on women and men and to understand the extent to which women can realize their rights and potential in those areas where the policies are intended to advance national development agendas. The underlying assumption is that changes in economic conditions and policies have different impacts on men and women due to the division of labour by sex and prevailing formal and informal structural and social gender inequalities⁶.

Building on a comprehensive situational analysis and desk review of the sectoral impacts of national and related agricultural policies, this report aims to support future gender-sensitive decisions on national and agricultural sector-related policies.

Finally, the Report quantifies the economic value-addition of greater integration of gender equality and women's economic empowerment into the design and implementation of national policies and supports the case for their systematic inclusion in the resilience building and human security strategies in the Caribbean.

1.3 Methodology

A literature review and analysis of available data were undertaken to inform the study and are included in the reference list to provide the conceptual framework for a descriptive analysis of the gender profiles under consideration.

⁵ Barriteau, V. Eudine, 1996.

⁶ Elson, 1989.

To better understand the links between policy and practice, a comprehensive policy analysis that focused on the elements of content, actors, and process in the development of the national policy instruments was undertaken.

In parallel to the desk study, stakeholder consultations were conducted with the Consultancy Steering Committee and three of the five National Steering Committees to triangulate information gathered during the literature review process. These consultations were aimed at obtaining the views, opinions, and aspirations of key stakeholders on national policies related to agriculture, fisheries, and small business.

The Public Expenditure and Institutional Review (PEIR) methodology⁷ was utilized to map the Governments' policy framework(s) and the mainstreaming of gender in national policies, plans and annual budgets. The instrument focused on policy, institutional and expenditure analyses of the relevant public bodies related to agriculture, fisheries, and small scale agro-enterprises within the context of a gender lens, where possible.

The analysis and findings provided in this report are based on all materials collected during the literature review, the policy analysis and PEIR, group discussions, and the professional experience and knowledge of the Consultant. The analysis has helped identify critical gaps and support recommendations related, but not limited, to:

- Augmentation of the countries' efforts to address issues related to gender equality and empowerment in agriculture, fisheries, and small business that are impacted by structural adjustment programmes;
 - Facilitation of input to inform the strategic direction of the UN agencies' engagement and partnerships with national Governments that address gender equality and women's empowerment in agriculture, fisheries, and small business sectors; and
 - Development of a public awareness programme to foster a broader recognition of the priorities of gender equality and women's empowerment for enhanced resilience, stronger economic growth, a more inclusive society and strengthened human security.
- this Report is an integral part of the Report on the Gender Responsive Impact of SAPs on the identified vulnerable groups. Some of the information contained in the Gender Responsive Impact report is included in this report where appropriate.

1.4 Limitations of Study

The Evaluation depended heavily on gender and age disaggregated statistical data for analysis. These data were not readily available during the review and therefore there are some information gaps in the report. In addition, up to date information on key national, sectoral, sub-sectoral and household indicators were not readily available. In such situations, the most recent data was utilized for analysis. This limitation suggests the urgent need for future investments in sex and age disaggregated data capture.

⁷ This was based on UNDP (United Nations Development Programme) and ODI (Overseas Development Institute), August 2012 Climate Public Expenditure and Institutional Review (CPEIR) - A methodological to review climate policy, institutions and expenditure, Working Paper. ref is correctly given/formatted?

2. Agriculture, Fisheries and Small Scale Agro-industry and Gender Considerations

2.1 Agriculture in the Global Context

2.1.1 Overview

Agricultural development,⁸ including fisheries and agro-processing, is one of the most powerful tools to end extreme poverty, boost shared prosperity and feed a projected 9.7 billion people by 2050. Growth in the agriculture sector is estimated to be two to four times more effective in raising incomes among the poorest compared to other sectors. Analyses in 2016 found that 65 percent of poor working adults made a living through agriculture.⁹ Agriculture is also crucial to economic growth: in 2018, it accounted for four percent of global gross domestic product (GDP) and in some developing countries, it can account for more than 25% of GDP.¹⁰

However, in recent years the growth rates of world agricultural production and crop yields have slowed. It is projected that over the coming decade, global agricultural production will increase by 1.4% p.a.; a slowdown compared to the growth in output experienced over the last decade (1.7% p.a.). The projections are based on the assumption that the measures on social distancing used to contain the COVID-19 pandemic will mostly end in 2021. Thereafter, it is assumed that countries will not prolong restrictions on the movement of people, which has limited the availability of agricultural labour, resulting in increased production costs in several countries (International Labour Organization, 2020¹¹), or the enforcement of strict health protocols, which have a strong negative effect on all labour intensive agricultural activities. It is also projected that production growth in agriculture will be predominantly located in emerging economies and low-income countries and will be driven by productivity-increasing investments in agricultural infrastructure and research and development, wider access to agricultural inputs, and improved management skills in these regions. An additional driver of growth will be investments to mobilize production resources (e.g. land, irrigation water). Growth in production in North America and Western Europe is expected to be slower, largely due to constraints imposed by environmental policies.¹²

The slowdown has occurred not because of shortages of land or water but because demand for agricultural products has slowed. This is mainly because world population growth rates have been declining since the late 1960s. However, it is also the case that a high share of the world's population remains in absolute poverty and so lacks the necessary income to translate its needs into effective demand.¹³ As a result, global demand for agricultural commodities (including for non-food uses) is projected to grow at 1.2% p.a. over the coming decade, well below the growth experienced over the last decade (2.2% p.a.). This is mainly due to an expected slowdown in demand growth in China (0.8% p.a. compared to 2.7% p.a. over the last decade) and other emerging economies, and lower global demand for biofuels.¹⁴

⁸ Hereafter agricultural development/production refers to crop, livestock, fish production and agro-processing.

⁹ World Bank Report, 2020: Agriculture and Food. September, 2020.

¹⁰ Ibid

¹¹ International Labour Organization (2020), "COVID-19 and the impact on agriculture and food security", https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_742023.pdf

¹² OECD-FAO Agricultural Outlook 2021-2030 © OECD/FAO 2021

¹³ FAO World agriculture: Towards 2015/2030. Summary Report

¹⁴ International Labour Organization (2020), "COVID-19 and the impact on agriculture and food security.

The slow growth rate in agricultural production has raised fears that the world may not be able to grow enough food and other commodities to ensure that future populations are adequately fed. There is no doubt that agriculture-driven growth, poverty reduction, and food security are at risk: Climate change could cut crop yields, especially in the world's most food-insecure regions. Agriculture, forestry and land-use change are responsible for about 25 percent of greenhouse gas emissions. Mitigation in the agriculture sector is part of the solution to climate change.

2.1.2 Agriculture, Poverty and Hunger

The current food system also threatens the health of people and the planet. Agriculture accounts for 70 percent of water use and generates unsustainable levels of pollution and waste. One-third (1/3) of food produced globally is either lost or wasted. Addressing food loss and waste is critical to improving food and nutrition security, as well as to helping to meet climate goals and reduce stress on the environment. Risks associated with poor diets are also the leading cause of death worldwide. Millions of people are either not eating enough or eating the wrong types of food, resulting in a double burden of malnutrition that can lead to illnesses and health crises. A 2020 report found that nearly 690 million people—or 8.9 percent of the global population—are hungry, up by nearly 60 million in five years. Food insecurity can worsen diet quality and increase the risk of various forms of malnutrition, potentially leading to undernutrition, overweight and obesity. The cost of healthy diets is unaffordable for more than 3 billion people in the world.¹⁵

A World Bank Report that was prepared for the “Future of Food” event in 2015,¹⁶ suggested that to permanently end poverty and hunger by 2030, the world needs a food system that can (i) feed every person, every day, everywhere; (ii) raise real incomes of the poorest people; (iii) provide safe food and adequate nutrition; and (iv) better steward the world's natural resources. The report also suggested that the world needs a food system that is more resilient and that shifts from being a major contributor to climate change to being part of the solution. All these aspects are closely interlinked and call for a more comprehensive approach to delivering a healthier and more prosperous future. The Report lays out key elements of an action agenda for the global food system in accordance with Sustainable Development Goals (SDGs) 1 and 2 on ending poverty and hunger by 2030. The three core elements of the agenda are aligned around:

- Ensuring a more climate-smart agriculture;
- Improving nutritional outcomes; and
- Strengthening value chains and improving market access.

Within these groupings, a combination of policies, investments, knowledge, partnerships, South-South learning, and political will and leadership will be needed.

2.1.3 Climate Smart Agriculture

The SDGs aim to address the interlinked problems of inequality, hunger and climate change by 2030. Nevertheless, the achievement of many of the SDGs rests upon the ability to provide a climate-smart food system that will feed a growing population with nutritious food, provide livelihoods and also help steward our natural resources. A World Bank report, *Future of Food: Shaping a Climate-Smart*

¹⁵ World Bank Report, 2020: Agriculture and Food. September, 2020.

¹⁶ World Bank Group, 2015. Ending Poverty and Hunger by 2030: An Agenda for the Global Food System.

Global Food System,¹⁷ examines ways to improve the productivity and resilience of the food system and to make agriculture part of the solution to climate change.

The report recommends implementing agriculture and food production practices that secure a triple win: boosting productivity, enhancing resilience and lowering greenhouse gas emissions (GHG) – the three pillars that form the basis of climate-smart agriculture (CSA). The recommendations include:

- Ensuring access to existing and new climate-smart technologies for poor farmers. These technologies can help reduce yield gaps and improve resilience.
- Closing the gender gap. Providing women farmers with proper resources and support will help raise yields and improve food security.
- Reducing GHG emissions through improved fertilizer use, alternate wet and dry irrigation of rice and improved livestock breeding and waste management.

2.1.4 Agriculture and Food Quality

Food quality is as important as food quantity. Over 165 million children under five are stunted due to chronic malnutrition. Contaminated food affects one in ten people globally, and around 420,000 people die from eating contaminated food each year. More than two billion people do not get all the vitamins and minerals they need and another two billion struggle with being overweight or obese, many of them in developing countries. Malnutrition and food-borne diseases impose large current and future human, economic, fiscal and social costs on countries. Key among these is child stunting, which reduces cognitive development further translating in to reduced lifetime earnings.

Therefore, the formulation of food systems to deliver improved nutrition and health requires a combination of improved knowledge, sound policies, regulations, and investments across the production-to-consumption continuum. The goal is to stimulate behavioural change in food producers, post-harvest handlers, food processors, food distributors, and consumers. Women will also play a key role because they often link food systems and household nutrition.

Key interventions should therefore be aimed at reducing food loss through improved storage, fortifying foods with nutrients, expanding nutrition education, improving food labelling and modernizing food safety.

2.1.5 Agriculture and Employment

The issue of employment in agriculture is of great importance as over the next 15 years about 1.6 billion people in low and middle-income countries will reach working age. Creating jobs for a new generation of workers while sustaining and improving the quality of employment of the billions of people already working will be a significant challenge for all sectors.

The food system currently employs the majority of people in both self and wage employment in developing countries and will continue to do so for the foreseeable future. Jobs in the food system extend beyond agricultural production and account for a large share of the global economy's manufacturing and services sectors. As *per capita* incomes increase and eating patterns shift, the demand for jobs in these off-farm segments of the food system – including processing, distribution, transportation, storage, retailing, preparation and restaurants – will increase.

¹⁷ World Bank Group, 2015. Future of Food: Shaping a Climate-Smart Global Food System, 2015.

A paper from the World Bank¹⁸ focuses on how the food system can deliver jobs and provides a framework for understanding the factors that determine the number and quality of jobs in the sector. The paper also highlights a set of actions that countries can adopt, adapt, and apply to their circumstances to strengthen the food system's contribution to employment. The main messages are:

- Self and wage employment in farming still generates a large share of rural incomes and can have large poverty-reducing effects.
- While the employment share in farming tends to decline as per capita incomes rise, the share in food manufacturing and services tends to increase.
- Increasing the number and inclusiveness of jobs will require attention to food system growth, employment intensity, and inclusion of youth and women. Urbanization and per capita income growth offer significant new opportunities in non-cereal products and new jobs in the food system beyond the farm.
- The inclusion of women and the growing number of youth into food system jobs can raise productivity and improve social harmony.

2.1.6 Agriculture and Information and Communication Technologies

Digital technologies have significant potential to improve efficiency, equity, and environmental sustainability in the food system. A range of digital technologies is already leading to better informed and engaged consumers and producers, smarter farms, and improved public services. Adoption of digital technologies varies significantly across countries, with lower current adoption rates in low-income countries. Increasing adoption will require addressing supply-side factors, such as rural network coverage and availability of digital applications, and demand-side factors, including skills and knowledge, trust, affordability, and complementary investments. While digital technologies have significant potential they also pose several risks that need to be addressed including an overconcentration of service provider market power; lack of data privacy; exclusion; and cybersecurity breaches. These risks cut across all segments of the economy, including the food system. In addition, digital technologies should not be viewed as a panacea. Other investments are needed to address the multiple constraints farmers face and to realize the potential benefits of digital technologies.

2.1.7 Agriculture and Investment in Value Chains

Current levels of investment in agricultural value chains are insufficient to achieve key development goals including ending poverty and hunger, boosting shared prosperity through more and better jobs, and better stewarding the world's natural resources by 2030.¹⁹ The promotion of private investment to help achieve these goals and optimize the use of scarce public resources will be needed, as will the continued promotion of good governance and environmental and social sustainability. Increasing private sector investment and associated financing will require identifying and understanding market failures currently leading to the sub-optimal private provision of goods and services needed to achieve key development goals. Where the private sector is already investing in agricultural value chains, promoting responsible investment can help increase development impacts. The promotion of more private investment requires increasing the space for private sector activity, improving the policy and regulatory environment, and considering options for using public financing to improve private incentives and to reduce transaction costs and risks, including blended

¹⁸ **World Bank Group, 2015. Future of Food: Shaping the Food System to Deliver Jobs**

¹⁹ International Bank for Reconstruction and Development / World Bank, 2018. Future of Food: Maximizing Finance for Development in Agricultural Value Chains

finance solutions.²⁰ While these actions can help induce more private investment, there is still a critical need for public resources to finance essential public goods and services such as human capital, agricultural research, and complementary public infrastructure.

The International Financial Institutions (IFIs) are providing innovation, infrastructure and other resources to the food and agriculture sector of the countries in order to:

- Promote climate-smart agriculture that is more productive and resilient in the face of climate change while reducing emissions, both from crops and livestock;
- Boost agribusiness by building inclusive and efficient value chains;
- Improve food security and produce enough safe, nutritious food for everyone, everywhere, every day and is nutrition-smart; and
- Improve livelihoods and create decent jobs, including for women and youth;

2.2 The Relevance of Gender in Agriculture, Food and Nutrition Security and Climate Change in the Global Context

The pursuit of gender justice is anchored in international and regional commitments and instruments such as the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW, 1979), the Convention on the Rights of the Child (CRC, 1989), the Beijing Platform for Action (BPfA, 1995), the Millennium Development Goals (MDGs, 2000), the InterAmerican Convention on Human Rights (1969), and the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women (Convention of Belém do Pará, 1994).

The 'gender agenda' promotes the view that equality between men and women has positive long-term socio-economic and developmental consequences, and is essential in the fight against poverty and the achievement of economic growth and sustainable development. Another approach is to examine the cost to a society's economic, social and governance development of not promoting gender equality. Ensuring that gender equality issues are fully considered in development policy-making, planning and programming thus requires a clear understanding of why they are important and how women and men, by virtue of their gender-based social roles and responsibilities, participate in and experience society differently. The focus on gender equality must therefore address the different ways in which political, economic and social issues affect men and women, and ensure that the situations and needs of both are considered and addressed.²¹

Addressing the gender gaps in agriculture is not only relevant in terms of a human rights and equality perspective, but also in terms of strategic and economic development. First, to consider gender dimensions in agriculture is relevant, as this sector constitutes the most important source of employment for women in rural areas in most of the developing country regions.²² They also represent 43% of the agricultural labour force in developing countries on average and about 20% in Latin America.²³ Nevertheless, those numbers need to be considered carefully as the economic contributions of women in rural areas are often systematically underestimated because of lack of

²⁰ Ibid

²¹ Caribbean Development Bank, 2016. Country Gender Assessments (CGAs): Synthesis Report.

²² FAO. 2011. The state of food and agriculture 2010-2011.

²³ Ibid

available data, gender norms - women tasks are seen as duty and not work - and definition adopted for data collection.²⁴

It should also be noted that not only men and women have differentiated preferences and constraints, but also that 'rural women' should not be treated as an homogeneous category, since different types of women (depending on their age, race, socio-economic status, ethnicity, etc) will have different preferences, challenges and play different roles in agriculture, fisheries, livestock, etc.²⁵ Even though women contribute largely to the agricultural sector in developing countries, they have less access than men to productive resources such as assets, inputs, services, land, education, financial services, technologies and opportunities.²⁶

Women are also more likely than men to engage in seasonal employment and receive lower wages.²⁷ Female-headed households may be more vulnerable to economic shocks and to fall into poverty, especially when the woman's income is the only one in the household or when it comes from non-labour sources (like transfer) (IICA, 2018). Women have also been found to be 4 to 25% less productive than male farmers, depending on the country and the crop.²⁸ This situation is all the more serious since research has shown that female farmers are just as efficient as male farmers, but they produce less because of this lack of access to resources and opportunities gap.²⁹ The consequences of not addressing the gender gap are also reducing per hectare yields and leads to over-cultivation, soil erosion and land degradation (UN Women, 2015). Thus, this gender gap is having a cost not only on the women themselves but also on the agricultural sector and the economy in general (FAO, 2011). Together, these inequalities are known as the gender gap in agriculture (FAO, 2011). It has been calculated that closing the gender gap could increase agricultural output in the developing world by 2.5% to 4%, on average (FAO, 2011). For example in Malawi, Tanzania and Uganda closing the gender gap in agriculture would amount to \$100, \$105, and \$67 million respectively (UN Women, 2015). No such estimation has been calculated for Latin American and Caribbean (LAC) countries.

Problems of food and malnutrition insecurity cannot be solved without addressing gender inequalities.³⁰ Gender inequalities exist along all the full food production, "from farm to plate" which is a limit to food and nutritional security (FAO, 2010). In this context, it is relevant to adopt a "gender-aware understanding of food security" since the inconsideration of gender leads to inadequate policies³¹ (Njuki et al., 2016). Closing the gender productivity gap could help to reduce

²⁴ IICA. 2018. Luchadoras; Mujeres Rurales en el mundo: 28 voces autorizadas.

²⁵ Ibid

²⁶ Coello, B., M. E. Reimo, S. Theis, and V. Stanley. 2015. Impact of male outmigration from Guatemala on rural women's agency, land use and agricultural production. World Bank, Washington, DC; FAO. 2011. The state of food and agriculture 2010-2011; and IICA. 2018. Luchadoras; Mujeres Rurales en el mundo: 28 voces autorizadas.

²⁷ FAO. 2011. The state of food and agriculture 2010-2011.

²⁸ Women, U.N., 2015. The Cost of the Gender Gap in Agricultural Productivity in Malawi, Tanzania, and Uganda.

²⁹ FAO. 2011. The State of Food and Agriculture 2010-2011.

³⁰ ³⁰ IICA. 2018. Luchadoras; Mujeres Rurales en el mundo; Njuki, J., Parkins, J.R. and Kaler, A. 2016. Transforming Gender and Food Security in the Global South. Routledge.;and Women, U.N., 2015. The Cost of the Gender Gap in Agricultural Productivity in Malawi, Tanzania, and Uganda.

³¹ Njuki, J., Parkins, J.R. and Kaler, A. 2016. Transforming Gender and Food Security in the Global South. Routledge.

poverty and improve nutrition in the sectors, as many poor work in agriculture. This could also result in lower food prices which could lead people to purchase more and better quality food and increase access to food from their own production (UN Women, 2015).

Thus, women are key in all the dimensions of food security and nutrition. At the availability level, in the LAC region, women are active in all the production stages although the lack of access to land, labour, fertilizer, credit, technology, extension and market hinders women's productivity and efficiency and thus food availability.³² Tenure insecurity for women can lead to lower investment and environmental degradation which compromise current and future production potential for achieving food security (SIDA, 2015). The wage gap between genders limits women's access to food mostly for women head-of-household (IICA, 2018) and cultural practices can limit the amount of food accessed by women and girls (SIDA, 2015). Food utilization and consumption in LAC is showing higher female obesity (26.8%) than men (18.5%) (IICA, 2018). Empowering women can thus have an effect not only on their health but also their children's. Indeed, as women are typically responsible for food preparation, they are key for the diet of their household (SIDA, 2015). Finally, food stability will be guaranteed through gender and climate-sensitive actions (IICA, 2018). For instance, women and girls tend to reduce their food consumption in crisis in favour of men, putting at risk their food security and nutrition (SIDA, 2015).

Thus, within the international context it is important to push countries to achieve gender integration in policy design, implementation and monitoring and evaluation (M&E), which is considered crucial to the attainment of national development goals.

2.3 Agriculture, Fisheries and Small Scale Agro-industry in the Regional Context

2.3.1 The Agricultural Sector and the National Economies in Antigua and Barbuda, Barbados, Dominica, Grenada and Saint Lucia

Although the five countries under review are Small Island Developing States (SIDS) they are highly diverse, varying widely in terms of their landmass, population, levels of socio-economic development, and vulnerability to external shocks. Agriculture remains the primary economic activity in Dominica, but the other economies are largely service-oriented, with emphasis on tourism.

There are basically two agricultural production systems in the countries. The first production system may be characterized as commercially important export sectors, built on historical trade patterns, and dominated by a handful of traditional commodities (mainly sugar, coffee, and bananas). Spices such as nutmeg, citrus, cocoa, and root crops are also important export crops in some countries. These crops earn foreign exchange and have played an important, sometimes controversial, role in the economic development of the countries but they are also vulnerable to economic and climatic events. By their nature, export crops compete in world markets and their trade is affected by the policies of importing countries.³³ Hurricanes have devastated crops and destroyed livestock and infrastructure. While dependence on revenue from export crops is declining along with the production of the traditional commodities themselves, they still dominate the agricultural sectors of most economies of the countries under study.

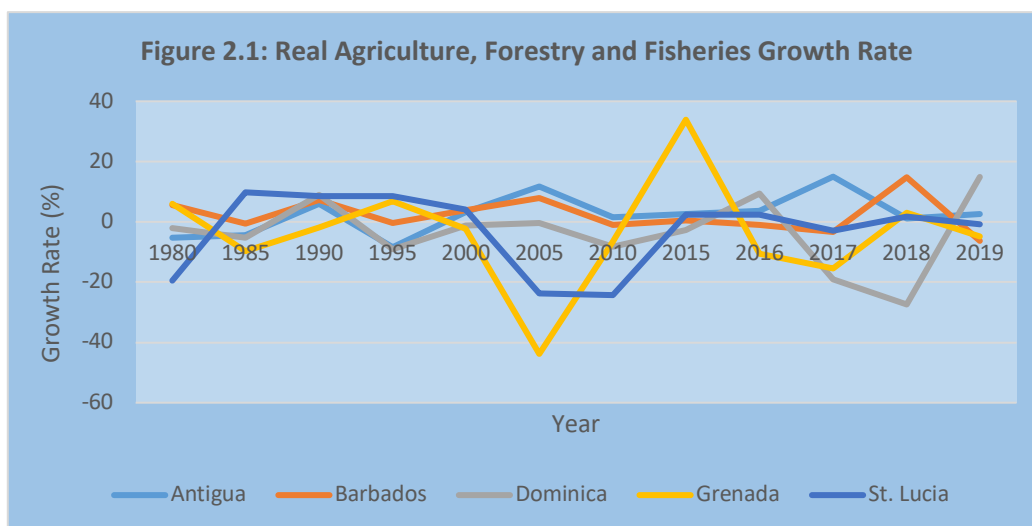
³² IICA. 2018. Luchadoras; Mujeres Rurales en el mundo: 28 voces autorizadas; Swedish International Development Cooperation Agency (SIDA). 2015. Women and Food security.

³³ In some cases the exports are granted favorable access into importing markets (as with sugar and bananas into the EU) but this emphasizes the dependence upon importer trade and domestic policies

The second system is that of peasant farming, often done on hillsides with thin soils and low productivity. Such farms are small and often fragmented. Markets are usually local and informal, with an emphasis on root crops (yams, cassava, sweet potatoes, dasheen, and eddoes), vegetables (lettuce, cabbages, carrots, tomatoes, cucumbers, pumpkins, okra, and onions) and fruits (mangoes, breadfruit, bananas, and plantains). The problems related to peasant farming include inadequate land tenure arrangements, limited access to credit, poor infrastructure, and limited training opportunities resulting in limited employment alternatives and rural poverty. These farming areas are also vulnerable to climate extremes, such as drought, as well as to environmental problems such as soil erosion. Policies include targeted infrastructure improvements, but often it is the non-agricultural interventions in areas such as education, health, and social safety nets that have the greatest potential impact.

As mentioned earlier, the prolonged global oil, financial and economic crises have negatively impacted the economies of these countries. This resulted in most of these countries being characterized by low to negative growth rates, declines in foreign investment inflows and exports, high public debt, loss of competitiveness in the traditional agricultural export product markets (sugar and bananas), high and increasing national food import bills, and increased losses from disasters due to the countries' proneness to natural hazards, including hurricanes, droughts, landslides, and earthquakes.

The real growth rate of the agriculture sector of these countries over the period under review (1980 – 2019) has shown a downward trend (**Figure 2.1**). However, the sector continues to play an important part in the economic life of the countries through its contribution to GDP, employment, and foreign exchange earnings. This contribution has been enhanced through its linkages and impacts on the manufacturing, health, and tourism sectors and the achievement of food and nutrition security.



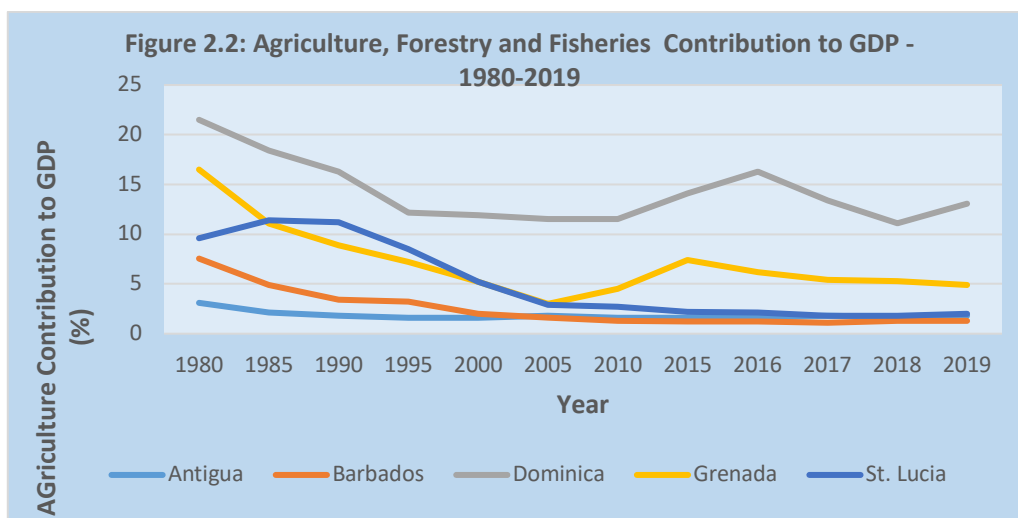
Source: World Bank Database

It is plausible to conclude that the drastic decline in the real rates of growth of the agricultural sector in St. Lucia and Grenada in 2005 was due mainly to the impact of Hurricane Ivan in 2004. Likewise, the agriculture sector growth rates in Dominica and Antigua and Barbuda were negatively affected by Hurricanes Irma and Maria in 2017, which destroyed the agricultural infrastructure of both countries.

Natural disasters often cause millions of dollars of losses in infrastructure and the economic and social sectors - the damage caused to the five countries from natural disasters for the period 1990-

2014 is estimated at US\$1.927 billion. The countries are beset with plant pests and diseases which are a serious constraint on agricultural growth and development. Furthermore, movement of pests and diseases among these small islands constitutes a severe quarantine problem. Root crops provide a major source of food in all countries; however, they are affected by a myriad of diseases. Several types of vegetables are also widely produced in the countries, but they are also significantly affected by pests such as aphids, mites, nematodes, and whiteflies. The countries have yet to achieve sustainable means of managing pests and diseases, with indiscriminate use of pesticides and inadequate knowledge, which often lead to misdiagnosis and incorrect management.

In 2018, the contribution of agriculture to GDP ranged from a low of 1.3% in Barbados to a high of 13.1% in Dominica, compared to 7.5% and 21.5% in 1980 in the two countries, respectively (**Figure 2.2**).



Source: World Bank Database

Historically, the food and agriculture sector has been the main contributor to economic development in the countries. However, the two main economic pillars of the food and agriculture sector – sugar and bananas – have declined significantly over the last three decades, due mainly to the loss of export markets. Parallel to the loss of export markets was the rise of food imports, resulting in declines in the production of some commodities for local consumption and export, which contributed to rising unemployment and economic decline in rural areas.

The agricultural sector also contributes to food and nutrition security, with deliberate and focused attention paid to all dimensions of food security: food availability, access, consumption/ utilization, and stability. Most countries are self-sufficient in roots and tubers. Additionally, most countries have a viable agricultural sector that produces a range of fresh vegetables, legumes, and tree crops. Nevertheless, for several essential food groups, national production per capita has declined, most notably, including fruits and vegetables.

A profile of the agricultural sector of the countries is presented in **Error! Reference source not found.**

2.3.2 The Fishing Industry in the Selected Countries³⁴

³⁴ This section draws heavily from the various FAO Fishery and Aquaculture Country Profiles

The fishing industry in the selected countries is very important to their socio-economic development, through its contribution to GDP, employment, foreign exchange earnings/savings, and food and nutrition security.

In Antigua and Barbuda, the contribution of the fisheries sub-sector of 1.2 percent to real GDP is greater than that of the combined contribution of agriculture, livestock, and forestry combined. The contribution of fishing to GDP in Barbados is currently undervalued and is usually cited as ranging from between US\$12 million to US\$16 million per annum in real terms. This represents an approximate contribution to GDP of 0.1% or 8% of the total of agriculture, livestock, forestry, and fishing. In Dominica, although the sector accounts for only 0.5% of the GDP, this contribution could have been greater if targeted incentives were provided by the government.

Fisheries play an important role in the Grenadian economy and has become a major source of employment and income, a significant contributor to food supply and food security, and a foreign exchange earner. In 2019, the fisheries sector contributed 25.6 percent of the total agricultural GDP (agriculture, livestock, forestry, fisheries) and 1.59 percent of the national GDP. Fish is one of the few products for which the island is self-sufficient. In times of crisis, fisheries are an important safety net for the Grenadian population considering that after hurricanes fisheries generally recover quicker than other economic sectors. In St. Lucia, fisheries accounts for 0.8% of GDP and about 25% of the agricultural GDP. These figures do not reflect the social role of fisheries in the development of the rural areas, where fishing is the only employment available. **Table 2.1** presents the level of employment in the fishing industry in each country.

Table 2.1: Employment Level in the Fishing Industry of the Selected Countries

Country	Employment ('000')							
	1980	1990	2000	2010	2012	2015	2016	2017
Antigua & Barbuda	1.45	0.64	0.89	1.53		1.88		
Barbados	3.00	3.00	3.00	3.01	3.01			
Dominica	1.50	2.50	2.24	1.54		1.20	1.05	0.91
Grenada	1.70	1.75	2.18	2.81		3.50	3.50	3.50
St. Lucia	2.60	4.80	28.02	2.55		2.97	3.18	3.33

Source: FAO Fisheries Statistics

The table shows that in 2015 a total of 1,877 persons were registered in the fishery and aquaculture sector in Antigua and Barbuda, of which 4 percent of fisher-folks were women and the remaining 96% men. The employment levels in the industry should be taken as conservative estimates since the fisheries sector acts as a “safety-net” for other economic activities. In Barbados, the industry provides work for 6,000 people either as fishers, fish retailers and/or fish processors. Recently, the post-harvest sector has grown, attracting both young women and men in considerable numbers. Vendors and boners make up the majority of the primary post-harvest stakeholders (37% and 39%,

respectively). Women make up the majority of the post-harvest sector, comprising 63% of the workforce.³⁵

The fisheries sub-sector in Dominica provided direct jobs to 1,195 persons in 2015, but this was reduced to approximately 912 persons in 2017, mainly in marine coastal fishing. There were 14 women working part-time in marine coastal fishing in 2015 and 17 in 2017. Since the crash of Dominican banana production, many farmers have become dependent on fishing to make a living. Overall, the fisheries sector employs approximately 2,200 people and is an economic alternative for many part-time agriculturists. In Grenada, the fishing industry continues to play a critical role in providing sustainable employment opportunities for the workforce, especially for the youth. In 2017 there were 3,500 fishers employed and another 400 persons employed in the secondary sector such as marketing, transport, boat building etc.

In 2017, the fishery sector in St. Lucia provided direct employment to 3,330 people in marine fishing (4% women) and 114 people (20% women) in aquaculture. About 50% of the labour was in full-time employment and approximately 120 persons worked as fish vendors and processors. Although the sector employed a mere 1.2% of the labour force of the country, it has been able to sustain the livelihoods of many families, especially in rural communities.

The fisheries sector provides food security to a large number of the population and provides livelihoods not only to fishers but also to those associated with the industry (e.g., boat builders, mechanics) as well as market vendors, who are mostly women.

Finally, fisheries play an important role in rural development. The fisheries sector is also an important social safety net for the population, especially in moments when the main source of livelihoods is impacted and there is no income. In fact, in a situation where underemployment and unemployment are still pressing problems, the fishing industry is seen as an important vehicle for providing income and sustenance to rural coastal communities. Fishing is a way of life for many of the people living in the selected countries.

A profile of the Fishing industry in the countries is presented in **Error! Reference source not found..**

2.3.3 Small Agro-Business Sector in the Selected Countries

Information on small business enterprise development in the Caribbean is often only based on one or more of the larger Caribbean states, mostly due to the absence of key information on other smaller Caribbean states of the region. This has resulted in a severe lack of data and analysis of small business enterprises in the five countries. Notwithstanding, information gleaned from a 2015 study that profiled women entrepreneurs in the Caribbean region is considered relevant to this report.³⁶

The study presented an estimate of the number of self-employed women in the region, from a total estimated 1.2 million employed women. It reported that:

- It is estimated that women comprise 1.2 million, or 42 percent, of the total employed workforce (2.86 million) in the region.
- Of the 1.2 million women employed, self-employed women comprise 8 percent of the total.

³⁵ FMP, 2004

³⁶ Lashley, J. and Katrine Smith. 2015: Profiling Caribbean Women Entrepreneurs: Business Environment, Sectoral Constraints and Programming Lessons. An Info Dev publication, July 2015.

- There were approximately 228,000 self-employed women, of which 204,000 (89.5 percent) had no employees, 21,000 (9.2 percent) had one to four employees, and 3,000 (1.3 percent) had five or more employees.
- The distribution of women-owned enterprises is dominated by the service sector: the two largest sectors (retail trade and hotels and restaurants) accounted for 46% of all businesses owned by women, as compared to 34% of businesses with full ownership by men.

The report identifies priority barriers and constraints that require addressing. These include:

- Access to financing and credit;
- Appropriate and relevant training and counselling (business advisory services) and other forms of capacity-building support (for example, business coaching and mentoring);
- Access to relevant and timely business-related information (for example, regulations, trade missions, obtaining technical support, etc.);
- Access to networks (for example, women entrepreneurs, and business associations); and
- Access to technology and equipment.

Three main priorities were identified to address gender segregation in the labour market, which is a direct effect of socio-cultural factors. These are:

- Expanding women's involvement in sectors with growth potential, both as employees and owners;
- Increasing acceptance of self-employment as a viable career option; and
- Improving access to developmental resources to promote greater involvement in self-employment in growth-oriented sectors.

An in-depth and comprehensive assessment of the overall small business agro-food system in the countries is also hindered by the lack of up-to-date and reliable data. Nevertheless, based on available data, the small business agro-processing industry in the countries may be characterized as not very well developed. Moreover, the food industry often processes imported raw materials instead of using local produce. The food industry consists mostly of Small and Medium Enterprises and micro-companies and there are only a few larger (>50 staff) food processors, including a few international companies. It is usually the larger companies that have the capacity for Research and Development and the size of the interregional agricultural and food trade is small. The countries do have some medium-sized retail chains, together with a large number of small local shops, street vendors and food markets. About two-thirds of grocery sales are conducted in the retail sector.³⁷

The Caribbean agro-processing industry is made up of a small number of large enterprises (e.g., sectors such as bakery and snacks, beverages, oils and fats, sugar, rice and poultry) and a proliferation of micro, small and medium enterprises (e.g., preservatives, jams, jellies, condiments, juices, spices, herbs, hot beverages), many of which are family-owned and often based in the entrepreneur's household.³⁸

The industry is a major source of employment and the subsectors in which most Small Agro-Enterprises (SAEs) operate have relatively low entry barriers, creating a platform for the development of small enterprises while making a significant contribution to rural development. In several states of the CARICOM, SAEs industry is a key component of GDP, saving and/or earning foreign exchange and central to food and nutrition security programmes. The industry has high

³⁷ Wuddivira, M. et al (2017)

³⁸ Presentation: Caribbean SMAE Industry Profile, Megnath Gosein, CARIRI, 2012

growth potential as ethnic foods export markets surge and can play a strategic role in supporting the development of other industries, such as light manufacturing and tourism.

SAEs play an important role in adding value to agricultural farm output and minimizing post-harvest losses, thereby increasing the availability and quality of food available for consumption. While many of the larger enterprises utilise a high percentage of imported raw materials, the SAEs are more dependent on locally sourced raw materials. There is some sourcing of raw materials intra-regionally, although this is somewhat limited by transport linkages. However, there is a small but growing trend to source intermediate products from within the region. With a few exceptions, SAEs tend not to have any formal arrangements for raw material supply and continue to be challenged with quantity, quality, seasonality, and cost issues. Bilateral trade agreements are increasing both raw material supply and finished product offerings of similar finished products from neighbouring producers in the Americas, who often have good quality and competitive prices.

Basic packaging is sourced within the region, but higher-end versions have to be imported. Processing equipment is often imported, unaccompanied by adequate training, and after-sales services levels are low so that equipment often tends to be inappropriate, have low-capacity utilisation, is subject to low economies of scale and has low operational flexibility. There is little use of collaborative solutions, such as multi-purpose processing facilities, mobile processing, inter-firm co-packing, and other forms of outsourcing services, to address these challenges.

Finance continues to be challenging for SAEs, due to the inadequate capacity of SAEs to develop and manage bankable propositions, the inaccessibility of credit, and their lack of willingness to explore equity-type injections as a significant financing vehicle, as this would produce a loss of some degree of ownership of the enterprise.

2.4 Economic Development Gender Considerations in the Caribbean

2.4.1 Human Development and Gender

Table 2.2 presents comparative statistical core gender-disaggregated demographic data on population, life expectancy, male-female headed households and literacy rates in the five selected countries of Antigua and Barbuda, Barbados, Dominica, Grenada, and St. Lucia.

The total population of the five countries, based on information taken from CEPAL Database, UNDP Development Report (2020), the CIA World Fact Book Report of 2020, and the Government of Dominica (2014), is approximately 0.757 million, with males comprising 49.2 percent and females 50.8 per cent. In three countries (Antigua and Barbuda, Barbados, and St. Lucia), the proportion of females is higher than that of males. However, for lower age groups (0-14 years) there are higher proportions of males to females. Overall, children under 15 years account for 19.2 percent of the population, while persons 65 years and older constitute 12.8 percent. Based on the age structure of the populations, the dependency ratio ranged from a low of 39.6 in St. Lucia to a high of 50.7 in Grenada.³⁹ The current dependency ratio means that there are between 4-5 persons in the dependent age groups (0-14 and 65+) for every 10 persons in the working-age group (15-64 years).

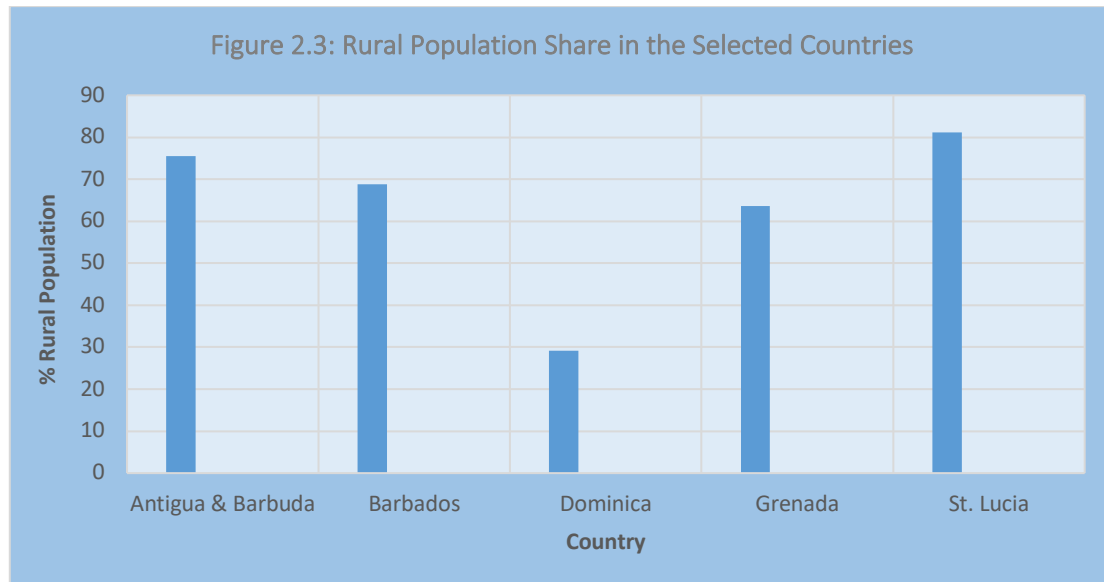
³⁹ Data on Dominica is not available

Table 2.2: Summary of Key Gender Demographic Indicators by Country

Countries	Total Population	Age Structure of Population					Dependency Ratio	Maternal Mortality Rate (2017)	Life Expectancy at Birth	Urban/ Rural (2019)	% Male or Female-Headed Households	Literacy Rate
		0-14 years	15-24 Years	25-54 Years	55-64 Years	65 Years & Over						
Antigua & Barbuda	97,905	(21.85%) 21,397 M-10,843 F-10,554	(14.95%) 14,632 M-7,390 F-7,242	(42.97%) 42,068 M-19,862 F-22,206	(10.92%) 10,691 M-4,953 F-5,738	(9.31%) 9,117 M-3,736 F-5,012	Total-45.1 Youth-31.8 Elderly-13.1	5.0 deaths/ 1,000 live births	Total-77.0 Years M-75.9 Years F-78.1 Years	Urban-24.5% Rural-75.5%	M-55.98% F-44.02%	Total-99% Male- 98.4% F-99.4%
Barbados	288,371	(16.70%) 48,165 M-24,484 F-23,681	(13.09%) 37,734 M-19,286 F-18,448	(39.75%) 114,635 M-56,058 F-58,577	(13.47%) 38,841 M-17,993 F-20,848	(16.99%) 48,996 M-22,263 F-26,733	Total-49.9 Youth-25.6 Elderly-24.3	11.3 deaths/ 1,000 live births	Total-79.2 Years M-77.8 Years F-80.5 Years	Urban-31.2% Rural-68.8%	M-52.5% F-47.5%	Total- 99.6% M-99.6% F-99.6%
Dominica	74,243	(21.41%) 15,895 M-8,135 F-7,760	(13.15%) 9,763 M-5,017 F-4,746	(42.79%) 31,770 M-16,133 F-15,637	(10.53%) 7,820 M-4,089 F-3,731	(12.12%) 8,995 M-4,128 F-4,867	Total	32.9 deaths/ 1,000 live births	Total-78.2 Years	Urban-70.8% Rural-29.2%	M-60.8% F-39.2% (2011) – GOCP Data from 2014 Report	
Grenada	112,879	(23.70%) 26,754 M-13,710 F-13,044	(14.37%) 16,213 M-8,242 F-7,971	(41.27%) 46,588 M-23,714 F-22,874	(10.58%) 11,946 M-5,981 F-5,965	(10.08%) 11,378 M-5,379 F-5,999	Total-50.1 Youth-35.6 Elderly-14.5	13.7 deaths/ 1,000 live births	Total-72.4 Years M-70.1 Years F-75.0 Years	Urban-36.4% Rural-63.6%		Total- 98.6% M-98.6% F-98.6%
St. Lucia	183,604	(17.95%) 32,964 M-16,694 F-16,270	(15.82%) 29,053 M-14,541 F-14,512	(45.35%) 83,267 M-40,664 F-42,603	(10.59%) 19,435 M-8,624 F-10,075	(10.29%) 18,885 M-9,894 F-11,920	Total-39.6 Youth-25.4 Elderly-14.0	14.9 deaths/ 1,000 live births	Total-76.2 Years M-74.9 Years F-77.6 Years	Urban-18.8% Rural-81.2%	M-56.4% F-41.6% (Kari CPA 2005/06)	

Source: CEPALSTAT Database; hdr.undp.org/data 2020; CIA World Fact book 2020; Government of Commonwealth of Dominica (2014)

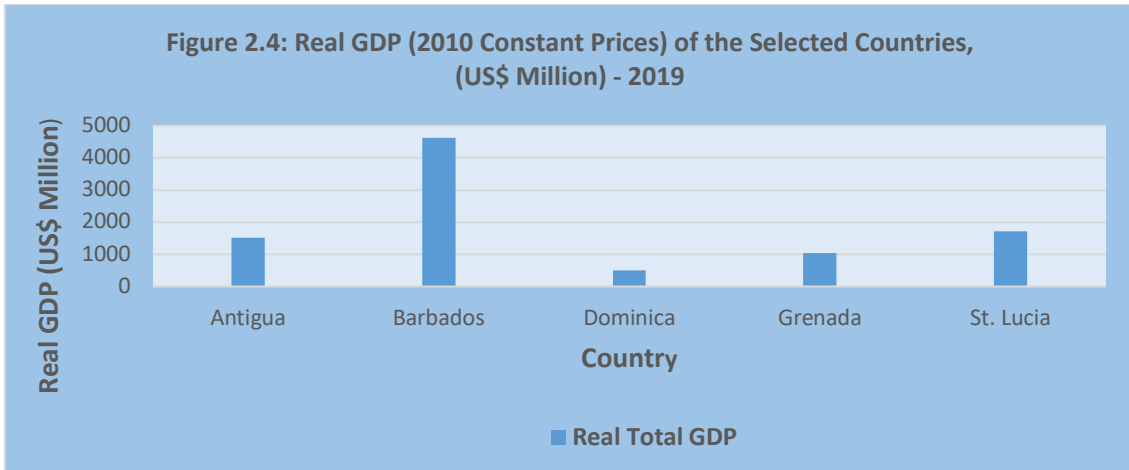
The distribution of population by country shows that, except for Dominica, more people live in rural areas (ranging from a low of 63.6% in Grenada to a high of 81.2% in St. Lucia) than in the urban and coastal areas. In Dominica, 29.2% of the population lives in rural areas, compared with 70.8% in urban areas (**Figure 2.3**).



Source: World Bank Database

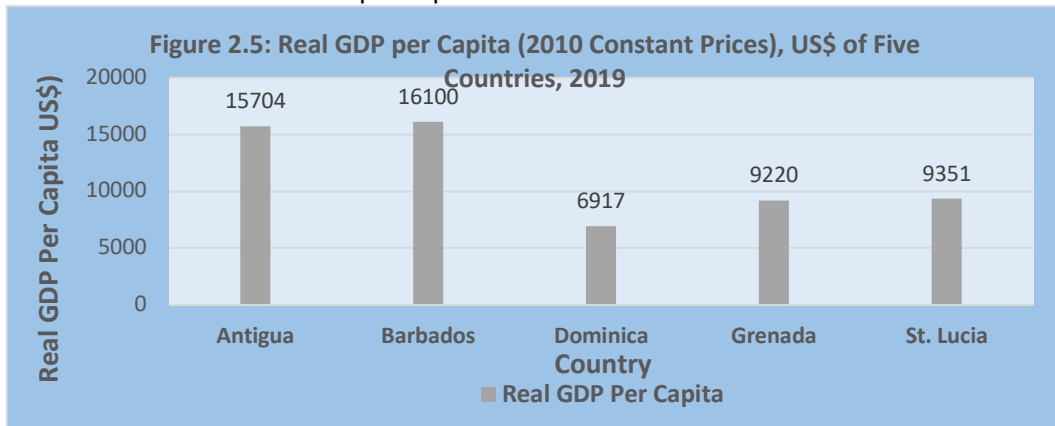
While most of the countries may be classified as “rural,” the rural populations do participate in the urban labour force. Likewise, a large proportion of the population of Barbados is classified as rural, though it is not necessarily involved in commercial agriculture.

The countries in the study share some characteristics that influence agricultural policy. They are among the middle-income countries with strong service sectors and significant foreign investment, and they have active fisheries sectors that complement small-scale agriculture in the islands. Barbados has made strides in specializing its agriculture, building on a tradition of selling sugar-based spirits rather than sugar. This has enabled the sector to capture the value-added in the processing of the raw materials and to reap the benefits of brand recognition. The total GDP for the countries in this study reflects the dominance of Barbados (over US\$4.6 billion) in the sub-region. By contrast, Dominica has a small economy relative to the other countries in the study. Antigua and Barbuda have a GDP similar to that of St. Lucia, though the per capita incomes are very different (**Figure 2.4**).



Source: World Bank Database

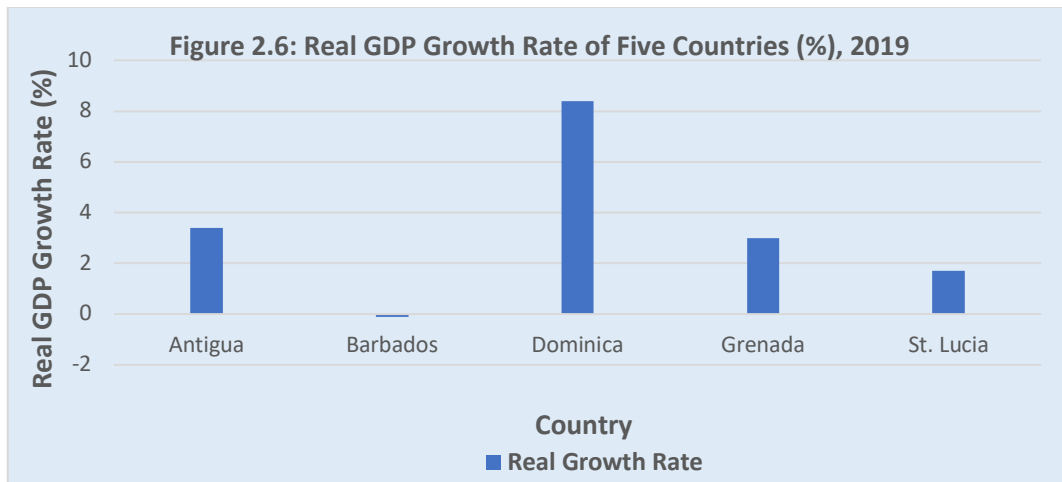
The prosperity of the five countries' economies differ widely. Dominica has the lowest per capita GDP (US\$6,917), whereas Barbados (US\$16,100 per capita) and Antigua and Barbuda (US\$15,704 per capita) are among the countries with the highest per capita incomes in the study (Figure 2.5). Grenada and St. Lucia have modest per capita GDP levels.



Source: World Bank Database

Income levels are a key determinant of economic policy and have a marked effect on the ability to support the agricultural sector. The richer countries have greater financial ability to provide robust fiscal support to the agricultural sector than poorer countries do.

Economic growth rates will also impact agricultural policies. Figure 2.6 shows the wide range of growth rates among the five countries included in the study. Dominica stands out as having a high growth rate in recent years. To a large extent, this reflects the economic recovery programme underway in the aftermath of Hurricane Maria which affected the country in 2017. Antigua and Barbuda and Grenada have reasonable GDP growth, but Barbados suffered negative growth in 2019, which has placed pressure on the government to cut public programme spending.



The proportion of men-headed households is higher than that of female-headed households; with Dominica recording the highest percent of men-headed households (60.8%), and Barbados the highest percent of women-headed households (47.5%). Literacy rates are comparable for men and women in the selected countries.

The first component of this report focussed on ‘A Gender Responsive Evaluation of the Impact of Structural Adjustment Programmes (SAPs) – Policies, Proposals and Plans – on Small Holder Farmers, Fisher-folks and Small Business Entrepreneurs in five (5) Caribbean Islands: Antigua and Barbuda, Barbados, Dominica, Grenada and St. Lucia’, and presented information on the following gender-related indices of the countries:

- Human Development Index (HDI), Components and Trends;
- Multidimensional Poverty Index (MPI);
- Gender Inequality Index (GII);
- Women’s Empowerment Index (WEI); and
- Inequality-adjusted Human Development Index (IHDI).

2.4.2 Agriculture and Gender

The agriculture sector in the Caribbean is male-dominated. In Antigua and Barbuda, males represent 73 percent of workers in the Agriculture, Hunting and Forestry sector. In Dominica, males comprise 85 percent of those employed in the sector. It is important to note, however, that labour force statistics are focused on formal waged labour, and thus women’s largely unpaid work in subsistence agriculture is neither quantified nor validated in these accounts.

Men’s and women’s unequal participation in agriculture is linked to gender-based inequalities in their access to land, credit and other means of production. These are hurdles that make women and their families more vulnerable to poverty. In Barbados, ownership of registered farms is predominantly male (80%), with most of the larger farms being owned by males.

3. National and Sectoral Policies of the Selected Countries

3.1 Challenges of Agriculture, Fisheries and Small Agro-businesses in the Countries

The agricultural, fisheries and small agro-processing sectors are of strategic importance in the countries included in this study. However, the sectors are under pressure to provide jobs, income, export earnings and quality food to local consumers. On the other hand, they are constrained by the need to sustain the environment and to compete with other sectors for resources.

The agriculture, fisheries and small agro-processing sectors in the selected countries face several challenges that require policy intervention. These challenges include the prevalence of relatively small and fragmented farms and small highly undercapitalized agri-businesses; rapidly changing marketing channels associated with the globalization of the food industry; high transport costs that inhibit inter-island trade; significant risks from adverse weather events; the macroeconomic impacts of tourism, oil and other dominant sectors in the economy; and the relatively small size of most of their economies, meaning domestic markets for local producers are small.

3.2 Gender and National and Sectoral Policies

For the Food and Agriculture Organization (FAO) of the United Nations' "Gender equality is central to its mandate to achieve food security for all by raising levels of nutrition, improving agricultural productivity and natural resource management, and improving the lives of rural populations. FAO can achieve its goals only if it simultaneously works towards gender equality and supports women's diverse roles in agriculture and rural development. Gender equality is not only an essential means by which FAO can achieve its mandate, it is also a basic human right". However, women's low status in agriculture and rural areas, coupled with gender stereotypes and a poor perception of gender inequalities, continues to persist in the countries selected for this study. This is largely due to practices that see men identified as 'heads of households and women as 'contributing family members, reinforcing the uneven and hierarchical status of women and men in society. Thus, women have limited access to power, decision-making, resources and fulfilment of their rights. They may also suffer from diminished self-esteem and confidence, which are critical personal assets that can discourage or encourage them to act. These are important gender disparities with regard to poverty in the countries. The Caribbean Development Bank (CDB) Gender Synthesis Report shows that female-headed households are more likely to be poorer than male-headed households. In the case of Barbados, for example, poverty is concentrated among households headed by women, which account for 47.5% of all households. The poverty rate in female-headed households is 19.4%, compared with 11.5% in male-headed households. Poor female-headed households also have the highest dependency ratio, with 74.8% of non-earners per household, as compared with 68.6% in poor male-headed households and 49.9% in the total population. However, in St. Lucia, the prevalence of poverty among female-headed households (21.2%) is almost the same as among male-headed households (22 %).⁴⁰

Education and training are key enabling factors for employment in the public/private/civil society sectors and for generating entrepreneurship. Gender segregation in boys' and girls' subject 'choices' in secondary, technical/vocational, and tertiary education plays itself out in the labour market. Despite their much-touted higher educational performance, women are under-represented in

⁴⁰ Loraine Blank (2009). Saint Lucia Social Safety Net Assessment prepared for the GoSL. Executive Summary.

targeted growth areas, better-paid jobs, large-scale enterprises, and leadership and decision-making.⁴¹

Sex-stereotyping and occupational segregation characterise the labour markets of the selected countries, with women occupying the lower-paying sectors of their economies. Women are more likely to be unemployed and defined as “economically inactive”. As indicated in the CDB Gender Synthesis Report 2016, women’s unpaid reproductive work in the home (or ‘care economy’), and their work in the informal economy and subsistence agriculture are not quantified or taken into account in economic and social policymaking. Women’s unpaid care work undermines their economic opportunities and life chances, is a direct root cause of the ‘female face’ of poverty.

Men predominate in the labour force except in Antigua & Barbuda, where the total labour force is 39,943, with females comprising 21,341 and males 18,602 (Kairi, 2005-2006). However, according to the Government of Antigua & Barbuda’s 2001 Census, women’s earnings are on average lower than men’s within occupational classes where both women and men were employed (FOCAL, 2006). Further, the unemployment rate is higher for women than men, and women tend to remain unemployed for longer periods than men. “Economically inactive” women are often excluded from strategies that seek to promote economic growth and development.

In a broader context, the Caribbean Development Bank (CDB) Gender Synthesis Report⁴² makes the point that in the wake of the 2008 global economic downturn, accompanied by poor economic growth in the individual countries, the economic strategies being put in place under regimes of fiscal restructuring need to include a gender analysis of the differential impacts on men and women. The Report cites, for example, that wage freezes in the public sector, VAT increases on basic food items, and cuts to health and education programmes and social safety nets, tend to have a greater negative impact on women heads of households and their dependents, the poor and unemployed. Further, the Report recommends that while undertaking fiscal restructuring to promote economic growth and sustainable development, gender equality objectives and anticipated outcomes should be integrated into the countries’ national budgets and development plans (gender-responsive budgeting and planning). This will serve to properly consider and situate men and women in the economy; ensure that men’s and women’s differential economic needs are taken into account (e.g., women’s responsibility for the care economy); put resources into stimulating their contribution to the growth of the economy, for example concerning women’s, men’s and youths’ equitable access to entrepreneurship initiatives, agri-business and eco-tourism programmes, etc.; and ensure that gender equality is mainstreamed across all sectors of the countries. The capacity for such gender analyses and gender-responsive budgeting strategies is often lacking across the countries, which would benefit from technical assistance from the CDB and other regional and international agencies.

The objectives and instruments of national and related agricultural policies, as well as aspects of food and nutrition policies, differ among the countries selected. However, the national policy instruments commonly used include tariffs on imported foodstuffs, administered prices set through marketing agencies, subsidies on inputs, and capital grants. Services provided to the sectors include agricultural research, extension, marketing assistance, and rural infrastructure improvements. There is a general recognition that national and related agriculture, fisheries and small businesses sectoral policies formulation and implementation can influence gender discrimination by:

⁴¹ Caribbean Development Bank Country Gender Assessments (CGAs) Synthesis Report, January 2016

⁴² Ibid

- Taking account of and helping mitigate the effects of social and cultural norms which disadvantage men or women specifically, or
- Reinforcing, consciously or unconsciously, existing discrimination against men or women.

Much scope exists for public policies to provide incentives that equalise access to productive resources for men and women. The fostering of a legal and regulatory framework that ‘levels the playing field’ for decision making by men and women is also predicated in such policies. The levelling of the playing field in this context means the removal or mitigation of discriminatory elements embodied in laws, institutions, market structures and technology, which are often applied differently by gender and for socially vulnerable groups (World Bank, 2000). However, the reduction of gender bias will require fundamental reforms not only in institutions and legislation but also in ways of designing and carrying out policies, programmes, and projects, and in their monitoring and evaluation. Systematic mainstreaming of gender in policy instruments involves the recognition of two key points:

- A given policy can have different impacts on men and women; and
- Gender relations and gender-biased institutions and norms influence policy outcomes.⁴³

Given that gender issues pervade all levels of the economy, policymakers need to adopt a gender-sensitive approach and analyse how gender influences the agriculture, fisheries, and small business sectors and the overall economy at the various levels. Effective, efficient, and sustainable agriculture, fisheries and small agro-businesses policies should be developed based on knowledge of the various sectors and their significance to the economy as a whole (macro), the markets, infrastructure, organisations and institutions of the sectors (meso), and the nature of agricultural households (micro).

3.3 Analytical Framework for Evaluation of National and Sectoral Policies

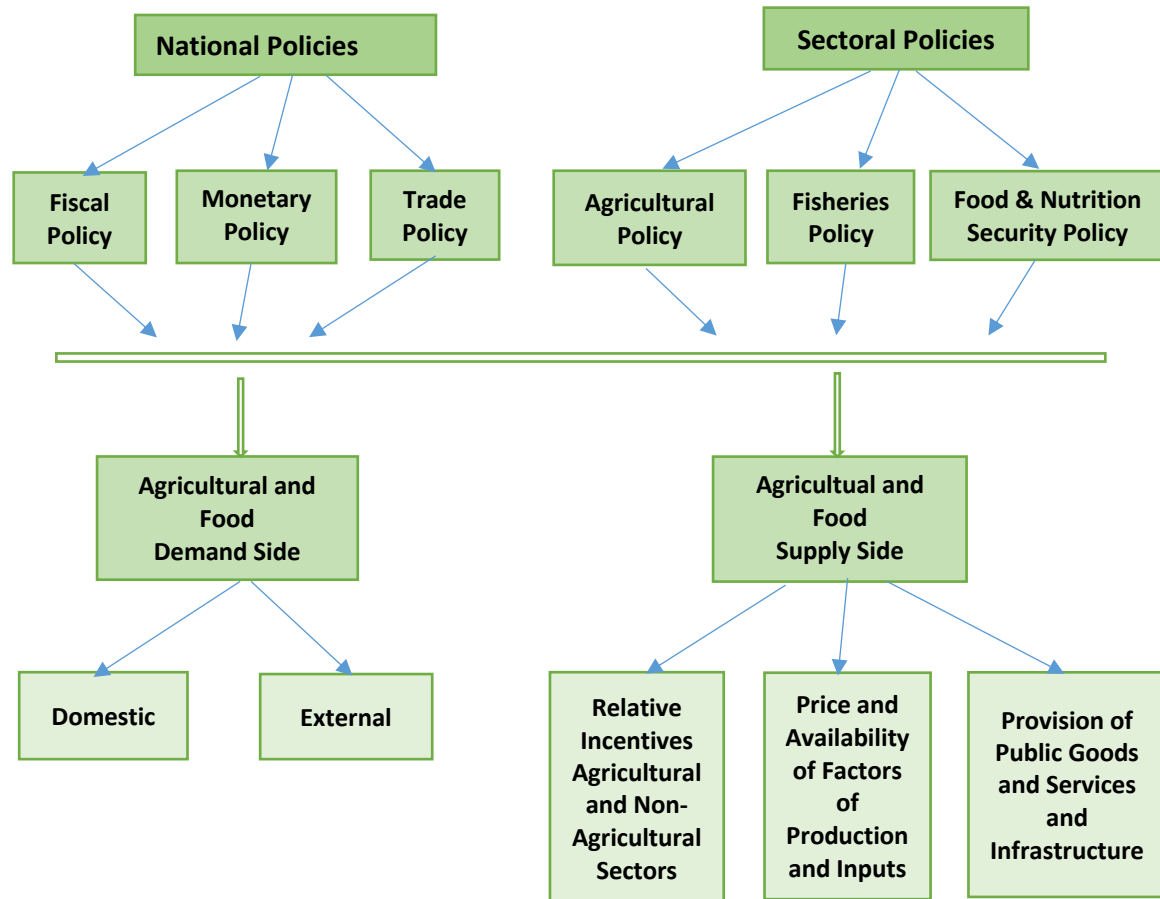
In this study, a macro-meso-micro analysis framework was utilized to conduct a gender-responsive evaluation of national policies on smallholder farmers, fisher-folks, and small business entrepreneurs in the five countries. Within the context of a gender lens, the study evaluated:

- The structure of agriculture, fisheries and small agro-businesses and their insertion within the national economy of the countries;
- The pattern of decision making and the way the economies respond to various national and sectoral policy instruments;
- The distortions and biases which hamper effective agriculture, fisheries, and small agro-business development, especially in the rural areas; and
- The opportunities and constraints for engendering national and sectoral policies.

A simplified analytical framework is presented in **Figure 3.1** below.

⁴³ FAO. 2006. Gender in Agricultural Development Policies.

Figure 3.1: Simplified Analytical Framework for Evaluation of National and Sectoral Policies



In the analytical framework, the macro level of the economy is referred to as the economy. Within this framework, macro policies (for instance interest rate, tariff, and tax policies) concern key indicators such as gross domestic product (GDP), imports, exports and the balance of payments accounts, and the government budget. It is important to note that official statistics often underestimate women’s contribution to national income. This is partly because women are concentrated in the informal and subsistence sectors, which tend to be undercounted. It is also due to the categorisation of “work” which often fails to capture what women do.

The Meso is referred to as the sectoral level and associated organizations and institutions which mediate between the macro and micro levels. These comprise markets and infrastructure, both economic (roads, communications, irrigation) and social (health and education). Included are the rules and norms, formal and informal, which govern individual and collective behaviour. There exist important linkages between markets and infrastructure and service: gender asymmetries and biases at this level are factors that could reduce the quality of agricultural institutions and organisations.

The Micro level of the economy consists of households, firms and individuals that make up these organisations, who may be producers (smallholder farmers, fisher-folks, and small business

entrepreneurs) or consumers. Resource endowments, men’s and women’s control over resource use, decision-making processes, and intra as well as inter-household relationships all have a profound influence on the household economy. Households are not a homogenous unit, therefore, there was the need to refine and disaggregate the micro level to permit a better understanding of relationships between men, women, and children members of households.

3.4 National and Sectoral Policies

3.4.1 Overview of National Macroeconomic Policies

An adequate analysis of specific national macroeconomic policies and their impacts needs to consider a variety of channels and interactions, structural aspects of the domestic economy and society (including the heterogeneity of economic agents), and the world economic environment. Many analytical and policy mistakes come from analysing a country’s macroeconomic policies in isolation, without considering the broader context.

In this study due consideration is given not only to the impact of national macroeconomic conditions and policies on agriculture, fisheries, and small business sectors but also the influence of events within the sectors on the general economy. The reverse causality must be considered in the countries, where contributions of the three sectors GDP, employment, trade and fiscal receipts linked to exports are declining, but remain important components of the economic and social landscape of the countries. In these situations, the performance of the agriculture, fisheries and small business sectors will to a large extent influence growth, inflation, balance of payment conditions and fiscal balances.⁴⁴ Furthermore, macroeconomic, and sectoral policymaking in the countries requires a deep awareness of the state of the global economy. This is particularly the case of the selected countries, where they are well integrated into world markets as shown in **Table 3.1**, which calculates the importance of export and imports as a percentage of GDP (measured both in constant 2010 USD).

Table 3.1: Exports and Imports as Percentage of GDP

Country	Exports as % of GDP	Imports as % of GDP
Antigua & Barbuda	71.7	69.5
Barbados	42.0	41.7
Dominica	37.7	71.0
Grenada	52.2	58.0
St. Lucia	N/A	N/A

Source: World Bank Database

The conditions of the global economy, considering both trends and cycles, affect a country’s performance in general and that of its agriculture, fisheries, and small agro-business sectors. At the cycle level, it is important to note whether the global economy is growing, what are the world interest rates and world agricultural prices, the evolution of the exchange rates of major global currencies and the level, composition, and direction of international capital flows.⁴⁵

⁴⁴ For an early analysis of the International Monetary Fund (IMF) – supported programmes in the agricultural sector, see Johnson, 1987).

⁴⁵ For instance, Reza and Parellada (2001) demonstrate that the important boom in dairy products (mainly nontradables) in Argentina during the early nineties was fueled by strong domestic growth linked to capital inflows. On the other hand, at the same time crop production (a tradable good) stagnated due to the

In terms of trends, it is crucial to monitor the integration of the world economy through the expansion of trade, finance, labour, and information flows. The impact of external shocks also interacts with domestic contextual factors, such as the urban-rural configuration and the structure of landholdings in rural areas (see Díaz–Bonilla, 2015).

3.4.2 National and Sectoral Policy Instruments of the Countries

In terms of the national macroeconomic policy instruments, this study looked at three main policy groups:

- Fiscal
- Monetary (and financial/banking issues)
- Trade

The macroeconomic policy instruments were to some extent evaluated under Deliverable 2 of this assignment⁴⁶, and only the relevant issues will be highlighted in this report. The sectoral policies considered in conducting the assignment for each country are presented in **Table 3.2**.

Table 3.2: National Sectoral Policy Instruments Evaluated by Country

POLICY INSTRUMENT EVALUATED	Treatment	COUNTRY				
		Antigua & Barbuda	Barbados	Dominica	Grenada	St. Lucia
CARICOM Common Agricultural Policy (CAP)	Reviewed	X	X	X	X	X
OECS Agricultural Policy	Reviewed	X		X	X	X
Food and Nutrition Security and Action Plan	Evaluated	X	X	X	X	X
Barbados National Agricultural Policy 2012	Evaluated		X			
Grenada National Agricultural Plan (GNAP): 2015 - 2030	Evaluated				X	
St. Lucia National Agricultural Policy 2009 – 2015	Evaluated					X
St. Lucia’s Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-28	Evaluated					X
CARICOM Common Fisheries Policy	Reviewed	X	X	X	X	X

Source: Ministries of Agriculture Database

appreciation of the Argentine peso generated by the capital flows (and lower world prices during that period) (see Díaz–Bonilla, 2015).

⁴⁶ The Assignment is entitled: ‘A Gender Responsive Evaluation of the Impact of Structural Adjustment Programmes (SAPs) – Policies, Proposals and Plans on Small Holder Farmers, Fisher-folks and Small Business Entrepreneurs in five Caribbean Islands: Antigua and Barbuda, Barbados, Dominica, Grenada and St. Lucia.’

In addition, and where applicable, some sub-sectoral policy instruments were also reviewed. The gender-responsive evaluation of the national and sectoral policies on the vulnerable groups was conducted by utilizing the following steps:

- Identification of commitments, targets, and objectives of the policy for sector development;
- Identification of actions, programmes and initiatives undertaken to achieve policy goals and objectives;
- Conduct gender-sensitive assessments of the policy instruments;
- Evaluate the sector performance under the policy/ies, where data permits, within the context of gender lens with a focus on the small farmers, fisher-folks, and small business; and
- Identify and discuss the main factors influencing the performance of the sector.

3.5 National Food and Nutrition Security Policies and Action Plans (NFNSPAP)

3.5.1 Overview

All the countries included in the study have developed and are in the process of implementing their National Food and Nutrition Security Policies and Action Plans (NFNSPAP). For Antigua and Barbuda and Dominica, the NFNSPAPs are the main policy instruments that are providing strategic guidance to the development of the sector.

3.5.2 Vision of the NFNSPAP

The NFNSPAP envisions a rapid transformation of the rural and agricultural sector and its renewal as a vibrant and productive economic sector with an enhanced role and contribution to the national economy. The sector is envisaged to evolve as an important driving force in expanding livelihood options for rural people, enhancing employment and income opportunities, and improving food security and the nutritional status of the entire population. These goals are in keeping with those of the Vision of the National Development Plans and Programmes, including the Poverty Reduction Strategy.

The development goal of the NFNSPAP is **“to achieve sustainable food and nutrition security, to ensure the full protection and realization of the right to food for all residents of each country and to eliminate all forms of malnutrition in order to have a well-nourished and healthy population that can fulfil its aspirations to good health and economic well-being and effectively contribute to national economic development.** The specific objectives are to:

- Ensure that a sufficient quantity of nutritious food of appropriate quality is available to all people in the country, through increased domestic production and a **sustainable** level of imports, with special emphasis on a structured food import replacement programme (**Food Availability**).
- Ensure that all individuals in the country have access to adequate resources to acquire appropriate foods for a nutritious diet (**Food Access**).
- Ensure that all individuals in the country reach a state of nutritional well-being through food choices and consumption that reflect Recommended Dietary Allowances (RDAs) (**Food Utilization**).
- Ensure that the entire population have access to adequate, safe and nutritious food at all times, are not at risk of losing access to it due to shocks, and consume/utilize foods that reflect physiological needs (**Stability of Food Supply**).

3.5.3 The Nutritional Targets

The national nutrition, food safety and food security goals to be met by the end of the plan period are as follows:

- National population nutritional goals in line with CFNI/PAHO/FAO/WHO recommendations:
 - <10% of daily energy intake from saturated fatty acids;
 - <1% of daily energy intake from trans fatty acids;
 - <10% of daily energy intake from free sugars;
 - ≥ 400g fruits and vegetables a day;
 - <5g a day of salt.
- Increase per capita consumption of food to meet the need for balanced nutrition with adequate energy of 2,000 kcal/day and protein of 52 grams/day and sufficient micronutrients.
- At least 50% of infants should be exclusively breastfed for the first six months of life and continuously breastfed until at least 12 months.
- Food safety goals and targets should be risk-based and established regarding the current incidence of food-borne diseases and the prevalence of microbiological and chemical contamination in the food chain, based on adequate surveillance systems.
- In line with the then MDG 1, reduction by 50% of the proportion of people who suffer from hunger. The availability and affordability of healthy foods, such as fruit and vegetables, should be improved and the supply of energy-dense and nutrient-poor foods should be reduced if needed. The achievement of food security goals should be linked to the attainment of dietary goals in different socio-economic groups.
- Prevent the increasing prevalence of obesity and NCDs due to overnutrition.
- Increase knowledge and capacity of the family to apply the healthy living approach and awareness behaviour in food and nutrition, which is indicated by increased access to nutrition services and family food consumption.

3.5.4 Strategic Framework of the NFNSPAP

The NFNSPAP comprises six Programme Components (PC), four of which correspond to the four core policy objectives of the NFNSPAP; the remaining two cover cross-cutting issues and organizational matters. They are distinct but interrelated to facilitate cooperation in addressing food insecurity and malnutrition among all stakeholders. The PCs are supported by corresponding Strategic Objectives. The strategic framework of NFNSPAP, including the PCs, goals and strategic objectives are presented in detail in **ANNEX 3 (3A): Programme Components of the NFNSPAP**, and summarized in **Table 3.3** below.

Table 3.3: Strategic Framework for NFNSPAP in the Countries

PROGRAMME COMPONENT	PROGRAMME GOAL	OBJECTIVE
1. Food Availability	To promote the sustainable production of safe, affordable, nutritious, good quality food commodities/products.	1.1 Increase production and supply of safe and nutritious local foods to traditional and on-traditional domestic market segments.
		1.2 Improve the efficiency and coverage of the domestic food distribution system.
		1.3 Improve the cost efficiency of primary and value added production.
		1.4 Enhance the enabling environment for development of the agro-food sector.
2. Food Access	To ensure access of households and individuals to sufficient, nutritious	2.1 Ensure access to adequate and nutritious food for the entire population, particularly in times of crisis.

	affordable food at all times.	<p>2.2 Increase access of vulnerable population to livelihood assets and basic public goods and services.</p> <p>2.3 Create and enhance information systems to identify, measure and monitor poor persons and groups vulnerable to food insecurity.</p> <p>2.4 Enhance the social welfare of poor and vulnerable groups.</p>
3. Food Utilization/ Nutritional Adequacy	To promote nutritionally adequate, safe, affordable dietary intakes and other positive lifestyle behaviours throughout the life course.	<p>3.1 Increase public awareness and advocacy on issues related to food and nutrition.</p> <p>3.2 Improve the health and nutritional behaviour of the population.</p> <p>3.3 Improve the health and nutritional status of the population, with emphasis on vulnerable groups.</p> <p>3.4 Improve the institutional capacity for responding to nutritional challenges.</p>
		3.5 Improve systems for continuing nutrition research, surveillance, monitoring and evaluation.
4. Stability of Food Supply	To improve the food and nutrition security resilience of the national community to natural and socio-economic shocks and climate change.	<p>4.1 Ensure an adequate/consistent supply of food for the population while improving environmental sustainability/stewardship.</p> <p>4.2 Reduce the impact of climate change and climatic variability on food production and livelihoods.</p> <p>4.3 Improve the capacity of institutions to build the resilience of the agro-food sector and livelihoods to climate change and variability.</p>
5. Crosscutting Issues	To develop appropriate solutions to emerging threats to the food and nutrition security system, to include Climate Change Adaptation and Mitigation Strategies, Bio-fuels and Climate Smart Agriculture Technology.	5.1 Identify and address emerging food and nutrition security issues, particularly as these threaten the food security and nutrition status of the most vulnerable and marginalised households and population groups.
6. Institution Building	To strengthen the coordination and implementation mechanisms for Food and Nutrition Security.	6.1 Build institutional and organizational capacities for Good Governance of National Food and Nutrition Security Actions.

3.6 Barbados National Agricultural Policy 2012

3.6.1 Overview of the Barbados National Agricultural Policy Design Process

In early 2012, the Minister of Agriculture called for an overhaul of the Agricultural Sector of Barbados to meet the challenges of the 21st Century. The Ministry facilitated a National Consultation and Town Hall meetings were held in Bridgetown, St. Philip, St. George and St. Peter to obtain the opinions and ideas of the society at large and farmers in particular in the development of the proposal. This policy which includes input from these meetings presents a new vision for the agricultural sector of Barbados.

The policy sets out a new vision to change the agricultural sector from one based primarily on the production of sugar for export to generate foreign exchange to a Food and Agricultural Sector oriented to the production of food to improve food security, nutrition and health of the Barbados population. The policy presents the view that an agricultural sector that is technology-driven, competitive and market-oriented can significantly add value to six aspects of national development:⁴⁷

⁴⁷ Barbados National Agricultural Policy 2012

- Contribute to foreign exchange savings by reducing the current food import bill which according to recent figures was estimated at \$653 million in 2011;
- Provide safe, fresh nutritious food which will help to reduce the incidence of chronic non-communicable diseases such as diabetes, stroke, high blood pressure, heart attacks and obesity;
- Promote agribusiness enterprises which can assist in the production of jobs and the reduction of the high unemployment level in the country;
- Reduce food prices by producing foods closer to the market thus reducing transport cost, energy consumption and imported inflation caused by high food prices in the international market;
- Support the local economy by indicating that money spent on food production in Barbados generated wealth in the local economy whilst money spent on imported food generates wealth in distant lands; and
- Preserve the beauty and aesthetic appeal of the country, as preservation of the beauty and aesthetic appeal of our country, is important for the health of the nation and for maintaining our tourist industry. The sector also contributes to maintaining the biodiversity of our country, reduce the erosion of soils, restore the fertility of our soils thus reducing the need for expensive fertilizers and ensuring the preservation of our environment and our heritage.

The policy presents a National Food Plan to improve the food security of the nation and to provide healthy nutritious food for Barbados. The policy is presented within the view that a modern Ministry of Food and Nutrition Security that is focused on feeding the nation and which coordinates food imports, food production, food safety, food quality and food security is a necessity of our time. There is the recognition that the establishment of a market information system, farmer training, strengthening farmer organizations, investment in new technology and innovation, the establishment of a wholesale market for farmers and promoting the production and consumption of more local foods can contribute to the modernization and growth of the sector. There is also the recognition that the Ministry must continue to partner with regional and international donor and technical cooperation agencies in support of the implementation of this strategic plan. It is felt that the implementation of the policy will reverse the decline in the current agricultural systems, preserve the environment as we seek to establish a green economy, improve farmer's incomes, facilitate synergistic linkages with tourism, health and manufacturing sectors, generate jobs and preserve and improve the social stability of the Barbadian society.

3.6.2 Vision of the Barbados National Agricultural Policy⁴⁸

The proposals contained in the policy document are premised on a vision that recognizes the following:

- That agriculture is more, much more than primary production;
- That an improved level of food security is fundamental to the growth and diversification of the Barbadian economy;
- That the linkages of the sector to health, nutrition, tourism and manufacturing, if emphasized and developed can rebound to the benefit of the society and the people;
- That modernization of the sector is a prerequisite to poverty alleviation and the reduction in the cost of food and the high food import bill;
- The production of food locally will contribute to employment creation and the creation of business enterprises; and

⁴⁸ Barbados National Agricultural Policy 2012

- That the preservation of the agriculture sector is in the long term strategic interest of the country given the world food situation.

3.6.3 Elements of the Barbados National Agricultural Policy⁴⁹

The policy proposes the provision of farmers with the land, technology, market information, infrastructure and incentives and the various other inputs necessary for increased production of identified priority commodities. The policy calls for important changes to be made to existing arrangements, to include:

- Introduction of New Technologies including mechanization and food processing into the sector.
- Establishment of New Marketing arrangements that respond to the Supermarket Revolution.
- Improvements in the technical and managerial capacity of our farmers.
- Promotion of a new consumer thinking which values fresh, locally produced food.
- Promotion of new investment in food processing, food storage, greenhouse technology, and food packaging facilities.
- Establishment of a permanent mechanism for cooperation between the Private Sector, Farmers, the University, the Trade union movement and the new Ministry of Food and Nutrition Security.
- Establishment of a national market information system that monitors supply, demand and prices of agricultural produce for farmers, wholesalers and retailers.
- Implementation of Agricultural Health and Food Safety legislation and regulations.
- Establishment of a Ministry of Food and Nutrition Security that is focused on food production, food imports, food safety, food security and providing safe nutritious food for the nation.
- Increased investment capital from both the public and private sectors for the Food and Agriculture Sector.
- Establishment of an Agro-tourism Council to facilitate better linkages between the Agriculture and tourism sectors.
- Establishment of a Food and Nutrition Council to promote coordination of Food and Nutrition Policies.
- Establishment of an Agribusiness Unit in the Ministry of Food and Agriculture to facilitate the access by farmers to Government Incentive Programmes and to prepare project proposals for funding.
- Engagement of the commercial banking sector and the credit union movement to make financial resources available to farmers and other sector workers by reducing the cost of credit.
- Modernization of the fisheries subsector, increasing the national fishing fleet, markets and access to Caribbean fishing waters.
- Engagement of the regional and international agencies to which Barbados is a member to support this Food and Nutrition Plan.
- Review trade policies that negatively impact production by allowing cheap imported products to undermine local production initiatives.
- Promotion of value-added linkages, agroindustry and agro-processing to add value to local production and to enhance the supply chain.
- Promotion of a favourable, enabling environment for farmers by promoting reasonable access to credit, efficient access to incentives, reasonable and reliable access to fertilizers, water, market information, access to technology, a fair price for his/her products and the

⁴⁹ Ibid

assurance that he/she can make a comfortable standard of living from the pursuit of an investment in the food and agriculture sector.

- Development of a Farmers Training Centre and a Model Farm in cooperation with the University of the West Indies at Cave Hill.
- Increase the allocation to the Food and Agriculture sector gradually to 10% of the national budget.

3.6.4 Goals Established Under the Barbados National Agricultural Policy⁵⁰

Policy

- A National Food and Nutrition plan be implemented.
- A policy on food imports to be developed.
- A national award for food security be established.
- A national backyard garden competition to be promoted.
- Food safety policy developed as a priority.
- Land use policy implemented to preserve land for agriculture and food security.
- A land bank promoted to provide lands for youth and persons interested in Agriculture but who have no land.
- Farmers' organizations strengthened.

Infrastructure

- Model farm and Farmers Training centre developed which demonstrates the new technologies developed.
- A Marketing Facility with a wholesale market for farmers established.

Information and Communication

- A modern market information system developed and implemented.
- A traceability system implemented.
- A public information program to educate the public on health and the nutritional value of local foods developed.
- New information technology incorporated into development plans in support of the Market Information System and to modernize the agricultural extension service to provide farmers with technical advice and market information.

Capacity Building

- A training programme for farmers developed in the new centre for food security and entrepreneurship.
- Training at all levels of the sector provided.

Institutional Reform

- A proposed Ministry of Food and Nutrition Security established.
- A Ministry with a business approach to Food and Agriculture promoted.

⁵⁰ Barbados National Agricultural Policy 2012

- A Food and Nutrition Council and an Agro-tourism Council established to promote linkages between agriculture and tourism.
- An investment seminar for attracting new investment with the Agricultural Sector held
- An Agribusiness unit established within the Ministry to facilitate delivery of Government financial assistance to the sector, including management of the incentives programme.
- Barbados Agricultural Trading Trust evaluated for effectiveness and efficiency.
- One extension/ information officer allocated to each parish to collect relevant production information and to link with a Market Information System that monitors supply and demand for agricultural products.
- Review current agriculture incentive scheme to provide new incentives for the promotion of food and nutrition security and exports.

3.7 Grenada National Agricultural Plan (GNAP): 2015 – 2030

3.7.1 Overview of the Grenada National Agricultural Plan Design Process

The Grenada National Agricultural Plan was developed in 2015, with support provided by the CARICOM Secretariat under the 10th EDF Agricultural Policy Programme. A key requirement under the terms of reference for the development of the NAP was alignment with national and regional agricultural policies and national, regional and international development priorities.

The methodology applied in the development of the GNAP, involved a desk review of existing national and regional agricultural and related policy and strategy documents, review of the literature on the sector, analysis of the latest available economic, trade, and other sector-related statistics, review of international development priorities, and consultations with industry experts and stakeholder, culminating with a national stakeholder’s consultation which was held on July 16, 2015.

The GNAP was informed by a rigorous situational analysis of the sector and its performance focusing on economic, social and environmental issues; structural and institutional considerations; and the policy framework, and development priorities. Among the highlights from the analysis at the time were the following:⁵¹

- Although the national economy was showing signs of recovery it was still reeling from the protracted recession following the 2008 financial crisis.
- Access to development financing was limited by weak current account surplus, inability to access loans at commercial rates under the three-year homegrown structural adjustment program which was implemented in 2014, and difficulty in accessing grants and concessionary financing because of Grenada’s designation as an upper-middle-income country.
- During the last decade growth in the agriculture sector surpassed growth in the national economy with the contribution of the sector to real GDP increasing from 4% in 2008 to a projected 5.7% in 2015.
- Growth in exports was driven mainly by increased prices. The main exports were nutmeg and mace, fish, milling products, cocoa, and fruits.
- Food imports declined between 2010 and 2014 driven mainly by increased prices. Meat imports, however, showed a steady increase. The main imports were meats (mainly chicken), cereals and cereal preparations, and dairy products which together accounting for over 60% of food imports. Fruits and vegetables accounted for only 3% of food imports.

⁵¹ Source: Grenada National Agricultural Plan: 2015-2030

- More than 70% of the food consumed was imported.
- There was a significant decline in the number of lands under agriculture (24%) and the number of farmers (22%) between 1995 and 2012. The largest decline was in farms larger than 25 acres. Based on the 2012 GAC, 25% of the available agricultural lands were uncultivated in 2012. Average farm size also dropped slightly from 2.62 acres in 1995 to 2.54 in 2012.
- The agriculture sector accounted for 9.6% of the labour force in 2012. However, there was a decline in direct employment (73% compared to 1995) which was directly correlated with increased use of farm machinery and equipment.
- Agro-processing was carried out mainly at a cottage level but recently there has been significant private investments in cocoa and nutmeg processing.
- Thirty-eight percent (38%) of farmers reported that they do not sell produce in 2012. Most of the produce sold by farmers was for export.
- There has been a decline in the use of agricultural inputs (fertilizer, herbicides, etc.) but increased use of farm machinery and equipment.
- Most of the investments in agriculture over the past 5 years (2010-2015) were in farm and feeder roads and fisheries processing facilities. However, there was concern about the impact of feeder roads on agricultural production versus real estate development.
- The sector is highly vulnerable to climate change, and increased incidence of natural disasters and other extreme weather events. It also impacts the environment based on the system of agriculture applied.
- Implementation of approved national policies, strategies and plans needed to be strengthened.

3.7.2 Vision of the Grenada National Agricultural Plan

The vision for the Grenada National Agricultural Plan (GNAP) is ‘an agricultural sector that is globally competitive; contributes to economic growth, enhanced national food and nutrition security, poverty alleviation and social wellbeing, and conservation of the natural environment; and that is aligned to regional and international agricultural policies and strategies that are beneficial to the country’.

Its overall goal is to stimulate economic growth in the agriculture sector through the development of a well-coordinated planning and implementation framework that is interactive and effective, and involve the full participation of the stakeholders, and promotes food security, income generation and poverty alleviation.

3.7.3 Strategic focus, Strategic Objectives and Priority Actions of the Grenada National Agricultural Plan

Based on the analysis done and consultations with stakeholders the strategic priorities and objectives that were identified for the GNAP are presented in Table 3.4 below.

Table 3.4: Strategic Priorities and Objectives of GNAP

STRATEGIC FOCUS AREA/Output	STRATEGIC OBJECTIVES
1. Increased agriculture contribution to national economic growth, employment creation, poverty reduction and rural development.	1.1: Increase exports of traditional crops, fish, fruits, vegetables, root crops, minor spices, and value-added products to international and regional markets.
	1.2: Increase production and sales of targeted fruits, vegetables, root crops, herbs and minor spices for targeted domestic markets.

	1.3: Increase production of livestock for the domestic markets and bee and bee products for the domestic market and export.
	1.4: Leverage opportunities in the tourism sector to strengthen the linkage between agriculture and tourism.
2. Enhanced National Food Security.	2.1. Reduce dependence on food imports and imported staples in particular and increase availability of local fresh and fresh processed products
	2.2: Increase economic access to food by vulnerable persons and their capacity to address their food and nutrition needs.
	2.3: Improve the health status and wellbeing of the Grenadians through the consumption of nutritious and safe foods.
3. Strengthened agricultural sector's resilience to climate change and natural disasters, reduce its adverse impact on climate change and the environment, and ensure that development is socially, economically, and environmentally sustainable.	3.1: Build climate resilience to avoid, prevent, or minimize climate change impacts on agriculture (including forestry and fisheries), the environment and biodiversity; improve preparedness for climate change impacts and extreme events; enhance the country's response capacity in case of extremes; and facilitate recovery from impacts and extremes.
	3.2: Reduce the impact of land based agriculture on climate change and the environment.
	3.3: Preserve and optimize resources (Land, Sea, and Genetic).
4. Increased investments for the Development of the infrastructure; physical resources; Research and Development, institutional and human resource capacity of the sector.	4.1: Additional investments in economic infrastructure for increased contribution of the agricultural sector to economic growth, poverty alleviation and environmental sustainability.
	4.2: Additional investments in institutional and human resource capacity development in the agricultural sector to improve governance and efficiency.
	4.3: Investment in upgrading agricultural research and development capacity.
5. Fostered mutually beneficial partnerships with our regional counterparts and development partners.	5.1: Achieve greater collaboration in regional and international trade for agricultural products.
	5.2: Create framework for donor and development partner coordination in providing support for the agriculture sector.

Source: Grenada National Agricultural Plan: 2015-2030

Recommended strategies are aligned with the CARICOM Agricultural Policy, and other sector policies and the Sustainable Development Goals (SDG's). In addition, for each strategic objective, the GNAP outlines the rationale, priority actions, expected outcomes, indicators, baseline, and timeframes for implementation. Time frames for implementation are indicative. This takes into consideration the uncertainty relating to the mobilization of financial resources in the current financial situation.

3.7.4 Priority Commodities identified Under the Grenada National Agricultural Plan

The priority agricultural commodities recommended in the GNAP are summarized in **Table 3.5** below. These are aligned to the CARICOM priorities and thematic priorities.

Table 3.5: Priority Commodities identified Under the Grenada National Agricultural Plan

PRIORITY COMMODITIES	UTILIZATION			
	Food Security	Hotel Tourism	Export	Import Substitution
Tree/Fruit Crops				
▪ Cocoa			X	

▪ Nutmeg and Mace			X	
▪ Soursop	X	X	X	
▪ Mangoes	X	X	X	
▪ June Plum	X	X	X	
▪ Breadfruit	X	X	X	
▪ Bananas	X	X		
▪ Coconuts	X	X		
▪ Salad Fruits				
Root Crops				
▪ Dasheen	X	X	X	
▪ Sweet potatoes	X	X	X	
▪ Yellow yam	X	X	X	
▪ Cassava	X			X
Vegetables				
▪ Lettuce	X	X		
▪ Hot peppers	X	X	X	
▪ Carrots	X	X		X
▪ Onions	X	X		X
Herbs and Spices				
▪ Cinnamon	X	X	X	
▪ Cloves	X	X	X	
▪ Ginger	X	X	X	
▪ Turmeric	X	X	X	
Fish				
▪ Tuna	X	X	X	
▪ Lobsters		X	X	
Livestock				
▪ Chicken	X	X		X
▪ Pigs	X	X		X
▪ Goats	X	X		X
▪ Sheep	X	X		X
▪ Bees	X	X	X	X
Forestry	X	X		

Source: Grenada National Agricultural Plan: 2015-2030

3.8 St. Lucia National Agricultural Policy 2009 – 2015

3.8.1 Vision of the St. Lucia National Agricultural Policy 2009 – 2015

The vision envisages an efficient, competitive, market-driven agriculture that assures food security, differentiates products that profit from the opportunities occasioned by the process of globalization and trade liberalization. In this regard, the vision for the sector is ‘A vibrant agri-food chain or system that provides adequate supplies of safe, high quality, nutritious food and non-food products and services at stable and affordable prices, that assure financial security to producers and is socially and environmentally responsible, thereby promoting development in rural areas and conservation of resources.’

This sector vision is to be pursued within the broad framework of a globally competitive market, liberalized global trading environment and national economic and social imperatives in respect of rural prosperity, food and nutrition security, natural resource conservation and gender equity. The intention of the Government, therefore, is to have a focused and targeted approach to the long-term development of the agriculture, forestry and fisheries sectors enveloped in a comprehensive national development policy package. In effect, the sector-specific policies are to be complemented

and coordinated with other policy measures within the broader sustainable development policy framework of the country as a whole.

3.8.2 Goal of the St. Lucia National Agricultural Policy 2009 – 2015

The goal is to promote economic development, generate employment and enhance the viability of rural communities. In this context, the agricultural policy is designed to achieve seven broad objectives.

- To increase the efficiency and competitiveness of the island’s agriculture.
- To promote the generation, adaptation and adoption of improved and appropriate technology.
- To expand the agricultural production and market base.
- To rationalize the use of land in the country.
- To enhance national food security.
- To generate new opportunities for employment and income generation in rural areas.
- To protect, conserve and ensure sustainable use of the natural resource.

3.8.3 Strategic Objectives and Core Strategies of the St. Lucia National Agricultural Policy 2009 – 2015

Table 3.6: Strategic Objectives and Core Strategies of the St. Lucia National Agricultural Policy

POLICY OBJECTIVES	CORE STRATEGIES
1: To increase the efficiency and competitiveness of the island’s agriculture.	1.1: Foster a commercialized and an agri-entrepreneurial approach to farming.
	1.2: Create the environment to enable non-state actors to effectively participate in the development and decision-making process.
	1.3: Facilitate credit and agricultural finance.
	1.4: Find a solution to farm labour problem.
	1.5: Eliminate and minimize the effects of praedial larceny.
	1.6: Assist farming community to mitigate and manage risks.
	1.7: Promote gender equality.
	1.8: Encourage succession planning and youth involvement in agribusiness.
2: To promote the development, adaptation and adoption of improved /appropriate technology.	2.1: Improve competitiveness through product differentiations, which is supported by research.
	2.2: Focus on producing and supplying strategic niche crops.
	2.3: Promote the development of science and innovation programs to increase the potential for growth and profitability in St Lucia’s agriculture and agri-food sectors.
	2.4: Foster a supportive climate for scientific investment, improved technology transfer and commercialization of new products, development of sustainable production systems and product differentiation.
	2.5: Establish stronger mechanisms for accessing and sharing information among the public/private research system.
	2.6: Foster increased collaboration with national, regional and international research agencies with a view to adapt technologies that impact productivity, yields, quality and minimize risks.
	2.7: Provide stronger incentives to the private sector to encourage their support to agricultural research.
	2.8: Reform the Extension Service to enhance its effectiveness and made more accountable thereby bridging the gap between available technology and the diffusion and adoption of innovation.
3: To enhance national food security.	3.1: Foster growth in food production and improved access to food.
	3.2: Develop a specific basket of crops, fisheries and livestock production to meet food and nutrition requirements.
	3.3: Ensure that each household has physical and economic access to food i.e. each household has the ability to produce or procure the food it needs.

	3.4: Invest in post-harvest handling, storage, preservation and distribution to reduce loss at all stages.
	3.5: Strengthen the local leadership, people's participation and community involvement.
	3.6: Provide incentives to promote processing at the local level and better utilization of indigenous foods.
	3.7: Promote credit that combines small scale credit with technical advice and assistance.
	3.8: Implement strategies that promote and influence the consumption of locally grown foods products.
4: To rationalize the use of land in the country.	4.1: Institute a wide range of legal instruments, institutional arrangements and programmes aimed at rationalizing and optimizing the use of land.
	4.2: Improve upon the coordination and administration in land administration and management in the country.
	4.3: Zone or designate all agricultural lands, with the supportive legislative and enforcement mechanism put in place to protect and ensure the remaining lands fit for agriculture is not used for other purposes.
5: To protect, conserve and ensure sustainable use of natural resource.	5.1: Place strong emphasis on minimizing the risks to farm income arising from potential environmental liabilities.
	5.2: Promote programmes that enhance soil, water quality and quantity, air, biodiversity and protect wild life.
	5.3: Promote "Stewardship" incentives, conservation compliance and regulatory assistance programmes.
	5.4: Place increased emphasis on the use of beneficial fertilizers, land and water management practices.
	5.5: Support to be provided to facilitate the rehabilitation of degraded lands.
	5.6: Encourage the citizenry to take greater responsibility for their environment by creating a conservation ethic through public education, awareness and monitoring of land management practices.
	5.7: Make users of the resource who degrade and/or cause environmental damage to contribute to the remedy and restoration of the resource.
	5.8: Institute measures to effectively manage and allocate water, including its use in agriculture and non-agriculture activities, with the appropriate institutional and legislative framework established to ensure same.
	5.9: Take appropriate steps to conserve and protect the island's plant and animal species and endangered ecosystems in keeping with her international commitments.
	5.10: Conserve forest resources through zoning regulations, reforestation and community-based management systems.
	5.11: Promote the conservation of coastal and marine resources through appropriate legislation, public education of end users and beneficiaries of the resource.
	5.12: Put in place appropriate legislation and measures establishing fishing priority areas, gear restrictions, marine reserves, closed seasons and protection of breeding species.
	5.13: Discharge its obligation in accordance with the United Nations Law of the Sea Convention and the Maritime Areas Act, No. 6 of 1984 developing its fisheries in harmony with the development of shipping, marine transportation, tourism and the recreational use of the marine waters.
	5.14: Grant foreign interests limited access to national fishery resources once they have been determined to positively contribute to the long-term goals and objectives for the fisheries sector and deemed to be non-detrimental to existing and potential economic and social interest of Saint Lucians.
6: To expand the agricultural production and market base.	6.1: Adopt a trade posture that enhances and maintains market access particularly for non-traditional products, by ensuring access barriers are minimized and where possible removed.
	6.2: Take steps to protect the country's traders against unfair trading practices.
	6.3: Facilitate adjustments to new trade regulations and liberalization.
	6.4: Improve coordination among Government Ministries to implement and monitor agreements and compliance, including reforming and modernization of existing legislation, where compliance necessitates.

	6.5: Implement new measures for promoting and enhancing export readiness and competitiveness including the development of standards and certification for major crops and animal products.
	6.6: In collaboration with the private sector, take steps to reform the domestic market reducing its role in direct trading.
	6.7: Strengthen plant and animal health quarantine services and other regulatory services to ensure quality standards and food safety.
	6.8: Promote an understanding and implementation of agreed international sanitary and phytosanitary measures and other technical barriers to trade which restrict access to export market.
	6.9: Will build on existing food safety measures while undertaking new measures such as (a) product training throughout agri-food continuum and to adopt Hazard Analysis and Critical Control Point (HACCP) practices (b) enable tracing of food products back to the farm(c) improve food quality (d) educate producers about farm food safety systems and help them implement those systems (e) strengthen the capacity of plant and animal quarantine services.
7: To generate new opportunities for employment and income generation in rural areas.	7.1: Promote economic activities that create earning and employment streams, especially in rural communities and targeting the vulnerable groups in those areas.
	7.2: Invest in a number of targeted initiatives that promote the diversification of rural income base and rural enterprise, especially those interventions that link rural areas with the growth sector – hospitality industry.

Source: St. Lucia National Agricultural Policy: Policy Brief, 2009 – 2015

3.9 St. Lucia’s Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

3.9.1 Overview of the Agriculture SASAP, 2018-2028⁵²

The St. Lucia National Adaptation Planning (NAP) is a new and major government effort to facilitate the integration of climate change adaptation considerations into all relevant policies and programmes and development planning. Through the NAP process, initiatives to address critical climate change-related risks and development priorities take place in an integrated and coordinated manner, utilising existing and future synergies. St. Lucia’s NAP has been defined as a 10-year process, consisting of priority cross-sectoral and sectoral adaptation activities outlined in the NAP document and complemented with Sectoral Adaptation Strategies and Action Plans (SASAPs) which detail sectoral adaptation objectives and priority measures, propose activities and timing for the implementation of the measures and offer project concept notes for implementation. The formulation of the NAP and the parallel elaboration of the SASAPs for the water, agriculture and fisheries sectors have entailed consultations and focus group sessions with a multitude of actors.

The formulation of Saint Lucia’s Agriculture SASAP followed an inclusive, participative and interactive approach. It was possible, primarily as a result of the efforts made by the Department of Agriculture, Fisheries, Natural Resources and Cooperatives, in making all required information available and ensuring the concerns and solutions to current and future climate challenges raised by all stakeholders in the sector were heard, analysed and included for action in the final SASAP document. This SASAP also had the support of the Department of Sustainable Development (DSD), which leads the coordination of climate change adaptation efforts in Saint Lucia and used key inputs received from members of the multi-sectoral National Climate Change Committee (NCCC).

⁵² St. Lucia’s Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

In order to foster equality in adaptation benefits, St. Lucia’s NAP and associated SASAPs focus their attention on vulnerable groups, for whom no clear policy strategy has been formulated in agriculture (Graham, 2015), and although gender-disaggregated information will be collected and assessed, the NAP and SASAPs include activities focussing on women and men based on other vulnerabilities. Saint Lucia’s Agriculture SASAP has been designed to:

- Include investment priorities that contribute to the SASAP’s overarching goal of overcoming existing barriers and facilitating the adoption and scaling up of climate-resilient agriculture;
- Ensure all adaptation priorities have been defined through a transparent consultation process with the participation of national public, private and civil society stakeholders;
- Be implementable by encompassing programmes and projects that are within the implementation and monitoring capacity of the GoSL;
- Be led (implemented and monitored) by identified and committed national institutions.
- Be aligned with national policy and complementary to existing baseline or planned initiatives to minimise duplication and increase efficiency;
- Be composed of climate-smart investments that can be funded with public resources or through international funding mechanisms. Given the difficulty of consistently monitoring investments by the private sector, Non-Governmental Organisations (NGOs) and Civil Society Organisations (CSOs), such investments are not specifically included in the SASAP. Nevertheless, the SASAP promotes projects and programmes that catalyse private-sector investments and increase non-state party participation in general.

3.9.2 Goal of the Agriculture SASAP, 2018-2028⁵³

The Agriculture SASAP has been designed as a 10-year framework for action to reduce risks induced by climate change and climate variability in Saint Lucia’s agriculture sector and to build the necessary capacities of all relevant actors to develop climate-resilient and sustainable food production systems and value chains. The Agriculture SASAP forms part of Saint Lucia’s wider policy response to climate change, builds on previous efforts and projects and is the product of a highly consultative process that started in 2017.

The overarching goal of the Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector is to overcome the barriers (policy, regulatory, institutional, technical, financial, business and social) to facilitate the adoption and scaling up of climate-resilient agriculture best practices and businesses for enhancing food and nutrition security in Saint Lucia under a changing climate.

3.9.3 Strategic Framework of the Agriculture SASAP, 2018-2028

The Agriculture SASAP consists of 45 adaptation measures deemed critical for building climate-resilient agriculture systems in the country. The measures, endorsed by relevant stakeholders, offer solutions to information, technical, institutional, financial, regulatory and policy limitations hampering adaptation in the sector. In the SASAP, the adaptation measures are grouped under fourteen strategic objectives and contribute to four major expected outcomes, presented in **Table 3.7** below.

Table 3.7: Strategic Objectives and Outcomes of the Agriculture SASAP, 2018-2028

EXPECTED OUTCOMES	STRATEGIC OBJECTIVES
1. Enhanced enabling environment	1.1: Improve the national legal, regulatory and institutional

⁵³ St. Lucia’s Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

for climate adaptation action in the agriculture sector.	framework to facilitate climate adaptation in the agriculture sector.
	1.2: Strengthen research and development in climate-resilient agriculture to improve access to climate-resilient varieties and local inputs (organic fertiliser and natural pesticides).
	1.3: Enhance human and institutional capacity for the design, implementation, monitoring and evaluation of agriculture-related climate adaptation projects.
2: Enhanced nutrition, food availability, quality and security through adaptation in the agriculture sector.	2.1: Promote climate-resilient crop production.
	2.2: Promote climate resilient livestock production.
	2.3: Strengthen resilience and ecosystem services through integrated sustainable land and watershed management.
	2.4: Scale-up water supply-side management by improving rainwater harvesting and water storage infrastructure.
	2.5: Scale up water demand-side management by improving water and soil conservation best practices.
	2.6: Promote sustainable wastewater management by reducing, reusing and recycling agro-waste resources.
3: Strengthened partnerships for scaling up climate-resilient agriculture.	3.1: Forge a strong public-private partnership to scale up climate-resilient agriculture best practices and businesses.
	3.2: Leverage private sector resources by improving access to resilient financial and business supports and best practices for scaling up crop and livestock production.
4: Built adaptive capacity to climate variability and extremes in the agriculture sector.	4.1: Improve agro-meteorological data monitoring, emergency planning and informed decision-making.
	4.2: Minimise agriculture-related climate change risks by adopting Ecosystem-based Adaptation solutions.
	4.3: Scale-up climate-resilient agricultural infrastructure to reduce climate risks.

Source: St. Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

3.10 Caribbean Community Common Fisheries Policy (CCCFP)

The Caribbean Community Common Fisheries Policy (CCCFP) is the umbrella policy that provides the conducive environment for the development of the fishing industries in the countries under review. It is a binding treaty focusing on cooperation and collaboration of Caribbean people, fishermen and their governments in conserving, managing and sustainably utilising fisheries and related ecosystems. The strong regional fisheries policy supports the welfare and well-being of all Caribbean people. The benefits provided by the CCFP to the countries are:

- Biodiversity protection in the regional marine environment
- Increased regional food and nutrition security
- Better research supporting fisheries development and management
- Greater income for fishers and wealth creation through social and economic development of the sector
- More investment opportunities in the fishing industry for CARICOM entrepreneurs
- Integrated regulation and enforcement to minimise any regional sectoral conflicts
- Increased regional market and economic competitiveness for the sector
- Unified standards for quality assurance and food safety
- Improved regional fisheries monitoring, control, and surveillance to reduce illegal fishing
- Harmonised regional and national data and information systems for better data sharing and open access to all
- Recognition of the Caribbean Sea as a special area of sustainable development.

The Caribbean Regional Fisheries Mechanism (CRFM) is an inter-governmental organisation whose mission is to “Promote and facilitate the responsible utilisation of the region’s fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region”. The CRFM Secretariat worked closely with Chief Fisheries Officers, fisher-folk organisations, and other stakeholders across the region to draft and implement the Caribbean Community Common Fisheries Policy.

The fisheries sector in each country is governed by a Fisheries Act, which applies to an Economic Exclusive Zone (EEZ), fisheries zone, territorial sea, archipelagic waters, and internal waters. The Act and its regulations make provision for: the establishment of a fisheries advisory committee; fisheries access agreements; fishing licensing (local and foreign); fisheries research; fish processing establishments; fisheries enforcement; and the registration of fishing vessels. There is provision for input controls, such as special permits for the fishing of queen conch and spiny lobster.

3.11 Gender-Sensitive Assessments of the National Sectoral Policies

The gender-sensitive assessments of national sectoral policies were conducted with a focus on issues related to (i) Policy relevance (policy conception, participation and budgeting); (ii) Effectiveness (institutional capacity for gender programming, monitoring and evaluation); (iii) Efficiency: Resource Use Efficiency (natural resource management, technological efficiency - labour use, value chain development and market access); and (iv) Likely impact (decent rural employment and food security); and Sustainability strategy for putting policy into action, which includes financing (financial Inclusion and resilience of the agriculture and food systems). A detailed description of the gender-sensitive assessments of the relevant National and Sectoral Policies of the countries is presented in **Error! Reference source not found.**

Table 3.8 presents a collective summary of identified bottlenecks for the design, implementation and monitoring and evaluation of gender-sensitive policies and programmes on Climate-Smart Agriculture, Food and Nutrition Security and Agriculture Sector Policies and Plans in the countries.

Table 3.8: Bottlenecks for Gender Policies and Plans Identified in the Countries

Policy process	Bottlenecks for Gender Policies and Plans Identified in the Countries
Design	▪ Gender considerations are more included in food and nutrition security sector plans, than in general agriculture sector policy and plans.
	▪ During the policy design phase, there is limited local communities’ involvement and no specific gender organizations.
	▪ Gender analysis is not integrated into agricultural policy and planning in the countries although it is a key factor to understand the importance of gender issues.
	▪ Budgeting for gender is not completely practiced by governments.
	▪ Lack of human capacity in gender issues and budget planning; lack of resources allocated for gender issues.
	▪ Presence of “gender blind” sectorial policies.
	▪ There is a lack of gender sensitization at the agricultural sector level in the countries.
Implementation	▪ Although gender is explicitly mentioned in policies at the international and national level, there are very limited gender-sensitive programmes on the ground in the countries.
	▪ The disappointing results of gender mainstreaming are linked with the gap between policy design and implementation, lack of institutional commitment and leadership in the countries.
	▪ If there are gender considerations identified and formulated at the design stage, they are not taken into account at the implementation stage.
	▪ Gender budgets allocated at the national level are low and do not correspond to estimated budgetary needs.
	▪ Gender programmes do not address any specific structural inequalities.
	▪ Mismatch between gender mainstreaming conceptualization in international arenas and cultural and social context at the national level which leads to diverse interpretations.

	<ul style="list-style-type: none"> ▪ There is limited institutional capacity and political commitment (functional implementation structures) in the countries. ▪ Lack of law enforcement at the local level leading to constrained access to resources. ▪ Incorporating gender consideration into activities is seen as adding more work and resources.
Monitoring and Evaluation (M&E)	<ul style="list-style-type: none"> ▪ Limited interest to collect gender disaggregated data. ▪ Lack of understanding and thus demand from the government to collect sex-disaggregated data on gender-sensitive programmes. ▪ Lack of skills in M&E frameworks and M&E of budgets. ▪ Lack of measure of gender gaps (and their underlying factors) in health, control of assets, and decision-making to inform project design and impact analysis of household productivity, food security, and health outcomes. ▪ Most of the time M&E only track men's and women's participation in activities. ▪ Most of the gender indicators don't allow for the assessment of dynamics/gender relations within households and organizations and fail to assess change over time. ▪ Quantitative data is not sufficient to understand gender dynamics and changes. They are not complemented with qualitative data. ▪ There is a lack of research on gender and the links with Climate Change and / food security.

4. Major Programmes, Actions and Initiatives Undertaken to Achieve Policy Goals

4.1 Introduction

The evaluation of the impact of national policies is of particular importance for the development of any country. This activity allows the country to assess whether policies are being implemented efficiently, to evaluate their success in terms of the achievement of objectives and goals and determine whether they are having beneficial impacts on the target populations and make decisions on the way forward. Countries that are armed with knowledge and information of how well policies are being implemented and the results and impacts they are having in the short, medium, and long term have decision making platforms to refine and improve the design of the policies on which project and programme interventions are built.

In the context of the above, this impact analyses of national policies on Agriculture, Fisheries and Small Businesses will be evaluated, by taking into consideration four important factors, namely:

- The priorities, strategies and actions undertaken by the countries to realize the goals and objectives established within the policy frameworks;
- The macroeconomic environment in which the sectors are operating, especially as it relates to fiscal policy issues;
- The challenges faced by the countries in the implementation of the policies; and
- The gender-sensitive issues identified in the evaluation of the policies.

4.2 Priorities, Strategies and Actions of the Countries

4.2.1 Antigua and Barbuda

The Ministry of Agriculture, Lands, Fisheries and Barbuda Affairs has determined that the sector's advancement will be accomplished through the application of modern and emerging practices designed to strengthen food security initiatives, efficient land use management, environmental conservation measures and sustainable development of natural resources thereby contributing to the well-being of its people and consistent with national objectives and stakeholders expectations. The priorities, strategies for the Ministry are summarized in **Table 4.1** below.

Table 4.1: priorities, strategies for the Sectors in Antigua and Barbuda

PRIORITIES	STRATEGIES
Implementation of the National Food and Nutrition Security Action Plan.	Establish an inter-sectoral committee to oversee implementation Establish a Planning and Implementation Unit (PIU) within the Ministry.
To mainstream key issues such as Climate Change adaptation and disaster risk management into the budgeting process.	Identify and cost Adaptation and mitigation measures. Determine inter Ministry/agency involvement.
Reduction of Food Import Bill.	Improve and utilize national information system accessible to all players in the food chain.
To revitalize the research and development capacity of the Ministry.	Pilot, adapt and apply climate-smart technologies and systems of production in the agricultural sector.
To improve the quality of the human resources and to enhance the knowledge base, capacity and culture within the sector.	Training of Ministry staff in all departments. Area-focused short-term courses for technicians and farmers. Upgrade technology transfer and diffusion mechanisms within the productive sector. Institutional strengthening.
To improve the quality of service to	Create a comprehensive database that would include, production,

all stakeholders in the Agricultural Value chain and to provide real-time marketing information.	marketing, land allocation and utilization, infrastructure inventory to inform institutional development and planning.
To update and enforce existing legislation and introduce new ones.	Liaise with regional counterparts with respect to model harmonized documentation . Enlist the assistance of the Legal and strengthen relations with law enforcement agencies Establish Animal Control Unit.
To improve the quality of service to all stakeholders in the Agricultural Value chain and to provide real-time marketing information.	Create a comprehensive database that would include, production, marketing, land allocation and utilization, infrastructure inventory to inform institutional development and planning.
To update and enforce existing legislation and introduce new ones.	Liaise with regional counterparts with respect to model harmonized documentation. Enlist the assistance of the Legal and strengthen relations with law enforcement agencies Establish Animal Control Unit.
To upgrade and strengthen the facilities and infrastructure associated with the provision of supports to the agriculture sector	Develop and submit appropriate proposals for funding through development agencies.
To enhance fiscal contribution to the consolidated fund.	Institute mechanisms for increased and improved revenue generation and collection.
To provide a wide range of critical support and promotion to all stakeholders in the agriculture and food chain.	Strengthen inter and intra district communication and transportation system within the Extension Department Collaborate with agencies such as GARDC in training programmes Investigate key issues and make remedial recommendations eg invasive species: Giant African Snail, Citrus Greening, Red Palm Mite, Black Sigatoka, Bud rot and Lethal Yellowing Upgrade and refurbish the field services and crop Protection Units. Promote greater utilization of locally produced fresh food Engagement of the supermarkets, hotels, traders and tourism operators Continuous analytical and advisory services to farmers.
To facilitate compliance with obligations under various International Treaties and Conventions to which the Ministry is a signatory.	Seek / provide resources necessary to subscribe to and attend meetings of respective entities.
To overhaul, modernize and refurbish the food and agricultural infrastructure in the country.	Seek funds for completion Retool and equip agricultural stations and laboratories. Expand and repair rainwater harvesting and storage systems Improve access to farms Ensure supply of wholesome local meats and vegetables compliant with accepted food safety standards.
Continuous Monitoring of Public Health and Environmental Factors.	Provide reliable physicochemical and microbiological services on various matrices: Food Water Soil and sediment, Plant material. Provide training for the development of human resources in related areas.

In addition, there will be significant capital investments in greenhouse technology, refurbishing of abattoir and meat markets, construction of an artisanal fishing port in Barbuda, upgrade of archiving system in the Lands Division, and the construction of farm and feeder road.

4.2.2: Barbados

In the case of Barbados, the strategic goals of the Ministry are:

- To facilitate food and nutrition security and the sustainable development of the agricultural sector through improved access to land for food production. (Farmers' Empowerment and Enfranchisement Drive (FEED) programme);
- To enhance the sale of domestic agricultural produce at public markets through operational efficiency and improved infrastructure. (Markets);
- To facilitate the development of the cotton industry as a viable source of foreign exchange through the creation of value-added products. (Cotton);
- To boost the development of the Barbados Blackbelly Sheep industry through research and development, increased access to genetic material and the creation of export niche markets and value-added products (including cheese, yogurts, soaps and high-end leather products). (Livestock);
- To facilitate the development of a medicinal cannabis industry through research and development and the provision of an enabling legislative and regulatory framework.

Barbados is also providing significant public support for programmes and actions in key areas of agriculture which are summarized in **Table 4.2** below.

Table 4.2: Agricultural public support programmes in Barbados, 2011-2018

Policy	Description
Agricultural Incentive Programmes.	Partial compensation of the costs of:
	▪ Spraying and weed control equipment (50% costs rebate).
	▪ Irrigation systems (50-75% costs compensation).
	▪ Pasture development (per hectare cost rebate).
	▪ Orchard development.
	▪ Organic Farming certification.
	▪ Agricultural and agro-processing machinery cost compensation.
	▪ Land cultivation (per hectare subsidies and cost rebates).
	▪ Resource protection subsidies.
	▪ Livestock development.
	▪ Post-harvest infrastructure support and cost compensation.
▪ Farm security (50%).	
Agricultural concessions programmes.	▪ Duty-free import of agricultural inputs, including live animals, planting materials, fertilizers and other chemicals, and machinery and equipment.
Export Promotion.	▪ International transportation cost compensation for primary agricultural products (30%, max. Bds\$10,000).
	▪ Compensation of 75% of the costs of feasibility studies, new market evaluations, and quality assurance scheme implementation.
Tax concessions.	Income tax deductions: <ul style="list-style-type: none"> ▪ The amount equal to the following percentage of the capital expenditure on agricultural machinery (new or imported into Barbados for the first time) can be deducted from the taxable income: sugar cane harvesters - 10% or 15%; other machinery - 18%; sugar refining machinery - 40%.
Subsidized loans.	▪ Subsidized loans through the Agricultural Development Fund (ADF) at preferential interest rates (6.5%, compared to the average commercial banks' prime loan rate of 8.2%).
Import duties.	▪ Average applied tariff for agricultural goods is 33.9%.
	▪ Some commodities receive very high border protection: whole chicken 184%, sweet potatoes and cassava 160%, milk 141% (cheese 0%), beans 40%, cotton 5%.
Agriculture Health and Food Control Programme.	Co-funded by IDB (US\$28 million total costs):
	▪ Management reform.
	▪ Management reform.
	▪ Review of the existing food safety legislation.
	▪ Upgrade of the existing laboratory facilities.
Infrastructure development.	▪ Irrigation and water systems are operated by BADMC.
	▪ Investments in on-farm irrigation are subsidized.

Policy	Description
	<ul style="list-style-type: none"> Rural Development Commission provides loans and technical assistance for rural housing and small businesses.
Marketing and promotion.	<ul style="list-style-type: none"> The BADMC Food Promotion Unit researches, develops, and organizes local produce processing and marketing to create value-added products from cassava, breadfruit, and sweet potato. Farmers markets are operated by the MAFS.
State participation in trade.	<ul style="list-style-type: none"> The BADMC trades poultry and onions and exports cotton. Farmers sell their output to the BAMC for further marketing.
Land for the Landless Programme.	<ul style="list-style-type: none"> Land lease or license arrangements for farmers who otherwise would not be able to access land. Technical support, infrastructure, extension services, and marketing assistance are provided.
Scotland District Development.	<ul style="list-style-type: none"> Grants for agricultural projects in Scotland District. 10-year tax holiday for investments in fruit production, processing, and marketing. Orchard development subsidy (Bds\$5 per tree for a maximum of 1,000 trees per farmer).
Training.	<ul style="list-style-type: none"> 4-H Youth Program. Promotes involvement of young people in agriculture.
Sugar industry support.	<ul style="list-style-type: none"> Cane Replanting Incentive Scheme Program: Per acre subsidy for planted cane (Bds\$550 per acre for force-back planting and Bds\$450 per acre for conventional planting of sugar cane). Sugar producer BAMC receives grants to compensate it for losses. Cane industry restructuring: BCIC received financing for developing the sugar and energy-producing facility.
Dairy industry incentives.	<p>Fixed costs rebate for dairy:</p> <ul style="list-style-type: none"> 25% for the components of dairy housing, maximum of Bds\$40,000. 40% of the cost of components for a milking parlour, maximum Bds\$60,000.
Cotton Research and Development Fund.	<ul style="list-style-type: none"> Grants to research institutions for cotton studies.
Investment in non-sugar crop production.	<ul style="list-style-type: none"> US\$10 million production grant incentive initiative (2014). Tax holidays for investment in cotton.
Farm to Hotel incentive schemes	<ul style="list-style-type: none"> Tying in tourism incentives to increase use of local produce (starting in 2013-14).

Source: Josling, T. et al. 2018. *Agricultural Policies in the Caribbean: a regional analysis*

4.2.3 Dominica

In Dominica, the main objectives outlined for the sector are to:

- Increase production and productivity of agricultural commodities and enterprises.
- Strengthen agriculture service institutions and enabling environment.
- Improve access to critical production inputs.
- Improve product quality and market access across value chains.
- Increase long-term viability and reduce risks.

In the context of the above stated objectives, the key areas of action are:

- Sustainable production of crops, livestock, fisheries.
- Institutional competence and capacity building.
- Knowledge, data processing and management.
- Research, innovation and development.
- Create an enabling environment through planning, regulatory and legislative policies.
- Risk Management.
- Improved networking and coordination.

4.2.4 Grenada

Grenada's strategic focus will be in the following five (5) areas:

- Increased agriculture contribution to national economic growth, employment creation, poverty reduction and rural development;
- Enhanced National Food Security;
- Strengthened agricultural sector's resilience to climate change and natural disasters, reduce its adverse impact on climate change and the environment, and ensure that development is socially, economically, and environmentally sustainable;
- Increased investments for the Development of the infrastructure; physical resources; Research and Development, institutional and human resource capacity of the sector;
- Fostered mutually beneficial partnerships with our regional counterparts and development partners.

The country has identified priority commodities for promotion by areas of utilization.

4.2.5 St. Lucia

In St. Lucia the key areas of action will focus on:

- Increase the efficiency and competitiveness of the island's agriculture;
- Development, adaptation and adoption of improved /appropriate technology;
- Enhanced national food security;
- Rationalized use of land in the country;
- Protected, conserved and ensured the sustainable use of natural resource;
- Expand agricultural production and market base;
- Generated new opportunities for employment and income generation in rural areas.

4.3 Macroeconomic Environment

In the study, national macroeconomic policies were considered within the broader framework of economic and social development programmes. The evaluation was accomplished with due considerations that the countries policy objectives are usually based on the need to:

- Maintain or accelerate economic growth with sustained employment;
- Promote microeconomic efficiency and correcting distortions;
- Avoid unsustainable disequilibria in the balance of payments (external equilibrium);
- Control inflationary and deflationary pressures (internal equilibrium);
- Eliminate poverty, providing for the basic needs of the population, including food security, and expanding opportunities for human development.

In terms of the national macroeconomic policy instruments, the component of the study looked briefly at the fiscal policies, as the monetary and trade policies were addressed in some detail under Deliverable 2.

The fiscal dimensions of the national policies under SAPs were quite similar across the countries in the study, although there were important differences concerning the components of the packages.⁵⁴

⁵⁴ Hilaire, Alvin, 2000.

All countries initially placed a heavier emphasis on expenditure reduction as opposed to revenue increases in order to maintain fiscal balance in the central government operations. **Table 4.3** presents the overall fiscal positions of the countries for the period 2010 through 2020.

**Table 7.1: Central Government Operations of the Countries
(% of GDP)**

Description	YEAR										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	In Percent of GDP										
Antigua & Barbuda											
▪ Fiscal balance	-2.3	-3.6	-12.0	-4.2	-10.4	-0.7	1.7	1.8	1.9	2.0	2.0
▪ Revenue and grants	26.5	20.6	21.1	18.7	22.6	20.5	21.6	21.5	21.5	21.4	21.4
▪ Total expenditure	28.8	24.3	33.1	22.9	33.1	21.3	19.9	19.7	19.6	19.4	19.3
Barbados											
▪ Fiscal Balance	-8.8	-4.5	-8.0	-11.0	-6.9	-7.0	-5.3	-4.3	-0.3	3.5	2.7
▪ Revenue and grants	25.8	29.4	27.6	26.7	28.8	29.7	28.3	28.6	29.3	30.5	30.2
▪ Expenditure	34.6	33.9	35.6	37.7	35.6	36.7	33.6	32.9	29.6	27.0	27.5
Dominica											
▪ Fiscal Balance	-2.6	-1.7	-5.4	-2.8	-4.6	-0.9	3.8	0.7	-5.5	-5.6	-9.9
▪ Revenue and grants	31.7	31.4	30.3	30.0	27.1	31.5	47.1	46.8	37.0	34.8	27.8
▪ Expenditure	34.3	33.1	35.6	32.8	31.7	32.4	43.3	46.1	41.0	38.9	36.2
Grenada											
▪ Fiscal Balance	-3.6	-5.2	-5.9	-7.3	-4.7	-1.2	2.3	3.0	4.8	4.1	4.6
▪ Revenue and grants	24.6	23.6	20.8	20.9	24.5	24.5	26.2	25.6	26.5	25.6	25.5
▪ Expenditure	28.2	28.8	26.7	28.1	29.2	25.7	23.9	22.6	21.7	21.5	20.9
St. Lucia											
▪ Fiscal Balance		-6.5	.9.3	-6.0	.3.8	-2.6	-1.3	-2.2	-1.0	-3.3	-6.9
▪ Revenue and grants		26.2	25.0	25.6	25.7	23.1	21.3	21.1	22.1	22.2	20.4
▪ Expenditure		32.7	34.3	31.6	29.5	25.7	22.6.	23.3	23.1	25.5.	27.3

Source: IMF ARTICLE IV CONSULTATION Staff Report- Various Years for the Countries

The table shows that the governments achieved some elements of fiscal balance as per the following:

- Reduced expenditures in **Antigua and Barbuda** as revenue and grants declined;
- Reduced expenditures and increased revenues in **Barbados**;
- Increased revenues and grants in some years in **Dominica** as the county was forced to respond to various natural disasters with increased expenditures;
- Reduced expenditures in **Grenada**;
- Reduced expenditures in **St. Lucia**.

The impact of reduced central government expenditures on the budgets of the agricultural sectors for the corresponding years will be presented and discussed under the challenges of agricultural development.

5. Performance of the Agricultural, Fisheries and Agro-industrial Sectors under the National Policies

5.1 Agricultural Output, Trade and Prices Production data for agricultural commodities are presented in ANNEX 5.

The data shows that the Food Production Index of agricultural production for each year (1980-2017) relative to the base period 2004-2006 has declined significantly, especially after 2000. The data shows that most of the decline in the Food Production Index was attributed to declines in the crop production indices. In fact, the declines in agricultural production in countries were due mainly to decreased output in the main traditional export commodities, including sugar cane (Barbados), bananas (Dominica, Grenada, and St. Lucia) and nutmeg in Grenada. In Barbados, for example, sugar cane production has for decades been the backbone of the economy but is now largely in decline. Barbados achieved its highest sugar cane production of 1.855 million tons in 1967. Since then, production has declined to 146,831 tons in 2018. The countries also experienced significant declines in banana production (Dominica, Grenada, and St. Lucia), as well as the production of nutmeg and mace (Grenada).

The data also shows that domestic crop production in the countries declined (Dominica and Grenada) or remained stagnant (Grenada) over the review period. The main agricultural commodities with significant exports in the countries are sugar cane and related products (Barbados), bananas (Dominica and St. Lucia), cocoa (Dominica), bay products (Dominica), nutmeg (Grenada) and pineapple (Antigua and Barbuda). The level of agricultural exports, which are shipped mainly to Europe and North America, has declined significantly over the last two decades. In 2018, the total value of export agricultural commodities was estimated at only US\$165 million.

Some root and tubers (yams, dasheen, and sweet potato) are also exported, but mainly to other Caribbean countries. The size of this inter-regional agricultural and food trade is very small. Information obtained from the FAO Statistical Database shows that the combined food import bill for the five countries has increased significantly from US\$163.4 million in 1980 to US\$307.6 million in 2000, US\$572.6 million in 2010, and surpassed the US\$774.4 million mark in 2019.

However, when food imports are denominated by GDP, the data exhibit downward trends for the five countries under review, especially between 1980 and 2000, and to a lesser extent between 2015 and 2019.

Based on available, albeit dated, information the average food import dependence ratio (total food imports/total food consumption) increased from the range of 50-79% in 1995 to 55-92% in 2011. The value of the total imports was US\$641 in 2011.

Local agriculture is therefore clearly insufficient to supply the needs of the populations of the countries. The countries face considerable food supply, quality, and safety issues. Most farmers in these countries are smallholders operating on hillside farms. They are resource-poor and unable to supply sufficient quality and safety of foods to meet the demand of the population. In addition, the quality and safety of foods are challenged by the high incidence of pests and diseases and the high usage of pesticides. In all countries, agricultural production has declined considerably during the last decade except for poultry production, which has increased significantly. An econometric analysis of Caribbean food import demand reported that an increase in prices of imported food will not result in

an equivalent decrease in the quantity of imported food demanded, mainly comprising oils, staples, and other food products.⁵⁵

FAO World Food Price Commodity Indices for the period 2003 – January 2021 reflects significant increases in the prices of the main imported commodities (meat, dairy, cereals, vegetable oil and sugar) which increased by 64%, 87%, 73%, 59% and 81%, respectively.

5.2 Impact of National Policies on Fisheries

5.2.1 Antigua and Barbuda Fish Production, Trade and Utilization

As can be observed over the last four decades, the annual output of capture fish and aquaculture production for Antigua and Barbuda varies significantly from a low of 875 tonnes in 1990 to a high of 5,951 tonnes in 2012. In 2015 and 2018, imports of fish products into Antigua and Barbuda were valued at US\$6.8 million and US\$10.0 million respectively, with Canada and the USA the main trading partners. Dried and salted fish from Canada and frozen fillets from the USA were the main products imported. About 1 500 tonnes of fish or 3 600 tonnes in live weight equivalent were imported every year, which represents an important part of national fish consumption and thus is important for food security in the country.

Imports account for about half of the fish intake. However, it is difficult to quantify the real consumption, due to the under-reporting of exports. More or less 4,000 tonnes of domestic production are exported, without being recorded in the national statistics.⁵⁶

All fishery products landed in Antigua and Barbuda are marketed fresh for direct human consumption. High-energy costs associated with processing and inadequate access to capital have curtailed the development of any further fish processing. There are currently only two major facilities that allow the processing of fisheries products for retail (Market Wharf and Point Wharf Fisheries complexes). Traditional salting and drying (corning) of some species still occurs at a subsistence level.

The lone sea-moss farmer produces several products that are marketed both locally and exported to regional neighbours. These products include bottled and canned concentrates, as well as dried and packaged sea moss.

The fishing subsector is the most resourceful of all sub-sectors within the agricultural sector but is yet to realize its full potential because of the myriad challenges faced, including:

- Imports of cheap fish products from other CARICOM countries;
- Chronic problems with fish poisoning i.e., ciguatera, particularly off the Redonda Bank;
- Poaching by fisher-folks from the French islands;
- Restricted marketing of fish in European Union countries, resulting from the stringent health and quality standards;
- Limited investment capital to equip boats for deep-sea fishing to harvest the migratory species;
- Limited enforcement of legislation to ban spearfishing in and around reefs.

⁵⁵ Walters and Jones, 2016

⁵⁶ FAO Antigua and Barbuda Fishery and Aquaculture Country Profile, 2018.

Some opportunities can be exploited in the fishing industry through improved fish processing and the maintenance of the cold chain in all retail outlets and during distribution. Replacement of the imported dried and salted products by domestic fishery products could bring a substantial boost to the local fisheries, especially of species that are presently under-exploited.

5.2.2 Barbados Fish Production, Trade and Utilization

In Barbados, annual fish production varies significantly over the period under review, with a downward tendency. Fish output ranged from a low of 1,500 metric tonnes in 2015 to a high of 3,832 metric tonnes in 1985. Imports of fish products into Barbados totalled US\$29.6 million in 2018, compared to US\$18.0 million in 2010 and US\$3.0 million in 1980. Fish exports were US\$0.49 million in 2018, compared to US\$0.34 million in 2010 and US\$1.35 million in 2005.

Many of the processing facilities in Barbados import fish from Trinidad and Tobago, Guyana, Suriname, Canada, and Vietnam. Dolphin is sourced from Peru, shrimp from Indonesia and lobster tails from Jamaica. Fish imported from the UK and US include cod, salmon, halibut, seabass, lemon sole, Dover sole, scallops, and live mussels. Much of the locally caught tuna is exported to the US.

The final destinations of the majority of fish (primarily yellowfin tuna) exported from Barbados are the US and Canada. Exports into the European market are not possible as the fish supply chain and the public fish processing facilities do not meet the stringent Sanitary and Phytosanitary (SPS) standards of the EU. Many of the private fish processing establishments and government facilities are working towards the goal of compliance with Hazard Analysis Critical Control Point (HACCP) principles.

Per capita, fish consumption in Barbados in most years is twice that of the world average. This is attributed largely to the demand from the tourism sector.

In Barbados, the unknown status of stocks of many of the marine fisheries resources, suspected overfishing and overexploitation of resources and the lack of infrastructure and facilities feature prominently as the major constraints faced by the local fisheries sector.

With these constraints come opportunities for improvement and change. The marine reserves and protected areas serving recreational and tourism purposes may act as population reservoirs for adjacent fished areas. The controlled use of fish aggregating devices (FADS) to increase catches or catch rates of selected species of large pelagic should be further examined. Furthermore, there is a need to establish fishing access agreements to harvest flying fish resources that seem under-utilized in neighbouring countries.

5.2.3 Dominica Fish Production, Trade and Utilization

Annual production varies over the period under review, with some stability over the last decade. Fish output ranged from a low of 458 metric tonnes in 1982 to a high of 1,445 metric tonnes in 1980. Aquaculture production ranged from a low of 4 metric tonnes in 1995 to a high of 24 metric tonnes in 2006 through to 2009. Annual production over the last decade has since stabilized at 6 metric tonnes.

In 2014 imports of fish products into Dominica were valued at US\$3.6 million; this compared to fish imports valued at US\$1.8 million in 2018 with approximately two-thirds of the consumption coming from imports. Imports show an increasing trend over the years, exceeding 1,000 tonnes in product weight. The products imported by Dominica vary from year to year, but canned fish is dominating the import market, with sardines and mackerel as the main products. Dried salted cod and cured herring from Canada also are significant.

All fish caught is sold fresh to local consumers. There is no facility for processing and storage, resulting in wastage when the supply of pelagic fish (those fish that are neither close to the bottom or close to the shore) exceeds local demand. Most fish landed in Dominica is sold directly to the public at the landing sites. Since 1997, following the completion of the Roseau Fisheries Complex, fishers have been selling their catch directly to the Complex, particularly in times of glut on the market. The Fisheries Complex was heavily impacted by Hurricane Maria in 2017. There are approximately 30 market vendors, mainly women, in Dominica.

In September 2017, Hurricane Maria impacted Dominica, which resulted in damage to or the destruction of nearly every fishing boat on the island, with a negative impact on livelihoods and food security. Significant support was and is still being provided by the international donor community.

Inshore marine habitats are threatened by land-based sources of pollution and sedimentation, as well as possible over-exploitation of some coastal resources. There are no specific policies to promote fisheries in Dominica. In addition, no research institutes deal with fisheries in the country. In this context, the status of the fish stocks is widely unknown.

Significant opportunities exist to modernize the fishing industry in Dominica to strengthen the country's capacity to address critical areas related to increased fish catch, import replacement, fish processing, and increased employment in the sector.

5.2.4 Grenada Fish Production, Trade and Utilization

Fish production varied somewhat over the period under review, from a low of 1,417 tonnes in 1980 to a high of 2,707 tonnes in 2015. Over the last decade, Grenada has been a net exporting country of fishery products, with exports two to three times the import value.

Over the period under review, imports varied from a low of US\$0.96 million in 1980 to a high of US\$4.7 million in 2007. However, imports have been quite stable at an average of US\$2.6 million over the last decade.

Imported fish supplies were dominated by the species of herrings, alewives, saithe, pollock, haddock and hake, sourced mainly from Canada, Norway, and the United States of America. Thailand supplies canned seafood, mainly mackerel and tuna. These imports provide security of supply to the tourist services food providers and to the public. Limited quantities of salmon, cod, snappers, lobsters, shrimps, and oysters were also imported to substitute for seasonal or other shortages in local-fish supply.

Exports have varied in value from a low of US\$0.025 million in 1980 to a high of US\$8.1 million in 2014, although it decreased to US\$8.05 million in 2018. The recent increases were mainly due to more fresh tuna being exported by Grenada. Grenada fish exports to the United States of America represent more than 90% of total seafood exports from the country - the bulk of this is fresh fish, especially fresh yellowfin. Grenada is ranked 11th ranked as a supplier of fresh yellowfin to the United States of America market. The unit value of Grenadian yellowfin exports is USD 7.00/kg, one of the lowest values for this type of product in the United States of America market.

Overall, the country trade policy for fish is that of exporting high-value fish and importing low-value products, which in 2018, resulted in a positive trade balance of US\$4.6 million net earnings. In live weight terms, imports were higher than exports in 2018, with 1,200 tonnes imported and 1,000 tonnes exported.

The fish catch in Grenada is mainly marketed fresh, fresh on ice and to a lesser extent frozen. Fish is consumed on average twice a week, with cured herring used in rice dishes, to add some flavour and protein to a simple dish. Since the majority of the Grenadian catch are pelagic fish and the imports are also mainly pelagic, this type of species represents almost half of the fish consumption in Grenada, with 17.4 kg per capita consumption. The second major species group consumed are demersal fish, which represents a supply of 7.4 kg on average.

The by-catch from the yellowfin long lining, that is sharks, sailfish, mahi-mahi (dolphin) and other billfish, are sold on the domestic market. The peak harvest season is January to May when bigger boats catch yellowfin for export to the USA, while smaller boats supply the domestic market. The bigger boats stay at sea for 4 -5 days, smaller boats do their trips by going out early in the morning and returning to the port at 4-5 pm. The Ministry of Health is responsible for conducting quality control at the landing sites and in the markets. The clients of the market are the general public including hotels, restaurants, cruise ships, and school and prison feeding programmes. The market administration is responsible for the collection of information on the volume of fish traded every month, which is submitted to the fisheries division for action.

The fish vendor in the main markets (Melville Street and Grenville) purchase fish directly from the fishing boats. These vendors' weekly purchases depend on the season but range between 150 lbs and 4000 lbs. The fish from these two markets is directed mainly towards the local population, with not more than 20% going to tourists (including direct sales to consumers, and restaurant and hotel purchases). The main sales seasons are Christmas and Easter, and the market authority does not record prices at which the fish is sold in the market.

The open-access policy of Grenada and the recent introduction of FADs in the tuna fisheries gave way to worries about the future of the yellowfin tuna fisheries in the country. On the other hand, the introduction of FADs has led to bumper catch of yellowfin and landings on the East Coast (Grenville) in recent years, creating a completely new opportunity for the sector. The promotion of this product with the local companies who can export to the United States of America should be fostered.

The possibility of Grenada exporting to the European Union (EU) offers a great opportunity for the country, but more research should be conducted to explore the possibility of exporting the fresh yellowfin and some of the so-called by-catch, such as swordfish and mahi-mahi to that market. School feeding programmes are sponsored by the Grenadian government, and fish seems already to be a part of the diet regime. The possibility exists to design some value-added fish products, especially for this market segment.

. The country imports a lot of salt-fish and cured herring, which in part could be replaced by domestic production - salting and drying of small pelagic and tuna from the catch, which is already carried out but could be improved and expanded.

The Government of Grenada's fisheries policy is aimed at the development of the fisheries sector to increase its contribution to income, employment, and foreign exchange earnings. The country is actively promoting the application of the FAO Code of Conduct for Responsible Fisheries in its fisheries management and is interested in the application of the Ecosystem Approach to Fisheries (EAF). The Government's main efforts are currently concentrated on addressing the following challenging issues:

- How to increase production from the migratory oceanic pelagic resources in the medium and long term. The current strategy encourages private entrepreneurs to use larger iceboats (30-45 foot) that have proven to meet cost/benefit requirements.
- Utilization of capture fisheries as an avenue for agricultural diversification.
- Engagement in human resource development of fishers by administering training in appropriate fishing technology, safety at sea, business, and financial management, and encourage participation in social security.
- Promotion of increased harvesting of underutilized and unutilized species for export and domestic consumption.

Enhanced collaboration with the neighbouring island states concerning their involvement in fisheries, through Grenada's membership in the Caribbean Regional Fisheries Mechanism (CRFM) and the implementation of the Caribbean Common Fisheries Policy.

5.2.5 St. Lucia Fish Production, Trade and Utilization

Domestic production of fish in St. Lucia is stable at about 2,000 tonnes, with total capture production estimated at 2,019 tonnes in 2018. Conch is the main species caught in recent years. The increase in production of this species is notable, up from 150 tonnes five years ago to 500 tonnes at present. As the country is not exporting any conch, its production is not covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), but the important increase in production should raise questions about the sustainability of the resource.

Common mahi-mahi and Marine fish not specified also accounts for about one-quarter of production each, while tuna species, mainly yellowfin and skipjack, represent one-fifth of total fish production. No lobster production is recorded.

Fish imports are needed to complement domestic production and to satisfy the demand from the tourism sector, while fishery exports continue to be negligible. One of the main products imported is dried and salted fish. This includes salted cod, saithe, and herring. This product is mainly directed towards the local population. In recent years, canned tuna imports have become the main product imported. This product goes both to the tourism market and the local market. Frozen fish fillets include tilapia and pangasius, which are competing with local tilapia production. Smoked herring represents a niche, mainly directed towards the local consumers. The annual per capita supply is estimated at 34.4 kg in 2017. In addition, fish imports are needed to complement domestic production and to satisfy the demand from the tourism sector. In 2016, imports of fish and fishery products were estimated at US\$8.9 million, while fishery exports continued to be negligible.

Saint Lucia faces several problems in developing aquaculture:

- An inability to produce enough fish fingerlings and prawn fry in support of a general increase in production; (2) a lack of aquaculture facilities and technology to stabilize supplies of fish and prawn fry; (3) a lack of aquaculture management skills among Saint Lucian fish farmers.
- Compared with other countries in the OECS, the fisheries of Saint Lucia are well managed. The country's experience with co-management dates to the last century. Overall, the fish resources are not overexploited.

The statistical system of data collection for fisheries is well established and working despite budgetary constraints.

5.3 Food and Nutrition Security

The impact of the FNS policy at the country level is evaluated by examining the following four dimensions and related indicators of FNS:

- **Food availability:** Average protein supply (g per capita per day); Average dietary energy supply adequacy (%).
- **Food access:** Gross domestic product per capita.
- **Food utilization/nutritional status:** Prevalence of Anaemia among women of reproductive age (15-49 years); Prevalence of obesity in the adult population 18 years and over.
- **Food stability:** Average value of food production.

Data obtained from the FAOSTAT database show the FNS policies implemented by the countries have had mixed results. While the FNS policies for the countries were developed between 2012 and 2015, it is important to recognize that most of the elements of the policies were being implemented long before the existing well-integrated coherent frameworks were developed. The results obtained must therefore be interpreted within this context. The main outcomes of the analysis of the impact of FNS on the countries are presented below.

There were marginal changes in food availability as reflected in slight upward trends in the average protein supply (g per capita per day) as well as the Average dietary energy supply adequacy (%).

The situation with respect to food access has improved as measured by GDP per capita in constant 2011 international \$. While declines can be observed in the countries for the measured indicator of the prevalence of anaemia among women of reproductive age of 15-49, a worrying upward trend was observed in all countries for the prevalence of obesity in the adult population 18 years and over. (Most countries experienced marginal declines in food stability as measured by the average value of food production in constant \$ per person utilizing a three-year average. It should be noted that by utilizing the 3-year average, the yearly effects of natural disasters on food output in the countries may have been masked.

5.4 Impact of National Policies on Small Agro-Enterprises (SAEs)

The report of the FAO Roundtable on Small-sized Agro-enterprises (SAEs) (SAE) Competitiveness in the Caribbean⁵⁷ held in Jamaica during March 2012,⁵⁸ noted that most of the SAEs in the Caribbean are involved in producing principally processed foods from fruit, vegetable, root and herbal commodities, although there are several fresh produce (fruit and vegetable) pack houses, wholesalers and producers of processed animal (eggs, dairy) and fish products. The products tended to be made from local perishable products, either capturing local recipes or traditional cuisine, preserving primary commodities for use in these cuisines or export, and most were careful to minimize or exclude additives and preservatives.

In some operations, the service component of the firms' offering was found to be an important part of the marketing mix, such as agro-tourism visits to condiment/preserve manufacturer's factories and farms, private labelling for exporters of canned fruit and vegetables, retail franchises for ice cream, and customer-driven flexible product/packing configuration for fish exporters. Branding often positioned the product as a Caribbean/national product and the labels made claims to be a combination of fresh, natural, preservative/additive-free content. The products came in a range of packaging formats, which are dependent on the nature of the commodity, level of transformation of the product and requirements of the target market. Target markets could be the domestic, regional,

⁵⁷ FAO, 2012. SMAE Competitiveness in the Caribbean

⁵⁸ Three of the five countries under review (Antigua and Barbuda, Barbados and Grenada) were represented at the Meeting by owners of SOEs in the countries

or extra-regional markets. Product ranges varied from five for small operations to up to 50 products for larger operations, although some larger export-orientated operations had very narrow ranges in a focused export marketing strategy.

Quality was an important claim for almost all the SAEs, and food safety and, to a lesser extent, ethical product certification was especially important to exporters. Major shocks in the export market food safety regulation had been a driving force in the investment of international food safety standards in processors of the two major export products (ackee and fish/shrimp). The SAEs sold products to a variety of markets, including domestic retail, food service and hospitality buyers and export markets. Small operators focused on the domestic retail, food service and hospitality markets. Interestingly, several agro-processors, though relatively small in number, had significant shares of sales being exported into the USA, EU, and Canada (and the rest of the world). Sales to regional markets seemed to be generally small.

The technologies used by the agro-processors could be divided into two groups: those which sought to principally preserve single commodities, such as dried herbs, chilled juices, chilled liquid eggs, frozen roots, dried, chilled, and frozen fish, and those which sought to combine commodities and add other ingredients to arrive at bottled preserves, condiments, canned mixed juices, fresh packaged fruit salads, tropical fruit ice creams and fruit-based alcohol drinks. There are a variety of supply chain and logistics configurations across the businesses. For outbound logistics, SAEs used combinations of traditional in-house direct distribution and sales; outsourced physical distribution and sales (private labelling); in-house retailing, franchising and agro-tourism and joint ventures with hospitality wholesalers. At the level of manufacturing, most processing is done in-house, but a few businesses are engaged in co-packing arrangements where they manufacture products to customer's specifications. For in-bound logistics and procurement, several clear groups of arrangements presented themselves. For agriculture commodity input supply, most SAEs had longstanding arrangements with a core group of farmers who had a reasonable understanding of specifications and for whom processing planning was managed through telecommunications. For several key products, such as ackee, coconut water and, to a lesser extent, fish, procurement took place through a network of collector/wholesalers. For a few medium-sized processors, contracts are used to manage the procurement process.

There was a rich diversity of organisational types at the Roundtable,⁵⁹ ranging from small sole traders and associations of small women's kitchens targeting local markets to quite sophisticated limited liability medium-sized agro-processing enterprises focused on export markets. Many of the SAEs were established 20 to 40 years ago by women working out of their kitchens. Even in the larger enterprises, women held senior management and technical (food technology, food safety) positions, so that of the 18 business participants in the meeting, 60% were women. In addition, it was clear from discussions on the side-lines of the Roundtable⁶⁰ that women tended to dominate the workforce in most agro-processors and in some cases a large share of them were female small farmers. The number of permanent employees for SAEs at the Roundtable ranged from one to 200 employees, with the majority of them having fewer than 60 permanent employees.

The structure of the agro-food industry of the countries under review has changed over the last decades with the top four retailers, in most countries, controlling over 50% of the market share.⁶¹ Similar concentrators are becoming evident in the large agro-processing or importing (international

⁵⁹ FAO, 2012. SMAE Competitiveness in the Caribbean

⁶⁰ Discussions with the Author of this Consultancy

⁶¹ FAO, 2012. SMAE Competitiveness in the Caribbean

brand) sectors. Agriculture production in the countries is becoming more commercial. Notwithstanding, the SAEs have made major investments in serving the export market opportunities to the growing international market for Caribbean products marketed under the branding of cuisine and culture of the region, primarily to the North Atlantic Diaspora but increasingly to a larger global market. In this regard, key SAEs have very high export concentrations, primarily under wholesale and customer brands, to these markets. Smaller SAEs also serve this export segment by providing products and agro-tourism services to the domestic hospitality/cruise-ship segment.⁶²

However, the business environment for SAEs in the countries under review is challenging and characterized by a weak policy and institutional framework. Indeed, the agri-food sector, from farm to fork, is subjected to a lack of an overarching policy and incentive framework, as these often fall under several ministerial portfolios. There tend to be low levels of dialogue and coordination among ministries with portfolio responsibility for the extended agri-food sector and a lack of overall policy promoting SAE development. In terms of industry organisation, there is limited inclusion of the private sector, and especially of SAEs and producers in the policy dialogue.

6. Factors Impacting the Performance of Agriculture, Fisheries and Small Agro-Industry in the Countries.

6.1 Overview

This chapter examines the challenges faced and the opportunities that can be exploited by smallholder farmers, fisher-folks and small agro-producers operating under the various national and sectoral policies within the Agriculture, Fisheries and Small business sectors in the countries. Where available information permits, this analysis was conducted from a gender-sensitive perspective.

6.2 Finance/Credit Availability

Data on central government budgetary allocation to the agricultural and related sectors for several years is presented in **ANNEX 6** and summarized below. The following can be observed from examinations of the national budgets:

- In **Antigua and Barbuda**, the agricultural budget expressed as a percent of Agricultural GDP declined over the period under review, with declines in crop, livestock, fisheries, and agricultural extension allocations.
- Reduced overall allocation to agriculture, especially with respect to the allocation to stimulate increased crop production.
- Deep cuts in the budgetary allocation to the **Barbados** Agricultural Management Company (Sugar production) were observed in later years.
- The Agricultural sector in **Dominica** experienced declines in budgetary allocations, mainly in the management of the fisheries resources.
- In **Grenada**, budgetary allocation to the agricultural sector fluctuated over the period. However, in the later years, there was increased allocation to the marketing division.
- In **St. Lucia**, budgetary allocation increased significantly over the period, with increased allocations going to crop and livestock production divisions.

⁶² Ibid

The limited fiscal space faced by the countries under SAPs has resulted in the reduction of funding to implement the actions proposed under the national and sectoral policies. In addition, with its burden of debt repayment, the Governments have little room for fiscal expansion in investments and social costs. Thus, the economic growth and poverty reduction programmes are being undertaken in an environment of fiscal restraint.

Cuts in government spending on extension services for crop and livestock, markets and distribution channels, rural infrastructure, as well as processing, storage and distribution systems could hurt smallholders, fisher-folks and small business entrepreneurs more than larger farmers, especially those living in rural areas.

Access to credit by smallholder farmers, fisher-folks and small business entrepreneurs is a major factor limiting the development of the sectors in the countries. This situation is exacerbated as it relates to women.

In Antigua and Barbuda, micro-credit/financing options are limited in-country, however, an additional option was presented with the introduction of Axcel Finance in 2012. It is a regionally based micro-credit/capital source that was established in the region in 2012 and provides for both personal and small business loans. Axcel Finance, with branches in other OECs countries, Barbados, and the Dominican Republic, offers SMEs loans on the initial conditions that they are owned and operated by a citizen or legal resident; are commercially viable ventures operating within the law; are generating revenues; have not declared bankruptcy; achieved profitability and are up to date with other bills and credit obligations.⁶³ As described, these stipulations notably exclude businesses operating within the informal economy and further require a well-defined history of market success. Outside of these specific conditions for businesses, personal loans may be acquired by the financier, however calling for letters of employment, which would not be available to SAE owners.

However, the challenges persist in Antigua and Barbuda in accessing credit and loans to develop their enterprises, primarily due to high-interest rates, limited collateral to access loans, intimidating application processes and poor production and market records. These sentiments were fully echoed in reports on the market-linked challenges for SAEs throughout the Caribbean region.⁶⁴

In Barbados, women's non-ownership of resources that could be used for collateral constrains their access to credit for agriculture and for productive work in other sectors. Some seek to overcome this by getting their husband or male relative who has collateral to apply on their behalf. However, this option is not available to many unmarried women. Often a job letter must be supplied, which is a greater barrier to women than to men given lower levels of female employment in the formal sector. Other factors may also constrain access by poorer women, such as the formality of credit institutions and a history of discrimination that make women feel uncomfortable, perceptions that there may be little or no return from a possible investment because of unforeseen events (including climatic events) or poor quality of available inputs, the need to minimise risk because of the repercussions for their dependents and a preference to use savings rather than take loans. Several interviewees also reported gender bias by credit institutions that appear to regard women as less likely than men to make a profit on investment.

⁶³ Accessed at: <http://www.axcelfinance.com/small-business-loans/>

⁶⁴ Maynard, Jennifer (2006). "Market Linkage Challenges for the SMEs in Small Caribbean Islands like Antigua and Barbuda: Opportunities for Change". Presentation at the UNCTAD Expert Meeting, 11-13 December 2006. p. 2. Accessed at: <http://www.unctad.org/sections/wcmu/docs/c1EM32p30.pdf>.

These gender-related constraints compound some general constraints in finance for businesses in Barbados. The World Bank Enterprise Survey for Barbados 2010 found that the foremost obstacle to business identified by firms was access to finance, which was mentioned by 27 percent of firms in the country as compared with 14 percent in Latin America and the Caribbean as a whole. The survey found that, compared with other countries in the survey, more of the Barbadian firms were financed internally (i.e., by the business owners, their personal contacts, and families) and fewer by other sources such as banks, trade credit or equity.⁶⁵

In studies of entrepreneurship in Barbados, it has been noted that women are less likely to finance their businesses from commercial sources than men. In her study of women in the formal business sector, Barriteau (2002) found that most had applied for commercial funding but had been unsuccessful, and this was why they used personal, family or friend finances.⁶⁶ Barriteau noted that when women are constantly denied access to credit – even though they meet the formal requirements of obtaining it – the financial institutions and governments are shifting to women the costs of operating in the public domain of the economy.

Many women continue to set up businesses informally because of such barriers and also to balance caring responsibilities with income-earning possibilities.⁶⁷ With high dependency ratios in poor female-headed households, such women are especially likely to be found in the informal sector as it is difficult to find formal employment that allows enough flexibility for sole carers to be able to cater to the full range of needs of their families.⁶⁸ In the informal sector, female businesses are often in areas that are based on traditional female care roles, such as food preparation and marketing of surplus produce from subsistence farming. They also complement the work of males in agriculture and fisheries by marketing their products and processing the raw foodstuff.⁶⁹ In many instances, income from any one type of occupation in the informal sector is insufficient to sustain the household.⁷⁰

Research conducted and data obtained from the AID Bank in Dominica, the country's main credit provider for agricultural and enterprise development, reveal the comparatively low numbers⁷¹ of women accessing credit for agriculture and enterprises.⁷² The research indicates that in 2011-12, 89.7 percent more loans were made to men compared to women (10.3 percent). Since agriculture and tourism are the main economic drivers in the economy, the figures indicate that men and women do not have equitable access to loans from the AID Bank to contribute to and benefit from these sectors of economic growth and national development. This is reinforced by the stringent and

⁶⁵ World Bank (2011), "Enterprise Surveys: Barbados country profile 2010", International Bank for Reconstruction and Development/ World Bank, Washington, D.C.
<http://microdata.worldbank.org/index.php/catalog/865/download/19351>.

⁶⁶ Barriteau (2012), Op. Cit., p. 242.

⁶⁷ Lashley (2012). Op. Cit.

⁶⁸ Ellis (2001), Op. Cit., p. 37; Lashley (2012). Op. Cit.

⁶⁹ Grant, S. C. (2004), "Caribbean Women in Fishing Economies", in Proceedings of the Gulf and Caribbean Fisheries Institute, 55, pp. 69–75.

⁷⁰ McConney, P., V. Nicholls and B. Simmons (2012), "Women in a Fish Market in Barbados", in Proceedings of the Gulf and Caribbean Fisheries Institute, 65, pp. 26–30; Bernard (2012), Op. Cit.

⁷¹ It needs to be noted that the data in Table 8.3 indicate only the numbers of males and females who accessed loans in each category and in total. It is therefore not possible to compare the EC\$ amounts allocated to males and females in each category or in total

⁷² Caribbean Development Bank. 2014. Dominica Country Gender Assessment Report

risk-averse collateral requirements of the institutions (land/property or cash in the bank, equivalent to the loan required) which makes it difficult for the majority of women-owned small businesses to access loans.

Data collected from the Grenada Development Bank (GDB) and the National Development Foundation of Grenada (NDFG) for 2012⁷³, indicated that men accessed 100 percent of loans for agriculture (EC\$81,000) and fishing (EC\$29,000), compared to women who received 0 percent, indicating not only that these sectors are male dominated but also that females may not have the collateral base to access loans. However, surprisingly, males predominate even in the micro-sector, accessing EC\$26,500 (or 25 percent) of these loans, compared to females who accessed only EC\$10,200 (or 9 percent). The majority of micro-sector loans were made to mixed applicants (men and women applying collectively), who received EC\$71,000 (or 66 percent) of all loans in this sector. Since women are perceived to predominate in the micro -sector, the statistics suggest that women do not have the collateral to enter loan arrangements independently and do so in partnership with men.

Finally, data provided by the National Development Foundation of Grenada (NDFG), while not disaggregated by sector, indicate a similar picture of dominance by men regarding access to loans. Interestingly, 57.8 percent of loans were made to men who received 70 percent of the total dollar value of loans, while 44.2 percent of the loans were made to women who received 30 percent of the total dollar value of loans. Thus, not only were more men than women granted loans, but men also received a disproportionately large percentage of the total dollar value of loans granted.

6.3 Land Policy

A poor land policy has been recognized as a major constraint to sustainable agricultural production in the countries. It is further recognized that land use policy and legislation can play an important role in addressing this problem. To this end, it is important to understand the land policy situation in the countries.

Many farmers are land tenants, not landowners. Insecurity of tenure is recognized as the main factor limiting the ability of land tenants to invest in improvements to their farms. Since the 1930s, this problem has been addressed by laws giving land tenants security of tenure provided they practice “good husbandry”, coupled with laws for the creation of land settlement schemes on Crown/State lands. In most countries, this old legislation is not in use.

“Family land”, which is co-owned in undivided shares by the heirs and successors of the original purchasers, is very common in the countries, particularly in St. Lucia where 45 percent of all landholdings falls into this category. This affects agricultural development as all the beneficial co-owners of the land enjoy the right to live upon and cultivate the land and no individual can borrow against it. Although an application for partition may be made to subdivide the land, this is sometimes impossible and only St. Lucia has introduced legislation to facilitate dealings with undivided family land.

Except for the St. Lucia Land Registration Act, there is no legislation in the countries that seeks to address the issue of family land and that legislation approaches the issue simply by creating a trust for the sale. In most jurisdictions, there is legislation analogous to the Dominica Partition Act, which facilitates the subdivision or sale through the courts, of land that is owned by tenants in common,

⁷³Caribbean Development Bank. 2014. Grenada Country Gender Assessment Report

including family land. The Partition and Land Registration legislation in the relevant countries needs to be amended to ensure that (i) no subdivision can be effected without the consent of the agencies responsible for the regulatory control of subdivision and that (ii) there is a minimum parcel size for subdivision, to prevent the indefinite fragmentation of agricultural land.

Dominica is the only island with a community of indigenous people, the Kalinagos. The Kalinago Council holds all the land within the Reserve as communal land and administers it pursuant to the provisions of a special Act. The fact that the land is communally owned affects the occupants' access to credit and investment in agriculture. The situation in Barbuda is also unique as all the land is vested in the Crown on behalf of the people of Barbuda in perpetuity and all the inhabitants of the island are deemed to be land tenants. Historically, therefore, land in Barbuda has been treated as communal land, which continues to frustrate agricultural development. Legally, the use of the land by residents is controlled by the Barbuda Council. However, there is an issue between the central and local governments concerning which body has responsibility for the allocation of land to foreign investors.

While land-use planning and development control legislation in the countries can be used to preserve agricultural land, is not concerned with the uses to which land reserved for agriculture is put. There are very few enactments in force in the countries that have some bearing on agricultural production zoning. Consideration should be given to legislation on agricultural production zoning.

The fact that financial institutions in the countries do not lend against leasehold interests in land is a major problem for financing agricultural development. Unless the recommended strategy of converting leaseholds to freeholds is adopted, this problem can only be addressed by creating a loan window for land tenants. It has been recommended in Dominica that Government banks should take the lead in this respect. This recommendation applies to most of the other countries studied. The question of financing for the development of family lands requires further study. Innovative strategies, such as the Grameen Bank approach, may be relevant in this context.

In Antigua and Barbuda, the limited resource endowments of women, in particular land and capital, are major constraints that make them and their families more vulnerable to poverty. Women's persistently low land ownership undermines their voices in "claiming property that they have traditionally used" for production and economic sustainability.⁷⁴ UN Department of Economic and Social Affairs argues that the gender asset gap maintains significance due to: male preference in inheritance; male privilege in marriage; male bias in community and state programmes of land distribution and male bias in the land market.⁷⁵ As a result, women's low access to property and economic resources continues to impact on their subsistence and livelihoods. The Ministry of Agriculture, Fisheries and Barbuda Affairs does not maintain sex-disaggregated data on land ownership.

In Barbados, ownership of land and other productive resources is essential to enable ascent from poverty and to contribute substantially to economic growth. Policies and laws providing for equal access for women and men to land holdings and tenure have been in place since 1968. The Town and Country Planning Act (1968) (Amended 2003) provides for land and water rights and legal

⁷⁴ UNIFEM (2010), Who Answers to Women? Gender and Accountability: Progress of the World's Women 2008-2009. Accessed at: http://www.unifem.org/progress/2008/media/POWW08_Report_Full_Text.pdf

⁷⁵ UN Department of Economic and Social Affairs (2011). The World's Women 2010: Trends and Statistics, p. 170. Accessed at: http://unstats.un.org/unsd/demographic/products/Worldswomen/WW_full%20report_color.pdf

security of tenure for all individuals irrespective of gender.⁷⁶ Nevertheless, available evidence suggests that men own the bulk of the land and other productive resources. These findings suggest an area of importance for research to be carried out to understand the factors limiting the implementation of land reform in the country.

The 2011 Dominica Population Census (GOCD, 2014) indicates that men generally own larger parcels of land and are involved in larger-scale agricultural production for export and the rearing of large livestock. Women generally have access to smaller plots of land, are more involved in household food production, small scale vegetable production and the rearing of small livestock, with subsistence production and food security being the main outcomes.

Land is the primary economic factor in the country’s predominantly agricultural economy. It is therefore a strong indicator of women’s marginalized economic status in rural communities that an assessment of farm ownership and average acreage indicated that women owned only 21% of banana farms, compared to men’s ownership of 79% (GOCD, 2006). There is therefore an urgent need for the forthcoming Agricultural Census to provide sex-disaggregated data on land title registration, farm ownership, crops produced, etc.

Land is the primary economic factor in Grenada’s predominantly agricultural economy. **Table 6.1** below indicates land ownership patterns among men and women in the country, indicating significantly higher numbers of men owning and leasing land than women. According to the GPRS 2012-2016, many small landholders are women, and without an effective land titling project which gives women legal title to their land, women are unable to convert their interest in the land into a tangible asset (GOGR/CDB, 2012: 41).

Table 6.1: LAND OWNERSHIP BY GENDER, 2013

Gender	Land Ownership					
	Owned	Rent/Leased	Family Land	Others	Government	Not Specified
Males	532	210	339	21	11	21
Females	199	49	86	6	3	4
Total	731	259	425	27	14	25

Source: Grenada Small Farmers Vulnerability Reduction Initiative Project (GSFVRIP), Ministry of Agriculture, Government of Grenada, September 2013

In 2007, the Ministry of Agriculture of St. Lucia, with the assistance of the FAO analyzed the gender dimensions of the agriculture sector inclusive of land ownership, the legal status of landholders (individual, joint, cooperative etc.), land tenure and access to agricultural machinery and equipment. This analysis was based on the Ministry’s 2007 Agriculture Census – the last available year for such a report. It found that there were more male than female holders of land and that the majority of both women and men landholders were over the age of 35, with a significant proportion over the age of 65. In addition, while there is no institutionalized gender inequality in relation to land tenure, women landholders had more restricted access to land than men did, and male landholders had more access to and use of agricultural machinery than their female counterparts did.

The development of agriculture in St. Lucia is guided by the National Agricultural Policy 2009–2015 and the FNS policy of 2015. Concerning the promotion of gender equality, the national policy states:

⁷⁶ Ministry of the Environment, Water Resources and Drainage (2010), Barbados National Assessment Report of Progress made in addressing Vulnerabilities of SIDS through Implementation of the Mauritius Strategy for Further Implementation (MSI) of the Barbados Programme of Action, Government of Barbados, Bridgetown

“Government is cognizant of the contribution of both men and women to food production. It recognizes that each group is affected differently by policy decisions and experiences. Government will seek to reduce the factors that cause gender inequality in agriculture and promote equity in the execution of all policies and programs”.⁷⁷

However, although the Government notes the role of women in food production, it does not explicitly discuss their role in commercial food production or their economic contribution to agriculture. According to the 2007 Agriculture Census, there were 9,972 holders’ legal landholders that year. Of these, 6,894 were men and 2,906 were women. As shown in **Table 6.2**, individual holders predominated.

Table 6.2: Status of Land Holder by Sex⁷⁸

Description Legal Status of Holdings	Number of Holdings		
	Total	Males	Females
Individual	9,800	6,894	2,906
Joint individual	156	121	35
Cooperative	1	0	0
Company/corporation	8	0	0
Government	2	0	0
Others	5	0	0

Source: Paul, R. (2007)

In 2007, men held 70 percent of land holdings while women held 30 percent. This is a slight increase from 1996 when women held about 26 percent of landholdings as compared to men who held 74 percent.⁷⁹ While the ages of both female and male holders have been increasing over the years, female holders are older than male holders. Given this fact, and because there is a significant number of holders over the age of 65, agriculture has begun to lose its footing with the youth, who do not see it as a means to wealth.

While freehold land is popular, family land remained the predominant form of land tenure for both women and men landholders, with more men owning this than women. Lack of women’s ownership and tenancy becomes important in matters of accessing credit and finance as more women lack the necessary documentation (land deed/title) that is required by many lending institutions to facilitate needed loans. In this regard, more men own more agriculture equipment, inclusive of trucks/vans, water tanks, pumps, and sprinklers etc., than do women.

6.4 Labour

According to analysis put forward by the ILO’s Women at Work Initiative, women are less likely to participate in the labour market than men, with a global rate of 49 per cent – 27 percentage points lower than men’s participation rates.⁸⁰ Globally, the unemployment rate for women stands at 6.2 per cent in 2017, compared to 5.5 per cent for men, and based on current trends there is unlikely to be a reduction in the gap in the near future (ibid.). Amongst those most vulnerable to

⁷⁷ Ministry of Agriculture, Lands Forestry & Fisheries undated, p. 6

⁷⁸ Paul, R. 2007. St. Lucia Census for Agriculture: Gender dimensions of the agriculture sector.

⁷⁹ FAO. 2007. St. Lucia Census for Agriculture

⁸⁰ ILO 2017. World Employment and Social Outlook Report: Trends for Women 2017 (Geneva)

unemployment are young women in many regions of the world. In Northern Africa and the Arab States, for example, the female youth unemployment rate is almost double that of young men, at 44.3 per cent and 44.1 per cent, respectively.⁸¹

The ILO's World Employment and Social Outlook: Trends 2017 report also showed that women undertake more unpaid work than men due to time spent on household chores and family responsibilities. Underemployment of women is also a serious problem (measured as working fewer hours than they would like) with rates that can reach 40 per cent to 50 per cent (ILO, 2017).

Through research and concrete action, the barriers most often identified as reasons why progress on decent work for women has been slow are:

- Gender stereotypes, discrimination and unequal access to work;
- Absence of equal pay;
- Unequal distribution and undervaluation of care work; and
- Violence at work.

Similarly, women make up the majority of workers in vulnerable forms of work such as own-account work and contributing family work. A particularly pernicious area of discrimination is the gender wage gap which prevails in all countries regardless of income status. According to the ILO, women earn 77 per cent of men's wages.⁸² This wage gap cannot be explained solely by differences in education or age. It is linked to the undervaluation of the women's work, the skills required in female-dominated sectors or occupations, and the need to take career breaks or reduce hours in paid work to attend to care responsibilities, all of which leads to many forms of discrimination.

Equally difficult to dislodge is labour market segregation – both horizontal, in which women are over-represented in a narrower range of jobs and sectors than men, and often in the more poorly paid segments; and vertical, in which women are often concentrated in lower-ranking positions and have less opportunity for promotions, access to positions of authority and management, or higher salaries. This latter “glass ceiling” can occur as a result of many factors, including discrimination in the recruitment process; less investment in female staff because of the perception that their childbearing potential weakens their attachment to the labour market; as well as the fact that women are more likely to take jobs that offer a better balance between family responsibilities and work.

All these cumulative disadvantages faced by women throughout their life cycle and in the labour market put them at greater risk of poverty in their later years. Pension coverage is lower for women than men, the global level accounting for an average gender difference of 10.6 percentage points lower.⁸³ Women also represent nearly 65 per cent of people above the retirement age without any regular pension worldwide, resulting in an estimated 200 million elderly women who are living without any regular income from an old age or survivor's pension compared to 115 million men.⁸⁴ The question is: Is there evidence from the study to support the ILO's global findings, whether from the general economy and/or the agricultural sector. Throughout the most productive economic sectors of Antigua and Barbuda, women predominate in positions that are precarious, lower-paying

⁸¹ ILO, 2016. Women and Work Trends (Geneva)

⁸² Ibid

⁸³ ILO, 2016. Women and Work Trends (Geneva)

⁸⁴ Ibid

and/or less secure, and largely reinforce stereotypical gender roles of domesticity and the provision of care.⁸⁵

Data presented in **Table 6.3**⁸⁶ reveal that men are far more represented in the sectors that contributed the highest percentage to GDP (Construction, Transportation and Communication), and within those targeted by the Government of Antigua and Barbuda (GOAB) for development (Agriculture and Fisheries). Women are more represented in Government Services and Financial and Business Services and are noted to not only fill the positions that are lower paid (Osoba, 2005) but also greater represented amongst the poor for persons employed within these services. Overall, women maintain a higher unemployment rate than men, and remain unemployed for longer periods, once they fall into the category of ‘economically inactive’ (FOCAL, 2006).

Table 6.3: Employment Distribution by Sex in Economic Sectors

Sectors and Indicators	Distribution of Real GDP (2006-2010)	Total Employment by Sector (1000s)	
		Male	Female
Agriculture, Hunting, Forestry	0.77	0.563	0.225
Fishing	0.96	0.288	0.002
Manufacturing	2.19	1.054	0.70
Wholesale and Retail Trade	16.16	2.586	2.931
Hotels and Restaurants	13.13	2.327	3.455
Government Services	7.89	2.399	2.587
Education	4.83	0.45	1.507
Health and Social Work	2.70	0.341	1.614
Others	51.37	8.692	4.691
Total	100.0	18.295	17.082

Source: Extracted from Caribbean Development Bank. 2016. Antigua and Barbuda Country Gender Assessment Report

Of the eighteen (18) business types/categories of employed persons by industry in the 2001 Census, women’s participation exceeds men in wholesale/retail trade (53%); hotels and restaurants (59.9%); public administration (51.9%); education (75%); health and social work (82.6%); other community, social and personal services (56.4%); and private housework with employed persons (82.3%). Where women and men were employed within the same occupational class, women’s earnings are on average lower than men.⁸⁷ (FOCAL, 2006).

In the absence of a Labour Market Survey in Antigua and Barbuda, current wage gap data cannot be obtained, however, data for 1983 to 1999 pegged Antigua and Barbuda’s occupational gender wage gap data at 0.09 (zero being equal) – double the average of countries within which it is categorized (0.03) (Oostendorp, 2004).

In 2012, a public sector census was conducted by the Public Sector Transformation Unit to obtain an accurate headcount of public servants, and was successful in capturing 90% of employees in central government ministries (Public Sector Transformation Unit, 2013):

- 7,439 workers were counted, 2,720 of whom were male and 4,719 female, with approximately 63 percent of the public service female, and 37 percent male;
- The Barbuda Council maintains a very different gender representation, with greater equality in numbers, with a total of 480 workers, of whom 225 were male and 255 female.

⁸⁵ Ibid

⁸⁶ Obtained from various sources including the Eastern Caribbean Central Bank; Caribbean Development Bank 2016 Antigua and Barbuda Country Gender Assessment Report

⁸⁷ FOCAL, 2006. The Caribbean Single Market and Economy (CSME): The Case for Tracking Impacts on Women and Men.

Combining numbers for the central and local government reveals that approximately 2,495 government workers (37.2 percent) were male, and 4,974 (62.8 percent) were female. The public service accounts for approximately 18 percent of the total labour force in Antigua and Barbuda. As a result of public indebtedness, at times Government was forced to pay public sector employees late, particularly those receiving weekly wages, which includes cleaners and messengers; these workers are predominantly female.⁸⁸ With wage freezes in force and a significant proportion of women in the government service, women are statistically more likely to be adversely affected by this strategy. The Government is recognized as a significant employer of persons in the lowest poverty quintile (Country Poverty Assessment, 2007). However, women are more represented amongst these groups than men. As noted, women within Paid Employment by Government account for 34.4 percent and 32.8 percent of the lowest two per-capita consumption quintiles, respectively, while men of the same employment category account for 22.0 percent and 15.1 percent, respectively.⁸⁹

Consumption levels differ along gender lines in the country, particularly at the lowest levels, and create varying challenges. Wage insecurity has been particularly noted to affect the purchase of school supplies and timely payment of utilities and other essential bills. Therefore, reduction and/or freezes in wages within the public sector will have a disproportionately higher impact on women than men while failing to account for rising living costs and other debt-reduction planned interventions.

Antigua and Barbuda's Labour Statistics Division calculates the unemployed labour force using the categories of those persons who looked for work, and those persons who wanted work. Through this calculation, no measure of persons who participate solely in "Home Duties" or unpaid labour in the home is accounted for. Consequently, the contribution of women to production through unpaid work receives no economic consideration or further measure in the GDP. This is further emphasized by the definition of the "economically inactive population" as referenced in the 2001 Census. Persons considered "economically inactive" are those engaged in Home Duties, e.g., "housewives, and others engaged in cooking, cleaning, and child-rearing" and who do not receive monetary pay for such activities. Women are over-represented in this category (and implicitly placed into this category with the word "housewives") and are thus largely not counted as contributors to the economy. Among those who are deemed "economically active", women have a higher unemployment rate than men, and remain unemployed for longer periods. In Antigua and Barbuda, there are no active systems for measuring the contribution of unpaid work to overall social security, household economic security, and broader economic growth. Unpaid labour however provides for the provision of food, clothing, shelter, basic safety, and health care. Moreover, unpaid labour is highly sex-segregated - not only socio-culturally deemed a woman's responsibility but is also overwhelmingly performed by females. This includes the women's burden of care of children, the elderly, infirm and disabled, all commonly subsumed within the category of "labour of love".⁹⁰

Barbados has a formal economy largely based on services, with manufacturing, construction, mining and quarrying, utilities and agriculture contributing relatively little to GDP in comparison. Gender analysis of the structure of the economy is possible by looking at the numbers of females and males employed by sector. **Table 6.4** presents the employment data by sex for the sectors of the economy.

⁸⁸ Under the Government's Public Sector Transformation Programme, in addition to the numbers, positions and qualifications of public sectors workers have been documented. This is expected to result in a detailed, sex-disaggregated account of the public sector labour force, which at present is unavailable

⁸⁹ Caribbean Development Bank. 2007. Antigua and Barbuda Country Poverty Assessment Report.

⁹⁰ Caribbean Development Bank. 2016. Antigua and Barbuda Country Gender Assessment Report

Table 6.4: Barbados Employment by Sector and Sex

Sector	Employment in Sector ('000')		
	Male	Female	Total
Hotels and restaurants	4.4	8.3	12.7
Transport, storage, and communications	5.7	1.7	7.4
Wholesale and retail	9.0	11.2	20.2
Manufacturing	4.5	3.9	8.4
Construction, mining and quarrying	11.9	1.1	13.0
Personal and other services including private education and health	2.1	2.2	4.3
Electricity, gas and water	1.9	1.0	2.9
Agriculture, forestry, and fishing	2.2	1.3	2.3
Public administration and defence	5.4	4.3	9.7
Administrative and support service	4.4	2.5	6.9
Education	2.4	4.5	6.9
Human health and social work	1.5	5.1	6.6
Other services	2.4	2.8	5.2
Activities of households as employers	1.3	3.7	5.0
Other groups	3.6	3.0	6.6
Total	62.7	56.6	119.3

Source: Barbados Statistical Service Labour Force Survey, 2012.

Table 6.4 illustrates how, based on employment data, there are gendered patterns regarding employment. The sector that contributes the most to male employment is construction, mining, and quarrying. This sector also has the largest difference between the numbers of men and women employed. Other sectors making major contributions to male employment are wholesale and retail, transportation and storage, and public administration and defence. For women, the top sectors for employment are wholesale and retail, accommodation, and food services (tourism), health and social work, education, and public administration and defence. In all these other sectors, except public administration and defence, the number of women is much higher than the number of men employed. There are also many more women than men carrying out 'activities of households as employees', usually as domestic workers.

There is evidence of a sexual division of labour within the employed labour force. There are 4.5 or more times as many men as women employed as craft and related workers, plant and machine operators and skilled agricultural workers, emphasizing the role of men in manual labour. There are also more men in unskilled or elementary occupations. In addition, more men are in work requiring a high level of qualification and in senior jobs – such as technicians and associated professionals, legislators, and managers – though not by a wide margin. However, among professionals in general, there are more women than men. Women are more numerous among service and shop workers and clerks and, along with professionals, these workers account for 60.4% of the female workforce whose occupations were defined in the Labour Force Survey in 2012 (**Table 6. 5**).

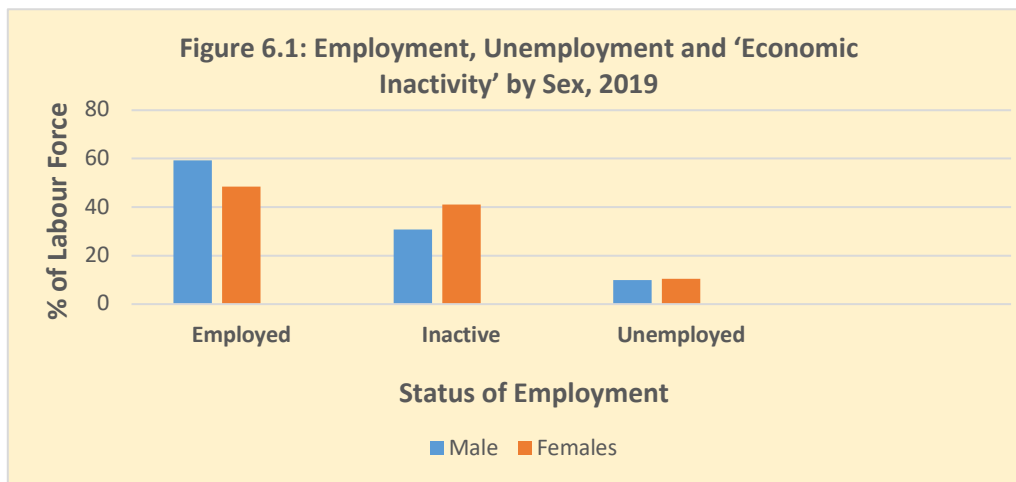
Table 6.5: Numbers of Male and Females in the Employed Labour Force and Male/Female Ratio by Occupation, 2012

Description of Occupation	Males	Female	Male/Female Ratio
Craft and related workers	13.7	1.5	9.13
Plant and machine operators	6.0	1.2	5.00
Skilled agricultural workers	2.7	0.6	4.50
Elementary occupations	13.2	9.3	1.42
Technicians and associated professionals	7.1	6.6	1.08

Legislators, managers	5.1	5.7	1.09
Professionals	5.7	9.8	0.58
Service/ shop workers	8.4	15.0	0.56
Clerks	2.6	11.6	0.22
Total	64.5	60.3	1.07

Source: Barbados Statistical Service Labour Force Survey, 2012

It is important to look beyond the population that is employed to examine those who are not. In 2019, as presented in Figure 6.1, close to two-thirds of male adults were employed as compared to just over half of female adults.



Source: World Bank Database

Over two-fifths of women were 'economically inactive'⁹¹ compared with just under 31 percent of men. Around 10 percent of both women and men were unemployed. It may be observed that the rate of unemployment is usually calculated as a percentage of the employed plus the unemployed populations, which ignores the so-called 'economically inactive' population. According to the conventional measure of unemployment, 17.6 percent of females and 14.3 percent of males were unemployed in 2019.

The earnings of women are below those of men. There are more women than men in earnings brackets up to \$499 per week, and more men than women in every income bracket from \$500 per week upward. The findings reflect those of Bellony, Hoyos and Nopo (2010), who found lower earnings among females than males when analysing 2004 Labour Force Survey data for Barbados.

As previously mentioned, women are over-represented in lower-income brackets and the 'economically inactive population. Both contribute to higher levels of poverty among women than men. Sociological and demographic factors are also important. Poverty is concentrated among households headed by women, which account for 47.5 percent of all households.⁹² Of poor households, 62.2 percent are headed by women. The rate of poverty in female-headed households is

⁹¹ The economically inactive population comprises all persons who were neither "employed" nor "unemployed" during the short reference period used to measure "current activity". This population is split into four groups: Attendant at educational institutions; Retired; Engaged in family duties; other economically inactive

⁹² 2010 Population and Housing Census.

19.4 percent, compared with 11.5 percent in male-headed households and 15 percent in all households.⁹³

The 2011 Dominica Census indicates that 39.2% of households are headed by women, indicating a 17.3% increase over the last decade (GOCD, 2014: 13). Women thus bear the heavy responsibility of providing for their children. Dominica's draft CEDAW Report points out that the gender dimension of poverty is evident in the percentage of poor people living in women-headed households compared to men-headed households (GOCD, 2011: 53-55). Many poor women engage in transactional sex and other illegal activities to survive, a practice that is passed down to their daughters which is further complicated by the risk of teenage pregnancy. Some 40.3% of women aged 15-49 reported having had their first child between ages 15-19, representing a high incidence of teenage pregnancy (Kairi, 2009).

Poverty reduction strategies are critical to developing country economies. The CDB-supported Basic Needs Trust Fund (BNTF) is guided by the findings of the Country Poverty Assessment (CPA) and targets the poor and vulnerable, specifically the Carib community, persons displaced by the banana crisis, parishes/communities identified as 'poor' in the CPA, and women and youth (CDB, 2010: v).

BNTF's skills training programmes seek to provide marketable skills and empower beneficiaries through building self-esteem, management, and leadership skills, etc. However, while the skills training programmes are accessed by relatively equal numbers of men and women, the courses reflect traditional gender roles (e.g., men predominate in courses on auto-body repairs, small appliance repairs, carpentry and joinery, painting, plumbing, and tiling; and women in sewing courses, catering, hospitality, and food preparation. In addition, while increasing numbers of women are gravitating towards 'male' fields, the reverse is not the case. It is recommended that BNTF training courses should include awareness-raising on critical gender issues that are posing challenges to the society (e.g., changing male/female gender roles, teenage pregnancy, family planning, parenting, anger management, gender-based violence, gender, and the law, etc.), as well as those that are necessary for individual enterprise and economic growth (e.g., information on banking and credit services).

As part of the Government's GSPS (2008), some gender-friendly initiatives were implemented concurrently with the 2006 National Gender Policy which addressed the needs of women, children, senior citizens, and other vulnerable groups in the society. There are no legal barriers to prevent men's and women's equal participation in the labour force. The Government has paid attention to issues of the protection of employment, conditions of work, and tripartite labour relations, and is a signatory to numerous International Labour Organization (ILO) Conventions that provide an international framework and a legal basis for labour issues.

Based on available data on employment obtained from the 2011 Population Census, the labour force was estimated at 30,204 comprised of 17,646 (or 58.4%) males and 12,558 or (41.6%) females. Of the male labour force, 15,482 (or 87.7%) of men are employed compared to 11,320 (or 90.1%) of women. Women's productive work is still not quantified or valued in labour force statistics, as indicated by the comparative numbers of men and women designated as 'employed'. The unemployed comprise 2,164 (or 12.3%) men compared to 1,238 (or 9.9%) women, indicating that male unemployment is higher than that of women. In addition, while there were no sex-disaggregated statistics for youth unemployment, the overall figures were very high – 39.9% among

⁹³ Based on the poverty line of \$7,860.65 in 2010. Source: Sir Arthur Lewis Institute of Social and Economic Studies (2012).

15-19-year-olds and 22.2% among 20-24-year-olds, indicating that youths account for almost two-thirds of the unemployed.

There is clear evidence of gendered occupational segregation in Dominica. Despite women's educational outperformance of men at all levels,⁹⁴ men comprise the majority of managers (legislators, senior officials, and managers) at 53.6% compared to 46.4% of women. However, women's educational achievement is evident in the labour force among professionals (M: 34.4%; F: 65.6%), and technical and associate professionals (M: 47.8%; F: 52.2%). The category of sales and services, accounting for the highest number of workers (5,975 or 22.3%) is dominated by women (M: 36.9%; F: 63.1%), as is that of clerical workers (M: 21.9%; F: 78.1%). However, the crafts and trades category (comprising building construction, metal and machinery trades, food processing, woodwork, handicraft, and garment workers) is dominated by men (M: 91.9%; F: 8.1%), as is that of skilled agricultural and fishery workers (M: 85.0%; F: 15.0%).

The 2011 Census data indicate that there is a strong presence of women in the public service. Of a total of 4,458 Government workers (comprising 16.6% of all workers), men represent 44.3% and women 55.7% (GOCD, 2014). In the Statutory Bodies, of a total of 721 workers, 58.5% are men and 41.5% are women. The Census data also indicate that women outnumber men among the 3,245 professionals [Male (M): 34.4% and Female (F): 65.6%], the 2,754 technical and associate professionals (M: 47.8% and F: 52.2%), and the 1,801 clerical support workers (M: 21.9% and F: 78.1%).

A detailed analysis of the labour force statistics reveals that women comprise the majority in the administrative, technical, and professional ranks of the public service. They also constitute the majority in the nursing and teaching professions. While relatively 'secure' (despite the downsizing of the public sector due to Structural Adjustment policies), these jobs are relatively low paid. However, women have been able to achieve a level of economic independence, cope with the increasing cost of living, raise families as single parents, contribute to male-headed households, etc. Women are also engaged in low-paid domestic work and constitute a decreasing number of agricultural wage workers (due to the decline of the banana industry). It needs to be pointed out that one of the consequences is that women have been coping with higher levels of stress-related non-communicable diseases than men.⁹⁵

Regarding entrepreneurship, women predominate in the 'informal economy' as street and market vendors, 'hucksters' in the inter-island trade in agricultural produce and other commodities, and vendors at tourism sites. They are also taking advantage of small business skills training programmes (e.g., BNTF and DYBT). However, there is a continuing gender division of labour in the kinds of enterprises being undertaken by men and women (e.g., men are engaged in agriculture, and women in food and beverages). Women also experience unequal access to credit for agriculture and enterprise development through the mainstream banks such as the AID Bank⁹⁶ but have greater access through micro and small enterprise 'windows' such as the National Development Foundation of Dominica (NDFD) and credit unions.

The Grenada Poverty Reduction Strategy (GPRS) 2012-2016 indicates that the well-being of women and the families they head is of concern in Grenada since the country has the highest recorded percentage of women-headed households among the OECS member states. Not surprisingly,

⁹⁴ Caribbean Development Bank. 2014. Dominica Country Gender Assessment Report

⁹⁵ Ibid

⁹⁶ Caribbean Development Bank. 2014. Dominica Country Gender Assessment Report

discussions on the poor focus mainly on women heads of households due to their low labour force participation and employment rates, their comparatively low incomes (e.g., as domestic, and agricultural workers, clerical workers, nurses and teachers, street vendors and other occupations in the informal economy, etc.), in addition to the unpaid labour of reproductive work. Almost one-quarter (24 percent) of poor women heads of households are not in the formal labour force and of those seeking to participate, only 21 percent are employed. In urban households, 44 percent of women heads of households are in the three lowest consumption quintiles, compared to only 18.6 percent of men heads of households.

Several challenges which restrict women’s ability to care for themselves and their families were highlighted in the GPRS 2012-2016, including the following:⁹⁷

- Inability to find jobs, especially those paying enough to sustain themselves and their children;
- Lack of financial and other caregiving support from the fathers of their children;
- Lack of understanding by society about the real barriers faced by poor, vulnerable women;
- Women’s lack of knowledge of their rights
- Failure/lack of capacity to use available development opportunities;
- Lack of support for women by women; and
- Absence of key social support mechanisms, services, and safety nets for women in need, often compounded by a lack of knowledge as to where help can be obtained, even when support services exist (GOGR/CDB, 2012: 41).

Table 6.6 below shows the gendered occupational segregation in the labour force in Grenada, based on the 2011 Population and Housing Census. The data indicate that men predominate in the following occupational fields: agriculture, forestry, and fishing; manufacturing; electricity, gas, steam, and air conditioning supply; water supply, sewerage, waste management; construction; transportation and storage; information and communications; administrative and support services; arts, entertainment, and recreation. Women predominate in the following occupational fields: wholesale and retail trade; accommodation and food services; financial and insurance services; professional, scientific, and technical activities; education; health and social work; other service activities; and household production. The occupational fields which show some gender parity are mining and quarrying; real estate; and public administration, defence, and social security.

TABLE 6.6: EMPLOYED POPULATION BY INDUSTRY AND GENDER, 2011

Employed Population by Industry and Gender, Population Census 2011				
Description of Industry	Sex		Total	
	Male	Female	No.	%
Agriculture, forestry and fishing	2,785	640	3,389	8.2
Mining and quarrying	20	18	38	0.1
Manufacturing	1,243	713	1,956	4.7
Electricity, gas, steam and air conditioning supply	192	71	264	0.6
Water supply; sewerage, waste management and remediation activities	317	64	381	0.9
Construction	4,238	202	4,440	10.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	2,951	3,272	6,232	15.0
Transportation and storage	1,885	410	2,295	5.5
Accommodation and food service activities	864	1,550	2,414	5.8
Information and communication	324	226	550	1.3

⁹⁷ Growth and Poverty Reduction Strategy (GPRS), 2012-2016

Financial and insurance activities	375	733	1,108	2.7
Real estate activities	27	26	53	0.1
Professional, scientific and technical activities	237	370	607	1.5
Administrative and support service activities	1,009	757	1,766	4.3
Public administration and defense; compulsory social security	1,864	1,747	3,611	8.7
Education	1,097	2,700	3,797	9.2
Human health and social work activities	285	1,519	1,804	4.4
Arts, entertainment and recreation	389	189	578	1.4
Other service activities	390	498	888	2.1
Household activities: Undifferentiated production of goods and services for household use	87	915	1,002	2.4
Activities of extraterritorial organizations and bodies	14	23	37	0.1
Not stated	2,199	2,000	4,199	10.1
Total	22,793	18,607	41,400	100.0

Source: Population and Housing Census 2001 and 2011, Central Statistical Office, Ministry of Finance, Government of Grenada. Note from CSO: "Parts may not sum to total because data are weighted".

Gender segregation in employment exists in St. Lucia as men predominate in agriculture, forestry, and fishing; construction; manufacturing; and transportation and storage while women predominate in wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service; public administration and defence and compulsory social security. According to the PSA, which utilizes St. Lucia Labour Force Survey data, tourism, agriculture and/or wholesale and retail trade accounted for 38.5 percent of employment.⁹⁸

6.5 Preferential Trading Arrangements

Until the early 1990s, the economies of the islands of Dominica, St Lucia, and to a lesser extent, Grenada (the Windward Islands) were heavily dependent upon the banana industry in terms of its contribution towards GDP, employment and export earnings. This dependency was further accentuated by their complete reliance upon the European Community (EC) market, principally the UK, for their banana exports. As former British Colonies and signatories of the Lome Convention, the countries have long enjoyed preferential access to these markets, as enshrined in the Community's Banana Protocol. However, the advent of the Single European Market (SEM) presented important external implications for Dominica, St. Lucia and Grenada as exporters of products such as bananas. The SEM legislation necessitated the elimination of nationally administered trade barriers within the EC, including those sanctioned under the Banana Protocol. In the absence of the implementation of an equivalent import scheme, the SEM created severe difficulties for the countries. These difficulties negatively impacted the social and economic structure of the smallholder agricultural sector (primarily banana-growing) with worrying implications for rural poverty and inequality.

There is no doubt that Central American banana production systems have a considerable comparative advantage over those in banana producing countries of Dominica, Grenada, and Saint Lucia. The key factors of production, land and labour are lower in cost and more productive, and the combination of those factors have enabled the Central American growers to produce the fruit at a lower free on board (FOB) price per carton than the three countries of the Windward Islands, a price that could not sustain the industry in the islands. As the level of protection available for islands' fruit in the market diminishes, the islands were forced to develop strategies to ensure that banana producers can compete in the UK market. Two important strategies were market diversification and the repositioning of the fruit in the fair trade market. The strategies were not sustainable and resulted in a rapid decline in banana exports from these small islands and widespread abandonment of banana cultivation. Those banana farmers who remain are now primarily fair trade producers.

⁹⁸ Caribbean Development Bank. 2016. St. Lucia Country Gender Assessment Report

Similarly, over the last four decades, Barbados was favoured by several agreements and arrangements with Britain and the European Union (EU), which accepted the country's sugar at preferential prices. However, the sugar industry in Barbados sustained a blow when the cost of sugar production on the island escalated due to the increased cost of imported inputs and the price of sugar on the international market plummeted as Europe drastically reduced the price it was willing to pay for Barbados sugar (to safeguard its beet sugar industry). Although the production cost has exceeded the selling price globally, Barbados has maintained the industry for its foreign exchange value. However, the economic challenges led to the number of factories being shrunk, from 10 to 2. The strategic plan of the sugar industry for Barbados is to produce speciality products carrying the Barbadian sugar trademark for the local retail market, produce molasses for the island's growing rum export industry, and produce electricity for local use in the longer term.

Grenada is responsible for more than 20 per cent of the world's nutmeg production, second only to Indonesia, which produces around seventy-five per cent of nutmeg globally. The crop provides income to approximately 30 per cent of the island's population.

In its peak period, Grenada produced over 2,000 tonnes of nutmeg per year with revenues of approximately EC\$13 million per annum. However, between 2002 and 2004, in the aftermath of Hurricanes Ivan and Emily, 555,000 nutmeg trees (more than 90 per cent) were destroyed, and the nutmeg industry experienced a significant decline. By 2010, nutmeg production has recovered, but recovery was still below the pre-hurricane volumes.

Technical improvements have also enabled nutmeg farmers to overcome many threats to the growth of the sector. The nutmeg tree takes four to six years to produce fruit and more than 20 years to reach full production. Given its shallow roots, it can be easily uprooted by the wind. Farmers are learning to adapt to these vulnerabilities by creating windbreaks and shelterbelts using trees such as bamboo, mango and citrus in the path of damaging winds, to reduce wind erosion. Intercropping with cocoa, banana, coconuts and root crops has also been an effective measure for soil and root protection. An alternative propagation method called grafting, introduced in Grenada in 2016, aimed at increasing nutmeg productivity by converting hundreds of male trees into female fruit-bearing ones also holds immense promise for the sector. These developments and advances have opened the door for a "second wind" for Grenadian nutmeg, both locally and internationally. Notwithstanding the efforts made by the various stakeholders to save the sugar, banana and nutmeg industries, the fallout that resulted from the erosion of preferential treatment for banana and sugar and the impact of Hurricane Ivan on nutmeg output, crop production and productivity within the industries declined, and livelihoods along the entire value chains were negatively affected.

6.6 High Food Import Bill

In nominal terms, all countries are experiencing increased food import bills, resulting in high levels of imported food commodities in the domestic food consumption bundles. It is not surprising, therefore, that this high level of food imports has negatively impacted the development of domestic agriculture and the agro-processing industry due to the inability of domestic sectors to compete against imports.⁹⁹ This is partly because the agricultural producers of the countries are experiencing many challenges throughout the food value chain. Some of these include limited access to the factors of production, high cost of production related mainly to cost of imported inputs, insufficient processing capability, high freight costs, small markets, tariff policies and lack of mechanisms for

⁹⁹ Silva et al., 2011

health/food safety and production certification. This suggests that the impact of national policies on agricultural trade has been limited.

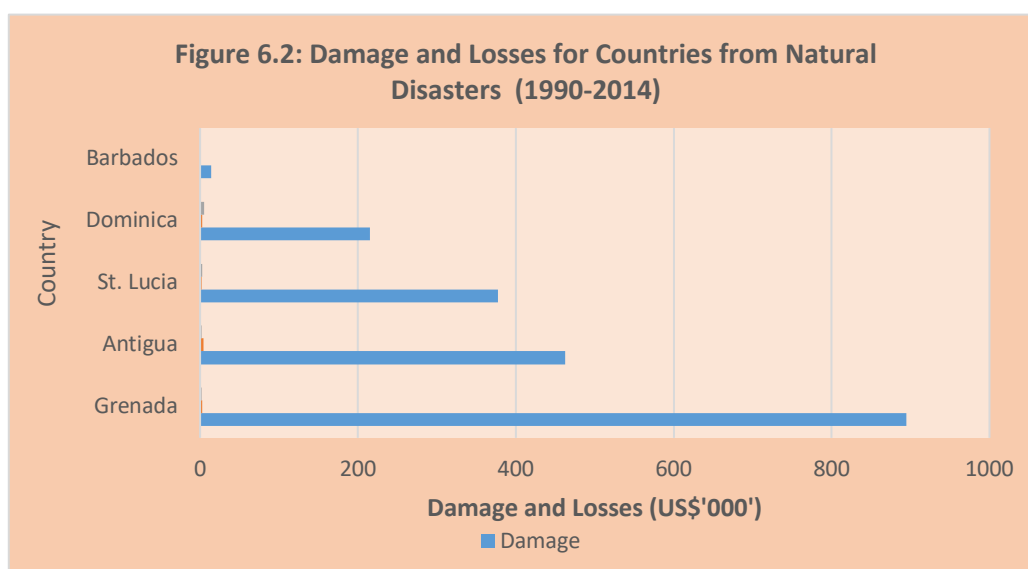
To reduce this high food import bill in the countries, a shift is needed to one that can replace a high proportion of food imports through the identification and development of viable value chains. For example, root crops such as cassava and sweet potato are important commodities grown in the countries and can be used to replace some of the wheat flour in the diet of households. Unfortunately, within the context of the development of national policies, at the onset, there were inadequate analysis and determination of viable value chains that should be promoted for agricultural production (including value addition) and trade.

6.7 World Food Price Inflation

The transmission of international food price inflation through domestic food prices in the countries was evaluated by comparing the FAO World Food Price Index with the food price index of the countries. The comparative analysis indicates that except for the 2010-2013 period, a close relationship exists between the international food price index and the indices of Antigua, Dominica, Grenada and St. Lucia. In the case of Barbados, the domestic rate of food price inflation is higher than the international food price inflation. The influence of international food price inflation, domestic food demand and supply situation, and government taxes/and or subsidies on domestic food price inflation is an important factor that must be considered in the design of national policies and related plans for the agricultural sector.

6.8 Natural Disasters

Disasters (hurricanes, floods and droughts all associated with climate change and volcanic eruptions) in the countries often cause millions of dollars in losses in infrastructure and economic and social sectors. The damage caused to the five countries from natural disasters for the period 1990-2014 is presented in monetary terms in **Figure 6.2**.



Source: EM-DAT Database, 2015; NOAA Hurricane Tomas Report 2011.

In 2017, Antigua and Barbuda and Dominica were heavily impacted by Hurricanes Irma and Maria resulting in significant destruction of properties and livelihoods. In Dominica, Hurricane Maria resulted in total damage of US\$931 million and losses of US\$380 million. The greatest losses were

sustained in the agriculture sector (32%).¹⁰⁰ In Antigua and Barbuda, the total damage of the Irma/Maria events for Antigua and Barbuda amounted to US\$136 million, while losses amount to approximately US\$19 million. Recovery needs are estimated at US\$222 million, of which housing recovery financial needs are US\$79 million, health US\$7 million, and education US\$6.3 million (PDNA 2017).

Flooding is one of the most frequently occurring natural disasters in the countries, where it is most prevalent during the hurricane season and presents a serious threat to the socio-economic development of the region. Droughts have also negatively affected the economic and social sectors of these countries and are often related to the El Niño Southern Oscillation (ENSO).

6.9 Pests and Diseases

The countries are beset with plant pests and diseases which are a serious constraint on agricultural growth and development. Furthermore, movement of pests and diseases among these small islands constitutes a severe quarantine problem. Root crops provide a major source of food in all countries, however, they are affected by a myriad of diseases. Several vegetables are also widely produced in the countries but they are also significantly affected by pests such as aphids, mites, nematodes and whiteflies. The countries have yet to achieve sustainable means of managing pests and diseases which is important for food security. Moreover, there has been indiscriminate use of pesticides in the countries and inadequate knowledge about pests and diseases, which often lead to misdiagnosis and incorrect management.

6.10 Design of Policy and Plans

In the preparation of national policies and plans, stakeholder groups engaged by the countries included sector-related ministries, researchers, NGOs, private sector operators along the value chains (input suppliers, processors, traders, exporters, financial institutions, etc.), academia, national and regional technical level officers. The assessment was not systematic throughout the design process. In addition, there were no comprehensive gender assessments in the development of the policies and plans and therefore only some of the proposed programmes reflect the situation. Therefore, there are no targets designed to achieve gender equity. Consequently, there are no outcomes and outputs designed to achieve the goal of gender equality and the eradication of hunger and food insecurity.

It is important to note that while agriculture can be an important engine of growth and poverty reduction, the sector is underperforming in many countries in part because women, who are often a crucial resource in agriculture and the rural economy, are usually marginalized in the development agenda for the sector.

6.11 Value Chain

The countries are still unable to provide focus attention to the identification of viable value chain and development and allocation of the required resources for implementation.

6.12 Main Constraints of SAEs in the Countries

¹⁰⁰ Post Disaster Needs Assessments (PDNAs) conducted by the UN Group, EU and the WB in 2017.

The problems of SAEs identified at the country level have been enunciated and debated ad infinitum in many local and regional fora and a range of practical recommendations advanced. However, the implementation of most of the recommendations appears to be non-existent. The very absence of implementation strategies may well be the result of the lack of well thought-out, planned strategies for agro-industrial development in the five countries. Some of the critical constraints are discussed below.¹⁰¹

Suitability and Availability of Raw Materials

It is highly questionable whether the present state of the agro-processing sector in the countries is due to a lack of suitable indigenous raw material and the availability of such raw materials in desired quantities. In addition to bananas, plantains, sugar cane and coconuts, the Caribbean countries are endowed with a wide variety of exotic primary commodities, many of which have been used in the agro-processing sector with excellent results. Most of the commonly known fruits have been used in jam and jelly manufacture and the production of fruit nectars and drinks. Other commonly used materials include herbs, spices and root crops. It has however been suggested that very few of these commodities are available in the quantities required throughout the year to sustain a viable agro-processing sector.

Based on the experience with the agro-processing sector in Grenada, raw materials for agro-processing are available in that country in the required amount throughout the year.¹⁰² One needs to differentiate between the seasonality of growth and the availability of raw materials for processing. Hot peppers and sea moss, for example, are available for processing throughout the year as the country has developed semi-processed forms in which they can be stored. Similar attention has not been given to the range of exotic tropical fruits with tremendous year-round processing potential. This constraint needs to be addressed by conducting fundamental and applied research aimed at developing know-how for better, innovative processes for the utilization of indigenous resources.

The countries have also given considerable attention to crop diversification. However, the programmes are geared once again for the fresh fruit export market and little if any attention has been paid to the production of selected commodities for processing. The thinking continues to be that the surplus from the fresh fruit market will feed into the agro-processing sector. The reality is that surpluses generated from the fresh fruit market varieties may not be best suited to agro-processing or the prices asked by the farming community for such may be prohibitive. One possible solution to the problem of adequate raw material supplies throughout the year is the development of dedicated farms for the production of raw materials. Here selected commodities that would be channelled into the agro-processing sector could be propagated and grown on a phased basis to meet the demands of the processing sector. Another possible solution is to develop a mechanism that would guarantee adequate raw material supplies throughout the year from the farming community.

National policy then must be set within a framework for the structural transformation of primary production and the establishment of linkages for the development of a vibrant and profitable agro-industrial sector. Adequate attention must be given to the promotion and organization of domestic production to supply raw materials for the development of this sector. The lack of a clear policy framework regarding the production and utilization of these commodities is perhaps the most critical constraint that needs to be resolved.

¹⁰¹ See the Report of Lambert, I. 2001. Problems and Constraints to the Development of the Agro-Processing Sector.

¹⁰² See the Report of Lambert, I. 2001. Problems and Constraints to the Development of the Agro-Processing Sector.

Research and Technology and Technical Support for Agro-Industrial Development

The process of making jams, jellies, fruit nectars and other beverages is well established in the Caribbean. However, the technology utilized in the small-scale processing sector has remained relatively static and traditional. Thus, in many respects, other crucial constraints to the development of the agro-processing sector are the lack of proper utilization of research and technology, a lack of trained personnel, inadequate technical, managerial and marketing support. Neither the state nor the private agro-processing sector has invested in the development of the most effective research, nor have they readily embraced and adopted the most appropriate and current technology. These problems are even more serious in the case of small farmers since they generally do not have the financial resources or credit facilities at their disposal to invest in new processes, human resources, management nor technological innovation.

In the countries of the Organization of Eastern Caribbean States (OECS),¹⁰³ the food processing sub-sector has for some years now been served in a limited way by Produce Chemist Laboratories. In other CARICOM countries, there are better organized and staffed facilities serving the agro-processing sector. What seems evident however is that the agro-processing sector, even with limited technical assistance, has generally been unable to absorb and fully utilize the technological packages and services provided by these research and development agencies. We can cite the example of the development of "*instant yam*" by George Sammy and Gidden in the 1970s, and the development of "*composite flour*" in 1973, and pose the question "*are they on the market in any of these islands today?*" If not, then why not? What is evident is that the countries under review have access to research and development and the capacity to develop excellent ideas, but we are either unable or unwilling to capitalize on these ideas.¹⁰⁴

In addition to trained professional staff in the Produce Chemist Laboratories, technical assistance in agro-processing is also readily available from regional institutions such as U.W.I. and CARIRI. These linkages however need to be strengthened via outreach programmes. Thus, the need for training and technical assistance in the basic principles of processing, hygiene and sanitation, quality assurance and standards, product development, food microbiology, labelling and packaging can all be addressed once the political and financial will exist.

It is quite obvious that a science-based approach is needed to set standards in the processing of food products. This will also have implications for national, regional, and international trade as the industry and other institutions, such as a National Food and Drugs Administration and a Bureau of Standards developed. Furthermore, food science and technology are the foundation discipline for research and development in the food industry. Thus, professional development in this area must be seen as the cornerstone in any agro-industrial/food processing development programme. This reality must be seriously addressed in agricultural and agro-industrial development policies at the national level.

Management, Finance and Marketing Support Mechanisms

Another serious constraint to the development of a viable agro-industrial sector in countries is the scarcity of funding and the low level of entrepreneurship and management training of the large

¹⁰³ Antigua and Barbuda, Dominica, Grenada and St. Lucia are Members of the OECS

¹⁰⁴ See the Report of Lambert, I. 2001. Problems and Constraints to the Development of the Agro-Processing Sector

majority of persons engaged in agro-processing and cottage enterprises. Generally, most of these operators have had little or no formal training in the technical aspects of the operations and less in a small business organization, marketing, and management. Furthermore, in contrast to the large agro-industrial enterprises, the small processors have had little consistent support from the government and have not shared in any coherent programmes or projects specifically designed to support their development. On the contrary, in the most critical area of marketing, domestic products have had to compete with a wide range of imported products in the domestic market. Some agro-processors are aware that their products need to be competitive in all aspects with imported products. In such situations, they would have studied their competitors' products, sourced relevant technologies, and upgraded packaging to compete on price and quality. Such individual successes can be attributed to a determination to succeed despite an environment seemingly insensitive to the need to support the growth and development of the agro-processing sector.

The lack of consumer education and market research has also contributed to the slow pace of development of the industry. There has always been the tendency to treat local consumers as a captive market with little or no investment in consumer education and market promotion of locally processed products. Similarly, very little resources are spent on investigations and promotions on the export markets, regional or extra-regional. As a result, little attention is given to the importance of such factors as standards, quality control, packaging, and product presentation. Some valid proposals for addressing some of the constraints have been highlighted by several reports.¹⁰⁵

Throughout the region, there is a general recognition of the importance and potential role of the small farmers and agro-processors in the development of agriculture and agro-industry. What however has not been adequately recognized is the need to vertically integrate these sectors to allow the primary producer to have a direct financial interest in the viability of the processing sector. Regrettably however, while financing for such a venture might be available through banks and other financial institutions, it may not always be accessible on account of the collateral requirements. One possible solution to this constraint may involve Government intervention by considering guarantees to encourage banks to offer lower interest rates to farmers involved in such agro-processing ventures. A second Government option is that of an equity partner or direct shareholder in financially viable agro-processing ventures. The fundamental concept here is that the Government would act as a facilitator of an investment opportunity, with Government divesting its shares in the venture over time.

Another attractive alternative for farmers and agro-processors is the possibility of sourcing financing from their credit unions that offer better rates than banks, or the credit unions themselves becoming partners in such a venture. The credit union could then provide financial and other critical management services as deemed necessary for the viability and success of the enterprise. From this type of arrangement, it would become impossible to either marginalize or ignore the contribution of the agricultural and agro-industrial sectors when formulating national policies and programmes. This arrangement would ensure that both sectors would be fully incorporated into the mainstream of economic planning and development.

In summary, therefore, there are tremendous opportunities for the successful establishment of a vibrant and potentially profitable agro-processing sector. This will however require stronger, more meaningful linkages between the farming community, the agro-processing sector, Government, and financial institutions. Certainly, private sector companies could also play a critical role in the

¹⁰⁵ FAO, 2014. SMAE Competitiveness in the Caribbean; Lambert, I. 2001. Problems and Constraints to the Development of the Agro-Processing Sector

marketing of products from the agro-processing sector. The success of the agro/food-processing industry in the countries is heavily dependent on:

- A policy environment that conducive to the development of the industry.
- Assurances of acceptable quality of raw or primary material and in quantities and a pre-processed form needed by the processors. This requires much greater attention and investment of resources to research into the collection, selection and propagation and production of suitable cultivars specifically for agro-processing.
- Access to capital, technology, effective management, and support services such as credit, marketing, research, and extension.
- Trained professionals in food science and technology and related disciplines.
- Careful analysis of the domestic, regional, and international markets as a basis for policy formulation and future investments in agro-processing. It is important to determine the optimum conditions of the market, particularly if significant funds and long-term investment capital are to be allocated into agro-processing.

Possible emphasis on product specialization and product quality with the specific objective of securing niches in the domestic, regional, and international markets. This has the potential of stimulating market demand through the novelty of essentially exotic tropical products of high quality and presentation. The development of a national, well-coordinated, Government-led policy would impose extremely exacting conditions of organization, production, training, technology, and management which, in the long run, would assure a viable agro-processing sector with acceptable product standards not only for export but equally for the domestic and regional markets.

Finally, it would be necessary to sensitize the private sector to the merits of fully participating in the development of the agro-processing sector, not only through possible direct investment but also in the marketing of the processed commodity.

There is no doubt that the selected countries under review have tremendous potential for the development of viable, profitable, and sustainable agro-industrial sectors. There are success stories in other Caribbean islands that do not possess the raw material base of these countries. These successes should be closely studied, and relevant methods and approaches adopted.

7. Institutional Capacity and Framework for Gender Mainstreaming in the Countries

7.1 Overview

The goal of implementing gender mainstreaming is to ensure outputs and outcomes that contribute to gender equality. To achieve this, the internal mechanisms at the country level and relevant institutional levels will have to be adjusted within a process of organisational development. This suggests the need for an internal dimension of gender mainstreaming (organisational and personnel development) as well as an external dimension (service provision). It is therefore important to evaluate the situation at the country level to determine the following:

- Are there gender equality objectives as well as indicators regarding the working results?
- Are gender mainstreaming methods and tools employed as an integral part of the institution's working routines?
- Is there a gender policy and/or action plan showing how the institution contributes to gender equality objectives?

7.2 Antigua and Barbuda

The Directorate of Gender Affairs (DOGA) is the National Gender Machinery and focal agency responsible for advancing gender equality in Antigua and Barbuda. When it was established in 1981, the Directorate was initially titled the Women's Desk. However, in 1985, at the end of the UN Decade for Women, the Women's Desk was re-titled "The Directorate of Gender Affairs" and given a wider mandate and scope to address gender inequalities in the country.

The Directorate divides its efforts into programmes, services and special events and activities. Although the Directorate maintains an extensive programmatic profile, its human resources are challenged to support the macro-level development processes of other government divisions. It has commonly been considered understaffed and underfunded.¹⁰⁶ With minimal public resources dedicated to its regular programmes and activities, the Directorate relies considerably on the support of external agencies to implement its work plan, which is principally secured through the submission of grant funding proposals written by the division's technical staff. The support provided to the Directorate by these agencies was concentrated in the areas of:

- Ending gender-based violence (including health-based responses);
- Sexual and reproductive health and rights;
- Women in leadership and decision-making;
- Youth gender issues; and
- 16 Days of Activism Against Gender-based Violence campaign.

Antigua and Barbuda does not have a National Gender Policy. However, other national policies developed for key sectors have incorporated gender considerations:¹⁰⁷

- National Strategic Action Plan to End Gender-based Violence (2013-2018);
- Antigua and Barbuda National Youth Policy (2007):
 - Provides the most comprehensive engagement with gender issues of existing national policy frameworks for the country. The core values underpinned within the policy include gender equality, committing youth, the Government and other

¹⁰⁶ Report on Antigua and Barbuda's 2007-2010 country strategy for the Global Environment Facility (GEF) Small Grants Programme. See http://boecs.org/sgp/documents/cps/cps_antiguabarbuda.pdf

¹⁰⁷ Caribbean Development Bank. 2016. Antigua and Barbuda Country Gender Assessment Report

- stakeholders to actively promote gender equality and the empowerment of women as the basis for the provision and delivery of services. The document notes CEDAW, the MDGs, and the Convention of Belem do Para as key human rights instruments;
- Notably, among the policy’s strategic objectives is the promotion of gender mainstreaming, not only in youth-focused programmes but also within the overall supportive policy environment.
 - The Education Sector Plan (2013-2018):
 - Articulates the need to eliminate gender inequality from all levels of the education system by 2015, in accordance with the Caribbean-specific MDGs. It notes gender issues as among the “most potent” factors fuelling the problem of children at risk in Antigua and Barbuda and calls for gender to be mainstreamed at all levels of education. However, the Plan does not make specific reference to policies for addressing gender issues within the education system.
 - National Strategic Plan (NSP) for HIV/AIDS in Antigua and Barbuda (2012-2016):
 - Notes that gender inequality continues to be one of the main factors driving the epidemic in the country and recognizes the need to “mainstream gender thinking throughout the HIV and AIDS response, in both policy and programme”.
 - Food and Nutrition Security Policy (2012):
 - Notes that food and nutrition insecurity levels vary with gender. It further seeks to improve mechanisms for measuring and monitoring food insecurity and poverty by identifying and mapping vulnerable groups, taking a gender-sensitive approach;
 - Explains that a life cycle approach and gender mainstreaming will be key to the planning and decision-making processes in respect to restructuring food security programmes.
 - National Anti-Drug Strategy Plan (2010-2014):
 - Notes the participation of the Directorate of Gender Affairs in drug demand reduction, and institutional strengthening.

As anticipated, there have been challenges in the integration and incorporation of gender issues in macro-level programmes and policy frameworks, particularly within the sectors or Ministries principally charged with the responsibility for economic development and core, national development strategies. The assessment and subsequent integration of gender considerations have been notably absent from the NEST Plan, Tourism Policy, and Public Sector Transformation Plan. Where ‘gender’ is mentioned in other policies and plans, a thorough engagement with gender issues, analysis of gender-based implications and integration of gender-sensitive policy interventions with gender-responsive targets and indicators is absent. Despite consultations with the DOGA, ‘gender’ appears in the key instances mentioned, where it receives token acknowledgement and is not successfully applied to ensure women’s and men’s experiences and concerns form ‘integral dimensions’ of the design, implementation, monitoring and evaluation of the policies and plans.

Another key obstacle to the integration of gender equality in sector programmes lies in the absence of quantitative and qualitative sex-disaggregated data, and gender analysis. Examples of the absence of sex-disaggregated data in policy frameworks include those related to land ownership as an indicator of access to productive resources and wealth; small- and microenterprise/ownership; and various divisions to determine programmatic interventions.

Another noted obstacle to the integration of gender equality across sector programmes is the absence of an overarching national policy framework that establishes clear measures, targets and indicators for advancing gender equality and gender mainstreaming. With no national gender development framework in place, Antigua and Barbuda lacks a strong gender mainstreaming strategy that can be utilized by Ministries, agencies, organizations and other groups to advance the

national gender quality mandate and to build understandings of the critical nature of gender equality to all development plans and processes.

7.3 Barbados

In 1976, Barbados set up a National Commission for the Status of Women as a mechanism to monitor and report on the status of women in the country. A Bureau of Women's Affairs was subsequently established as a secretariat for the implementation of the recommendations made by the Commission. In 1995, at the Fourth World Conference on Women, as part of the Beijing Declaration and Platform for Action, Barbados identified five priority areas for achieving gender equality: strengthening institutional capacity to mainstream gender; alleviating poverty amongst women; addressing violence against women; increasing the presence of women in decision-making positions, and health. Under the Ministry of Social Transformation in 1999, the national gender machinery was renamed the Bureau of Gender Affairs (BGA).

The BGA is responsible for facilitating the achievement of national objectives for gender equity and equality, as expressed in the National Strategic Plan of Barbados (2005–2025)¹⁰⁸ for:

- The integration of gender and development into all areas of national development;
- The provision of training in gender throughout the public service, community organisations, the private sector and the public;
- The promotion of gender mainstreaming into national development policies and programmes;
- The preparation of a national gender policy;
- The development of a framework of indicators, tools and methods for incorporating, monitoring and evaluating gender in policy-making and planning;
- The preparation and dissemination of information on gender and development issues to government entities and the general public;
- Monitoring the implementation of relevant international conventions and assisting with associated progress reports;
- Strengthening partnerships and relationships with local, regional and international agencies for gender and development;
- Making recommendations for amending legislation to reflect gender equality;
- Supporting the development of a research programme on national gender and development issues.

The 2013/14 budget estimates for the BGA totalled BD\$1,004,788, with the majority of the funds allocated to personnel and other operational costs. This compared with the BD\$610,000 allocated in the 1994/95 budget.

Focal points have been established and trained in each ministry as a strategy for increasing ministry capacity for gender mainstreaming and analysis and implementation of national policies and programmes. The activities of the BGA currently concentrate on:

- The delivery of gender training and sensitisation workshops;
- The coordination of information and research inputs into national and international reporting requirements;
- Revision and feedback on national legislation and policies;

¹⁰⁸ Government of Barbados (2005), The National Strategic Plan of Barbados, 2005–2025, Research and Planning Unit, Economic Affairs Division, Ministry of Finance and Economic Affairs, Bridgetown.

- Hosting of meetings for gender sensitisation around several issues and participation in national, regional and international meetings;
- The provision of technical assistance and other forms of support to partner civil society organisations; and
- Engaging in other forms of partnerships for advocacy and the provision of services for gender equality.

The BGA is spearheading the development of a National Gender Policy for Barbados. The policy will focus on thematic areas relating to poverty, health, education, crime and violence, employment, family life and power and decision-making. The shaping of the policy adopted a multi-sectoral approach with inputs from key ministries, research institutions and civil society through a coordination group for the gender policy, as well as a wider consultation with civil society organisations and the general public.

There is currently no gender budgeting strategy for Barbados, despite previous training initiatives in this area. In 1999 Barbados was one of three Commonwealth countries that participated in a pilot project for the Commonwealth Secretariat’s Gender Budget Initiative.

Despite the importance given in the National Strategic Plan of Barbados (2005–2025) to achieving gender equality and mainstreaming gender into national priorities and initiatives, in practice, gender is not a priority. This is evidenced in the ‘gender neutral’ stance, which does not recognise barriers to gender equality, and the difficulty in accessing sex-disaggregated data, particularly within the economic sectors. It is also reflected in the low levels of support from senior members within the public service for gender-sensitivity training and the extent to which trained personnel can incorporate gender mainstreaming into existing work obligations. Ministries other than the host Ministry of People Empowerment and Elder Affairs (MPEEA) do not have budgets for gender mainstreaming. This may be contrasted with the National AIDS Programme: budgets for HIV prevention and control exist in line ministries and these support the mainstreaming of HIV in these ministries. It is important to note, however, that HIV and AIDS care and prevention programmes have received funding from a number of international donors such as the World Bank.

7.4 Dominica

The Government of Dominica has put in place a National Gender Policy which emerged from a policy statement on Women and Development prepared in 1980. The development and adoption of the National Gender Policy have signalled The Bureau of Gender Affairs’ (BGA) expanded focus from “women’s rights and empowerment” to “gender equality” and attention to emerging male gender gaps and issues in the society (e.g., in the areas of education, health and violence).

The 2006 National Gender Policy is in keeping with the Government’s commitments at the international, regional and national levels. It is guided by the Government’s recognition that gender equality is a fundamental aspect of human development and national development. In 2013, the BGA initiated a process of accelerating the implementation of the 2006 National Gender Policy with the support of UN Women, which included updating the Policy, strengthening the institutional structures and mechanisms to enhance gender mainstreaming and undertaking a gender sensitization and consultation process to raise public awareness and increase capacity for policy implementation among stakeholders across the public and private sectors and civil society. The Updated National Gender Policy and Action Plan 2014-2024,¹⁰⁹ puts forward policy measures and

¹⁰⁹ It needs to be noted that the updated National Gender Policy and Action Plan 2014-2019 is currently in draft form, and is expected to be tabled for Cabinet’s adoption in 2014.

actions to address the gender-related disadvantages that women continue to face, as well as male gender gaps and vulnerabilities in nine key areas:

- Leadership and decision-making;
- Economic growth and poverty reduction;
- Agriculture and food security;
- Climate change, natural disasters and natural resource management;
- Labour and employment;
- Education and human resource development;
- Health and well-being; viii. Violence and security; and
- Family, sexuality, cultural beliefs and practices.

While the National Gender Policy takes a gender mainstreaming approach (i.e., gender is understood as a key factor in the country's political, economic, social and cultural development), the process of developing other national and sectoral policies has not been adequately informed/guided by the National Gender Policy. This is related to the lack of capacity and resources of the Bureau of Gender Affairs to effectively lead gender mainstreaming across the public/ private sectors and civil society.

A key example is Dominica's Third Medium-Term Growth and Social Protection Strategy 2012- 2014 (GSPS). The GSPS 2012-2014 represents the Government's strategy for pursuing growth and poverty reduction. The GSPS 2012-2014 includes a section on gender that recognizes the Government's adoption of the 2006 National Gender Policy and reiterates the imperative of achieving the empowerment of women and redressing gender disparities. It indicates that gender mainstreaming is the main approach for achieving the objectives of the National Gender Policy and urges "strong cooperation and collaboration from all departments in the entire Government system to enable the BGA to carry out its mandate effectively" (GOCD, 2012b: 74). However, the GSPS 2012-2014 does not integrate gender as a cross-cutting issue but views gender as a specific sector.

The main Ministries responsible for economic and social development have developed comprehensive medium-term planning documents detailing their approaches, strategies and objectives to advancing the national policy agenda. However, initiatives for promoting gender responsiveness in economic growth and poverty reduction strategies are unevenly articulated and implemented. Thus, there is no system-wide application of gender equality principles and goals in the economic and social development of Dominica.

The National Gender Policy takes a gender mainstreaming approach, thus recognizing the responsibility of all Government ministries, statutory bodies and other agencies; the private sector and labour unions; and the wide cross-section of civil society organizations including faith-based organizations for the implementation and monitoring of the policy. The following gender mainstreaming mechanisms/processes need to be systematically put in place:

- Gender equality is mainstreamed in all policymaking processes at the national and sectoral levels, including a diverse range of stakeholders.
- Gender-responsive planning and budgeting are introduced at the national level (i.e., through the mid-term national development plan and annual national budgets) and sector Ministries.
- Clear systems are adopted to integrate gender equality into Ministries' sector programmes, including collecting sex-disaggregated data, undertaking a gender analysis of the key issues in the sector, and developing gender-responsive indicators and targets.
- Clear procedures for gender monitoring and evaluation are put in place in Ministries, Departments and Agencies (MDAs), facilitated by Gender Focal Points.

The Dominica country gender assessment report of 2014 revealed inadequacies in the collection of sex-disaggregated data, and the conduct of gender-sensitive research and analysis by relevant stakeholders including the public/private sectors and civil society. Data gaps include the full publication of the 2011 population census, the absence of an agricultural census since 1995, the lack of sex-disaggregated data on credit services by banks and other credit institutions, etc. A few key institutions do have the capacity to collect sex-disaggregated data: the Central Statistical Office, and the Ministries of Education and Health.

7.5 Grenada

The Ministry for Social Development and Housing led the process of developing the Gender Equality Policy and Action Plan (GEPAP), with financial support from UN Women and the Caribbean Development Bank (CDB). GEPAP has been developed in partnership with civil society and the private sector and aims for mutual responsibility and accountability in achieving its objectives. This approach is based on the assumption that effective policy development and implementation need to integrate the perspectives and actions of multiple actors within the society.

The Gender Equality Policy and Action Plan recognises and appreciates the differences between men and women based on biological and physiological realities as well as social constructs. All men/boys and women/girls in Grenada require protection from harm, prejudice and discrimination; access to amenities including health care, opportunities for education and training and fair recourse to justice. However, men and women's specific requirements of these services, and how they use them, may differ. GEPAP identifies a range of institutions and thematic areas that must take on board these gender differences to advance gender equality in the society. The following are the priority thematic areas through which the Gender Equality Policy and Action Plan aims to bring a gender equality perspective to national development: Culture and socialization; Education and training; Labour and employment; Agriculture and tourism; Economic growth and poverty reduction; Climate change, natural disasters and natural resource management; Health and well-being; Violence and security; Leadership and decision-making; and Legislative and institutional framework for advocating gender equality.

The Government of Grenada established a Women's Desk following its national independence in 1974 and during the UN Decade for Women (1976-1985) when countries around the world were establishing national machinery for the advancement of women's rights, status and living conditions. After a series of institutional reforms, the Desk was finally upgraded to the Division of Gender and Family Affairs under the present Ministry of Social Development, Housing and Community Empowerment.

The Division of Gender and Family Affairs has faced many challenges including inadequate staffing linked to structural adjustment policies. This has resulted in a limited capacity for planning, implementing and monitoring programmes and activities for the advancement of women's rights and gender equality, and undertaking gender mainstreaming (GOGR/CEDAW, 2009: 7-8). There is, therefore, a need for the enhancement of the status and staffing of the national gender machinery to enable it to lead and coordinate the implementation of the (forthcoming) Gender Equality Policy and Action Plan (GEPAP).

The institutional mechanisms and processes that are needed to be systematically and iteratively put in place to advance gender equality at all levels in the society include the following: Gender-responsive policy-making; Gender-responsive planning and budgeting; Gender studies and sensitization/training; Sex-disaggregated data collection and gender-sensitive research and analysis;

Monitoring and evaluation of the implementation of GEPAP and gender mainstreaming; and Reporting on international and regional gender equality commitments.

Gender equality needs to be mainstreamed in all policy-making processes at the national and sectoral levels. This requires the equal participation of men and women (gender parity) from a diverse range of constituencies (government, private sector and civil society). However, since gender parity does not necessarily lead to gender-responsive policy-making, it is critical to include gender equality advocates from the public sector, private sector and civil society organizations in policy-making processes.

Gender-responsive planning and budgeting need to be introduced at the national level (i.e., through the mid-term national development plan and annual national budget) and sector Ministries. Unless gender equality is understood as being as important as all other aspects of national development and prioritized in budgetary allocations, gender equality will not be achieved.

Grenada has an Open Campus of the University of the West Indies and St. George's University¹¹⁰ and the UWI Open Campus does not offer courses in Gender Studies. Interviews with public sector personnel suggest that very few individuals pursue Gender Studies at the undergraduate and graduate levels. More significant capacity for gender analysis seems to reside among NGOs.

The public service, including the Division of Gender and Family Affairs, does not have the human resource capacity to bring a gender perspective to diverse areas of national development. In this context, the Division of Gender and Family Affairs should partner with the Ministry of Education to introduce age-appropriate Gender Studies curricula/ courses/ modules at the College level and in the primary and secondary school system. In addition, a programme of gender sensitization/training needs to be undertaken to advance gender equality at multiple levels in the society, including (i) Cabinet; (ii) Parliamentarians; (iii) Permanent Secretaries; (iv) Officers of the judiciary, police and prison agencies; (v) Gender Focal Points (GFPs); (vi) Members of the National Gender Equality Commission (NGEC); (vii) Leaders/board members of private sector bodies, trade unions, civil society organizations and faith-based organizations; (viii) Political candidates running for national elections.

The process of preparing the Gender Equality Policy and Action Plan (GEPAP), the Caribbean Development Bank's (CDB) Country Gender Assessment (CGA), as well as this study has revealed serious inadequacies in the collection, compilation and analysis of sex-disaggregated data, and the conduct of gender-sensitive research and analysis by relevant stakeholders including the public and private sectors and civil society. It needs to be noted that a few key institutions seem to have the capacity to collect sex-disaggregated data: the Central Statistical Office, the Ministry of Finance; the Parliamentary Office; the Ministry of Education; the Ministry of Health; and the Royal Grenada Police Force. Clear systems need to be put in place in all Ministries and agencies, including the regular/ongoing collection and collation of sex-disaggregated data on key issues in the sector, undertaking gender analysis of quantitative and qualitative data, setting gender-responsive targets, and using the above in policy-making, planning and service delivery.

Monitoring and evaluation of the implementation of GEPAP and gender mainstreaming, GEPAP's National Gender Action Plan, sets out the actions to be taken to implement the Policy in critical areas of national development, as well as the stakeholders (Ministries, Departments, Agencies, organizations, etc.) that are expected to take lead responsibility. Clear monitoring and evaluation

¹¹⁰ St. George's University is an independent, for-profit, international university offering degrees in medicine, veterinary medicine, public health, the health sciences, nursing, arts and sciences, and business. It comprises a predominantly foreign student population.

procedures need to be developed by the Division of Gender and Family Affairs and National Gender Advisory Commission (NGEC) and institutionalized in Ministries, Departments and Agencies (MDAs) for ongoing monitoring and evaluation of the implementation of the National Gender Action Plan, achievements and gaps.

The Government of Grenada, through its designated agencies, is responsible for ensuring compliance with, implementation of, and reporting on relevant international treaties, conventions and agreements such as CEDAW (see above), the Beijing Platform for Action (BPfA), the Millennium Development Goals (MDGs), and Belem do Para, among others.

7.6 St. Lucia

St. Lucia does not have a national gender policy. In addition, the following national policies have not explicitly articulated gender considerations:

- National Climate Change Policy and Adaptation Plan (2003): While guiding St. Lucia's process of addressing the short to medium and long-term effects of climate change, the policy does not include the terms 'women' or 'gender'. Absent, therefore, is any analysis or policy planning on the gendered effects of climate change and the fact that women are disproportionately affected;¹¹¹
- National Energy Policy (2010): According to the policy, given that "energy services are required for several activities including, inter alia; electricity generation, water supply, agricultural production, transportation and telecommunications". It is important that gender be included in all analyses to consider impacts on women, men and youth;
- St. Lucia Forest Policy (2008): While one of the actions of the plan is "enhanced community participation in implementing and monitoring local forestry plans for sustainable livelihoods", there is no gendered analysis or strategic outline on how women, men and youth are to be targeted and included in this undertaking;¹¹²
- National Land Policy (2007): One of the policy's strategic objectives is to "enhance the contribution of land to economic development, including poverty reduction, food security, employment and revenue generation opportunities for all citizens.", Women's lack of access to land and land ownership and other gender considerations are however not reviewed.¹¹³

There is consequently a great need to mainstream gender in all sectoral policies and plans. Funding for gender focal points is necessary along with gender sensitization and training of research staff and policymakers, evaluators and recommenders to inform gender-responsive policy-making. Gender equality should be mainstreamed in all policy-making processes at the national and sectoral levels. As mentioned for the other countries, this requires the equal participation of women and men (gender parity) from a diverse range of constituencies (government, private sector and civil society). However, since gender parity does not necessarily lead to gender-responsive policy-making, gender equality advocates from the public sector, private sector and civil society are critical inclusions in the policy-making processes.

¹¹¹ Ministry of Physical Development, Environment and Housing (2003),

¹¹² Ministry of Agriculture, Forestry and Fisheries 2008, p. 5.

¹¹³ Ministry of Physical Development, Environment and Housing, p. 7

The St. Lucian Government, in pursuit of its national development objectives,¹¹⁴ has employed a systematic approach to mainstream a gender perspective to affirm its commitment to achieving gender equality and the promotion of human rights. Ensuring gender equality outcomes in national planning requires deliberate, systematic and ongoing capacity building for planners in all Ministries, Departments and Agencies (MDAs). Saint Lucia is currently undertaking a gender mainstreaming project which will:

- Enable the development of a nationally-owned gender mainstreaming strategy to support inclusion among all citizens;
- Build capability in gender mainstreaming, budgeting and planning as part of the National Sustainable Development Plan and Saint Lucia’s vision for inclusion; and
- Prepare Saint Lucia’s Ministries, Departments and Agencies to pivot towards a transparent and data-driven culture that utilizes gender analysis as part of medium-term development planning.

The outcomes of this project will prove beneficial towards St. Lucia’s efforts in achieving the SDGs, especially goals 5 and 10. The institutional strengthening offered to the MDAs under this project will encourage the use of a gender perspective in policy development, thereby ensuring the benefits of these policies and strategies are realized equitably among women, men, girls and boys. Cognizant of macro-socio-economic challenges resulting from the intersectionality of gender with other statuses, such as age, disability and economic status, the Government of Saint Lucia is committed to mainstreaming gender into its plans, processes and procedures to ensure full inclusivity of all sections of the society. Over the medium term, the Government intends to develop gender-responsive policies and strategies such as mainstreaming gender-sensitive budgeting that will contribute to an equitable labour market, reduced unemployment, safer communities and an overall improved socio-economic dynamic in the country.

Furthermore, gender-responsive planning and budgeting are being introduced at the national level (i.e., through the mid-term national development plan and annual national budget) and sector ministries. Unless it is understood that the integration of gender issues into planning and budgeting at the national/sectoral levels is as important as all other aspects of national development and prioritized in budgetary allocations, gender equality will not be achieved.

¹¹⁴ St. Lucia Medium Term Development Strategy, 2020-2023.

8. Gender Responsive Evaluation and Recommendations¹¹⁵

A gender-responsive evaluation of national and sectoral policies was conducted for Antigua and Barbuda, Barbados, Dominica, Grenada and St. Lucia, with a focus on smallholder farmers, fisher-folks and small agro-entrepreneur. At the macroeconomic level, the evaluation focused on the fiscal policies of the countries in light of the fiscal constraint faced by the countries, under conditions imposed by the IMF and the World Bank. The sectoral policies focused on the countries' Food and Nutrition Security Policies, Agricultural Policies and related Action Plans where applicable, and Fisheries Policies.

A gender-sensitive analysis was conducted on all the sectoral policies and plans. The findings suggest that:

- While a wide stakeholder group was engaged by the countries in the preparation of national policies and plans, including sector-related ministries, researchers, NGOs, private sector operators along the value chains (input suppliers, processors, traders, exporters, financial institutions, etc.), academia, national and regional technical level officers, the gender assessment was not systematic throughout the design process.
- There were no comprehensive gender assessments in the development of the policies and plans and therefore only some of the proposed programmes reflect the situation. Therefore, there are no targets designed to achieve gender equity.
- Consequently, there are no outcomes and outputs designed to achieve the goal of gender equality and the eradication of hunger and food insecurity.

It is important to note that while agriculture can be an important engine of growth and poverty reduction, the sector is underperforming in many countries in part because women, who are often a crucial resource in agriculture and the rural economy, are usually marginalized in the development agenda for the sector.

In the evaluation of the impact of the policies on the sectors, national commitments, targets, and objectives were examined, in addition to the actions, programmes, and initiatives implemented to achieve the goals and objectives contained in the policies and plans.

The evaluation of the performance of the sectors under the various policies and plans of the countries reviewed demonstrated significant declines in most of the important development indicators.

- Real growth of the agriculture sector of the countries over the period under review (1980 – 2019) fluctuated with a downward trend.
- The contribution of agriculture to GDP declined in Barbados (the lowest range) from 7.5% in 1980 to 1.3% in 2018, and in Dominica (the highest range) from 21.5% in 1980 to 7.5% in 2018.
- Both arable and agricultural lands declined in all countries, except Dominica where agricultural lands increased.
- The employed labour in agriculture is very low in the countries, ranging from lows of 4% in Antigua and Barbuda and Barbados, to highs of 21% in Dominica and St. Lucia;

¹¹⁵ This section draws heavily on the Country Gender Assessment Reports of the five countries under review, and which was sponsored by the CDB, and conducted during the period 2014-2016.

- The employed labour of women in agriculture is very low in the countries, ranging from lows of 2% in Antigua and Barbuda and Barbados, to a high of 14% in St. Lucia.
- Of the combined economically inactive in all countries, 38% are involved in home duties, and 85% of those involved in home duties are women, ranging from a low of 80% in Grenada to a high of 92% in Antigua and Barbuda.
- Capital investment in the sector represented by Agriculture Investment Ratio (Agriculture Gross Fixed Capital Formation as a share of Agriculture Value Added) declined after 2010.
- There were significant declines in the Food Production Index of agricultural production for each year, due mainly to declines in main export crops (sugar, banana, and nutmeg) as well as the domestic crops. However, the livestock industry demonstrated increased production.
- The combined food import bill for the five countries has increased significantly from US\$163.4 million in 1980 to US\$307.6 million in 2000, US\$572.6 million in 2010, and surpassed the US\$774.4 million mark in 2019. Dated information showed an increase in the food dependency ratio.
- Between 2003 and 2020, the prices of the main imported commodities (meat, dairy, cereals, vegetable oil and sugar) increased by 64%, 87%, 73%, 59% and 81%, respectively.

Domestic food price inflation rates for the countries were closely aligned to the international food inflation rate, with the exception of Barbados, where the domestic rate of food price inflation was higher than the international food price inflation.

Concerning the fisheries sub-sector, capture fish and aquaculture production showed increases in Antigua and Barbuda, Grenada, and St. Lucia, while outputs in Barbados and Dominica declined.

During the period of review, the total employment in the fishing industry increased in Antigua and Barbuda, Grenada, and St. Lucia, remained steady at about 3,000 persons in Barbados but declined in Dominica. The availability of data for analysis on small business enterprises in the five countries was quite limited. Notwithstanding, information gleaned from various sources suggests that the sector's development was impacted by limited access to financing; inappropriate training and lack of business advisory services; limited access to relevant and timely business-related information (for example, regulations, trade missions, obtaining technical support, etc.); limited access to technology and equipment; and limited access to women's networks. Several factors were identified as impacting the performance of the sectors, with the implications for gender equity examined. These factors include:

- Limited funding of the sectors by government and difficulties encountered in accessing credit;
- Poor land policy making access for production a major concern;
- Lack of a robust labour policy enhance the participation of women and youth in the development agendas of the sectors;
- Erosion of preferential market status formally enjoyed by the countries;
- High food import bill and the associated cost competitiveness of local production;
- Transmission of world price food prices to domestic price and consumers;
- Impact of Natural disasters and climate change;
- Pests and diseases;
- Lack of integration of gender analysis into the policy design and implementation processes;
- Limited institutional capacity and framework of the national institutional mechanisms for gender mainstreaming.

While all producers were impacted by the factors identified above, smallholder farmers, fisher-folks and small agro-entrepreneurs, especially women, have not benefitted from national and

agricultural-related policies more so than the larger farmers, as many lacked equal opportunities to enter and benefit from liberalized markets for the targeted reasons:

- They have limited resources (land, labour, and capital) to invest in business opportunities that may be derived from the implementation of national policies;
- They have limited education and technical knowledge for diversification and/or expansion into viable value chains;
- They have limited access to credit, which has become more expensive, to invest and/or purchase required more expensive inputs - with the cost of these inputs rising and governments' removing of subsidies;
- They have been hurt by cuts in government spending on rural infrastructure, as well as processing, storage, and distribution systems
- They have to compete with imported foods;
- The lack of access to organized markets for produce, which has become monopolized by larger producers; and
- The reality that liberalization did not result in higher gross income margins, as farm production costs increased, and farm prices did not increase overall. In this case, larger farmers, who enjoyed economies of scale, as well as the exporters, may have experienced increased incomes.

In the context of the above, several specific recommendations are being made from a gender perspective.

Recommendations

Data

- Sex-disaggregated data must be collected and analyzed to effectively inform policy and programming targeted at farmers, fisher-folks and small business enterprises. Formal measurement of the participation of women and men in the informal sector should be undertaken, which leads to strategies to either include these enterprises in the formal economy or to formalize the respective informal sectors/areas. Mechanisms for the measurement of gender-related development indicators must be put in place, which includes: training on the collection and analysis of sex-disaggregated data for government ministries and departments, the establishment of protocols for sharing/reporting of national statistics, and electronic database management systems which provide for crosscutting sectoral analysis.
- The availability of sex-disaggregated data to evaluate the gender impact of the economic crisis in both the private and public sectors should be ensured. This should include data on issues such as the number of women and men laid off in the process of government retrenchment and their household structure to assess effects on dependents as well.
- Establish clear systems/protocols/guidelines for collecting, collating and analyzing gender-disaggregated data collection in all sectors.

Policy and Planning

- Integrate gender equality and social justice criteria into economic and sectoral policy design, implementation, trade negotiations and technical co-operation agreements, and poverty reduction strategies and programmes. This should be based on robust gender analyses.
- In terms of a gender-sensitive strategy for development, it is important to seek to stimulate growth in sectors that can contribute most to the employment of both women and men.

- Mainstream gender in the development and implementation of national/sector plans and the annual national budget, i.e., gender-responsive planning and budgeting.
- Establish clear systems/protocols/guidelines for gender monitoring and evaluation in Ministries, Departments, Statutory Bodies and other agencies.
- Ensure the participation of a diverse but relevant range of stakeholders, including civil society organizations, in all policy-making processes and implementation at national and sectoral levels.
- Conduct gender sensitization/training for senior/middle managers in Government-owned, private sector and civil society banks and other credit institutions in Grenada, to raise their awareness of the gender dimensions of banking, savings, credit and other facilities, and lead to the adoption of gender policies/guidelines.
- Support gender-responsive initiatives to facilitate private sector development, such as technical support to male and female entrepreneurs to access regional business and commerce; a biennial expo for male and female-owned small businesses; a biennial award programme for male/female small and medium enterprises for initiative, innovation and growth.
- Integrate the unpaid “domestic economy” into macro and agricultural analysis.
- Promote the use of gender-sensitive and gender-inclusive language in legislation, government documents and educational and public awareness materials.

Finance

- Introduce gender-responsive budgeting in national budgetary planning, implementation, and monitoring and evaluation processes.
- Provide technical assistance to the countries in their fiscal-restructuring strategies to support the analysis of mid and long-term gender and development impacts, which is currently weak.
- Examine the potential impacts of trade arrangements and development strategies on men’s and women’s ability to access the benefits of trade and mitigate any negative differential fall-outs on men and women.
- Ensure that CDB and Government-supported banks and other credit institutions adopt gender policies/guidelines, provide ‘hand-holding business support’ to new entrepreneurs (males, females and youth), and produce sex-disaggregated data annually (by selection criteria, number of loans, categories of enterprise, EC\$ values of loans awarded, etc.).
- Develop gender-sensitive risk assessment procedures for access to funding based on project review, experience and motivation of applicants, rather than solely on ownership of land and other forms of collateral.
- The Ministry of Finance, in developing the medium-term national development plan, should ensure that the national gender machinery plays a key role in ensuring the uptake of policy measures from national gender policy. This should be reflected in annual gender-responsive planning, budgeting and implementation.

Trade

- Address gender-based distortions in markets which can result in inefficient resource allocations.
- Examine the potential impacts of trade arrangements and development strategies on men’s and women’s ability to access the benefits of trade and mitigate any negative differential fall-outs on men and women.

Land Reform

- Address the critical issue of land reform in the countries to address key issues related to land distribution and ownership, and in particular as these issues impact access to credit by farmers, fisher-folks, and small agro-entrepreneurs to facilitate their agricultural production and entrepreneurial development in related sectors.
- Encourage men, women and youths to become agricultural entrepreneurs by paying specific attention to increasing women's land ownership and access to credit.

Employment

- Promote gender equality in agriculture by (i) recognizing men's and women's complementary roles in agriculture and rural development; (ii) increasing their equitable access to productive resources; (iii) creating opportunities for entrepreneurial development linking agriculture to agri-business and tourism; and (iv) facilitating the nation's goals of agricultural diversification, food security, economic growth, poverty reduction, and sustainable development.
- Encourage innovation in the wholesale and retail sector to maintain its viability concerning employing women and men, as available data shows that the wholesale and retail sector is the top employer in the countries. However, the sector is highly import-dependent, and therefore strong support for exports to generate foreign exchange would be necessary to maintain employment levels, especially among females.
- Diversify the range of occupations with a particular focus on men given their concentration in a smaller number of fields such as construction, mining and quarrying, and transport and distribution, which are highly vulnerable to international demand and therefore, external economic shocks.
- Develop policies to stimulate demand for employment in tourism products assisting tourism employees, the majority of whom are women. This may indirectly assist men's employment as construction, transport and distribution provide infrastructure and services to tourism.
- Consider gendered patterns of employment within the public service periods of government economic retrenchment, as cuts in government expenditure are likely to affect women and men differently as employees of government services.
- Create innovative gender equity policies to stimulate a shift in the entrenched gender division of labour, both in terms of occupational segregation and in terms of the balance between formal employment and the 'economically inactive' segment of the population. This segment is comprised of mostly women who are carrying out unpaid domestic work or working in the informal economy. Measures such as the development and implementation of policies to support flexible working arrangements¹¹⁶ and care for dependents are recommended. It is necessary to move beyond focusing on the unemployed who declare they are looking for work.
- Ensure innovative policies created results in greater flexibility concerning working hours, childcare and tax regimes, to increase the percentages of women and men in formal employment.
- Ensure that revised labour policy factors in support mechanisms associated with the working environment such as those related to caring for dependents (via, for instance, day-care and flexible working) so that women are enabled to put in the necessary hours to establish prosperous businesses.
- Government and private sector employers (or in partnership with labour unions) should provide facilities for childcare nursing for working mothers since increasing numbers of

¹¹⁶ Barbados has introduced flexible working arrangements under COVID-19 Management Protocols.

women in the labour force and migration have reduced the capacity of the extended family and community to provide childcare.

- Monitor the conditions of employment offered by Foreign Direct Investors and other businesses entering the economy, since women's lower labour force participation makes them more vulnerable to accepting jobs with low wages and social protection.

Poverty Reduction

- Promote gender-responsive, long-term economic growth and poverty reduction strategies that are based on the natural and human resources of Grenada.
- Ensure that poverty reduction programmes are evidence-based; promote gender equity; respond to the specific needs of the poor and disabled e.g. in areas related to education, training and credit, social protection schemes including pensions for 'unemployed' women (who provide reproductive care in the home), entrepreneurship training, equitable inheritance for women in common-law relationships; etc.
- Poverty strategies should focus particularly on single women who are heads of households.

Education and Training

- Promote the widespread education and involvement of male and female farmers, fisher-folks and small agro-entrepreneurs in the restructuring of the sectors, empowering them to increase their productive capacities, engage in entrepreneurial activities, create linkages between agriculture, fisheries and agro-processing and tourism, and build partnerships, networks and cooperatives to advance the sector.
- Review the education curriculum, textbooks and teaching materials to eliminate gender stereotypes, and integrate gender modules/courses into teacher training (addressing issues such as gender and education, gender parity in traditional male and female-dominated subject areas, gender-based occupational segregation, health and family life skills, counselling and mediation, etc.).
- Undertake awareness-raising among the public and in key institutions (e.g., schools) to change widely held gender stereotypes that specific professions such as nursing, teaching and hospitality are 'female professions', and construction work and engineering are 'male professions'.
- In partnership with the private sector, promote gender-responsive internships, apprenticeships and ICT initiatives to empower men, women and youths to achieve their full potential and contribute to national development.
- Introduce/strengthen enterprise training programmes in secondary schools, including theory, practical internships and mentoring, to build youth capacity for entrepreneurship. The State College should offer a diploma course in Agri-business, in addition to its current diploma course in Agriculture.
- Provide technical assistance, mentoring, training, small grants and micro-finance for people, especially women and young people, starting on the entrepreneurship path and to 'top up' resources sourced from within family and friend networks.
- Agricultural agencies should 'incubate' women and youth entrepreneurs, facilitate loans and markets, promote the use of new communication technologies, etc.
- Support the development of gender-responsive enterprise training courses/programmes in secondary schools and national colleges, including theory, practical internships and mentoring, to build the capacity for entrepreneurship among men, women and youths.
- Provide support to women's groups engaged in agri-businesses to grow their enterprises and expand from supplying the local market to contributing to export trade (e.g., training, product development, access to credit, marketing, etc.).

- Technical assistance to enhance the proficiency of entrepreneurs in the Agro-processing industry should ensure the participation of women and provide for focused training to support their increased competitiveness and market responsiveness.
- Agro-Eco tourism linkages should be promoted. This will open up employment and entrepreneurship opportunities for women, men and youth in the tourism sector and further boost the agricultural sector.

LITERATURE REVIEW - REFERENCES

- Atkinson, A.B. 'On the Measurement of Inequality', 1969.
- Alexander E. Kentikelenis, Thomas H. Stubbs, and Lawrence P. King. "IMF conditionality and development policy space, 1985-2014." Accessed Nov. 28, 2020.
- Ardagna, Silvia and Annamaria Lusardi (2008). Explaining International Differences in Entrepreneurship: The Role of Individual Characteristics and Regulatory Constraints, Massachusetts: National Bureau of Economic Research
- Bailey, Barbara and Suzanne Charles (forthcoming). Research project on "Gender Differentials at the Secondary and Tertiary Levels of Anglophone Caribbean Education Systems" (Belize, Guyana, Jamaica, Trinidad and Tobago), Institute for Gender and Development Studies, University of the West Indies, Funded by the Caribbean Development Bank, Barbados. Accessed at: <http://www.mona.uwi.edu/opair/development/abstracts/2006/gender-and-developmentstudies.pdf>
- Baksh, Rawwida (2013a). "Review of the Structure, Financial and Human Resources of the Bureau of Gender Affairs, and Recommendations for its Institutional Strengthening". Bureau of Gender Affairs, Ministry of Social Services, Community Development and Gender Affairs, Government of Dominica. Unpublished.
- _____ (2013b). "Review of the Composition and Terms of Reference of the National Gender Advisory Committee (NGAC)". Bureau of Gender Affairs, Ministry of Social Services, Community Development and Gender Affairs, Government of Dominica. Unpublished.
- _____ (2013c). "Review of the Composition and Terms of Reference of the Gender Focal Points (GFPs)". Bureau of Gender Affairs, Ministry of Social Services, Community Development and Gender Affairs, Government of Dominica. Unpublished.
- (2011). "Women Leaders as Agents of Change". Background paper for the Caribbean Regional Colloquium hosted by the Government of Trinidad and Tobago, Caribbean Institute for Women in Leadership, Commonwealth Secretariat, UN Women–Caribbean Office, and InterAmerican Commission on Women, Organization of American States (OAS/CIM), 28-30 June 2011, Port of Spain, Unpublished.
- Bamberger, M., Blackden, M., Manoukian, V. and Fort, L. (2000). "Chapter 10: Gender & Technical Notes", in: World Bank, PRSP Sourcebook, Washington D.C: World Bank.
- Bárcena, A. 2020, "Mobilizing international solidarity, accelerating action and embarking on new pathways to realize the 2030 Agenda and the Samoa Pathway: Small Island Developing States", document prepared for the High-Level Political Forum 2020, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 8 July, 2020.
- Barriteau, E. (2002), "Women Entrepreneurs and Economic Marginality: Rethinking Caribbean women's economic relations", in P. Mohammed (ed.), Gendered Realities: Essays in Caribbean feminist thought, University of the West Indies Press, Mona, Jamaica, pp. 221–48.
- Barriteau, V. Eudine. 1996. Structural Adjustment Policies in the Caribbean: A Feminist Perspective <https://www.jstor.org/stable/pdf/4316428.pdf>.
- Beckford C.L., Campbell D.R. (2013) The Small-Scale Food Farming Sector in the Caribbean: Food Production and the Caribbean Peasantry. In: Domestic Food Production and Food Security in the Caribbean. Palgrave Macmillan, New York. https://doi.org/10.1057/9781137296993_2
- Bellony, A., A. Hoyos and H. Nopo (2010), "Gender Earnings Gaps in the Caribbean: Evidence from Barbados and Jamaica", IDB Working Paper Series No. IDB-WP-210. <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35326952>.
- Beneria, L. and Roldan, M. 1987. The Crossroads of Class and Gender: Industrial Homework. Subcontracting and Household Dynamics in Mexico City. University of Chicago Press, Chicago.
- Bernard, A. (2012), "Fostering Freedom: A feminist analysis of micro-enterprise development in the Caribbean", in Barriteau, Op. Cit., pp. 286–322.
- Bhagwati, Jagdish N. 1978. Foreign trade Regimes and Economic Development: Anatomy and Consequences of Exchange Control Regimes. Cambridge, Massachusetts: Ballinger Publishing Company for National Bureau of Economic Research, New York, 1978.
- Blackden, C. Mark and Chitra Bhanu. 1999. "Gender, Growth, and Poverty Reduction: Special Program of Assistance for Africa, 1998 Status Report on Poverty in Sub-Saharan Africa." Technical Paper 428. World Bank, Poverty Reduction and Social Development, Africa Region. Washington, D.C.
- Blackwood, Mansfield. 2006. USAID Strengths and Weaknesses Analysis of International Trade Competitiveness Report; Antigua and Barbuda. January 2006.

- Boserup, Ester (1970). *Woman's Role in Economic Development*. London: Allen and Unwin.
- Caribbean Development Bank (2012). "Country Gender Assessment – Belize". Authored by Dana Peebles, Kartini International Consulting Inc., Toronto, Canada on behalf of the Caribbean Development Bank. Barbados: Caribbean Development Bank. Unpublished.
- Boussard, Jean-Marc. 1992. *The Impact of Structural Adjustment on Smallholders*. Food and Agriculture Organization of the United Nations, Rome, 1992.
- Buckmire, G. 1989. *An Overview of Small Scale Agro-Processing and Trade in the Caribbean. Constraints and Potential for Development*. Presented to the Regional Workshop on Problems and Development Strategies for small Agro-Processing and Marketing. GUYSUCO Management Training Centre, East Coast Demerara, Guyana.
- Caribbean Community Secretariat. 1998. *Documentation for the Regional Consultation on Agro-Industrial Development*. September 28-29. Port-of-Spain, Trinidad and Tobago.
- Caribbean Community Secretariat. 1998. *Recommendations and Conclusions of the Regional Consultation on Agro-Industrial Development*. September 28-29. Port-of-Spain, Trinidad and Tobago.
- Caribbean Development Bank. 2016. Country Gender Assessments (CGAs) Synthesis Report. Prepared by: Rawwida Baksh and Associates, January 2016
- Caribbean Development Bank. 2016. Antigua and Barbuda Country Gender Assessment Report. January 2016
- Caribbean Development Bank. 2016. St. Lucia Country Gender Assessment Report. January 2016
- Caribbean Development Bank. 2014. Dominica Country Gender Assessment Report. May 2014
- Caribbean Development Bank. 2014. Grenada Country Gender Assessment Report. January 2014
- Caribbean Development Bank (2010). "Country Strategy Paper (CSP) – Dominica, 2010-2012". Paper No. BD 70/10, presented at the 243rd meeting of the CDB Board of Directors, held in Barbados on 20-21 October 2010. Barbados: Caribbean Development Bank (CDB). Unpublished.
- Caribbean Development Bank. 2010. A Macroeconomic and Social Assessment of Barbados, 1995-2010.
- Caribbean Development Bank. 2010. Survey of Living Conditions of Barbados.
- Caribbean Development Bank (2009). "Country Strategy Paper (CSP) – Grenada, 2009-2011". Paper No. BD 75/09, presented at the 238th meeting of the CDB Board of Directors, Barbados, 14 October 2009. Barbados: Caribbean Development Bank (CDB). Unpublished.
- Caribbean Development Bank. 2009. Dominica: Country Poverty Assessment Report.
- Caribbean Development Bank (2008a). "Status of Gender and Development in CDB and the Caribbean: The Way Forward and CDB's Role". Barbados: Caribbean Development Bank. Mimeograph, May 2008
- Caribbean Development Bank (2008b). "Gender Equality Policy and Operational Strategy (GEPOS)". Paper No. BD 72/08 Add 1, presented at the 234th meeting of the CDB Board of Directors, Barbados, 10 December 2008. Barbados: Caribbean Development Bank (CDB). Unpublished.
- Caribbean Development Bank (2008c). Country Poverty Assessment – Grenada, Carriacou and Petite Martinique, vol. 1. Authored by Kairi Consultants Limited for Caribbean Development Bank. Barbados: Caribbean Development Bank.
- Caribbean Development Bank. 2008. Grenada: Country Poverty Assessment Report, 2007/2008.
- Caribbean Development Bank. 2007. Antigua and Barbuda: Country Poverty Assessment Report. 2007
- Caribbean Development Bank. 2001. St. Lucia: Country Poverty Assessment Report.
- Caribbean Fisheries Mechanism (CRFM). Mainstreaming of the Fisheries Sector in Poverty Reduction Strategy Papers and National Development Plans
- Carr, Marilyn (2004). *Chains of Fortune: Linking Women Producers and Workers with Global Markets*. London: Centre for Research on the Epidemiology of Disasters (CREDE). 2020. Emergency Events Database (EM-DAT) [online] <https://www.emdat.be/>.
- Commonwealth Secretariat. Commonwealth Secretariat (2005). *The Commonwealth Plan of Action for Gender Equality 2005-2015*. London: Commonwealth Secretariat.
- Commonwealth Secretariat. 1989. *Engendering Adjustment for the 1990s*. Report of a Commonwealth Expert Group on Women and Structural Adjustment. Commonwealth Secretariat, London.
- Cummins, D. and E. C. Harvey (1996), *Women Food Producers in Barbados: National summary*, InterAmerican Institute for Cooperation on Agriculture and Inter-American Development Bank, San José, Costa Rica.
- Díaz-Bonilla, E. 2015. *Macroeconomics, Agriculture, and Food Security. A Guide to Policy Making in Developing Countries*. Washington, DC. IFPRI.
- Dixon, J. A. 1998. Technical Support Services for Agro-Industrial Development-Jamaica. Paper presented at the Regional Consultation on Agro-Industrial Development. September 28-29. Port-of-Spain, Trinidad and Tobago.

- Dominica Bureau of Gender Affairs (2009). "Report on Some Gender Activities in the Commonwealth of Dominica". Report presented at the Fifth Meeting of Directors/Coordinators of Women's/Gender Bureaus held in Georgetown, Guyana on 6-7 October 2009. Bureau of Gender Affairs, Ministry of Social Services, Community Development and Gender Affairs, Government of Dominica. Unpublished.
- Economic Commission for Latin America and the Caribbean/Food and Agriculture Organization of the United Nations (ECLAC/FAO), 2020. "Preventing the COVID-19 crisis from becoming a food crisis: urgent measures against hunger in Latin America and the Caribbean", COVID-19 Report, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), June 2020.
- Ellis, E. (2001), "Jobs, Gender and Small Enterprises: Country paper on Barbados", in C. Ferdinand (ed.), Jobs, Gender and Small Enterprises in the Caribbean: Lessons from Barbados, Suriname and Trinidad and Tobago, International Labour Office, Geneva.
- Ellis, Patricia. 2003. "Women in the English-speaking Caribbean: an Overview". Women, Gender and Development in the Caribbean.
- Elson, D. 1991. Male Bias in Macroeconomics: The Case of Structural Adjustment. In D. Elson (ed.) Male Bias in the Development Process. Manchester University Press, Manchester, U.K. pp 164-90.
- Evers, Barbara and Bernard Walters. 2000. Extra-Household Factors and Women Farmers' Supply Response in Sub-Sahara Africa. World Development, Vol.28, Issue 7, July 2000
- Food and Agriculture Organization of the United Nations (FAO), 2020. Caribbean COVID-19 Food Security and Livelihoods Impact Survey Regional Summary Report, April 2020. World Food Programme (WFP) and the Food and Agriculture Organization of the United Nations, CARICOM and Caribbean Disaster Emergency Management Agency (CDEMA)
- Food and Agriculture Organization of the United Nations (FAO), (2015). Regional Overview of Food Insecurity: Latin America and the Caribbean. Rome, FAO (http://dx.doi.org/10.1787/agr_pol-2015-en)
- Food and Agriculture Organization of the United Nations (FAO), 2014. SMAE Competitiveness in the Caribbean: Proceedings of an FAO-JAPA Agribusiness Roundtable on Small and Medium Agro-processing Enterprises.
- Food and Agriculture Organization of the United Nations (FAO). 2012. Profile of Small-Scale Farmers in the Caribbean. Hunger Free Initiative of Latin America and the Caribbean. Prepared by Barbara Graham.
- Food and Agriculture Organization of the United Nations (FAO). 2006. Policy Highlights: Gender in Agricultural Development Policies.
- FOCAL (2006). The Caribbean Single Market and Economy (CSME): The Case for Tracking Impacts on Women and Men. May 2006.
- Fontaine, Thomson. Caribbean Country Experiences with IMF Stabilization Programs within the Context of Globalization. Undated.
- French, J. (1997) "Gender Issues in Caribbean Agriculture: Methodology and process in the movement towards change", in E. Leo-Rhynie, B. Bailey and C. Barrow (eds.), Gender: A Caribbean multidisciplinary perspective, Ian Randle Publishers, Kingston, pp. 311– 23.
- Gender Action (2007). Brief Review of PRSP Collaborations by Country, September 2007 <http://genderaction.org/images/Brief%20Review%20of%20PRSP%20Collaborations.pdf>
- Gomes, Rafael, and Max Lawson, 2003, "Pro-Poor Macroeconomic Policies Require Poverty and Social Impact Analysis," Economic Policy Empowerment Program, May (Brussels: European Network on Debt and Development).
- Government of Barbados. Barbados Medium-Term Growth and Development Strategy (MTGDS) 2013-2020."
- Government of Dominica (2014). "Revised Main Findings, 2011 Population and Housing Census". Central Statistical Office, Ministry of Finance, Government of Dominica. January 2014. Unpublished.
- Government of Dominica (2013). Tourism Master Plan 2012-2022. Report prepared by CHL Consulting Co. Ltd., on behalf of the Government of Dominica, with financial assistance from the Commission of the European Union under the 10th EDF General Budget Support Programme. Ministry of Tourism and Legal Affairs.
- Government of Dominica (2012b). Third Medium-Term Growth and Social Protection Strategy: Redoubling the Effort towards a Sustainable Development Pathway, 2012-2014, Ministry of Finance, Government of Dominica.
- Government of Dominica (2011). Behavioural and HIV Sero-prevalence Survey among Men who have Sex with Men (MSM) in Dominica. Health Information Unit, Ministry of Health.
- Government of St. Lucia (2011), "National Poverty Reduction Strategy and Action Plan", Castries, 30 January.
- Government of Dominica (2010a). Economic and Social Review for Fiscal Year 2009/2010. Ministry of Finance, Government of Dominica.

- Government of Dominica (2010b). Strategic Plan for Health: Investing in Health – Building a Safer Future; Volume 1: Health Situation Analysis. Ministry of Health.
- Government of Antigua and Barbuda. 2007. The Report of the Agricultural Census, 2007.
- Government of St. Lucia. 2007. The Report of the Agricultural Census, 2007.
- Government of Dominica (2006). National Policy and Action Plan for Gender Equity and Equality in the Commonwealth of Dominica. Women’s Bureau, Ministry of Community Development, Gender Affairs and Information.
- Grant, S. C. (2004), “Caribbean Women in Fishing Economies”, in Proceedings of the Gulf and Caribbean Fisheries Institute, 55, pp. 69–75.
- Hilaire, Alvin. 2000. Caribbean Approaches to Economic Stabilization. IMF Working Paper. WP/00/73, 2000
- Holvoet, N. (2007) Evolutions in Development Thinking and Policy: New Opportunities for Gender Equality. Brussels: Commission on Women and Development.
- Hussain, Belayeth A. H. M, and Nikhilendu Deb, 2016. Gender-sensitivity of Bangladesh PRSP: A Gender Scanning. In SUST Journal of Social Sciences, Vol. 25, No. 2, 2016, P: 43-55
- Inter-American Development Bank (IDB), 2016. IDB Agri-monitor database, accessed at: <http://www.iadb.org/en/topics/agriculture/agrimonitor/agrimonitor-pse-agricultural-policy-monitoring-system,8025.html>
- Inter-American Institute for Cooperation on Agriculture (IICA), 2016. Caribbean Intended Nationally Determined Contributions: Where does agriculture fit? (http://infoagro.net/archivos/Infoagro/Ambiente/biblioteca/EN_IICA.2016.CaribbeanI.pdf)
- International Bank for Reconstruction and Development, 2014. IFC, Doing Business in Antigua and Barbuda 2014, Comparing Regulation in 183 Countries. 1-76. Accessed at: <http://www.doingbusiness.org/Documents/CountryProfiles/ATG.pdf>
- Johnson, O. 1987. The Agricultural Sector and Adjustment Programs Supported by IMF Stand By Arrangements. IMF Working Paper No. 87/57. Washington, DC.
- Jones, F. 2016. “Ageing in the Caribbean and the human rights of older persons: twin imperatives for action”, Studies and Perspectives series, No. 45 (LC/L.4130-LC/CAR/L.481), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), January, 2016
- Jones, G. 1971. *The Role of Science and Technology in Developing Countries*. Oxford University Press, London, England.
- Josling, T., Alleng, G., De Salvo, C. P., Boyce, R., Mills, A., Valero, S. (2017). Agricultural policy and greenhouse gas emissions in Jamaica. IDB, April 2017.
- Josling, T., Mittenzwei, K. (2013). Transparency and timeliness: The monitoring of agricultural policies in the WTO using OECD data. *World Trade Review*, 12(3), 533-547.
- Josling, T., Valdés, A. (2004). Agricultural Policy Indicators, Working Paper No 04-04. Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations (FAO-ESA) available at: <ftp://ftp.fao.org/docrep/fao/007/ae059e/ae059e00.pdf>
- Kairi Consultants Limited (2009). Country Poverty Assessment, Dominica, Volume 1. Barbados: Caribbean Development Bank.
- Kairi Consultants Limited (2007), “Saint Lucia Country Poverty Assessment, Poverty Reduction Strategy Paper, 2005–2006”, Kairi Consultants Ltd., Tunapuna, Trinidad and Tobago.
- Kruger, Anne O. 1978. Foreign trade Regimes and Economic Development: Liberalization Attempts and Consequences. Cambridge, Massachusetts: Ballinger Publishing Company for National Bureau of Economic Research, New York, 1978.
- Lachaud, M.A., Bravo-Ureta, B.E., Ludena, C.E. (2015). Agricultural productivity growth in LAC and other world regions: An analysis of climatic effects, convergence and catch-up. Inter-American Development Bank. Working Paper No. 607 (IDB-WP-607). Washington, DC.
- Lambert, I. 2001. Problems and Constraints to the Development of the Agro-Processing Sector.
- Lashley, J. and Katrine Smith. 2015: Profiling Caribbean Women Entrepreneurs: Business Environment, Sectoral Constraints and Programming Lessons. An Info Dev publication, July 2015.
- Lashley, J. 2012, “Economics, Entrepreneurship and Gender: Integrating ‘the others’ into enterprise development strategies”, in Barriteau, Op. Cit., pp. 258–85.
- Ludena, C.E., Yoon, S.W. (2015). Local Vulnerability Indicators and Adaptation to Climate Change: A Survey. Inter-American Development Bank. Technical Note No. 857 (IDB-TN- 857). Washington, DC.
- Martínez, R., Palma, A., Atalah, E., and Pinheiro, A.C. (2009). Food and Nutrition Insecurity in Latin America and the Caribbean.

- Masilela, Temba, Relebohile Moletsane, Vasu Reddy, Sithabile Ntombela, Harsha Dayal, Lisa Wiebesiek, Crystal Munthre, and Mukole Kongolo, 2010. Gender and Poverty Reduction: Voice, dialogue and targeting. Policy Analysis and Capacity Enhancement (PACE), Human Sciences Research Council.
- Maynard, Jennifer (2006). "Market Linkage Challenges for the SMEs in Small Caribbean Islands like Antigua and Barbuda: Opportunities for Change". Presentation at the UNCTAD Expert Meeting. 11-13 December 2006, p. 2 <http://www.unctad.org/sections/wcmu/docs/c1EM32p30.pdf>
- McConney, P., V. Nicholls, and B. Simmons (2012), "Women in a Fish Market in Barbados", in Proceedings of the Gulf and Caribbean Fisheries Institute, 65, pp. 26–30.
- Moser, C.O.N. 1989a. The Impact of Recession and Structural Adjustment Policies at the Micro-level: Low Income Women and their Households in Guayacil, Ecuador. In Invisible Adjustment. Vol 2, UNICEF, Americas and the Caribbean Regional Office, pp 137-62.
- Moser, C.O.N. 1989b. Gender Planning in the Third World: Meeting Practical and Strategic Gender Needs. World Development. 17 (11):1799-1825.
- Neimanis, A. (2004). Gender Mainstreaming in Practice: A Handbook, <http://www.undp.org/women/publications.shtml>
- Nin-Pratt, A., Falconi, C., Ludena, C.E., Martel, P. (2015). Productivity and the performance of agriculture in Latin America and the Caribbean: From the lost decade to the commodity boom. Inter-American Development Bank. Working Paper No. 608 (IDB-WP-608). Washington, DC.
- O'Connor, Erin C., "The Patriarchy's Role in Gender Inequality in the Caribbean" (2014). Student Publications. 258. https://cupola.gettysburg.edu/student_scholarship/258
- Ongile, Grace, 1999. Gender and Agricultural Supply Responses to Structural Adjustment Programmes: A Case Study of Smallholder Tea Producers in Kericho, Kenya. A Report from the Research Programme: The Political and Social Context of Structural Adjustment in Africa, 1999
- Oostendorp Remco H. 2004. Globalization and the Gender Wage Gap. World Bank Document 77609
- Orden, D., Blandford, D., Josling, T. (eds.) (2011). WTO Disciplines on Agricultural Support: Seeking a Fair Basis for Trade. Cambridge University Press, Cambridge.
- Organization for Economic Cooperation and Development (OECD), 2015. Agricultural Policy Monitoring and Evaluation 2014: OECD Countries. OECD, Paris
- (2009). PSE Manual. OECD, Paris.
- Osoba, Ermina (2005). "Women in Management and Decision-Making Processes in Antigua and Barbuda: A Statistical Analysis". Unpublished.
- Oxfam, 2003, "The IMF and the Millennium Goals—Failing to Deliver for Low Income Countries," September (Washington: Oxfam International).
- Paul, R. (2007), "St. Lucia Census for Agriculture: Gender dimensions of the agriculture sector", analysis for the Food and Agriculture Organization of the United Nations, <http://malff.com/images/stories/Census%20Data/Gender%20thematic%20analysis.pdf>
- Ministry of Agriculture, Lands, Forestry & Fisheries (undated), "Policy Brief: National Agricultural Policy 2009–2015", <http://malff.com/images/stories/admin/Agricultural%20policy%20brief%202009-2015.pdf>
- Papageorgiou, Demetris, Michael Michaely and Armeane M Choski (eds). 1991. Liberalizing Foreign Trade. The World Bank, Basil Blackwell, INC. Cambridge, Massachusetts, 1991.
- Poverty Reduction Strategy Papers: A Poor Package for Poverty Reduction Jenina Joy Chavez Malaluan and Shalmali Guttal Focus on the Global South, January 2003
- Reca, L. and Parellada, G.H. 2001. Argentina Agriculture at the Beginning of the Millennium: Achievements and Challenges. Economic Development 40(160):707–737.
- Reid, R. A. (2013), "Barbados Food and Nutrition Security Strategy: Final report (relating to value chain, marketing and trade)", Inter-American Institute for Cooperation in Agriculture, Bridgetown.
- Richmond, Jennie, and Paul Ladd, 2001, "Ignoring the Experts: Poor Peoples' Exclusion from Poverty Reduction Strategies," Christian Aid Policy Briefing, October (London: Christian Aid).
- Salazar-Xiranach, José (2004). The Proliferation of Regional Trade Agreements in the Americas: An assessment of Key Issues. In: Aggarwal, Vinod / Espach, Ralph / Tulchin, Joseph. The Strategic Dynamics of Latin American Trade, p.116-155. Stanford University Press, 2004.
- Seguino, Stephanie (2009). "The Global Economic Crisis, Its Gender Implications, and Policy Responses." Paper prepared for Gender Perspectives on the Financial Crisis Panel at the Fifty- Third Session of the Commission on the Status of Women, United Nations, March 5, 2009. Accessed at: https://www.uvm.edu/~sseguino/pdf/global_crisis.pdf

- Silva, S., Best, R., & Tefft, J. (2011). Reducing the CARICOM Food Import Bill and the Real Cost of Food: Policy and Investment Options. Rough Draft- Proyecto GTFS/RLA/141/ITA.
- Simpson, N., H.A. Oxenford; D.Gill; and R.Turner. 2014 The Spear Fishery of Barbados. Proceedings of the Gulf and Caribbean Fisheries Institute (66): 1-8.
- Staskiewicz, T., J. Walcott, H.A. Oxenford, and P.W. Schuhmann. 2008. Analysis of the Fisheries Landings, Vessel and Demographic Data Collected by the Government of Barbados. First project report on the economic valuation of the fisheries of Barbados, Fisheries Division, Ministry of Agriculture and Rural Development, Barbados. 54 pp.
- St. Lucia Ministry of Agriculture, Forestry and Fisheries (2008), "Saint Lucia Forest Policy: Final draft" http://www.caribbeanelections.com/eDocs/strategy/lc_strategy/lc_Forest_Policy_2008.pdf
- St. Lucia Ministry of Agriculture, Forestry and Fisheries (2007), "St. Lucia Census of Agriculture", November, <http://malff.com/images/stories/Census%20Data/Final%20Report.pdf>
- St. Lucia Ministry of Agriculture, Lands, Forestry & Fisheries (undated), "Policy Brief: National Agricultural Policy 2009–2015", <http://malff.com/images/stories/admin/Agricultural%20policy%20brief%202009-2015.pdf>.
- St. Lucia Ministry of Physical Development and the Environment (2010), "Saint Lucia National Energy Policy January 2010", http://www.credp.org/Data/STL_NEP_Jan2010.pdf
- St. Lucia Ministry of Physical Development, Environment and Housing (2003), "Saint Lucia National Climate Change Policy and Adaptation Plan", Castries, 27 July 2003
- United Nations 2019: United Nations Trust Fund for Human Security project: Building Effective Resilience for Human Security in the Caribbean Countries: The Imperative of Gender Equality and Women Empowerment in a Strengthened Agriculture (and related Agri/Fisheries Small Business) Sector.
- UNDP, UNICEF and UN Women Eastern Caribbean, 2020. Antigua and Barbuda COVID-19 Heat Report: Human and Economic Assessment of Impact. July 2020
- United Nations Office of the Special Advisor on Gender Issues and Advancement of Women (OSAGI), 1995. Gender Mainstreaming Mandates: Macroeconomics. Beijing, 1995. [Gender Mainstreaming Mandates \(un.org\)](http://www.un.org).
- UNIFEM (2010). Who Answers to Women? Gender & Accountability: Progress of the World's Women 2008-2009. http://www.unifem.org/progress/2008/media/POWW08_Report_Full_Text.pdf
- Walters A, L.M., and Jones, K.G. (2016). Caribbean Food Import Demand: An Application of the CBS Differential Demand System. Journal of Food Distribution Research 47(2).
- Whitehead, A. (2003) "Failing Women, Sustaining Poverty: Gender in Poverty Reduction Strategy Papers" Report for the UK Gender and Development Network, Christian Aid, London.
- Williams, Ewart (2006). "Supporting the Growth of Small and Medium Enterprises", Address to the Nova Committee of Trinidad and Tobago Chamber of Industry and Commerce. 16 May 2006. UN Department of Economic and Social Affairs (2011). The World's Women 2010: Trends and Statistics. http://unstats.un.org/unsd/demographic/products/Worldswomen/WW_full%20report_color.pdf
- World Bank. 2001a. Engendering Development: Through Gender Equality in Rights, Resources, and Voice. Policy Research Report. Oxford University Press. Summary available at www.worldbank.org/gender/prr
- World Bank (2001b) "Gender in the PRSPs: A Stocktaking", Poverty Reduction and Economic Management Network, Gender and Development Group, Washington, D.C.
- World Bank Report 2000: The Effect of IMF and World Bank Programs on Poverty.
- Wuddivira, M. De Gannes, V, Meerdink, G. and Dalrymple, N. 2017. Challenges of Food and Nutrition Security in the Caribbean. November 2017
- Zuckerman, E. (2002a). Poverty Reduction Strategy Papers and Gender: Background Paper for the Conference on Sustainable Poverty Reduction and PRSPs – Challenges for Developing Countries and Development Cooperation Berlin, May 13-16, 2002
- Zuckerman, E. (2002b) Engendering Poverty Reduction Strategy Papers (PRSPs): The Issues and the Challenges, <http://www.genderaction.org/images/Oxfam%20Gender&Dev%20Journal%20Article-EZ%20PRSPs.pdf>.
- Zuckerman, E. and Garrett, A. (2003) "Do Poverty Reduction Strategy Papers (PRSP) Address Gender? A Gender Audit of 2002 PRSPs", Gender Action, Washington, D.C.

NATIONAL FOOD AND NUTRITION SECURITY POLICY AND ACTION PLAN (NFNSPAP)

PROGRAMME COMPONENT 1: FOOD AVAILABILITY

Policy Goal: To promote the sustainable production of safe, affordable, nutritious, good quality food commodities/products

OBJECTIVES	PRIORITY AREAS OF ACTIONS/TARGETS
Objective 1: Increase production and supply of safe and nutritious local foods to traditional and non-traditional domestic market segments.	1. 1: Selection of a basket of locally produced nutritious foods.
	1.2: Enact a Food Security Law to ensure, inter alia, domestic production of a minimum threshold of a selected basket of foods.
	1.3: Build technical capabilities and capacities of producers of selected crops/livestock/fisheries.
	1.4: Expand availability of improved planting and genetic material.
	1.5: Implement a food import replacement programme.
	1.6: Improve the institutional, regulatory and operational framework that supports food safety.
	1.7: Improve capacity of supply and value chain.
Objective 2: Improve the efficiency and coverage of the domestic food distribution system.	2.1: Establish a comprehensive marketing database that is accessible, user friendly and constantly updated.
	2.2: Develop reliable marketing, distribution and communications network and infrastructure
	2.3: Strengthen capacity of current practitioners in the informal distribution system.
	2.4: Strengthen post- harvest facilitates infrastructure.
	2.5: Strengthen linkages with other economic sectors including manufacturing and tourism.
Objective 3: Improve the cost efficiency of primary and value added production.	3.1: Create synergies within the production and processing, packaging and distribution chain functions for local commodities
	3.2: Increase access of producers to critical infrastructure such as post-harvest facilities, abattoirs, cold storage, packing houses through strategic public/private sector partnerships.
	3.3: Ensure the efficient organization and capacity building of producers in producer-market linkages.
	3.4: Increase exposure of agro-processors to relevant and innovative production technologies.
	3.5: Increase accessibility to financial and technical support for enterprise modernization.
	3.6: Strengthen/Expand agribusiness incubation model/approach.
	3.7: Develop capacity of local agro-processors in energy efficiency.
	3.8: Ensure continuous training for the workforce.
Objective 4: Enhance the enabling environment for development of the agro-food sector.	4.1: Strengthen the capacity of Government to play a supporting role in development of the agro-food sector.
	4.2: Expand and strengthen the institutional and technical capability of extension services
	4.3: Strengthen the institutional and technical capacities for research and development.
	4.4: Strengthen capacity of existing agricultural educational and training institutions.
	4.5: Improve marketing support for producers.
	4.6: Improve access to financing for the agricultural sector.
	4.7: Facilitate youth participation in the agricultural sector.

	4.8: Develop an effective framework to reduce praedial larceny.
	4.9: Provide adequate water supply, irrigation and drainage to meet the needs of the sector.
	4.10: Improve and rationalize road infrastructure including the farm road network.
	4.11: Enhance laboratory infrastructure to support the agricultural sector.
	4.12: Establish a policy, planning and enforcement framework to protect and develop suitable agricultural lands.

PROGRAMME COMPONENT 2: FOOD ACCESS

Policy Goal: To ensure access of households and individuals to sufficient, nutritious affordable food at all times

OBJECTIVES	PRIORITY AREAS OF ACTIONS/TARGETS
Objective 1: Ensure access to adequate and nutritious food for the entire population, particularly in times of crisis.	1.1: Encourage household food production.
	1.2: Enhance and expand the school gardens programme.
	1.3: Enhance and expand food gardens in residential facilities.
	1.4: Re-establish/Enhance farms in prisons.
	1.5: Develop reliable marketing, distribution and communications network and infrastructure.
	1.6: The Strengthen capacity of current practitioners in the informal distribution system.
	1.7: Strengthen post-harvest infrastructure.
	1.8: Establish mechanisms for an adequate supply of food in times of a national food shortage.
	1.9: Target vulnerable groups who are at greater risk for food insecurity.
Objective 2: Increase access of vulnerable population to livelihood assets and basic public goods and services.	2.1: Promote human resource development
	2.2: Design/expand programmes that provide economic opportunities to households vulnerable to food insecurity and poor households.
	2.3: Formalize land ownership among informal land owners.
	2.4: Encourage leasehold arrangements to facilitate economic activities.
	2.5: Enhance programmes to facilitate the acquisition of farm machinery and equipment.
	2.6: Ensure adequate shelter for vulnerable persons and households.
	2.7: Ensure adequate shelter for vulnerable persons and households.
	2.8: Increase access to road infrastructure and transportation.
	2.9: Increase access to safe water and sanitation facilities.
	2.10: Increase access to electricity.
	2.11: Strengthen existing programmes to improve and facilitate access to health care.
	2.12: Ensure universal access to education.
Objective 3: Create and enhance information systems to identify, measure and monitor poor persons and groups vulnerable to food insecurity.	3.1: Establish a National Integrated Food Security Information and Early Warning System.
	3.2: Improve measurement, identification and data collection methodologies to include food and nutrition security indicators.
Objective 4: Enhance the social welfare of poor and vulnerable groups.	4.1: Strengthen the School Feeding Programme.
	4.2: Improve the administration and management of the Social Safety Net Programme.

	4.3: Increase poor households' access to the Social Safety Net Programme.
	4.4: Expand scope of school feeding programme.
	4.5: Ensure adequate planning and procedures in place at national and local levels to respond to food access issues in times of crisis.
	4.6: Develop an appropriate fiscal regime for the selected basket of basic foods.
	4.7: Ensure minimum wage keeps pace with inflation.
	4.9: Promote backyard gardening by households.

PROGRAMME COMPONENT 3: FOOD UTILIZATION/NUTRITIONAL ADEQUACY

Policy Goal: To promote nutritionally adequate, safe, affordable dietary intakes and other positive lifestyle behaviours throughout the life course

OBJECTIVES	PRIORITY AREAS OF ACTIONS/TARGETS
Objective 1: Increase public awareness and advocacy on issues related to food and nutrition.	1.1: Promote consumption of local foods based on their nutritional and health values.
	1.2: Encourage healthy meal preparation to meet dietary needs.
	1.3: Promote healthy consumption practices among the population.
	1.4: Utilize ICTs to widen reach of social marketing campaign.
	1.5: Utilize ICTs to widen reach of social marketing campaign.
	1.6: Sensitize policy makers and planners about nutrition issues.
	1.7: Capacity building of non-state advocacy organizations.
	1.8: Capacity building of non-state advocacy organizations.
	1.9: Foster participation of non-state actors in policy dialogue and activities
Objective 2: Improve the health and nutritional behaviour of the population.	2.1: Develop food-based dietary guidelines.
	2.2: Utilize fiscal measures to influence food consumption patterns.
	2.3: Enact legislation to influence national food consumption patterns.
	2.4: Ensure proper labelling of foods for nutrition facts.
	2.5: Develop National Policy Guidelines for the Promotion of Physical Activity.
	2.6: Develop and implement a national plan for physical activity for schools.
	2.7: Develop and implement a national plan for physical activity for the workplace.
	2.7: Develop and implement a national plan for physical activity for the workplace.
	2.8: Develop and implement a national plan for physical activity for communities.
	2.9: Develop and implement a national plan for physical activity for Health Services.
2.10: Implement a National Public Health and Nutrition Education Campaign.	
Objective 3: Improve the health and nutritional status of the population, with emphasis on vulnerable groups	3.1: Ensure healthier composition of foods produced locally.
	3.2: Increase knowledge of food handlers for improving their offering of healthy foods.
	3.3: Promote responsible marketing of foods and non-alcoholic beverages to children.
	3.4: Promote, protect and support appropriate infant and young child feeding practices.
	3.5: Enhance the micronutrient intake of vulnerable groups.
	3.6: Utilize fortification and enrichment of foods to facilitate reduce

	micronutrient deficiencies.
	3.7: Improve nutritional status of school aged children and youth.
	3.8: Improve nutritional status of adults and the elderly.
	3.9: Improve nutritional status of persons in residential care facilities.
Objective 4: Improve the institutional capacity for responding to nutritional challenges.	4.1: Improve institutional capacity for food composition analysis.
	4.2: Nutrition and dietetic expertise integrated into all sectors.
	4.3: Increase public sensitization programmes.
	4.4: Incorporate nutrition principles in curriculum development at all levels of the educational system.
	4.5: Ensure capacity building of community actors for the identification of their nutrition problems and the monitoring and evaluation of programmes.
	4.6: Strengthen primary care renewal and hospital dietetics departments.
	4.7: Develop standards of care for nutritional management of NCDs.
Objective 5: Improve systems for continuing nutrition research, surveillance, monitoring and evaluation.	5.1: Strengthen national nutrition surveillance systems in line with WHO standard.
	5.2: Conduct studies of national interest.
	5.3: Strengthen capacity for monitoring the minimum nutritional food basket.
	5.4: Strengthen MCSR reporting system.
	5.5: Develop coordination mechanisms.
	5.7: Increase sharing of nutrition related work among stakeholders.
	5.8: Improve the institutional, regulatory and operational framework that supports food safety.
	5.9: Improve the capacity of food commodity supply and value chains.

PROGRAMME COMPONENT 4: STABILITY OF FOOD SUPPLY

Policy Goal: To improve the food and nutrition security resilience of the national community to natural and socio-economic shocks and climate change

OBJECTIVES	PRIORITY AREAS OF ACTIONS/TARGETS
Objective 1: Ensure an adequate/consistent supply of food for the population while improving environmental sustainability/stewardship.	1.1: Improve the management, mitigation, prevention and preparedness capability of the agricultural /fisheries/livestock sectors to deal with disasters and hazards.
	1.2: Ensure the conservation and appropriate use of indigenous genetic material.
	1.3: Develop comprehensive agricultural income compensating and risk transfer schemes.
	1.4: Establish mechanisms for an adequate supply of food in times of national food shortage.
	1.5: Target vulnerable groups who are at greater risk of food insecurity.
	1.6: Create an Information System for Food and Nutrition Security for food crisis prevention, risk management and the construction of adequate risk profiles for strategic crops/livestock/fisheries resources.
	1.7: Encourage sound natural resource management as part of production strategies.
	1.8: Facilitate access to and application of new and emerging technologies and information on environmental best practices and standards in the sector.
	1.9: Develop supporting environment and conditions for organic agriculture.
	1.10: Build institutional capacity and capability for mainstreaming sustainable production.
Objective 2: Reduce the impact of climate change and climatic	2.1 Assess the risks/opportunities for agriculture arising from climate change.

variability on food production and livelihoods.	2.2: Develop and implement a research agenda on climate change adaptation and mitigation (to include resilient crops/livestock/fisheries, technologies/techniques, etc.).
	2.3: Ensure improved management practices to control greenhouse gas emissions.
	2.4: Provide educational materials to increase knowledge on climate change adaptation and mitigation strategies.
	2.5: Identify options for remuneration for agricultural ecological goods and services.
	2.6: Increase the availability of information about best practice and improved technologies for energy/fuel utilization.
	2.7: Maximize implementation of energy/fuel efficiency practices and technologies on farms and in processing plants.
	2.8: Improve production practices of food processors.
	2.9: Empower local communities to build local resilience to climate change.
	Objective 3: Improve the capacity of institutions to build the resilience of the agro-food sector and livelihoods to climate change and variability.
3.2: Integrate climate change considerations into decision-making of agricultural organizations and operations.	
3.4: Strengthen the capacity of state and non-state institutions to generate, analyse and disseminate climate related information.	

PROGRAMME COMPONENT 5: CROSSCUTTING ISSUES

Policy Goal: To develop appropriate solutions to emerging threats to the food and nutrition security system, to include Climate Change Adaptation and Mitigation Strategies, Bio-fuels and Climate Smart Agriculture Technology

OBJECTIVE
Identify and address emerging food and nutrition security issues, particularly as these threaten the food security and nutrition status of the most vulnerable and marginalised households and population groups

PROGRAMME COMPONENT 6: INSTITUTION BUILDING

Policy Goal: To strengthen the coordination and implementation mechanisms for Food and Nutrition Security

OBJECTIVE
Build institutional and organizational capacities for Good Governance of National Food and Nutrition Security Actions

Gender Sensitive Assessment of National Sectoral Policies

Indicative Measurement Scale¹¹⁷

Scale	Description
G0	The Policy or related Action Plan does not address gender equality
G1	The Policy or related Action Plan addresses gender equality only in some dimensions
G2	The Policy or related Action Plan addresses gender equality in a systematic way, but this is not one of its main objectives
G4	The Policy or related Action Plan addresses gender equality and/or women's empowerment as its main focus

Table 3B1: Gender Assessment of National Food and Nutrition Security Policy and Action Plan (NFNSPAP) – All Countries

Description	Issue Assessed/ Questions	Response	Gender Equality Rating	Comments
Relevance				
R1: Policy Conception	Is gender assessment carried out as part of the country or sectoral context of National Policies and Action Plans (NFNSPAP)?	To a limited extent	G1	In the preparation of NFNSPAP, stakeholder groups engaged included sector related ministries, researchers, NGOs, private sector operators along the value chains (input suppliers, processors, traders, exporters, financial institutions, etc.), academia, national and regional technical level officers The assessment was not systematic throughout the design process.
	Do programmes and projects proposed in NFNSPAP reflect the situation based on gender assessment?	To a limited extent	G1	There was no comprehensive gender assessment in the development of NFNSPAP and therefore only some of the proposed programmes reflect the situation.
	Are there targets designed to achieve gender equity in the NFNSPAP?	Yes	G2	The target designed by the NFNSPAP is to promote increased availability of safe, affordable, nutritious, good quality food commodities/products through the identification and promotion of priority commodities in which small producers (farmers, fisher folk, cottage food processors etc., with a focus on gender) shall be critical in the production of the identified food commodities/products.
	Are there outcomes and outputs designed to achieve the goal of gender equality and eradication of hunger and food insecurity?	To some extent	G2	The policy seeks to improve the socio-economic conditions of food insecure and nutritionally vulnerable groups through the implementation of improved mechanisms for measuring and monitoring food insecurity and poverty, including identifying and mapping vulnerable groups (taking a gender sensitive approach) that are prone to chronic and /or transitory food insecurity, and establish a national database of this information.
	Are there interventions to address gender issues of malnutrition?	Yes	G2	NFNSPAP is pursuing nutritional education and advocacy to ensure that people have adequate knowledge and appreciate the importance of both macronutrient and micronutrient malnutrition. There are also programmes that seek to promote healthy lifestyles and the commercialization and consumption of safe, affordable nutritious and good quality food commodities / products, with adequate levels of both macro and micronutrients. Specifically, NFNSPAP seeks to address the issues of increasing levels of obesity, non-communicable chronic

¹¹⁷ Adapted from the FAO Gender Marker Criteria

				diseases (NCDs), stunting and underweight (in children), as well as the high deficiency levels of vitamin A, iron and iodine (in both children and women of reproductive age), in order to improve nutrition.
▪ R2: Participation	Is gender analysis incorporated in the formulation, implementation, monitoring and evaluation of NFNSPAP	To a limited extent	G1	The selection of stakeholders to formulate, implement, monitor and evaluate NFNSPAP was not based on gender analysis. However, both men and women and related civil society were engaged in the process. In addition, indicators will be established to track gender mainstreaming of some critical variables. However, the modalities were not specific in the design and implementation processes.
	Does it show the participation of different women and men's stakeholders?	Yes	G1	Many are specified, but the criteria for the selection of stakeholders were not based on gender balance in order to obtain a fair mix between the private and public sector participants. Women's participation was not mentioned.
	Did the NFNSPAP implementation process involve the Agency responsible for Gender and any other gender mainstreaming institution?	No	G0	Not reported.
	Were women's groups consulted in preparation of NFNSPAP?	To some extent	G1	There was a wide consultative process, including civil society and community based organizations. Implicitly, women's groups were involved.
	Did women's groups play a specific role in preparation of NFNSPAP?	No	G0	Not reported.
	Does the NFNSPAP clearly reflect the input of women's groups?	No	G0	Although women groups are engaged in the design and implementation stages, their inputs are not clearly reflected. Women are included in all the activities along the value chain, but their contributions were not clearly reflected.
▪ R3: Budgeting	Does NFNSPAP systematically allocate resources to address women's as well as men's constraints, needs and priorities?	Not really	G0	Although there are plans and programmes in place to improve agriculture, fisheries and agro-processing, these do not allocate budgetary resources to categorically address the constraints, needs and priorities of men and women in isolation.
	Does NFNSPAP make specific budget provision for a standalone programme or project that specifically targets women or addresses gender inequality and existing gender gaps?	Not really	G0	Although components targeting pregnant and lactating mothers as well as for livelihoods diversification, there were no specific budgeting nor resources allocated.
	What percentage, if any, of the NFNSPAP budget is allocated to women specific targeted interventions (FAO's minimum standard target is 30 percent)?	Not really	G0	Not reported.
	Does NFNSPAP make provision for gender responsive budgeting?	No	G0	Not reported.
Effectiveness				
▪ E1: Institutional Capacity for Gender Programming	To what extent has the design process made use of relevant country supporting institutional frameworks in preparing NFNSPAP?	To some extent	G1	The issues to be addressed by NFNSPAP have ramifications which transcend the agricultural and rural sectors and cut across the existing division of functions and responsibilities of the various ministries and agencies of the public sector as currently structured. A number of national efforts (policies, programmes and projects) have been developed through a participatory process to promote food and nutrition security and a fairly favourable policy framework for growth of agriculture and allied services in the areas of food processing, preparation and distribution are in place. The Ministries of Education, Sports, Youth and Gender Affairs have responsibility for life-long learning and the education of all citizens through creative problem solving and critical thinking in preparation work. They cover some of the activity programmes assigned priority for the implementation of NFNSPAP, including the school meals programme in primary and secondary schools, thus ensuring access to food for

				children and adolescents.
	Are there effective partnerships established for gender mainstreaming in agricultural, fisheries and agro-industrial policies and programmes?	Not really	G0	Not reported.
	Has NFNSPAP incorporated processes for institutional capacity-building of women's cooperatives in agricultural production, agro-processing and agribusiness?	To some extent	G1	NFNSPAP provides for the encouragement and participation in mechanisms to reduce poverty levels and provide increased opportunities for women and youth to become more involved in the food and agricultural sectors.
	Does NFNSPAP make provision for capacity-building for gender sensitive extension and other services?	To some extent	G1	The NFNSPAP speaks to the creation of an enabling environment for increased production and productivity and improved marketing of identified crops, livestock and fish commodities/products through expanding and strengthening the institutional and technical capacity of extension services to provide better support and more rapid and extensive transfer of new and innovative technologies to primary producers and other actors along the value chain as well as for linking producers to markets. However, the approach is gender neutral.
	Is there provision for capacity-building aimed at generating sex disaggregated data and gender sensitive indicators?	Not really	G0	There is limited available sex disaggregated data. However, there are indicators (input, outputs and outcomes) of programmes or projects that may consider issues concerning men and women farmers, children and pregnant or lactating mothers. In addition, the NFNSPAP interventions seek to address both micro- and macro issues and so designed as to consider a wide array of data that can be disaggregated down to the household level (or even to the intra-household level).
▪ E2: Monitoring and Evaluation (M&E)	Are there gender sensitive indicators?	To some extent	G1	Implicit in the assessment of food insecure and malnourished population only.
	Is there a role for monitoring or collecting feedback from women and girls in the M&E framework?	To some extent	G1	Implied, but not elaborated.
	Are sex disaggregated data being used to highlight the gendered impacts of programmes on men and women?	Not really	G0	No sex disaggregated data is being used – the M&E system was formulated to support the implementation of all programmes and projects in the agriculture, fisheries and agro-processing sectors and to assess their impacts in a gender neutral manner.
Efficiency: Resource Use Efficiency				
▪ E1: Natural Resource Management	To what extent has NFNSPAP incorporated principles of conservation of agricultural resources and biodiversity that tap into indigenous knowledge of rural women?	To some extent	G1	Approach is gender neutral. NFNSPAP will support adaptation and mitigation strategies as a means of enhancing the stability of food and nutrition security over time in domestic food supplies and household access from threats of natural disasters and climate change through identifying and building on successful indigenous knowledge and strategies for adaptation.
	Has the role and status of women been considered in processes of natural resource management?	Not really	G0	Not reported.
	Are there processes for soil and seed management that include women?	Not really	G0	Not reported.
	Does NFNSPAP make provision for alternative energy sources for women to reduce deforestation?	Not really	G0	Not reported.
▪ E2:	Does NFNSPAP provide for farm level	Not really	G1	Within the government support programmes. However, it is not systematically gendered and mainstreamed.

Technological Efficiency (Labour Use)	efficiency (fertilizer, seeds, tools etc.) for women farmers?			
	Are labour-saving technologies provided to promote women's productivity?	To some extent	G1	The use of technologies such as improved seeds, fertilizer and other agrochemicals will enhance farmers' productivity, especially that of women farmers.
	Does NFNSPAP incorporate training to enhance rural women's use of improved technologies?	Yes	G2	NFNSPAP has incorporated training of farmers, fisher-folks and agro-processors (men and women) in the use of improved technologies. For instance, NFNSPAP is training producers, processors and marketers in post-harvest handling technologies and also building capacity (training and resources) of producers and potential producers in other technologies, such as ICT, conservation farming, zero tillage, efficient management of irrigation systems and an improved water supply. Some selected farmers are being trained in the installation, operation and maintenance of recommended irrigation technologies. Other selected farmers/household members are being trained in water harvesting and water management technologies. There is also capacity-building of field officers, producers and other stakeholders in the use of new and improved technologies.
	Is NFNSPAP enhancing gender sensitive research for labour saving-technology?	Not really	G0	Not reported.
▪ E3: Value Chain Development and Access to Market	Are there programmes and initiatives that link women's cooperatives/ organizations to national, regional and global agricultural and food markets?	To some extent	G1	NFNSPAP seeks to increase competitiveness and boost integration into domestic, regional and international markets. Linkages between smallholders (men and women) and markets will be accomplished by improving efficiency and effectiveness of the food marketing and distribution system through the upgrading and/or establishment retail market facilities and packaging centres as public goods, strengthening the capacity and capability of production/marketing Information System, improving farm to market channels, e.g. access roads and post-harvest grading and handling, and upgrading of the transportation infrastructure by fostering greater use of refrigerated trucks and appropriate packaging material, and by maintaining cold chains for crops and livestock products to ensure quality assurance and food safety.
	Are women's cooperatives being strengthened for value chain participation?	To some extent	G1	NFNSPAP seeks to establish links to input and output markets and service providers, so as to help strengthen value chain participation (including for women). NFNSPAP also seeks to upgrade the skills of technical officers and stakeholders along the value chain to improve agricultural performance, in order to increase productivity and market access.
	Will women's groups' access to public procurement for agricultural products/inputs be enhanced?	To some extent	G1	Included in the NFNSPAP's strategies to improve agriculture, fisheries and agro-processing production and productivity are investments to be made infrastructure (production and post-production), upgrading skills of operators in the value chain, research to improve crops and livestock seed stocks and systems, market information, and appropriate policies that facilitate supply and access to productive resources (for all actors along the value chain, including women).
	Will NFNSPAP promote private investment flow into women's value chain enterprises?	To some extent	G1	The agriculture, fisheries and agro-processing value chains are dominated by private sector activities, so it is expected that much of the investment will come from this source. All actors along the value chain (including women) engage in these activities. In addition, one of the five pillars of the NFNSPAP relates to the expansion of pro-poor employment and income generating opportunities, including the provision of credit for micro-enterprises and SMEs.
Likely Impact				
▪ I1: Decent Rural Employment	Will NFNSPAP implementation increase rural women's employment in new agricultural value chains?	To some extent	G1	Not explicit, but this is a possible outcome dependent on the strategies to remove constraints implied in the NFNSPAP, such as those related to rural infrastructure, markets, operational management. This will enhance rural employment for all actors along the value chain (including women).
	Are there initiatives to provide care services for women farmers?	No	G0	Not reported.

	Will there be a reduction in unpaid farm labour of women and children?	To some extent	G1	NFNSPAP seeks to target the most vulnerable in society, who include women and children. By offering organized activities (capacity-building and other forms of investment) to support the rural poor and engage them effectively in the value chain, the NFNSPAP seeks to bolster this as a source of employment, for which women and children will receive any wage due to them for services rendered.
	Will NFNSPAP promote the integration of women into productive farming which sees agriculture as a business?	Yes	G2	NFNSPAP has some consistency with other related development programme (example poverty reduction), which provide an integrated framework to support agriculture, fisheries, agro-processing growth, rural development and food and nutrition security in the country, and thus, strategically target the most vulnerable – women and children. NFNSPAP seeks to increase competitiveness and forge stronger linkages to domestic and international markets. This will improve domestic and international markets penetration by smallholder (men and women) farmers.
	Will social protection programmes for women in agriculture be implemented?	To some extent	G1	No social protection programmes for women in agriculture are planned. However, NFNSPAP seeks to improve the social protection system, including the strengthening of the safety net system which provides coverage for vulnerable groups (women, aged, children, youth, and persons with disabilities).
	Will there be measures to eradicate negative working conditions for women in agriculture and its value chains?	Not really	G0	Not reported.
	Are there any provisions in the document that are likely to perpetuate further gender inequality?	To some extent	G1	There is the absence of asset building programmes for women especially as it relates at land and savings. NFNSPAP has a heavy focus on infrastructure development, which is gender neutral and not on facilitating the removal of women's production and market constraints, especially in the small scale agro-processing industry. This may benefit men more than women producers.
▪ I2: Food and Nutrition Security	Is there a reduction in the proportion of women among the food insecure population?	To some extent	G1	The number of food insecure (vulnerable) households is expected to decline. The most vulnerable are women and children.
	Is there a reduction in the proportion of females in the malnourished population?	Yes	G2	There is expected to be a significant reduction in the proportion of women (at reproductive stage) and children who are malnourished.
	Indicate the progress made towards zero hunger during implementation of NFNSPAP	Yes	G2	NFNSPAP seeks to increase productivity and total production, improve food distribution and enhance nutrition to vulnerable groups (predominantly women and children). It is therefore supporting groups that are most susceptible to food insecurity, providing income diversification opportunities to enable them to cope better with adverse food supply situations and production risk and increase their incomes to ensure better access to food. It is also promoting the nutritional aspect of food security, through research, education and advocacy on food choice, quality and safety. In addition, Zero Hunger Challenge Initiative is being implemented by FAO that is aimed at reducing hunger.
Sustainability strategy for putting policy into action, which includes financing.				
▪ S1: Financial Inclusion	Does NFNSPAP promote financial support for rural women farmers and women in agribusiness?	To some extent	G1	NFNSPAP is promoting financial support for the agriculture sector by increasing government budgetary allocation for the same. Private sector and foreign investment have been identified as sources of funds to finance activities in the agriculture sector. NFNSPAP is also promoting off-farm activities, with a particular focus on supporting the setting up of agro-processing SMSEs, especially targeting women and youth.
	Is there provision in NFNSPAP to partner	To some	G1	NFNSPAP seeks to establish reliable mechanisms for sustained financing of the requisite range of programmes. In

	with financial institutions to provide access to credit for women?	extent		this regard, in addition to traditional means of funding, Government will seek to promote and encourage multi sector partnerships between state and non-state sectors to address the needs of the poor and vulnerable.
	Is financial inclusion being promoted through producer organizations and agribusinesses (e.g women's trust fund etc.)?	To some extent	G1	NFNSPAP seeks to promote increased self-reliance and empowerment of civil society and producers organizations derived from improved understanding and information of domestic and international markets, planning and management capacity and networking.
▪ S2: Resilience of the Agriculture and Food Systems	Are women being strengthened to practise climate smart agriculture?	To some extent	G1	NFNSPAP seeks to pursue climate resilient development which focuses on adaptation as well as mitigation strategies for the food and agriculture sector. In respect of mitigation , priority focus shall be placed on coastal management (which affects the fishing industry) as well as sustainable forest management for reducing emissions while improving livelihoods and ensuring their stability over time. This strategic approach is expected to benefit both men and women.
	Does NFNSPAP support securing women's asset base?	Not really	G0	Not planned.
	Are women farmers being supported in crop insurance programmes?	To some extent	G1	There is no specific crop insurance programme for women. Nevertheless, women banana farmers in the Windward Islands (Dominica, Grenada and St. Lucia) are benefiting from the Windward Island Crop Insurance Facility. In addition, the countries continued to derive benefits from the Caribbean Catastrophic Risk Insurance Facility (CCRIP), which is parametric based.

Table 3B2: Gender Assessment of Barbados Agricultural Policy 2012: A Vision for the future of Agriculture in Barbados

Description	Issue Assessed/ Questions	Response	Gender Equality Rating	Comments
Relevance				
R1: Policy Conception	Is gender assessment carried out as part of the country or sectoral context of National Policies and Action Plans (BAP)?	To a limited extent	G1	In the preparation of BAP, stakeholder groups engaged included sector related ministries, researchers, NGOs, private sector operators along the value chains (input suppliers, processors, traders, exporters, financial institutions, etc.), academia, national and regional technical level officers. However, the design process did not benefit from a systematic assessment of gender issues.
	Do programmes and projects proposed in BAP reflect the situation based on gender assessment?	To a limited extent	G1	Since there was no comprehensive gender assessment in the development of BAP, only some of the proposed programmes reflect the situation. Nevertheless, BAP seeks to build capacity through a new educational curriculum in schools and colleges to promote awareness of gender issues and the role of women in agriculture.
	Are there targets designed to achieve gender equity in the BAP?	To a limited extent	G1	BAP seeks to provide farmers with the land, technology, market information, infrastructure and incentives and the various other inputs necessary for increased production of identified commodities. To be successful this plan calls for coordination of actions especially with the Ministry of Health, Education, Finance, Commerce, the Private Sector and farmer, with the policies and political to bring about change in place. Small producers (farmers, fisher folk, cottage food processors), including women will be critical in the production of the identified food commodities/products.
	Are there outcomes and outputs designed to achieve the goal of gender equality and eradication of hunger and food insecurity?	Not really	G0	Not specified.
	Are there interventions to address gender issues of malnutrition?	To some extent	G1	BAP recognizes the dependence on imported food which has increased and a diet typical of imports has largely supplanted the traditional diet in the country. At the same time, nutritional problems have undergone an epidemiological transition: under-nutrition, manifested by energy-protein malnutrition, has declined, while over-nutrition, evidences by obesity – especially in adult women – has become common. BAP, therefore seeks to promote increased production of these basic commodities contributing less than 80% of demand and to continue to increase the production of those that are close to self-sufficiency in order to satisfy increased demand related to population growth and the potential for agro-processing. This strategic approach will surely benefit women and men.
R2: Participation	Is gender analysis incorporated in the formulation, implementation, monitoring and evaluation of BAP	To a limited extent	G1	The selection of stakeholders to formulate, implement, monitor and evaluate BAP was not based on gender analysis. However, both men and women and related civil society were engaged in the process. In addition, indicators will be established to track gender mainstreaming of some critical variables. However, the modalities were not gender specific in the design and implementation processes.
	Does it show the participation of different women and men's stakeholders?	Yes	G1	Many are specified, but the criteria for the selection of stakeholders were not based on gender balance in order to obtain a fair mix between the private and public sector participants. Women's participation was not mentioned.
	Did the BAP implementation process involve the Agency responsible for Gender and any other gender mainstreaming institution?	No	G0	Not reported.

	Were women's groups consulted in preparation of BAP?	To some extent	G1	There was a wide consultative process, including civil society and community based organizations. Implicitly, women's groups were involved.
	Did women's groups play a specific role in preparation of BAP?	No	G0	Not reported.
	Does the BAP clearly reflect the input of women's groups?	No	G0	Although women producers are engaged in the design and implementation stages, their inputs are not clearly reflected. Women are included in all the activities along the value chain, but their contributions are not clearly reflected.
▪ R3: Budgeting	Does BAP systematically allocate resources to address women's as well as men's constraints, needs and priorities?	Not really	G0	Although there are plans and programmes in place within the BAP to improve agriculture, fisheries and agro-processing, the budgetary allocation of resources to categorically address the constraints, needs and priorities of men and women is not specified by gender.
	Does BAP make specific budget provision for a standalone programme or project that specifically targets women or addresses gender inequality and existing gender gaps?	Not really	G0	Not reported.
	What percentage, if any, of the BAP budget is allocated to women specific targeted interventions (FAO's minimum standard target is 30 percent)?	No	G0	Not reported.
	Does BAP make provision for gender responsive budgeting?	No	G0	Not reported.
Effectiveness				
▪ E1: Institutional Capacity for Gender Programming	To what extent has the design process made use of relevant country supporting institutional frameworks in preparing BAP?	To some extent	G2	The issues to be addressed by BAP have ramifications which transcend the agricultural and rural sectors and cut across the existing division of functions and responsibilities of the various ministries and agencies of the public sector as currently structured. A number of national efforts (policies, programmes and projects) have been developed through a participatory process to promote the growth of agriculture, fisheries and allied services in the areas of food processing, preparation and distribution are in place. They were all relevant in the design of BAP.
	Are there effective partnerships established for gender mainstreaming in agricultural policies and programmes?	Not really	G0	Not reported.
	Has BAP incorporated processes for institutional capacity-building of women's cooperatives in agricultural production, agro-processing and agribusiness?	To some extent	G1	BAP provides for the encouragement and participation in mechanisms to increase income and reduce poverty levels and provide increased opportunities for women and youth to become more involved in the food and agricultural sectors.
	Does BAP make provision for capacity-building for gender sensitive extension and other services?	To some extent	G1	BAP addresses the need for a Farmers Training Centre and a Model Farm for capacity building by training farmers, producers, extension officers and other professionals will be necessary in the implementation of this plan. Also the establishment of a Centre for Food Security and Entrepreneurship as a facility for the training of Barbadian farmers, entrepreneurs and professionals in the basics of agricultural science and technology, both for crop production, livestock production and fish production; conducting research on crop and livestock sustainable production systems including the development of organic farming and good agricultural practices; promoting entrepreneurship in agriculture based on the use of locally produced agricultural produce which can be transformed into agribusiness enterprises; incorporating a commercial component that contributes to the long-term financial sustainability of the Centre.
	Is there provision for capacity-building	Not really	G0	There is limited available sex disaggregated data. However, there are indicators (input, outputs and outcomes) of

	aimed at generating sex disaggregated data and gender sensitive indicators?			programmes or projects that may consider issues concerning men and women producers.
▪ E2: Monitoring and Evaluation (M&E)	Are there gender sensitive indicators?	To some extent	G1	Implicit in the implementation of BAP and associated programmes and projects.
	Is there a role for monitoring or collecting feedback from women and girls in the M&E framework?	To some extent	G1	Implied, but not elaborated.
	Are sex disaggregated data being used to highlight the gendered impacts of programmes on men and women?	Not really	G0	No sex disaggregated data is being used – the M&E system was formulated to support the implementation of all programmes and projects in the agriculture, fisheries and agro-processing sectors and to assess their impacts in a gender neutral way.
Efficiency: Resource Use Efficiency				
▪ E1: Natural Resource Management	To what extent has BAP incorporated principles of conservation of agricultural resources and biodiversity that tap into indigenous knowledge of rural women?	To some extent	G1	Approach is gender neutral. BAP will support adaptation and mitigation strategies as a means of enhancing the stability over time in domestic food supplies and household access from threats of natural disasters and climate change through identifying and building on successful indigenous knowledge and strategies for adaptation.
	Has the role and status of women been considered in processes of natural resource management?	Not really	G0	Not reported.
	Are there processes for soil and seed management that include women?	Not really	G0	Not reported.
	Does BAP make provision for alternative energy sources for women to reduce deforestation?	Not really	G0	Not reported.
▪ E2: Technological Efficiency (Labour Use)	Does BAP provide for farm level efficiency (fertilizer, seeds, tools etc.) for women farmers?	Not really	G1	Within the government support programmes. However, it is not systematically gendered and mainstreamed.
	Are labour-saving technologies provided to promote women's productivity?	To some extent	G1	BAP recognizes that given its high cost structure of production with agriculture, fisheries and agro-processing, Barbados will need to be more efficient in combining labour and capital, including research and technology, compared to other countries. In this context, BAP seeks to evaluate the labour needs of an expanding food production sector and new technologies to reduce the need for manual labour and man-power in the sectors.
	Does BAP incorporate training to enhance rural women's use of improved technologies?	Yes	G2	BAP has incorporated training of farmers, fisher-folks and agro-processors (men and women) in the use of improved technologies. For instance, BAP will establish a Centre for Food Security and Entrepreneurship, a Farmers Training Centre and a Model Farm for capacity building by training farmers, producers, extension officers and other professionals for the implementation of policy. Women producers are expected to benefit.
	Is BAP enhancing gender sensitive research for labour saving-technology?	Not really	G0	Not reported.
▪ E3: Value Chain Development and Access to Market	Are there programmes and initiatives that link women's cooperatives/ organizations to national, regional and global agricultural and food markets?	To some extent	G1	BAP seeks to increase competitiveness and boost integration into domestic, regional and international markets. Linkages between smallholders (men and women) and markets will be accomplished by improving efficiency and effectiveness of the food production, marketing and distribution system through applying modern and appropriate technologies, upgrading and/or establishing retail market facilities and packaging centres as public goods, strengthening the capacity and capability of production/marketing Information System, improving farm to market channels, e.g. access roads and post-harvest grading and handling, and upgrading of the transportation

				infrastructure by fostering greater use of refrigerated trucks and appropriate packaging material, and by maintaining cold chains for crops and livestock products to ensure quality assurance and food safety. This approach will benefit women producers.
	Are women's cooperatives being strengthened for value chain participation?	To some extent	G1	BAP seeks to establish links to input and output markets and service providers, so as to help strengthen value chain participation of producer's organizations (including for women). BAP also seeks to upgrade the skills of technical officers and stakeholders along the value chain to improve agricultural performance, in order to increase productivity and market access.
	Will women's groups' access to public procurement for agricultural products/inputs be enhanced?	To some extent	G1	Included in the BAP's strategies to improve agriculture, fisheries and agro-processing production and productivity are investments to be made infrastructure (production and post-production), upgrading skills of operators in the value chain, research to improve crops and livestock seed stocks and systems, market information, and appropriate policies that facilitate supply and access to productive resources (for all actors along the value chain, including women).
	Will BAP promote private investment flow into women's value chain enterprises?	To some extent	G1	The agriculture, fisheries and agro-processing value chains are dominated by private sector activities. In this context, it is expected that much of the investment will come from this source. All actors along the value chain (including women) engage in these activities. BAP seeks to engage the commercial banking sector and the credit union movement to make financial resources available to farmers and other sector workers by reducing the cost of credit. In a wider context, BAP will promote a favourable, enabling environment for producers by promoting reasonable access to credit, efficient access to incentives, reasonable and reliable access to seeds, fertilizers, water, market information, access to technology, a fair price for his/her products and the assurance that he/she can make a comfortable standard of living from the pursuit of an investment in the food and agriculture sector.
Likely Impact				
▪ I1: Decent Rural Employment	Will BAP implementation increase rural women's employment in new agricultural value chains?	To some extent	G1	Not explicit, but this is a possible outcome dependent on the strategies to remove constraints implied in the BAP, such as those related to rural infrastructure, markets, operational management. This will enhance rural employment for all actors along the value chain (including women).
	Are there initiatives to provide care services for women farmers?	No	G0	Not reported.
	Will there be a reduction in unpaid farm labour of women and children?	To some extent	G1	BAP seeks to enhance the participation of the most vulnerable in society in the sectors, who include women and children. By offering organized activities (capacity-building and other forms of investment) to support the rural poor and engage them effectively in the value chain, the BAP seeks to bolster this as a source of employment, for which women and children will receive any wage due to them for services rendered.
	Will BAP promote the integration of women into productive farming which sees agriculture as a business?	Yes	G2	BAP has some consistency with other related development programme (example NFNSPAP and poverty reduction), which provide an integrated framework to support agriculture, fisheries, agro-processing growth, rural development and food and nutrition security in the country, and thus, strategically target the most vulnerable – women and children. BAP seeks to increase competitiveness and forge stronger linkages to domestic and international markets. This will improve domestic and international markets penetration by smallholder (men and women) farmers.
	Will social protection programmes for women in agriculture be implemented?	Not really	G0	Not reported.
	Will there be measures to eradicate negative working conditions for women in agriculture and its value chains?	Not really	G0	Not reported.
	Are there any provisions in the document that are likely to perpetuate further gender inequality?	To some extent	G1	There is the absence of asset building programmes for women especially as it relates at land and savings. BAP has a heavy focus on infrastructure development and capacity building, which are gender neutral and although not specifically identified as such, will facilitate the removal of women's production and market constraints, especially in the small scale agro-processing industry. This may benefit men more than women producers.

<p>▪ I2: Food and Nutrition Security</p>	Is there a reduction in the proportion of women among the food insecure population?	To some extent	G1	The number of food insecure (vulnerable) households is expected to decline. The most vulnerable are women and children.
	Is there a reduction in the proportion of females in the malnourished population?	Yes	G2	There is expected to be a significant reduction in the proportion of women (at reproductive stage) and children who are malnourished.
	Indicate the progress made towards zero hunger during implementation of BAP	Yes	G2	Both the BAP and the NFNSPAP seek to increase productivity and total production, improve food distribution and enhance nutrition to vulnerable groups (predominantly women and children). They are therefore supporting groups that are most susceptible to food insecurity, providing income diversification opportunities to enable them to cope better with adverse food supply situations and production risk and increase their incomes to ensure better access to food. They are also promoting the nutritional aspect of food security, through research, education and advocacy on food choice, quality and safety.
Sustainability strategy for putting policy into action, which includes financing.				
<p>▪ S1: Financial Inclusion</p>	Does BAP promote financial support for rural women farmers and women in agribusiness?	To some extent	G1	The strategic financing plan under BAP for the agricultural sector in Barbados includes a plan to finance what might be termed public goods and public services; a plan to finance and raise financing for public/private sector partnerships; and a plan to develop, raise and leverage capital for access by the private sector (which clearly relates to the public/private partnerships mentioned immediately above). The precise elements of the financing plan are to be elaborated on an intervention by intervention basis. The provision of financing options and attraction of funding at rates appropriate for the agricultural sector initiatives are the focus of the strategic financing plan.
	Is there provision in BAP to partner with financial institutions to provide access to credit for women?	To some extent	G1	As indicated above, BAP seeks to establish reliable mechanisms for sustained financing of the requisite range of programmes. In this regard, in addition to traditional means of funding, Government will seek to promote and encourage multi-sector partnerships between state and non-state sectors to address the needs of the poor and vulnerable. However, the approach is gender neutral.
	Is financial inclusion being promoted through producer organizations and agribusinesses (e.g women's trust fund etc.)?	To some extent	G1	BAP seeks to promote increased self-reliance and empowerment of civil society and producers organizations derived from improved understanding and information of domestic and international markets, planning and management capacity and networking.
<p>▪ S2: Resilience of the Agriculture and Food Systems</p>	Are women being strengthened to practise climate smart agriculture?	To some extent	G1	Implied, but not elaborated.
	Does BAP support securing women's asset base?	To some extent	G1	Implied, but not elaborated.
	Are women farmers being supported in crop insurance programmes?	To some extent	G1	BAP seeks to investigate the cost, terms and conditions of farm and produce insurance.

Table 3B3: Gender Assessment of Grenada National Agricultural Plan: 2015-2030

Description	Issue Assessed/ Questions	Response	Gender Equality Rating	Comments
Relevance				
<ul style="list-style-type: none"> ▪ R1: Policy Conception 	Is gender assessment carried out as part of the country or sectoral context of National Policies and Action Plans (GNAP)?	To a limited extent	G1	In the preparation of GNAP, stakeholder groups engaged included Stakeholders consulted included the Representative for Agriculture in the Upper House of Parliament, senior Government officers (Ministry of Agriculture, Forestry, Fisheries and the Environment; Ministry of Finance & Energy; Ministry of Economic Development), representatives of Non-Governmental Organizations, and Development Partners (GIZ, IICA). Feedback was also received from stakeholders who were unable to attend due to other commitments. The feedback received was wide ranging and informed to a large extent the final output of the plan. However, the design process did not benefit from a systematic assessment of gender issues.
	Do programmes and projects proposed in GNAP reflect the situation based on gender assessment?	To a limited extent	G1	Since there was no comprehensive gender assessment in the development of GNAP, only some of the proposed programmes reflect the situation. Nevertheless, participants identified gender as a critical issue in agriculture that must be address.
	Are there targets designed to achieve gender equity in the GNAP?	To a limited extent	G1	GNAP seeks to provide farmers with the land, credit, technology, market information, infrastructure and incentives and the various other inputs necessary for increased production and productivity of identified priority commodities. To be successful this plan calls for coordination of actions especially with the relevant ministries and agencies of the government, the Private Sector and producers, with the requisite policies and political commitment to bring about change in place. Small producers (farmers, fisher folk, food processors), including women will be critical in the production of the identified food commodities/products.
	Are there outcomes and outputs designed to achieve the goal of gender equality and eradication of hunger and food insecurity?	Not really	G0	Not specified.
	Are there interventions to address gender issues of malnutrition?	To some extent	G0	GNAP recognizes the dependence on imported food which has increased and a diet typical of imports has largely supplanted the traditional diet in the country. At the same time, nutritional problems have undergone an epidemiological transition: under-nutrition, manifested by energy-protein malnutrition, has declined, while over-nutrition, evidences by obesity – especially in adult women – has become common. GNAP, therefore seeks to promote increased production of some basic commodities for import replacements in order to satisfy the increased demand related to population growth and the potential for agro-processing. This strategic approach will surely benefit women and men.
<ul style="list-style-type: none"> ▪ R2: Participation 	Is gender analysis incorporated in the formulation, implementation, monitoring and evaluation of GNAP	To a limited extent	G1	The selection of stakeholders to formulate, implement, monitor and evaluate GNAP was not based on gender analysis. However, both men and women and related civil society were engaged in the process. In addition, indicators will be established to track gender mainstreaming of some critical variables. However, the modalities were not gender specific in the design and implementation processes.

	Does it show the participation of different women and men's stakeholders?	Yes	G1	Many are specified, but the criteria for the selection of stakeholders were not based on gender balance in order to obtain a fair mix between the (private and public sector) participants. Women's participation was not specifically mentioned.
	Did the GNAP implementation process involve the Agency responsible for Gender and any other gender mainstreaming institution?	No	G0	Not reported.
	Were women's groups consulted in preparation of GNAP?	To some extent	G1	There was a wide consultative process, including civil society and community based organizations. Implicitly, women's groups were involved.
	Did women's groups play a specific role in preparation of GNAP?	No	G0	Not reported.
	Does the GNAP clearly reflect the input of women's groups?	No	G0	Although women producers are engaged in the design and implementation stages, their inputs are not clearly reflected. Women are included in all the activities along the value chain, but their contributions are not clearly reflected.
▪ R3: Budgeting	Does GNAP systematically allocate resources to address women's as well as men's constraints, needs and priorities?	Not really	G0	Although there are plans and programmes in place within the GNAP to improve agriculture, fisheries and agro-processing, the budgetary allocation of resources to categorically address the constraints, needs and priorities of men and women is not specified by gender.
	Does GNAP make specific budget provision for a standalone programme or project that specifically targets women or addresses gender inequality and existing gender GNAPs?	Not really	G0	Not reported.
	What percentage, if any, of the GNAP budget is allocated to women specific targeted interventions (FAO's minimum standard target is 30 percent)?	No	G0	Not reported.
	Does GNAP make provision for gender responsive budgeting?	No	G0	Not reported.
Effectiveness				
▪ E1: Institutional Capacity for Gender Programming	To what extent has the design process made use of relevant country supporting institutional frameworks in preparing GNAP?	To some extent	G2	The issues to be addressed by GNAP have ramifications which transcend the agricultural and rural sectors and cut across the existing division of functions and responsibilities of the various ministries and agencies of the public sector as currently structured. Stakeholders consulted included the Representative for Agriculture in the Upper House of Parliament, senior Government officers (Ministry of Agriculture, Forestry, Fisheries and the Environment; Ministry of Finance & Energy; Ministry of Economic Development), representatives of Non-Governmental Organizations and Development Partners (GIZ, IICA). Feedback was also received from stakeholders who were unable to attend due to other commitments. The feedback received was wide ranging and informed to a large extent the final output of the plan.
	Are there effective partnerships established for gender mainstreaming in agricultural policies and programmes?	Not really	G0	Not reported.
	Has GNAP incorporated processes for institutional capacity-building of women's cooperatives in agricultural production, agro-processing and agribusiness?	To some extent	G1	GNAP provides for the encouragement and participation in mechanisms to increase income and reduce poverty levels and provide increased opportunities for women and youth to become more involved in the food and agricultural sectors.
	Does GNAP make provision for capacity-	To some	G1	GNAP seeks to address capacity and human resource development in all their elements as key issues. Areas

	building for gender sensitive extension and other services?	extent		include the strengthening of the data and information management capacity of the MALFFE to include available resources (# farmers, fisher folks, agro-processors, acreage farmed, etc.), production (amount, location of production, etc.), marketing (sales by market, prices, trends), environment (biodiversity, weather, emissions, etc.), to support policy formulation and the decision making process and to conduct adaptive research; training of Extension Officers in Agri-Business Management; providing support for organizational capacity development for existing farmers, fisher folks, and other producer organizations; providing support for institutional capacity development of the Grenada Federation of Agricultural and Fisheries Organization (GFAFO); providing ongoing technical, management and leadership training for the staff of all institutions servicing the agricultural sector; and promoting the formation of additional commodity based producer groups and community organizations for producers involved in agriculture where gaps exist. Implicitly, women's producers are involved.
	Is there provision for capacity-building aimed at generating sex disaggregated data and gender sensitive indicators?	Not really	G0	There is limited available sex disaggregated data. GNAP seeks to strengthen the data and information management capacity of the MALFFE. Suggested areas include available resources (# farmers, fisher folks, agro-processors, acreage farmed, etc.), production (amount, location of production, etc.), marketing (sales by market, prices, trends), environment (biodiversity, weather, emissions, etc.), to support policy formulation and the decision making process. While the effort is gender neutral, there are indicators (input, outputs and outcomes) of programmes or projects that may consider issues concerning men and women producers.
▪ E2: Monitoring and Evaluation (M&E)	Are there gender sensitive indicators?	To some extent	G1	Implicit in the implementation of GNAP and associated programmes and projects.
	Is there a role for monitoring or collecting feedback from women and girls in the M&E framework?	To some extent	G1	Implied, but not elaborated.
	Are sex disaggregated data being used to highlight the gendered impacts of programmes on men and women?	Not really	G0	No sex disaggregated data is being used – the M&E system was formulated to support the implementation of all programmes and projects in the agriculture, fisheries and agro-processing sectors and to assess their impacts in a gender neutral way.
Efficiency: Resource Use Efficiency				
▪ E1: Natural Resource Management	To what extent has GNAP incorporated principles of conservation of agricultural resources and biodiversity that tap into indigenous knowledge of rural women?	To some extent	G1	Approach is gender neutral. GNAP will support a adaptation and mitigation strategies as a means of enhancing the stability over time in domestic food supplies and household access from threats of natural disasters and climate change through identifying and building on successful indigenous knowledge and strategies for adaptation.
	Has the role and status of women been considered in processes of natural resource management?	Not really	G0	Not reported.
	Are there processes for soil and seed management that include women?	Not really	G0	Not reported.
	Does GNAP make provision for alternative energy sources for women to reduce deforestation?	Not really	G0	Not reported.
▪ E2: Technological Efficiency (Labour Use)	Does GNAP provide for farm level efficiency (fertilizer, seeds, tools etc.) for women farmers?	Not really	G1	Within the government support programmes. However, it is not systematically gendered and mainstreamed.
	Are labour-saving technologies provided to promote women's productivity?	To some extent	G1	GNAP recognizes that given its high cost structure of production with agriculture, fisheries and agro-processing, Grenada will need to be more efficient in combining labour and capital in new labour saving technologies. In this context, GNAP seeks to evaluate the labour needs of an expanding food production sector and new technologies

				to reduce the need for manual labour and man-power in the sectors. While the approach is gender neutral it is expected to promote women's productivity.
	Does GNAP incorporate training to enhance rural women's use of improved technologies?	Yes	G2	GNAP has incorporated training of farmers, fisher-folks and agro-processors (men and women) in the use of improved technologies. For instance, GNAP seeks to provide support for ongoing technical, management and leadership training for the staff of all institutions servicing farmers, fisher-folks and agro-processors (men and women) and for the formation of additional commodity based producer groups and community organizations for producers involved in agriculture, where gaps exist.
	Is GNAP enhancing gender sensitive research for labour saving-technology?	Not really	G0	Not reported. It is important to note that available data shows that more farms were using farm machinery at the 2012 Grenada Agricultural Census (GAC) compared to the 1995 GAC. Notable increases were in the use of seed planters (850%), brush cutters (770%), chain saws (556%), motor vehicles (166%), plucking machines (190%) and mist blowers (90%). The reduction in farm labour correlates with the increased use of farm machinery and equipment.
<p>▪ E3: Value Chain Development and Access to Market</p>	Are there programmes and initiatives that link women's cooperatives/ organizations to national, regional and global agricultural and food markets?	To some extent	G1	GNAP seeks to increase competitiveness and boost integration into domestic, regional and international markets by reducing costs of production and improve quality of agricultural produce. Linkages between smallholders (men and women) and markets will be accomplished by improving efficiency and effectiveness of the food production, marketing and distribution system through applying modern and appropriate technologies, upgrading and/or establishing retail market facilities and packaging centres, strengthening the capacity and capability of production/marketing Information System, improving farm to market channels, e.g. access roads and post-harvest grading and handling, and upgrading of the transportation infrastructure by fostering greater use of refrigerated trucks and appropriate packaging material, and by maintaining cold chains for crops and livestock products to ensure quality assurance and food safety. This approach will benefit both men and women producers.
	Are women's cooperatives being strengthened for value chain participation?	To some extent	G1	GNAP seeks to establish links to input and output markets and service providers, so as to help strengthen value chain participation of producer's organizations (including for women). GNAP also seeks to upgrade the skills of technical officers and stakeholders along the value chain to improve agricultural performance, in order to increase productivity and market access. In addition, GNAP will support organizational capacity development for existing farmers, fisher folks, and other producer organizations, institutional capacity development of the Grenada Federation of Agricultural and Fisheries Organization (GFAFO), ongoing technical, management and leadership training for the staff of all institutions servicing the agricultural sector, and the formation of additional commodity based producer groups and community organizations for producers involved in agriculture.
	Will women's groups' access to public procurement for agricultural products/inputs be enhanced?	To some extent	G1	Included in the GNAP's strategies to improve agriculture, fisheries and agro-processing production and productivity are investments to be made infrastructure (production and post-production), upgrading skills of operators in the value chain, research to improve crops and livestock seed stocks and systems, market information, and appropriate policies that facilitate supply and access to productive resources (for all actors along the value chain, including women).
	Will GNAP promote private investment flow into women's value chain enterprises?	To some extent	G2	The agriculture, fisheries and agro-processing value chains are dominated by private sector activities. In this context, it is expected that much of the investment will come from this source. GNAP seeks to provide investments in infrastructure which is critical to the development of agriculture in Grenada. GNAP also seeks to implementation of Phase three of the Agricultural Feeder Roads Rehabilitation Project (AFRP) in additional Farm Roads in rural communities. Investment will be made in equipment to weigh produce for export, upgrade the Tissue Culture and Plant Propagation Facilities, the MNIB Pack house facility for HAACP Certification and in the construction of at least one Wholesale Produce Market. Investment will also be made in drainage to control runoff and conserve water, and in storage facilities in watersheds for irrigation and in renewable energy (solar power) for operating irrigation pumps and processing. GNAP will provide support for increased Private Sector Investment through PPP's in production and value added, to include resuscitating the sugar cane Industry for producing raw materials for the production of specially blended rum for export and producing soursop for export.

Likely Impact				
▪ I1: Decent Rural Employment	Will GNAP implementation increase rural women's employment in new agricultural value chains?	To some extent	G1	Not explicit, but this is a possible outcome dependent on the strategies to remove constraints implied in the GNAP, such as those related to rural infrastructure, markets, operational management. This will enhance rural employment for all actors along the value chain (including women).
	Are there initiatives to provide care services for women farmers?	No	G0	Not reported.
	Will there be a reduction in unpaid farm labour of women and children?	To some extent	G1	GNAP seeks to enhance the participation of the most vulnerable in society in the sectors, who include women and children. By offering organized activities (capacity-building and other forms of investment) to support the rural poor and engage them effectively in the value chain, the GNAP seeks to bolster this as a source of employment, for which women and children will receive any wage due to them for services rendered.
	Will GNAP promote the integration of women into productive farming which sees agriculture as a business?	Yes	G2	GNAP has some consistency with other related development programme (example NFNSPAP, Growth and Poverty Reduction Strategy and the OECS Growth and Development Strategy), which provide an integrated framework to support agriculture, fisheries, agro-processing growth, rural development and food and nutrition security in the country, and thus, strategically target the most vulnerable – women and children. GNAP seeks to increase competitiveness and forge stronger linkages to domestic and international markets. This will improve domestic and international markets penetration by smallholder (men and women) farmers.
	Will social protection programmes for women in agriculture be implemented?	Not really	G0	Not reported.
	Will there be measures to eradicate negative working conditions for women in agriculture and its value chains?	Not really	G0	Not reported.
	Are there any provisions in the document that are likely to perpetuate further gender inequality?	To some extent	G1	There is the absence of asset building programmes for women especially as it relates at land and savings. GNAP has a heavy focus on infrastructure development and capacity building, which are gender neutral and not on facilitating the removal of women's production and market constraints, especially in the small scale agro-processing industry. However, this may benefit men more than women producers.
▪ I2: Food and Nutrition Security	Is there a reduction in the proportion of women among the food insecure population?	To some extent	G1	The number of food insecure (vulnerable) households is expected to decline. The most vulnerable are women and children.
	Is there a reduction in the proportion of females in the malnourished population?	Yes	G2	There is expected to be a significant reduction in the proportion of women (at reproductive stage) and children who are malnourished.
	Indicate the progress made towards zero hunger during implementation of GNAP	Yes	G2	Both the GNAP and the NFNSPAP seek to increase productivity and total production, improve food distribution and enhance nutrition to vulnerable groups (predominantly women and children). They are therefore supporting groups that are most susceptible to food insecurity, providing income diversification opportunities to enable them to cope better with adverse food supply situations and production risk and increase their incomes to ensure better access to food. They are also promoting the nutritional aspect of food security, through research, education and advocacy on food choice, quality and safety.
Sustainability strategy for putting policy into action, which includes financing.				
▪ S1: Financial	Does GNAP promote financial support for	To some	G1	The strategic financing plan under GNAP for the agricultural sector in Grenada includes a plan to finance what

Inclusion	rural women farmers and women in agribusiness?	extent		might be termed public goods and public services; a plan to support the financing for public/private sector partnerships; and a plan to develop, raise and leverage capital for access by the private sector (which clearly relates to the public/private partnerships mentioned immediately above). The provision of financing options and attraction of funding at rates appropriate for the agricultural sector initiatives are the focus of the strategic financing plan.
	Is there provision in GNAP to partner with financial institutions to provide access to credit for women?	To some extent	G1	As indicated above, GNAP seeks to establish reliable mechanisms for sustained financing of the requisite range of programmes. In this regard, in addition to traditional means of funding, Government will seek to promote and encourage multi-sector partnerships between state and non-state sectors to address the needs of the poor and vulnerable. However, the approach is gender neutral.
	Is financial inclusion being promoted through producer organizations and agribusinesses (e.g women's trust fund etc.)?	To some extent	G1	GNAP seeks to promote increased self-reliance and empowerment of civil society and producers organizations derived from improved understanding and information of domestic and international markets, planning and management capacity and networking. For example, GNAP will provide support for institutional capacity development of civil society, including the Grenada Federation of Agricultural and Fisheries Organization (GFAFO)
▪ S2: Resilience of the Agriculture and Food Systems	Are women being strengthened to practise climate smart agriculture?	To some extent	G1	Implied, but not elaborated.
	Does GNAP support securing women's asset base?	To some extent	G1	Implied, but not elaborated.
	Are women farmers being supported in crop insurance programmes?	To some extent	G1	GNAP seeks to improve access to climate risk insurance for farmers and fisher folks.

Table 3B4: Gender Assessment of (i) St. Lucia National Agricultural Policy 2009 – 2015 and (ii) St. Lucia’s Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

Description	Issue Assessed/ Questions	Response	Gender Equality Rating	Comments
Relevance				
<ul style="list-style-type: none"> ▪ R1: Policy Conception 	Is gender assessment carried out as part of the country or sectoral context of National Policies and Action Plans (SASAP)?	To a limited extent	G1	The preparation of SASAP was spearheaded by the Ministry of Education, Innovation, Gender Relations and Sustainable Development. The process benefited from the input of multiple stakeholder groups comprising public, statutory, academic, and the private sector. The feedback received was wide ranging and informed to a large extent the final output of the plan. However, the design process did not benefit from a systematic assessment of gender issues.
	Do programmes and projects proposed in SASAP and the SNAP reflect the situation based on gender assessment?	To a limited extent	G1	Since there was no comprehensive gender assessment in the development of SASAP, only some of the proposed programmes reflect the situation. Nevertheless, based on international, regional and national best practices and lessons learned, gender responsive and easy to use knowledge materials (leaflets, training manual, guidebooks, toolkits, business models) and communication products (leaflets, TV/radio materials, social media), services and platforms on Climate Resilient Agriculture, best practices will be developed, tested, and approved under SASAP.
	Are there targets designed to achieve gender equity in the SASAP and the SNAP?	To a limited extent	G1	Both SASAP and SNAP seek to provide farmers with the land, credit, technology, market information, infrastructure and incentives and the various other inputs necessary for increased production and productivity of identified priority commodities. To be successful, this plan calls for coordination of actions especially with the relevant ministries and agencies of the government, the private sector and producers, with the requisite policies and political commitment to bring about change in place. Small producers (farmers, fisher folk, food processors), including women will be critical in the production of the identified food commodities/products.
	Are there outcomes and outputs designed to achieve the goal of gender equality and eradication of hunger and food insecurity?	To some extent.	G2	Based on international, regional and national best practices and lessons learned, gender responsive and easy to use knowledge materials (leaflets, training manual, guidebooks, toolkits, business models) and communication products (leaflets, TV/radio materials, social media), services and platforms on Climate Resilient Agriculture, best practices will be developed, tested, and approved under SASAP. Under SNAP the sector vision will be pursued within the broad framework of a globally competitive market, liberalized global trading environment and national economic and social imperatives in respect of rural prosperity, food and nutrition security, natural resource conservation and gender equity.
	Are there interventions to address gender issues of malnutrition?	To some extent	G1	Both SASAP and SNAP recognize the dependence on imported food which has increased, and a diet typical of imports has largely supplanted the traditional diet in the country. At the same time, nutritional problems have undergone an epidemiological transition: under-nutrition, manifested by energy-protein malnutrition, has declined, while over-nutrition, evidenced by obesity – especially in adult women – has become common. SASAP, therefore seeks to promote increased production of some basic commodities for import replacements in order to satisfy the increased demand related to population growth and the potential for agro-processing. This strategic approach will surely benefit women and men.
<ul style="list-style-type: none"> ▪ R2: Participation 	Is gender analysis incorporated in the formulation, implementation, monitoring and evaluation of SASAP and SNAP?	To a limited extent	G1	The selection of stakeholders to formulate, implement, monitor and evaluate SASAP and SNAP was not based on gender analysis. However, both men and women and related civil society were engaged in the process. In addition, indicators will be established to track gender mainstreaming of some critical variables. However, the modalities were not gender specific in the design and implementation processes.
	Does it show the participation of different women and men’s stakeholders?	Yes	G1	Many are specified, but the criteria for the selection of stakeholders were not based on gender balance in order to obtain a fair mix between the (private and public sector) participants. Women’s participation was not specifically mentioned.

	Did the SASAP and SNAP implementation process involve the Agency responsible for Gender and any other gender mainstreaming institution?	Yes	G2	The preparation of SASAP was spearheaded by the Ministry of Education, Innovation, Gender Relations and Sustainable Development. The process benefited from the input of multiple stakeholder groups comprising public, statutory, academic, and the private sector.
	Were women's groups consulted in preparation of SASAP and SNAP?	To some extent	G1	There was a wide consultative process, including civil society and community based organizations. Implicitly, women's groups were involved.
	Did women's groups play a specific role in preparation of SASAP and SNAP?	No	G0	Not reported.
	Does the SASAP and SNAP clearly reflect the input of women's groups?	No	G0	Although women producers were engaged in the design and implementation stages, their inputs are not clearly reflected. Women are included in all the activities along the value chain, but their contributions are not clearly stated.
▪ R3: Budgeting	Does SASAP and SNAP systematically allocate resources to address women's as well as men's constraints, needs and priorities?	Not really	G1	Although there are plans and programmes in place within the SASAP and SNAP to improve agriculture, fisheries and agro-processing, the budgetary allocation of resources to categorically address the constraints, needs and priorities of men and women is not specified by gender. However, under SNAP the Government is cognizant of the contribution of both men and women to food production. It recognizes that each of these groups is affected differently by policy decisions and experiences in particular. Government will seek to reduce the factors that cause gender inequality in agriculture and promote equality in the execution of all policies and programmes.
	Does SASAP and SNAP make specific budget provision for standalone programme or project that specifically targets women or addresses gender inequality and existing gender gaps?	Not really	G0	Not reported.
	What percentages, if any, of the SASAP and SNAP budgets are allocated to women specific targeted interventions (FAO's minimum standard target is 30 percent)?	No	G0	Not reported.
	Does SASAP and SNAP make provisions for gender responsive budgeting?	No	G0	Not reported.
Effectiveness				
▪ E1: Institutional Capacity for Gender Programming	To what extent has the design process made use of relevant country supporting institutional frameworks in preparing SASAP?	To some extent	G2	The issues to be addressed by SASAP and SNAP have ramifications which transcend the agricultural and rural sectors and cut across the existing division of functions and responsibilities of the various ministries and agencies of the public sector as currently structured. The preparation of SASAP was spearheaded by the Ministry of Education, Innovation, Gender Relations and Sustainable Development. The process benefited from the input of multiple stakeholder groups comprising public, statutory, academic, and the private sector.
	Are there effective partnerships established for gender mainstreaming in agricultural policies and programmes?	Not really	G0	Not reported. However, SASAP seeks to strengthen the partnership for scaling up Climate Resilient Agriculture.
	Have SASAP and SNAP incorporated processes for institutional capacity-building of women's cooperatives in agricultural production, agro-processing and agribusiness?	To some extent	G1	Both SASAP and SNAP provide for the encouragement of and participation in mechanisms to increase income and reduce poverty levels and provide increased opportunities for women and youth to become more involved in the food and agricultural sectors.
	Does SASAP and SNAP make provision for capacity-building for gender sensitive extension and other services?	To some extent	G1	SASAP seeks to address capacity and human resource development in all their elements as key issues. SASAP seeks to establish demonstration plots showcasing climate resilient farming techniques; Facilitate farmers training on climate resilient agriculture through farmer field schools; Develop training for new and existing extension

				officers using non-private lands or Memoranda of Understanding; Strengthen the capacity of the agriculture extension officers to provide timely and reliable support for farmers to adopt and scale up Climate Resilient Agriculture (CRA) businesses; and Provide training to farmers on appropriate technologies in livestock production; encouraging the establishment of commercial farms for small ruminants. Implicitly, women's producers are involved.
	Is there provision for capacity-building aimed at generating sex disaggregated data and gender sensitive indicators?	Not really	G0	There is limited available sex disaggregated data. SASAP seeks to develop a national database to store all data on the agriculture sector to support policy formulation and the decision making process. While the effort is gender neutral, there are indicators (input, outputs and outcomes) of programmes or projects that may consider issues concerning men and women producers.
▪ E2: Monitoring and Evaluation (M&E)	Are there gender sensitive indicators?	To some extent	G1	Implicit in the implementation of SASAP and associated programmes and projects.
	Is there a role for monitoring or collecting feedback from women and girls in the M&E framework?	To some extent	G1	Implied, but not elaborated.
	Are sex disaggregated data being used to highlight the gendered impacts of programmes on men and women?	Not really	G0	No sex disaggregated data is being used – the M&E system was formulated to support the implementation of all programmes and projects in the agriculture, fisheries and agro-processing sectors and to assess their impacts in a gender neutral way.
Efficiency: Resource Use Efficiency				
▪ E1: Natural Resource Management	To what extent has SASAP and SNAP incorporated principles of conservation of agricultural resources and biodiversity that tap into indigenous knowledge of rural women?	To some extent	G1	The approach is gender neutral. The policies will support adaptation and mitigation strategies as a means of enhancing the stability over time in domestic food supplies and household access from threats of natural disasters and climate change through identifying and building on successful indigenous knowledge and strategies for adaptation. SASAP seeks to enhance the enabling environment for climate adaptation action, enhance nutrition, food availability, quality and security, strengthen partnerships for scaling up climate resilient agriculture, and build adaptive capacity to climate variability and extremes. SNAP seeks to protect, conserve and ensure sustainable use of natural resources.
	Has the role and status of women been considered in processes of natural resource management?	Not really	G0	Not reported.
	Are there processes for soil and seed management that include women?	Not really	G0	Not reported. However, SASAP seeks to scale up water demand-side management by improving water and soil conservation best practices.
	Does SASAP and SNAP make provision for alternative energy sources for women to reduce deforestation?	Not really	G1	SASAP seeks to adopt CRA best practices to extend the use of soil and water and energy-efficient conservation measures (mulching, appropriate terracing, drip irrigation, solar pump, wind power, etc) to reduce water losses and erosion. Farmers and enterprises are expected to adopt, promote and scale up off-grid solar energy technologies (for water pumping for small-scale micro horticultural systems, and refrigeration for harvested food) for reducing costs and as part of CRA. Off-grid solar energy technologies. This approach is expected to reduce deforestation (where wood is utilized as a source of energy) and benefit women.
▪ E2: Technological Efficiency (Labour Use)	Does SASAP and SNAP provide for farm level efficiency (fertilizer, seeds, tools etc.) for women farmers?	Not really	G1	Within the government support programmes. However, it is not systematically gendered and mainstreamed.
	Are labour-saving technologies provided to promote women's productivity?	To some extent	G1	SASAP and SNAP recognize that given its high cost structure of production with agriculture, fisheries and agro-processing, St. Lucia will need to be more efficient in combining labour and capital in new labour saving technologies. In this context, the policies seek to introduce new technologies to reduce the need for manual labour and man-power in the sectors. While the approach is gender neutral it is expected to promote women's

	Does SASAP and SNAP incorporate training to enhance rural women's use of improved technologies?	Yes	G2	productivity. SASAP and SNAP have incorporated training of farmers, fisher-folks and agro-processors (men and women) in the use of improved technologies. For instance, both policies seek to provide support for ongoing technical, management and leadership training for the staff of all institutions servicing farmers, fisher-folks and agro-processors (men and women) and for the formation of additional commodity based producer groups and organizations for farmers involved in agriculture, where gaps exist.
	Is SASAP and SNAP enhancing gender sensitive research for labour saving-technology?	Not really	G0	Not reported.
E3: Value Chain Development and Access to Market	Are there programmes and initiatives that link women's cooperatives/ organizations to national, regional and global agricultural and food markets?	To some extent	G2	SASAP and SNAP seek to increase competitiveness and boost integration into domestic, regional and international markets by reducing costs of production and improve quality of agricultural produce. Linkages between smallholders (men and women) and markets will be accomplished by improving efficiency and effectiveness of the food production, marketing and distribution system through applying modern and appropriate technologies, upgrading and/or establishing the requisite market facilities, adopting a trade posture that enhances and maintains market access particularly for non-traditional products, taking steps to protect the country's traders against unfair trading practices, improving coordination among Government Ministries to implement and monitor agreements and compliance, implementing new measures for promoting and enhancing export readiness and competitiveness including the development of standards and certification for major crops and animal products, strengthening plant and animal health quarantine services and other regulatory services to ensure quality standards and food safety, and promoting an understanding and implementation of agreed international sanitary and phytosanitary measures and other technical barriers to trade which restrict access to export market. This approach will benefit both men and women producers.
	Are women's cooperatives being strengthened for value chain participation?	To some extent	G1	SASAP and SNAP seek to establish links to input and output markets and service providers, so as to help strengthen value chain participation of producer's organizations (including for women). SASAP and SNAP also seek to upgrade the skills of technical officers and stakeholders along the value chain to improve agricultural performance, in order to increase productivity and market access. In addition, the policies will support organizational capacity development for existing farmers, fisher folks, and other producer organizations, and provide ongoing technical, management and leadership training for the staff of all institutions servicing the agricultural sector.
	Will women's groups' access to public procurement for agricultural products/inputs be enhanced?	To some extent	G1	Included in the SASAP's and SNAP strategies to improve agriculture, fisheries and agro-processing production and productivity are investments to be made infrastructure (production and post-production), upgrading skills of operators in the value chain, research to improve crops and livestock seed stocks and systems, market information, and appropriate policies that facilitate supply and access to productive resources (for all actors along the value chain, including women).
	Will SASAP and SNAP promote private investment flow into women's value chain enterprises?	To some extent	G2	The agriculture, fisheries and agro-processing value chains are dominated by private sector activities. In this context, it is expected that much of the investment will come from this source. Under SNAP steps will be taken to revive agricultural credit. In addition to the establishment of the St Lucia Development Bank, schemes that encourage banks to provide easy credit to farmers will be introduced. Measures such as mild financial repression (keeping interest rate positive but low) and tax incentives to banks to encourage lending to farmers will be introduced. Under SASAP, financing options are linked to one or more of the following five categories: Affordable climate change-related loan financing for civil society and the general public; Economic Incentives; Private Sector Financing; International Funding; Mechanisms to realise sustainable financing for climate change adaptation. These options will be supported by an enabling fiscal regime.
Likely Impact				
I1: Decent Rural	Will SASAP and SNAP implementation	To some	G1	Not explicit, but this is a possible outcome dependent on the strategies to remove constraints implied in the

Employment	increase rural women's employment in new agricultural value chains?	extent		SASAP and SNAP, such as those related to rural infrastructure, markets, and CSA. This will enhance rural employment for all actors along the value chain (including women).
	Are there initiatives to provide care services for women farmers?	No	G0	Not reported.
	Will there be a reduction in unpaid farm labour of women and children?	To some extent	G1	SASAP and SNAP seek to enhance the participation of the most vulnerable in society in the sectors, who include women and children. By offering organized activities (capacity-building and other forms of investment) to support the rural poor and engage them effectively in the value chain, the SASAP seeks to bolster this as a source of employment, for which women and children will receive any wage due to them for services rendered.
	Will SASAP and SNAP promote the integration of women into productive farming which sees agriculture as a business?	Yes	G2	SASAP and SNAP have some consistency with other related development programme (example NFNSPAP, Poverty Reduction Strategy and the OECS Growth and Development Strategy), which provide an integrated framework to support agriculture, fisheries, agro-processing growth, rural development and food and nutrition security in the country, and thus, strategically target the most vulnerable – women and children. SASAP and SNAP seek to increase competitiveness and forge stronger linkages to domestic and international markets. This will improve domestic and international markets penetration by smallholder (men and women) producers.
	Will social protection programmes for women in agriculture be implemented?	Not really	G0	Not reported.
	Will there be measures to eradicate negative working conditions for women in agriculture and its value chains?	Not really	G0	Not reported.
	Are there any provisions in the document that are likely to perpetuate further gender inequality?	To some extent	G1	There is the absence of asset building programmes for women especially as it relates to land and savings. Both SASAP and SNAP have a heavy focus on infrastructure development and capacity building, which are gender neutral and although not specifically identified as such, will facilitate the removal of women's production and market constraints, especially in the small scale agro-processing industry. However, this may benefit men more than women producers.
▪ I2: Food and Nutrition Security	Is there a reduction in the proportion of women among the food insecure population?	To some extent	G1	The number of food insecure (vulnerable) households is expected to decline. The most vulnerable are women and children.
	Is there a reduction in the proportion of females in the malnourished population?	Yes	G2	There is expected to be a significant reduction in the proportion of women (at reproductive stage) and children who are malnourished.
	Indicate the progress made towards zero hunger during implementation of SASAP and SNAP	Yes	G2	Both the SASAP and the SNPAP seek to increase productivity and total production, improve food distribution and enhance nutrition to vulnerable groups (predominantly women and children). They are therefore supporting groups that are most susceptible to food insecurity, providing income diversification opportunities to enable them to cope better with adverse food supply situations and production risk and increase their incomes to ensure better access to food. They are also promoting the nutritional aspect of food security, through research, education and advocacy on food choice, quality and safety.
Sustainability strategy for putting policy into action, which includes financing.				
▪ S1: Financial Inclusion	Does SASAP and SNAP promote financial support for rural women farmers and women in agribusiness?	To some extent	G1	Under SASAP, financing options are linked to one or more of the following five categories: Affordable climate change-related loan financing for civil society and the general public; Economic Incentives; Private Sector Financing; International Funding; Mechanisms to realise sustainable financing for climate change adaptation. These options will be supported by an enabling fiscal regime. Under SNAP steps will be taken to revive agricultural

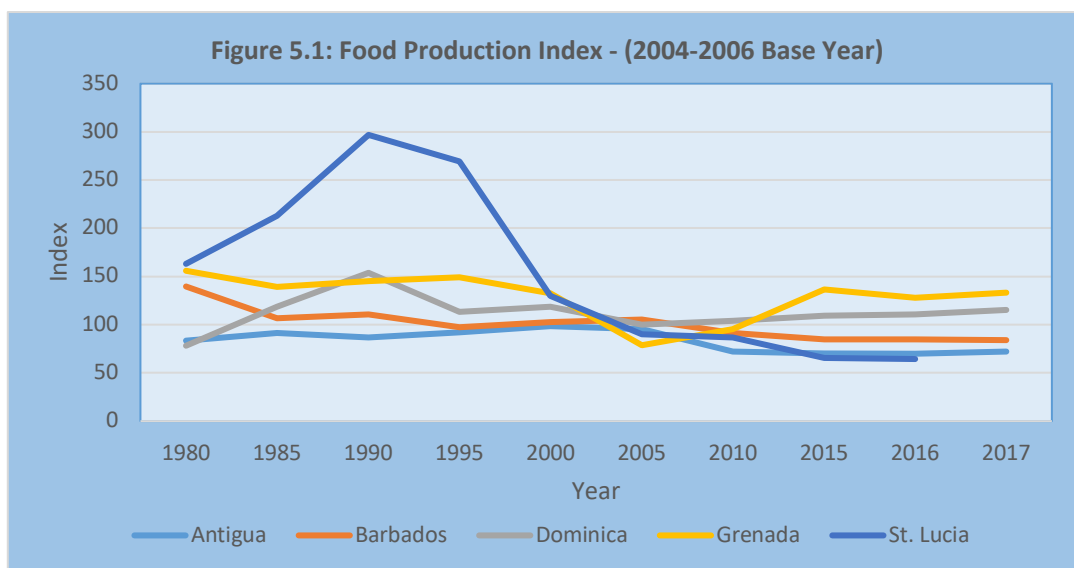
				credit. In addition to the establishment of the St Lucia Development Bank, schemes that encourage banks to provide easy credit to farmers will be introduced. Measures such as mild financial repression (keeping interest rate positive but low) and tax incentives to banks to encourage lending to farmers will be introduced. While the financing options do not specifically target women, they are expected to benefit significantly.
	Is there provision in SASAP and SNAP to partner with financial institutions to provide access to credit for women?	To some extent	G1	As indicated above, under SASAP and SNAP the Government will seek to promote and encourage multi-sector partnerships between state and non-state sectors to address the needs of the poor and vulnerable. However, the approach is gender neutral.
	Is financial inclusion being promoted through producer organizations and agribusinesses (e.g women's trust fund etc.)?	To some extent	G1	SASAP and SNAP seeks to promote increased self-reliance and empowerment of civil society and producer organizations especially in areas related to domestic and international markets information, planning and management capacity and networking.
<ul style="list-style-type: none"> ▪ S2: Resilience of the Agriculture and Food Systems 	Are women being strengthened to practise climate smart agriculture?	To some extent	G1	Implied, but not specifically elaborated. For instance, SASAP has been designed to include investment priorities that contribute to its overarching goal of overcoming existing barriers and facilitating the adoption and scaling up of climate resilient agriculture.
	Does SASAP and SNAP support securing women's asset base?	To some extent	G1	Implied, but not elaborated.
	Are women farmers being supported in crop insurance programmes?	To some extent	G1	SASAP seeks to improve access to climate risk insurance for farmers and fisher folks.

ANNEX 5

5A Performance of the Agricultural, Fisheries and Agro-industrial Sectors under the National Policies

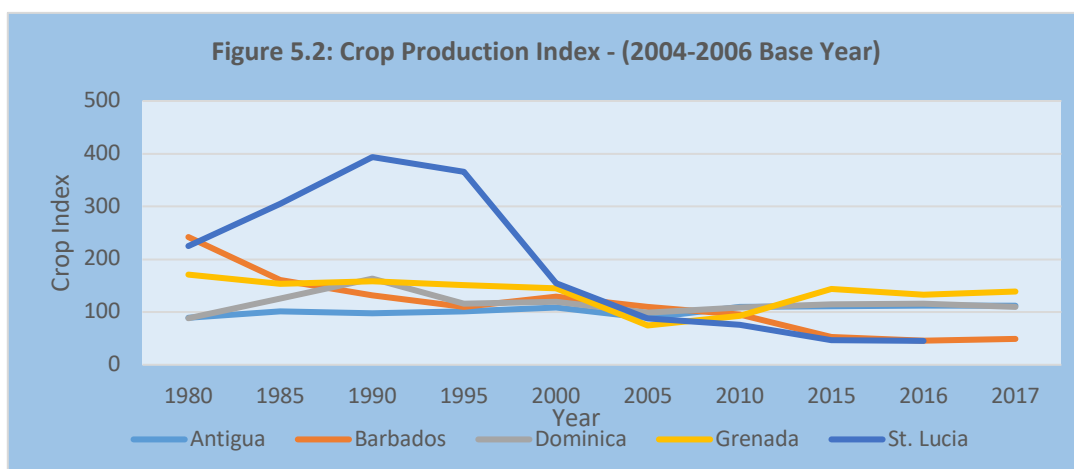
5A.1 Agricultural Output

Figure 5.1 shows the Food Production Index of agricultural production for each year (1980-2017) relative to the base period 2004-2006. It includes the production of all crops and livestock products originating in each country that are considered edible and contain nutrients, with the main exceptions of fodder crops, coffee and tea. The graph shows that although there was significant variation in the food production index among the countries between 1980 and 2000, the indices were above 100 for most countries.



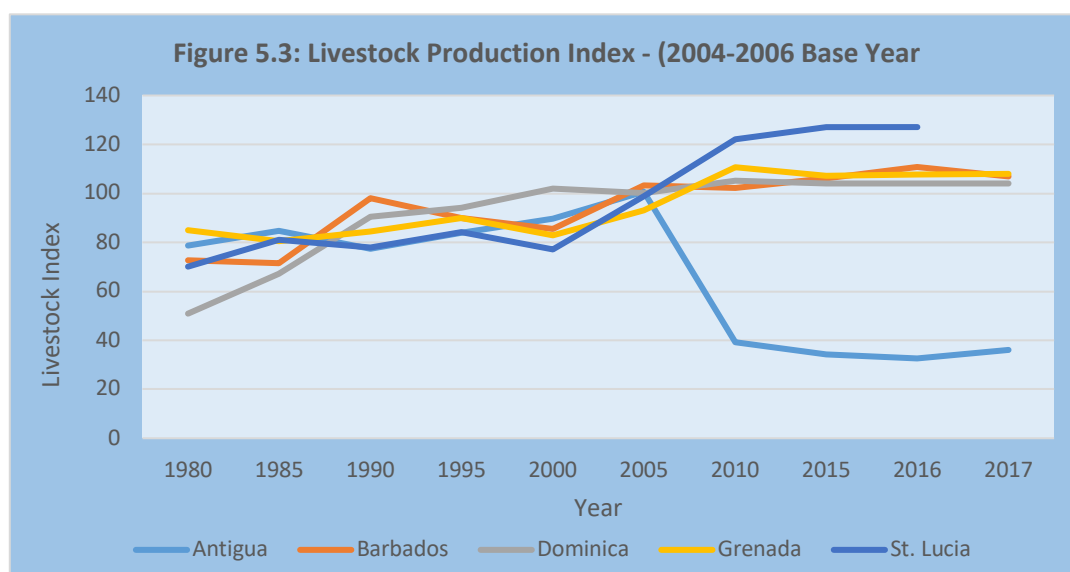
Source: World Bank Database

The food production index for most countries started on a downward trend in 1995, and thereafter remained relatively low. As can be gleaned from **Figures 5.2** (Crop Production Index) and **5.3** (Livestock Production Index), the declines in the food production index experienced by all countries were due mainly to declines in the crop production indices.



Source: World Bank Database

For Antigua and Barbuda, however, the livestock production index declined significantly between 2005 and 2010, before the downward trend was thereafter arrested and stabilized (**Figure 5.3**). St. Lucia experienced significant declines in livestock production between 2005 and 2017.



Source: World Bank Database

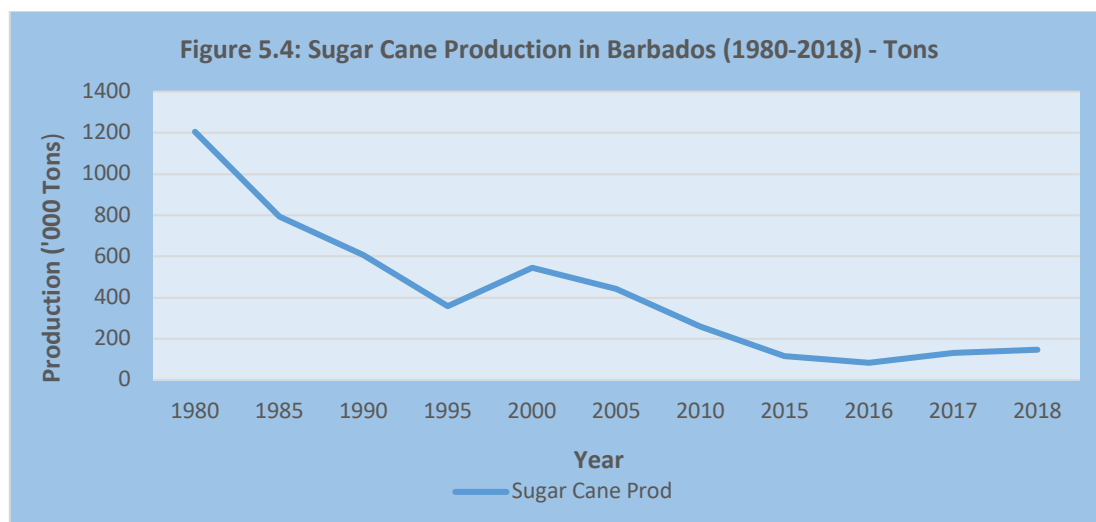
5A.2 Production of Traditional Export Commodities

The declines in agricultural production were due mainly to decreased output in the main traditional export commodities, including sugar cane (Barbados), bananas (Dominica, Grenada and St. Lucia) and nutmeg in Grenada. The trends in production for these traditional commodities are presented in **Figures 5.4 and 5.5** below.

Sugar cane production has for decades been the backbone of the Barbados economy but is now largely in decline. Barbados achieved its highest sugar cane production of 1.855 million tons in 1967. Since then, production has declined to reach a level of 146,831 tons in 2018.

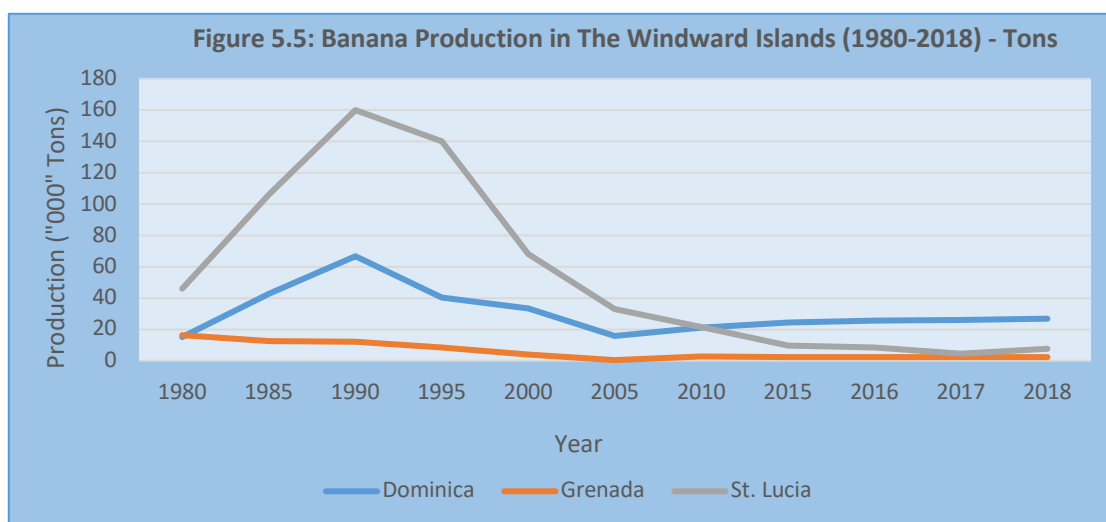
Over the last four decades, the country found help in several agreements and arrangements with the UK and the European Union (EU), which accepted Barbados' sugar at preferential prices. However, the sugar industry in Barbados sustained a blow when the cost of sugar production on the island escalated due to the increased cost of imported inputs and the price of sugar on the international market plummeted as Europe drastically reduced the price it was willing to pay for Barbados sugar to safeguard its beet sugar industry. Although the production cost has exceeded the selling price globally, Barbados has maintained the industry for its foreign exchange value. However, the economic challenges has led to reduction of the number of factories from 10 to 2.

The strategic plan of the industry is to produce speciality products carrying the Barbadian sugar trademark for the local retail market, produce molasses for the island's growing rum export industry, and produce electricity for local use in the longer term.



Source: Knoemo.com

Figure 5.5 shows the downward trend in banana production in the Windward Islands, a decline that started in the early 1990s.



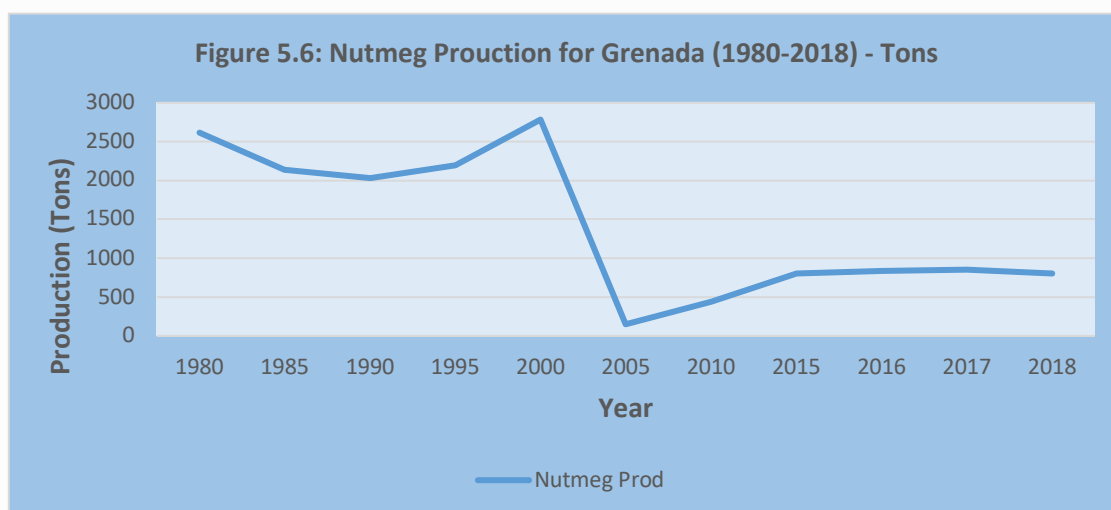
Source: Bananalink.org.uk/all about bananas

Until the early 1990s, the economies of the islands of Dominica, St Lucia, and to a lesser extent, Grenada (the Windward Islands) were heavily dependent upon the banana industry in terms of its contribution towards GDP, employment and export earnings. This dependency was further accentuated by their complete reliance upon the European Community (EC) market, principally the UK, for their banana exports. As former British Colonies and signatories of the Lome Convention, the countries have long enjoyed preferential access to these markets, as enshrined in the Community's Banana Protocol. However, the advent of the Single European Market (SEM) presented important external implications for Dominica, St. Lucia and Grenada. The SEM legislation necessitated the elimination of nationally administered trade barriers within the EC, including those sanctioned under the Banana Protocol. In the absence of the implementation of an equivalent import scheme, the SEM created severe difficulties for the countries, difficulties that negatively impacted the social and economic structure of the smallholder agricultural sector (primarily banana-growing) with worrying implications for rural poverty and inequality.

There is no doubt that Central American banana production systems have a considerable comparative advantage over those in the banana producing countries of Dominica, Grenada, and Saint Lucia. The key factors of production, land and labour are lower in cost and more productive, combining to enable producers to produce fruit at a lower free on board (FOB) price per carton than the three countries, a price that could not sustain the industry in the islands. As the level of protection available for the islands' fruit in the market diminishes, strategies should be developed to ensure that banana producers can compete in the UK market.

Grenada is responsible for more than 20 per cent of the world's nutmeg production, second only to Indonesia, which produces around seventy-five per cent of nutmeg globally. The crop provides income to approximately 30 per cent of the island's population.

In its peak period, Grenada produced over 2,000 tonnes of nutmeg per year with revenues of approximately EC\$13 million per annum. However, between 2002 and 2004, in the aftermath of Hurricanes Ivan and Emily, 555,000 nutmeg trees (more than 90 per cent) were destroyed, and the nutmeg industry experienced a significant decline. By 2010, nutmeg production had recovered, but production was still below the pre-hurricane volumes (**Figure 5.6**)

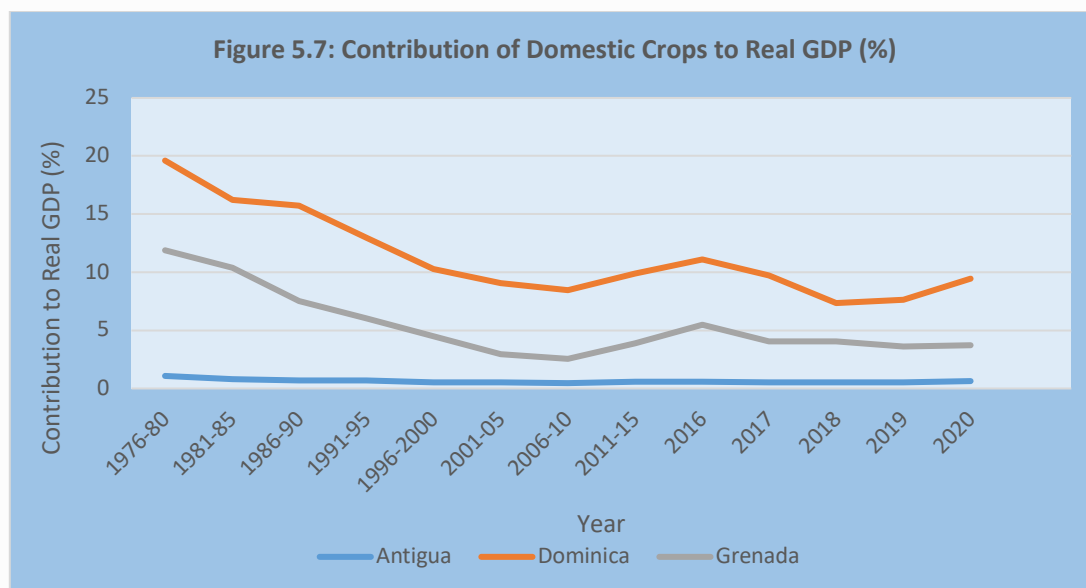


Source: Knoemo.com

Technical improvements have also enabled farmers to overcome a number of threats to the growth of the sector. The nutmeg tree takes four to six years to produce fruit and more than 20 years to reach full production. Given its shallow roots, it can be easily uprooted by the wind. Farmers are learning to adapt to these vulnerabilities by creating windbreaks and shelterbelts using trees such as bamboo, mango and citrus in the path of damaging winds to reduce wind damage. Intercropping with cocoa, banana, coconuts and root crops has also been an effective measure for soil and root protection. An alternative propagation method called grafting, introduced in Grenada in 2016, aimed at increasing nutmeg productivity by converting hundreds of male trees into female fruit-bearing ones, also holds immense promise for the sector. These developments and advances have opened the door for a "second wind" for Grenadian nutmeg— both locally and internationally.

5A.3 Domestic Crop Production

Figure 5.7 shows that domestic crop production of the countries declined (Dominica and Grenada) or remained stagnant (Grenada) over the review period.



Source: Eastern Caribbean Central Bank (ECCB)

5A.4 Agricultural Trade

The main agricultural commodities of significant exports in the countries are sugar cane and related products (Barbados), bananas (Dominica and St. Lucia), cocoa (Dominica), bay products (Dominica), nutmeg (Grenada) and pineapple (Antigua and Barbuda). The level of agricultural exports, which are shipped mainly to Europe and North America, has declined significantly over the last two decades. In 2018, the total value of export agricultural commodities was estimated at only US\$165 million (Table 5.1).

Table 5.1: Value of Agricultural Exports by the Countries -2018

Country	Value of Agricultural Export (US\$M)
Antigua & Barbuda	6
Barbados	93
Dominica	7
Grenada	24
St. Lucia	35
Total	165

Source: FAO Statistical Yearbook 2020

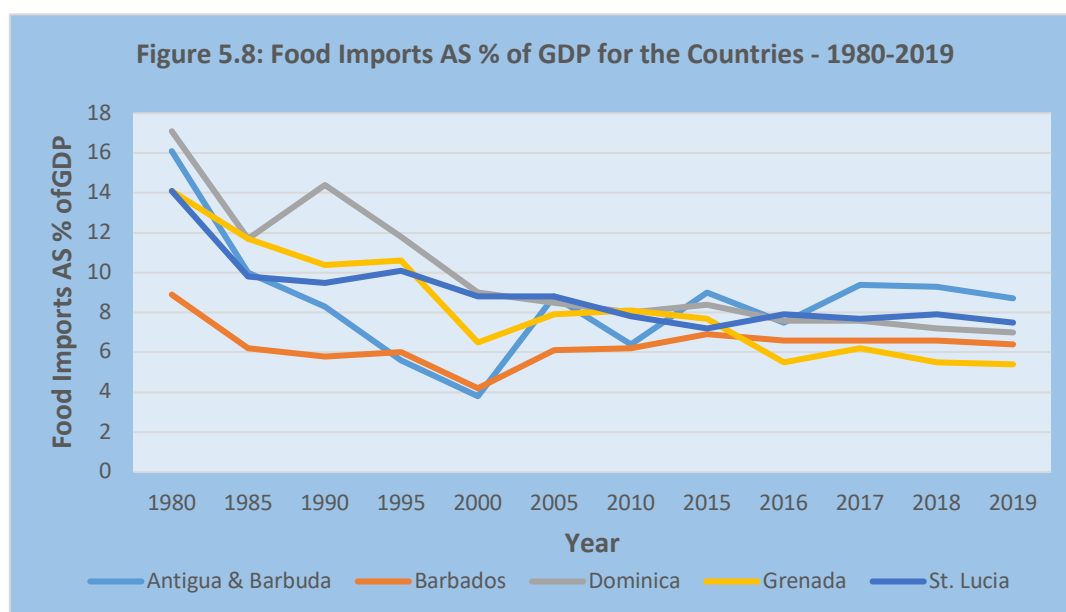
Some root and tubers (yams, dasheen and sweet potato) are also exported, but mainly to other Caribbean countries. The size of this inter-regional agricultural and food trade is very small. The combined food import bill for the five countries has increased significantly from US\$163.4 million in 1980 to US\$307.6 million in 2000, US\$572.6 million in 2010, and surpassed the US\$774.4 million mark in 2019 (Table 5.2).

Table 5.2: Total Value of Food Imports by Country (US\$ million) -1980 to 2019

Year	Country					Total
	Antigua & Barbuda	Barbados	Dominica	Grenada	St. Lucia	
1980	21.1	90.3	12.5	15.6	23.9	163.4
1985	24.0	87.0	13.9	19.6	27.7	172.2
1990	38.1	116.1	29.0	28.9	55.2	267.3
1995	32.5	134.1	32.4	36.1	77.2	312.3
2000	31.5	129.8	30.1	34.0	82.2	307.6
2005	90.2	233.2	30.8	55.1	100.5	509.8
2010	73.0	282.0	39.6	62.2	115.8	572.6
2015	120.3	323.8	45.4	77.0	129.5	696.0
2016	107.8	320.9	43.8	58.4	148.1	679.0
2017	138.2	327.1	39.3	69.9	154.4	728.9
2018	149.0	334.9	39.7	64.7	162.4	750.7
2019	143.9	335.3	40.5	65.4	159.3	774.4

Source: FAO Statistical Yearbook

Figure 5.8 presents the food imports of the five countries as percentages of GDP. As can be observed from the figure, food imports when denominated by GDP exhibit downward trends especially between 1980 and 2000, and to a lesser extent between 2015 and 2019.



Source: FAO Statistical Yearbook; World Bank Database

As presented in Table 5.4, the main imported food commodities in 2018 were meat and meat preparations (US\$117 million), fruits and vegetables (US\$116), beverages (US\$108) and cereals and preparations (US\$99 million).

Table 5.4: Main Food Import Commodities – 2018 (US\$ million)

Country	CEREALS AND PREPARATIONS	FRUIT AND VEGETABLES	MEAT AND MEAT PREPARATIONS	DAIRY PRODUCTS AND EGGS	BEVERAGES	Fish	OTHER FOOD	Total
Antigua & Barbuda	16	26	27	12	32	10	26	149
Barbados	51	69	39	33	47	29	67	335
Dominica	6	4	9	3	4	2	12	40
Grenada	10	5	16	8	5	3	18	65
St. Lucia	16	12	26	12	20	8	68	162
Total	99	116	117	68	108	52	191	751

Source: FAO Statistical Yearbook

The average food import dependence ratio (total food imports/total food consumption) increased from the range of 50-79% in 1995 to that of 55-92% in 2011 (Table 5.5). The value of the total import was US\$641 in 2011.

Table 5.5: Food Import Dependency Ratio – 1995 and 2011

Country	Import as % of Total Consumption in 1995	Import as % of Total Consumption in 2011	Food Imports (US\$ million)
Antigua & Barbuda	79	92	113
Barbados	72	87	312
Dominica	50	55	52
Grenada	65	81	60
St. Lucia	53	83	104
Total			641

Source: FAO State of Food Insecurity in the Caribbean 2015

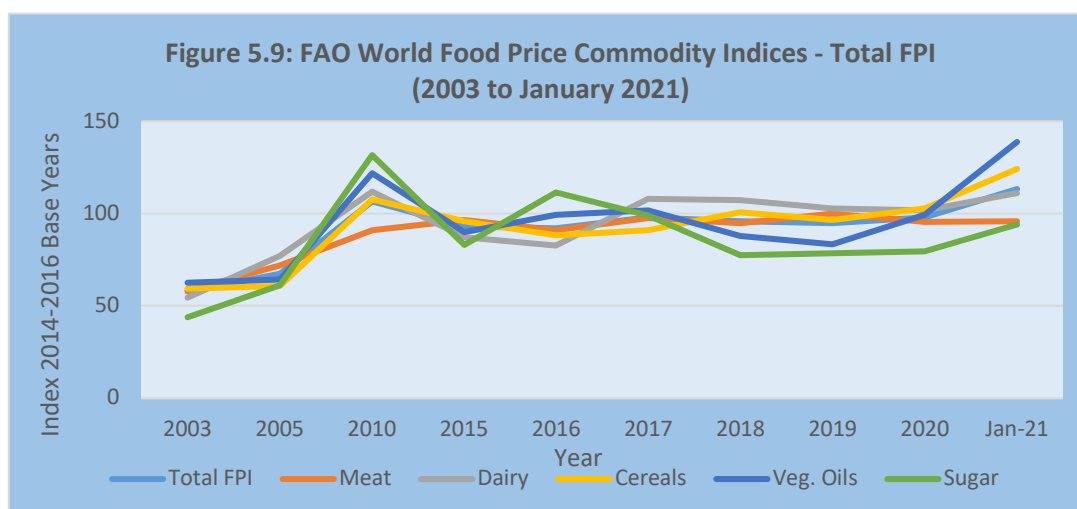
Local agriculture is therefore clearly insufficient to supply the needs of the populations of the countries. The countries face considerable food supply, quality and safety issues. Most farmers in these countries are smallholders of hillside farms, who are resource-poor and unable to supply sufficient quality of safe foods to meet demand. In addition, the quality and safety of foods are compromised by the high incidence of pests and diseases and the high usage of pesticides. In all countries, agricultural production has declined considerably during the last decade except for poultry production, which has increased significantly. An econometric analysis of Caribbean food import demand reported that an increase in prices of imported food will not result in an equivalent

decrease in the quantity of imported food demanded, mainly comprising oils, staples and other food products.¹¹⁸

It is not surprising that this high level of food imports has negatively impacted the development of domestic agriculture products and agro-processing industries due to the inability of domestic sectors to compete against imports.¹¹⁹ The agricultural producers of the countries are experiencing many challenges throughout the food value chain. Some of these include insufficient processing capability, high freight costs, small markets, tariff policies and lack of mechanisms for health/food safety and production certification. To reduce this high food import bill in the countries, a shift is needed to one that can replace a high proportion of food imports. For example, root crops such as cassava and sweet potato are important commodities grown in the countries and can be used to replace some of the wheat flour in the diet of households residing in the countries. This suggests that the impact of national policies on agricultural trade has been limited. Unfortunately, within the context of the development of national policies, at the onset there was inadequate analysis and determination of viable value chains that should be promoted for agricultural production (including value addition) and trade.

5A.5 Consumer Price Inflation Rates for Food

FAO World Food Price Commodity Indices for the period 2003 – January 2021 are presented graphically in **Figure 5.9** below. The index consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014-2016. As observed from Figure 7.15, between 2003 and 2020, the prices of the main imported commodities (meat, dairy, cereals, vegetable oil and sugar) increased by 64%, 87%, 73%, 59% and 81%, respectively.



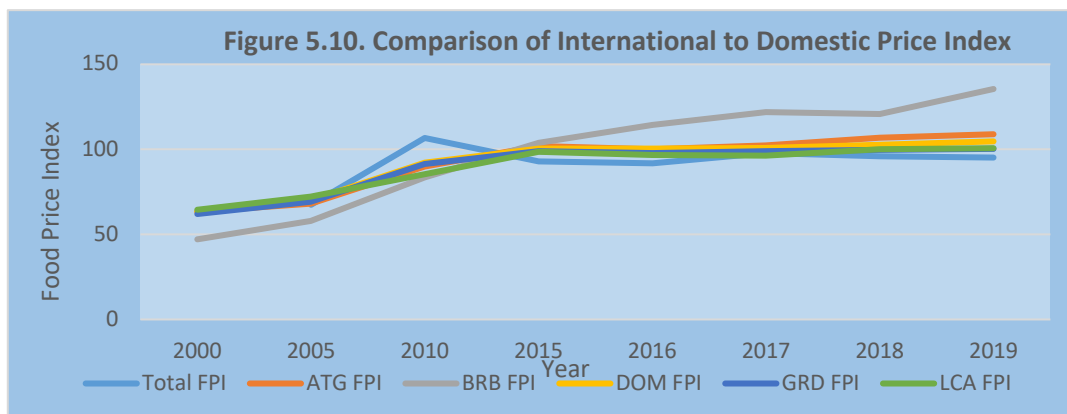
Source: FAO Food Price Index/World Situation

The FAO Food Price Index (FFPI) averaged 113.3 points in January 2021, 4.7 points (4.3 percent) higher than in December 2020, not only marking the eighth month of consecutive rise but also registering its highest monthly average since July 2014. The latest increase reflected strong gains in the sugar, cereals and vegetable oils sub-indices, while meat and dairy values were also up but to a lesser extent.

¹¹⁸ Walters and Jones, 2016

¹¹⁹ Silva et al., 2011

The transmission of international food price inflation through domestic food prices in the countries is evaluated by comparing the FAO World Food Price Index by the food price index of the countries (Figure 5.10).



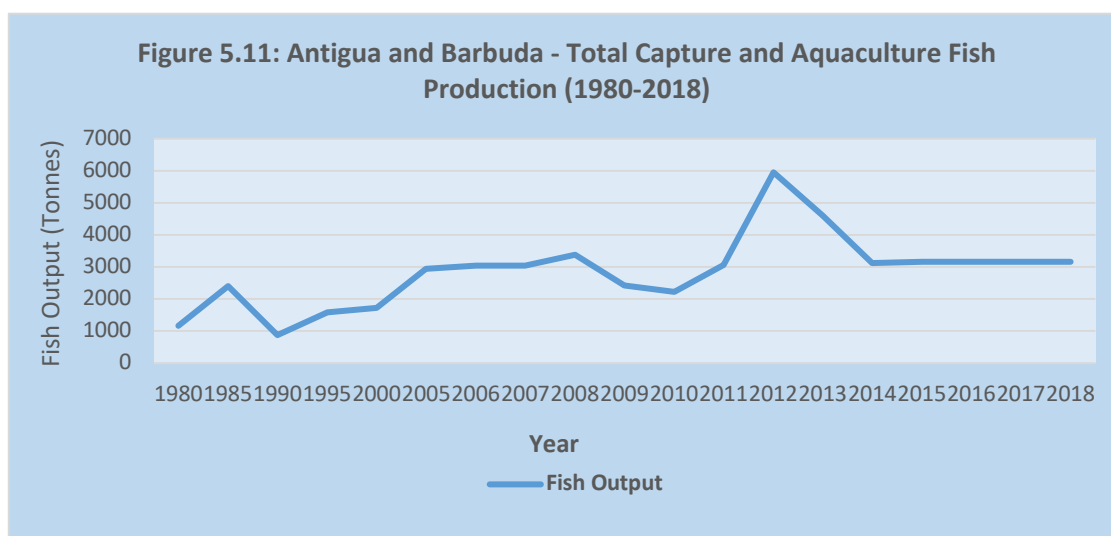
Source: FAO Statistical Yearbook

Figure 5.10 indicates a close relationship between the international food price index and the indices of Antigua, Dominica, Grenada and St. Lucia except for the period 2010-2013. In the case of Barbados, the domestic rate of food price inflation is higher than the international food price inflation. The influence of international food price inflation, domestic food demand and supply situation, and government taxes/and or subsidies on domestic food price inflation is explored in detail in the evaluation of the impact of national policies on the agricultural sector.

5A.6 Impact of National Policies on Fisheries

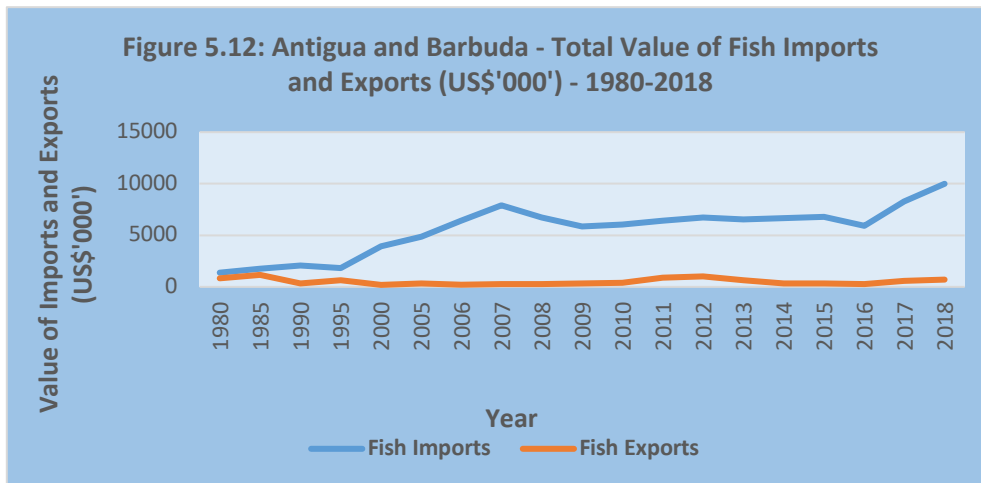
5.6.1 Antigua and Barbuda Fish Production, Trade and Utilization

As can be observed from Figure 5.11, over the last four decades the annual output of capture fish and aquaculture production for Antigua and Barbuda varies significantly from a low of 875 tonnes in 1990 to a high of 5,951 tonnes in 2012. As indicated earlier, aquaculture annual production is in the region of 15 metric tonnes.



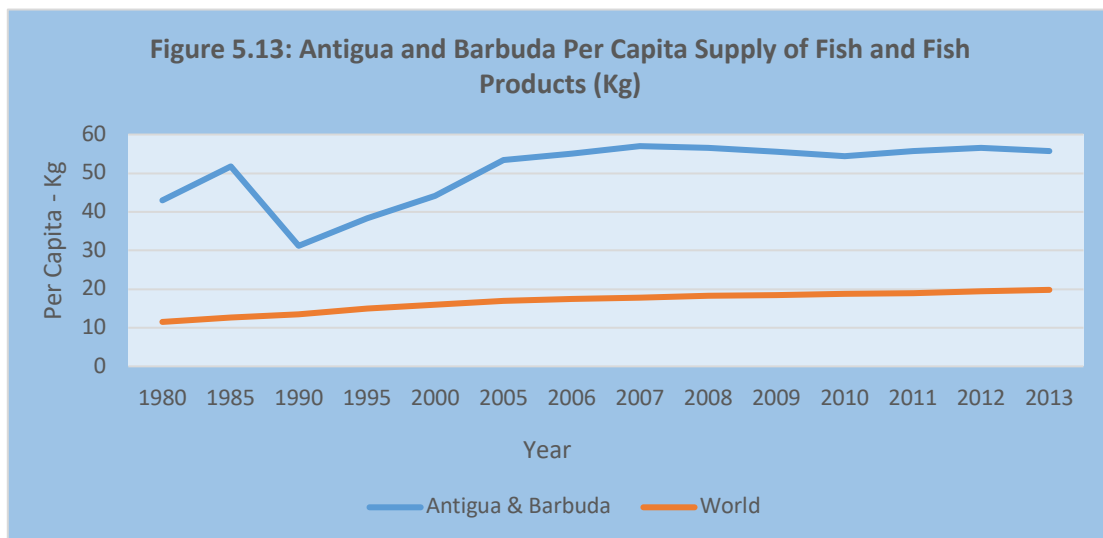
Source: FAO Statistics

In 2015 and 2018, imports of fish products into Antigua and Barbuda were valued at US\$6.8 million and US\$10.0 million, respectively, with Canada and the USA as main trading partners. Dried and salted fish from Canada and frozen fillets from the USA were the main products imported. About 1 500 tonnes of fish or 3 600 tonnes in live weight equivalent are imported every year, which represents an important part of fish consumption and thus is important for food security in the country. **Figure 5.12** presents the total values for fish imports and exports for the period 1980 through 2018.



Source: FAO Statistics

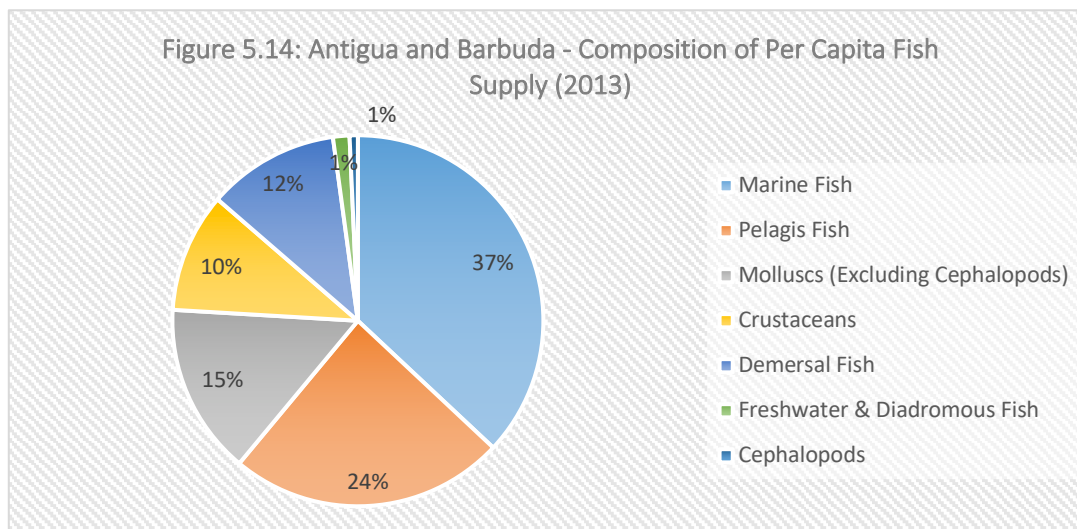
Imports account for about half of the fish intake. However, it is difficult to quantify the real consumption, due to the under-reporting of exports. Approximately 4,000 tonnes of domestic production is exported without being recorded in the national statistics.¹²⁰ **Figure 5.13** presents a comparison of per capita fish consumption in Antigua and Barbuda with that of the global average.



Source: FAO Statistics

¹²⁰ FAO Antigua and Barbuda Fishery and Aquaculture Country Profile, 2018.

The composition of per capita fish supply for Antigua and Barbuda for 2013 is presented in **Figure 5.14**.



Source: FAO Statistics

All fishery products landed in Antigua and Barbuda are marketed fresh for direct human consumption. High-energy costs associated with processing and inadequate access to capital have curtailed the development of any further fish processing. There are currently only two major facilities that allow the processing of fisheries products for retail (Market Wharf and Point Wharf Fisheries complexes). Traditional salting and drying (corning) of some species still occurs at a subsistence level.

The lone sea-moss farmer produces several products that are marketed both locally and exported to regional neighbours. These products include bottled and canned concentrates, as well as dried and packaged sea moss.

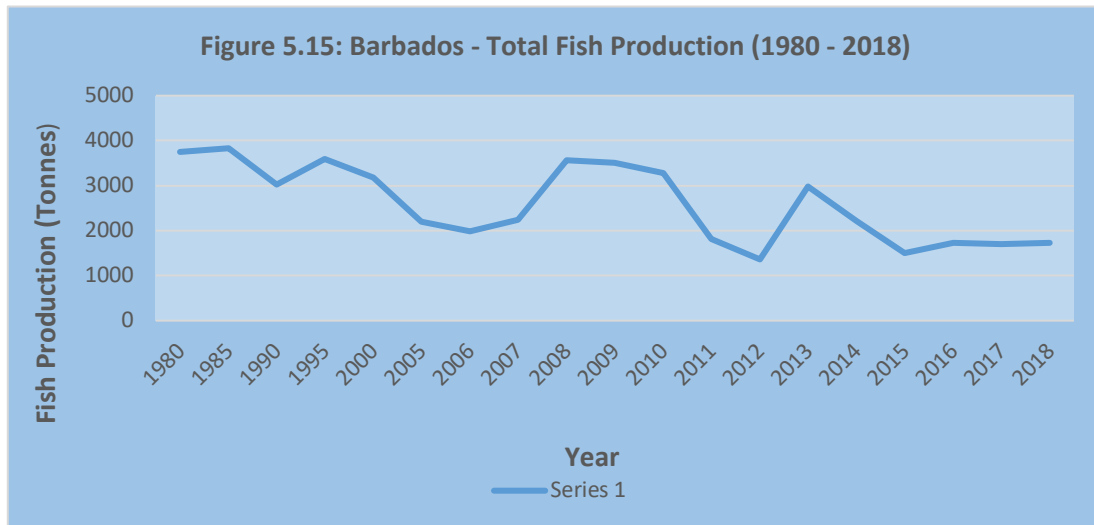
The fishing subsector is the most resourceful of all sub-sectors within the agricultural sector but is yet to realize its full potential as a result of the myriad of challenges faced, including:

- Imports of cheap fish products from other CARICOM countries;
- Chronic problems with fish poisoning i.e. ciguatera, particularly off the Redonda Bank;
- Poaching by fisher-folks from the French islands;
- Restricted marketing of fish in European Union countries, resulting from the stringent health and quality standards;
- Limited investment capital to equip boats for deep sea fishing in order to harvest the migratory species;
- Limited enforcement of legislation to ban spear fishing in and around reefs.

There are opportunities that can be exploited in the fishing industry through improved fish processing and the maintenance of the cold chain in all retail outlets and during distribution. Replacement of the imported dried and salted products by domestic fishery products could bring a substantial boost to the local fisheries, especially for species that are presently under-exploited.

5A.6.2 Barbados Fish Production, Trade and Utilization

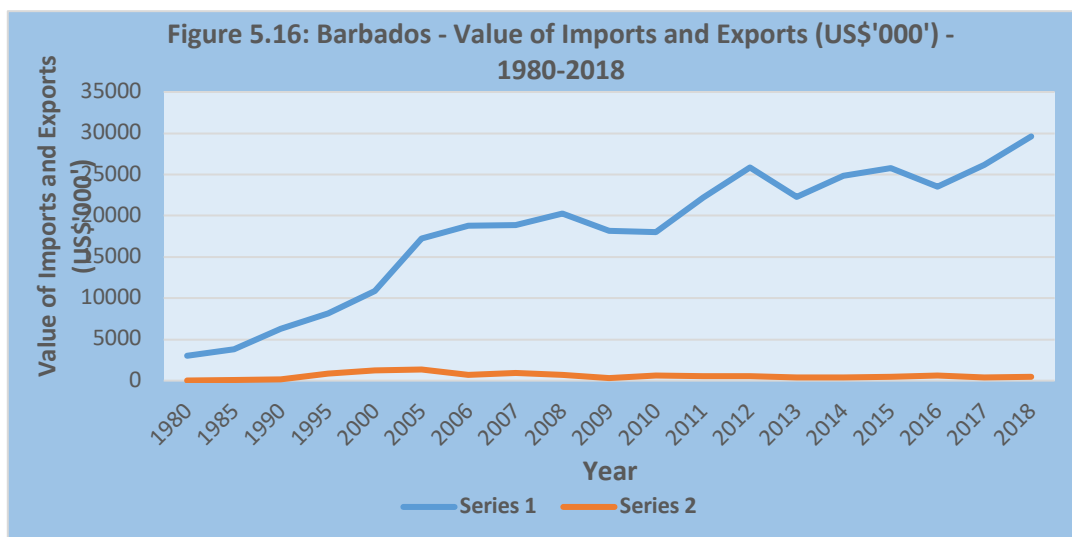
Figure 5.15 presents the annual production of capture fish for the period 1980 to 2018. Annual production varies significantly over the period, with a downward tendency. Fish output ranged from a low of 1,500 metric tonnes in 2015 to a high of 3,832 metric tonnes in 1985.



Source: FAO Statistics

As mentioned earlier, the principal stocks and resources exploited by marine capture fisheries in Barbados are the flying fish and large pelagic stocks.

Imports of fish products into Barbados totalled US\$29.6 million in 2018, compared to US\$18.0 million in 2010 and US\$3.0 million in 1980. Fish exports were US\$0.49 million in 2018, compared to US\$0.34 million in 2010 and US\$1.35 million in 2005. **Figure 5.16** presents the value of fish imports and exports for Barbados for the period 1980-2018. The figure shows that the value of imports has increased significantly between 1980 and 2018.



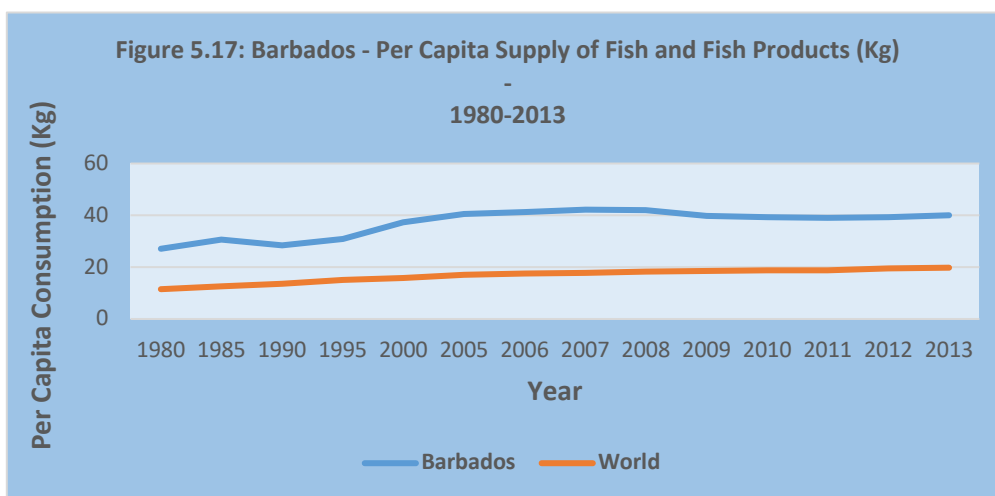
Source: FAO Statistics

Many of the processing facilities in Barbados import fish from Trinidad and Tobago, Guyana, Suriname, Canada and Vietnam. Dolphin is also sourced from Peru, shrimp from Indonesia and lobster tails from Jamaica. Fish imported from UK and US include cod, salmon, halibut, seabass,

lemon sole, dover sole, scallops and live mussels. Much of the locally caught tuna is exported to the USA.

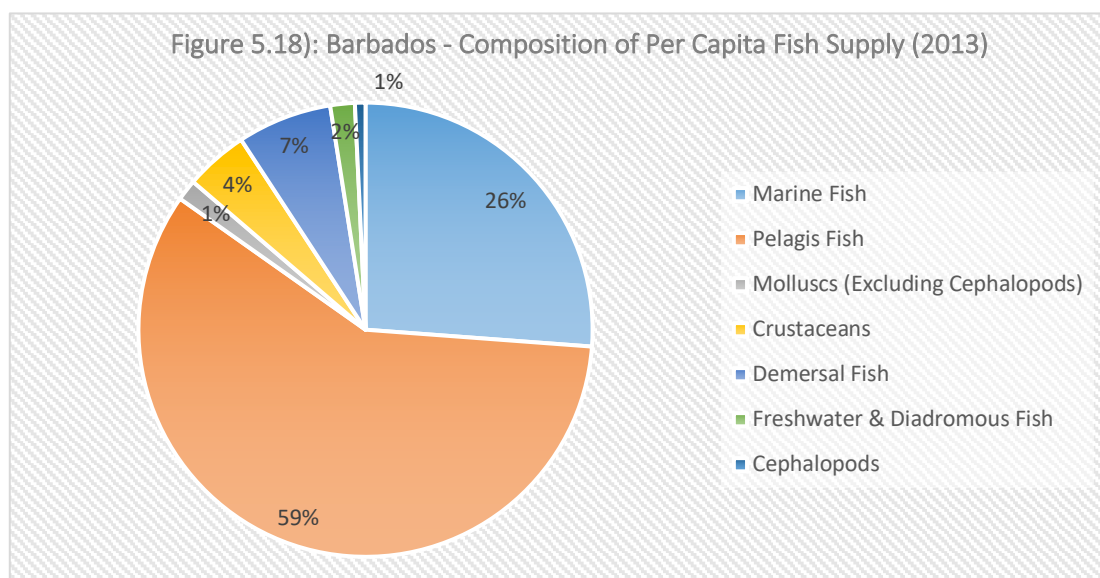
The final destinations of the majority of fish (primarily yellowfin tuna) exported from Barbados are the US and Canada. Exports into the European market are not possible as the fish supply chain and the public fish processing facilities do not meet the stringent Sanitary and Phytosanitary (SPS) standards of the EU. Many of the private fish processing establishments and government facilities are working towards the goal of compliance with Hazard Analysis Critical Control Point (HACCP) principles.

Figure 5.17 presents the per capita fish supply (consumption) in Barbados for the period 1980 through to 2013. The figure shows that per capita fish consumption in Barbados in most years is twice that of the world average consumption. This is attributed largely to the demand from the tourism sector.



Source: FAO Statistics

The composition of per capita consumption for Barbados for 2013 is presented in **Figure 5.18**.



Source: FAO Statistics

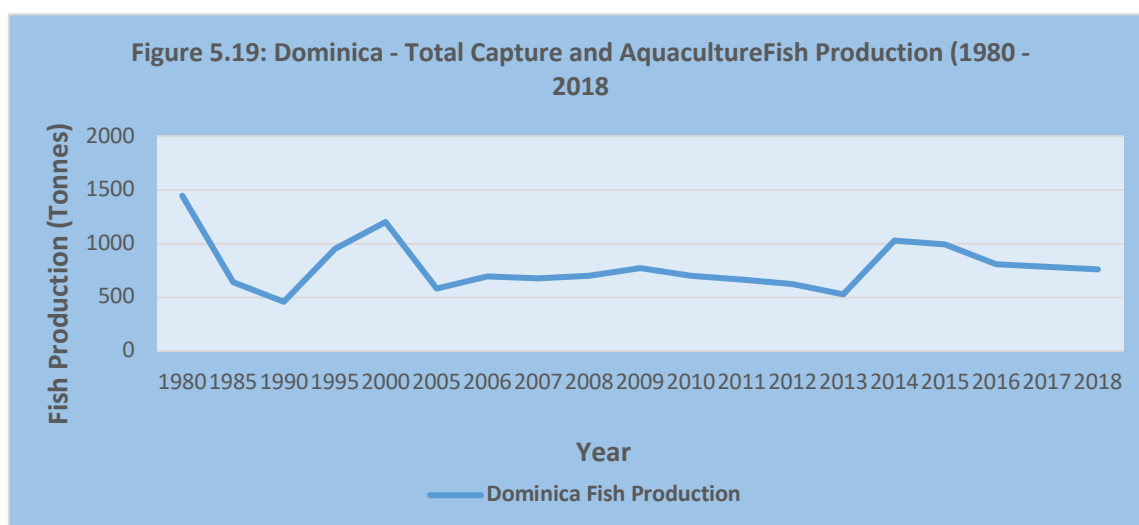
In Barbados, the unknown status of stocks of many of the marine fisheries resources, suspected overfishing and overexploitation of resources, and the lack of infrastructure and facilities feature prominently as the major constraints faced by the local fisheries sector.

With these constraints come opportunities for improvement and change. The marine reserves and protected areas serving recreational and tourism purposes may act as population reservoirs for adjacent fished areas. The controlled use of fish aggregating devices (FADS) to increase catches or catch rates of selected species of large pelagic should be further examined. Furthermore, there is a need to establish fishing access agreements to harvest flying fish resources that seem under-utilized in neighbouring countries.

5.6.3 *Dominica Fish Production, Trade and Utilization*

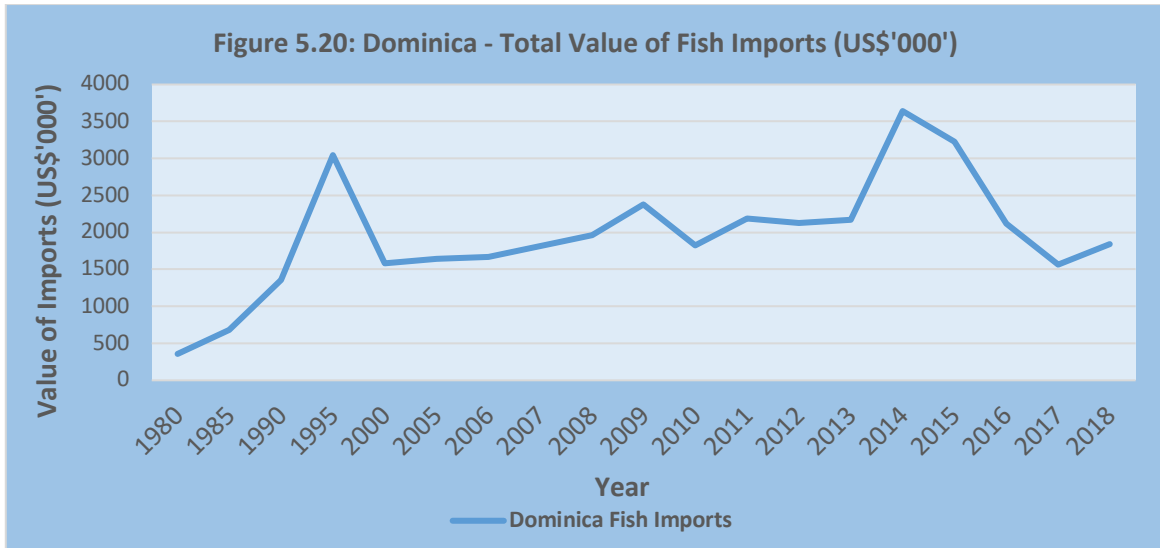
Figure 5.19 presents the annual production of capture fish for Dominica, covering the period 1980 to 2018. The figure shows that annual production varies over the period under review, with some stability over the last decade. Fish output ranged from a low of 458 metric tonnes in 1982 to a high of 1,445 metric tonnes in 1980.

Aquaculture production ranged from a low of 4 metric tonnes in 1995 to a high of 24 metric tonnes in 2006 through to 2009. Annual production over the last decade has since stabilized at 6 metric tonnes.

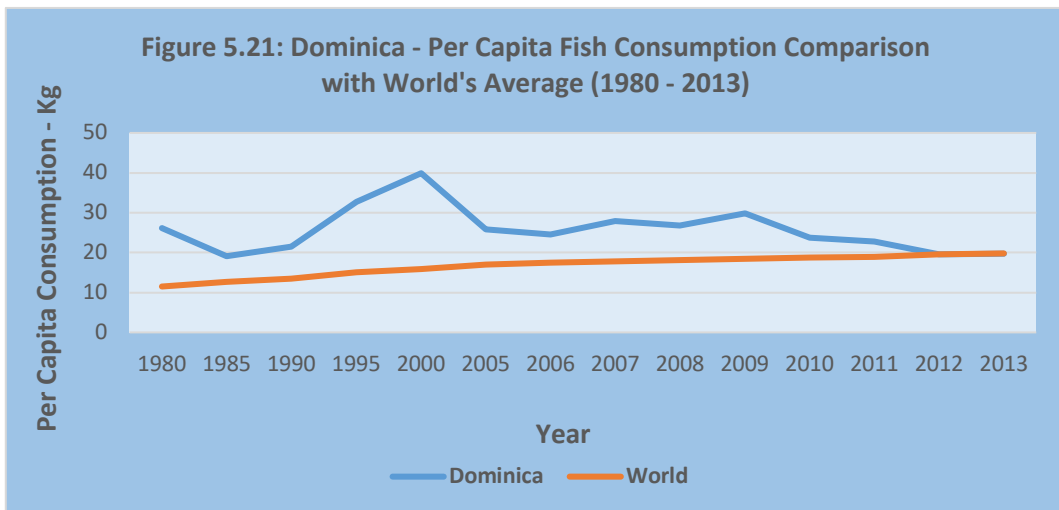


Source: FAO Statistics

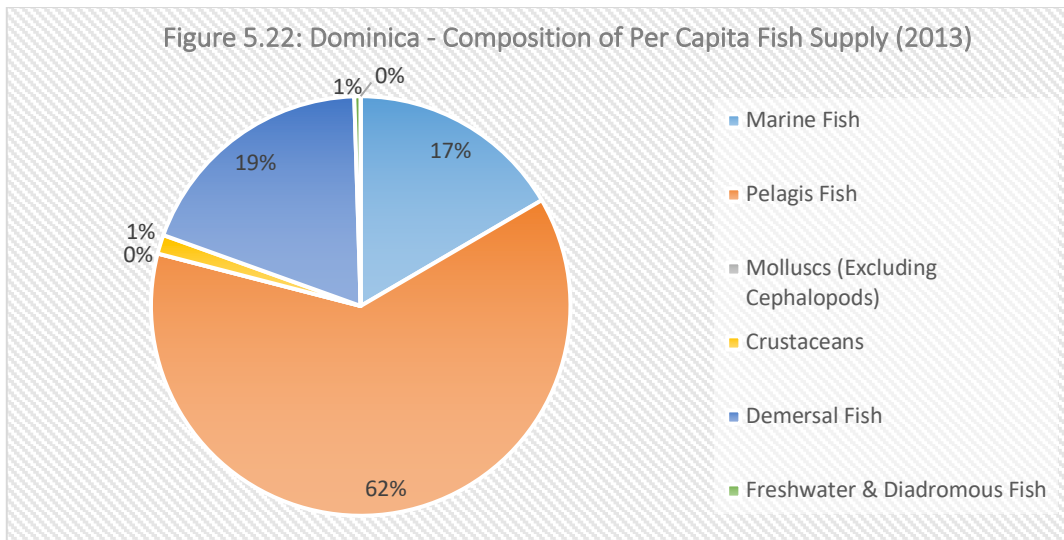
In 2014 imports of fish products into Dominica were valued at US\$3.6 million; this compared to fish imports valued at US\$1.8 million in 2018 with approximately two-thirds of the consumption coming from imports. Imports show an increasing trend over the years, exceeding 1,000 tonnes in product weight. The products imported by Dominica vary from year to year, but canned fish is dominating the import market, with sardines and mackerel the main products. Dried salted cod and cured herring from Canada also are significant. **Figure 5.20** presents the total value of fish imports into Dominica for the period 1980 to 2018 while **Figure 5.21** presents a comparison of per capita fish consumption in Dominica with that of the average for the world. The composition of per capita fish consumption in Dominica is presented in **Figure 5.22**.



Source: FAO Statistics



Source: FAO Statistics



Source: FAO Statistics

All fish caught is sold fresh to local consumers. There is no facility for processing and storage, resulting in wastage when the supply of pelagic fish exceeds local demand. Most fish landed in Dominica is sold directly to the public at the landing sites. Since 1997, following the completion of the Roseau Fisheries Complex, fishers have been selling their catch directly to the Complex, particularly in times of glut on the market. The Fisheries Complex was heavily impacted by Hurricane Maria in 2017. There are approximately 30 market vendors, mainly women, in Dominica.

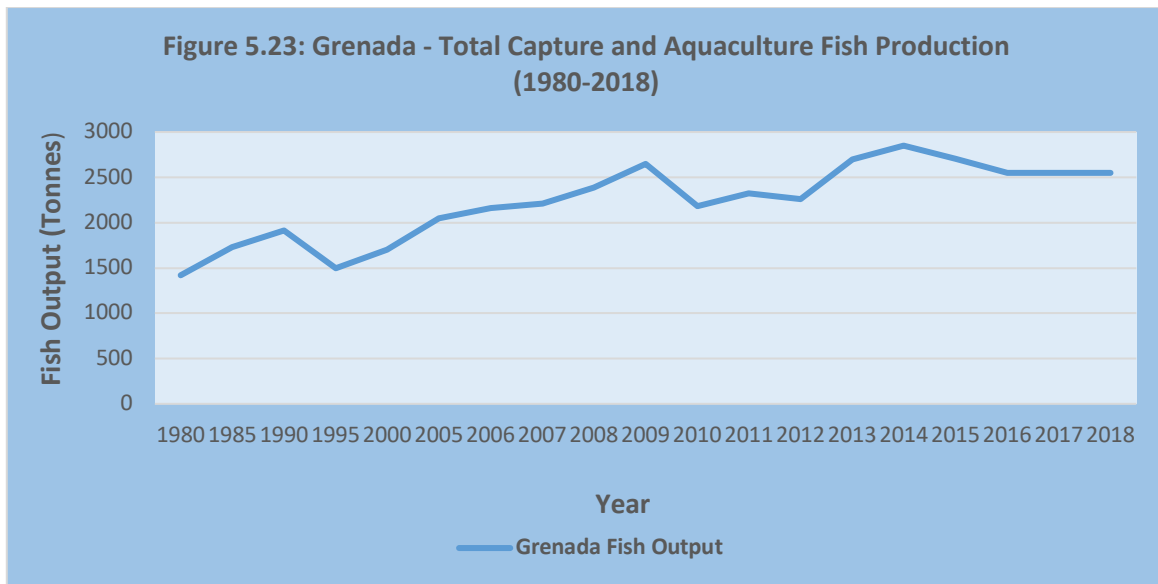
In September 2017, Hurricane Maria impacted Dominica, which resulted in damage to or the destruction of nearly every fishing boat on the island, with negative impacts on livelihoods and food security. Significant support was and is still being provided by the international donor community. Inshore marine habitats are threatened by land-based sources of pollution and sedimentation, as well as possible over-exploitation of some coastal resources.

There are no specific policies to promote fisheries in Dominica. In addition there are no research institutes dealing with fisheries in the country. In this context, the status of the fish stocks is widely unknown.

Significant opportunities exist to modernize the fishing industry in Dominica in order to strengthen the country's capacity to address critical areas related to increased fish catch, import replacement, fish processing, and increased employment in the sector.

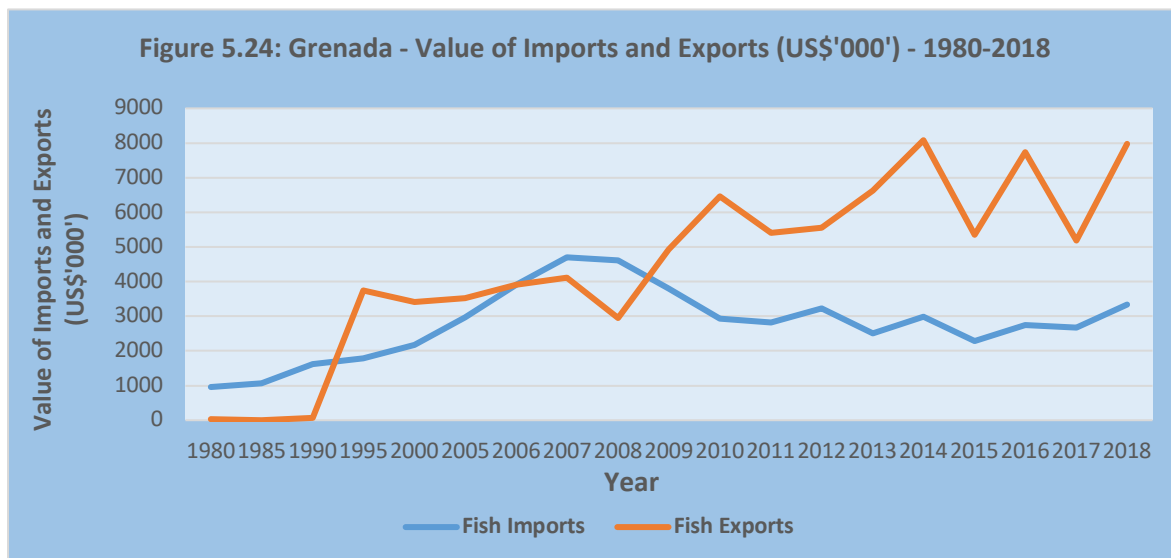
5.6.4 Grenada Fish Production, Trade and Utilization

Figure 5.23 presents the production of fish for Grenada over the period 1980 to 2018. As can be observed from the figure, fish production varies somewhat over the period under review; from a low of 1,417 tonnes in 1980 to a high of 2,707 tonnes in 2015.



Source: FAO Statistics

Figure 5.4 presents the total value for fish imports and exports for the period 1980 to 2018.



Source: FAO Statistics

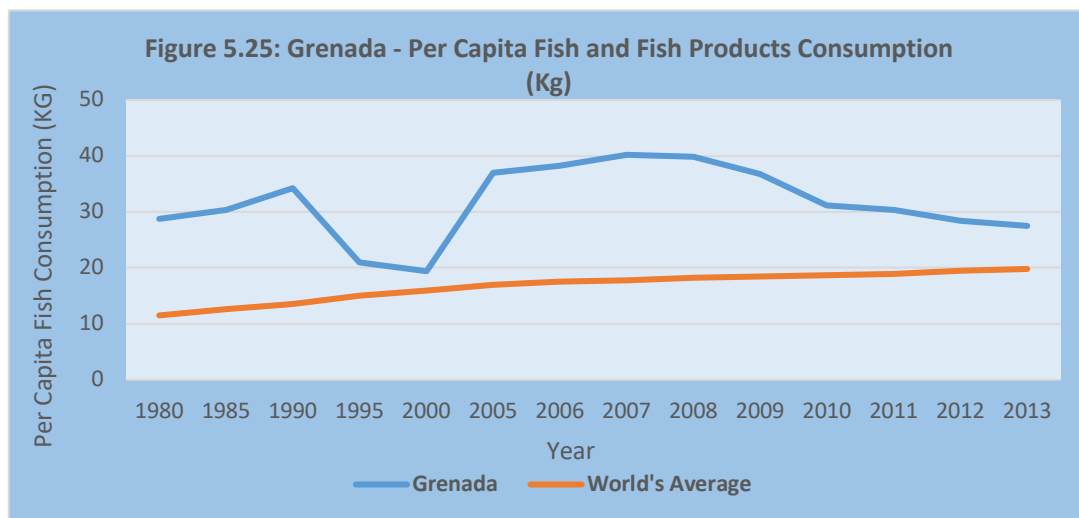
Over the last decade, Grenada has been a net exporting country of fishery products, with exports some two to three times the import value (See Figure 7.25). Over the period under review, imports varied from a low of US\$0.96 million in 1980 to a high of US\$4.7 million in 2007. However, imports have been quite stable at an average of US\$2.6 million over the last decade.

Imported fish supplies were dominated by the species of herrings, alewives, saithe, pollock, haddock and hake, sourced mainly from Canada, Norway and the United States of America. Thailand supplies canned seafood, mainly mackerel and tuna. These imports provide security of supply to the tourist services food providers and also to the general public. Limited quantities of salmon, cod, snappers, lobsters, shrimps and oysters were also imported to substitute for seasonal or other shortages in local-fish supply.

Exports have varied in value from a low US\$0.025 million in 1980 to a high of US\$8.1 million in 2014, although they decreased to US\$8.05 million in 2018. The recent increases were mainly due to more fresh tuna being exported by Grenada. Grenada fish exports to the United States of America represent more than 90% of total seafood exports from the country - the bulk of this is fresh fish, especially fresh yellowfin. Grenada is ranked 11th as a supplier of fresh yellowfin to the United States of America market. The unit value of Grenadian yellowfin exports is USD 7.00/kg, one of the lowest values for this type of product in the United States of America market.

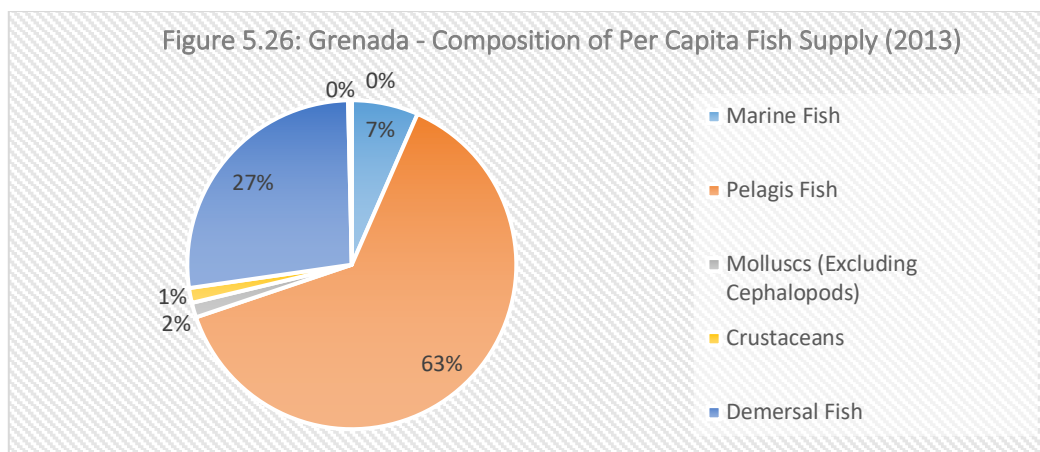
Overall the country trade policy for fish is that of exporting high-value fish and importing low-value products, which in 2018 resulted in a positive trade balance of US\$4.6 million net earnings. In live weight, equivalent imports were higher than exports in 2018, with 1,200 tonnes imported and 1,000 tonnes exported.

Figure 5.25 presents a comparison of per capita fish consumption in Grenada with that of the world's average.



Source: FAO Statistics

As shown, annual per-capita fish consumption in Grenada was estimated at 40.2 kg in 2007 and 27.5 kg in 2013. However, even with the decrease in per capita consumption in recent years, fish consumption in Grenada is still one of the highest in the Caribbean, and in the American continent overall. The composition of per capita fish consumption for Grenada in 2013 is presented in **Figure 5.26**.



Source: FAO Statistics

The fish catch in Grenada is mainly marketed fresh, fresh on ice and to a lesser extent frozen. Fish is consumed twice a week on average, with cured herring used in rice dishes to add some flavour and some protein to a simple dish. Since the majority of the Grenadian catch are pelagic fish and the imports are also mainly pelagic, this type represents almost half of the fish consumption in Grenada, with 17.4 kg per capita consumption. The second major group consumed are demersal fish, a supply of 7.4 kg on average. The by-catch from the yellowfin long lining - that is sharks, sailfish, mahi-mahi (dolphin) and other billfish - are sold on the domestic market.

The peak harvest season is January to May when bigger boats catch yellowfin for export to the USA, while smaller boats supply the domestic market. The bigger boats stay at sea for 4 -5 days, smaller boats do their trips departing in the early morning and returning to the port at 4-5 pm. The Ministry of Health is responsible for conducting quality control at the landing sites and in the markets. The clients of the market are the general public as well as hotels, restaurants, cruise ships, and school and prison feeding programmes. The market administration is responsible for the collection of information on the volume of fish traded every month, which is submitted to the fisheries division for action.

The fish vendors in the main markets (Melville Street and Grenville) purchase fish directly from the fishing boats. These fish vendors weekly purchases depend on the season but range between 150 lbs and 4000 lbs. The fish from these two markets is directed mainly towards the local population, with not more than 20% going to tourists (including direct sales to consumers, and restaurant and hotels purchases). The main sales seasons are Christmas and Easter. The market authority does not record prices at which the fish is sold in the market.

The open access policy of Grenada and the recent introduction of FADs in the tuna fisheries sector has caused concern for the future of yellowfin tuna fisheries in the country. On the other hand, the introduction of FADs has led to bumper catches of yellowfin and landings on the East Coast (Grenville) in recent years, creating a completely new opportunity for the sector. The promotion of this product with the local companies who can export to the United States of America should be fostered.

The possibility of Grenada exporting to the European Union (EU) offers a great opportunity for the country, but more research should be conducted to explore the possibility of exporting the fresh yellowfin and some of the so-called by-catch, such as swordfish and mahi-mahi, to that market.

School feeding programmes are sponsored by the Grenadian government, and fish seems already to be a part of the diet regime. The possibility exists to design some value-added fish products, especially for this market segment.

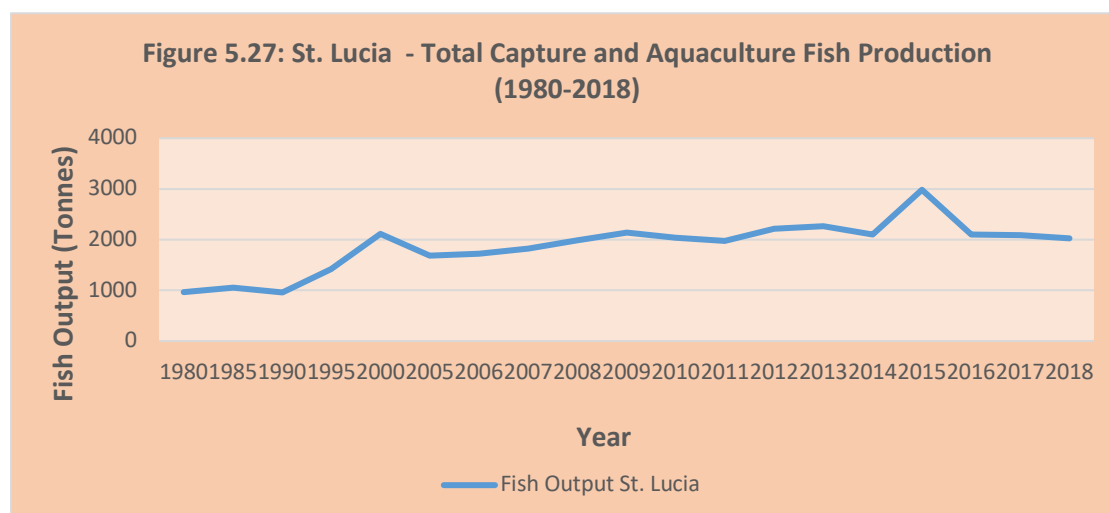
Another opportunity of great potential is improved salting and drying of small pelagic and tuna from the catch, which is already carried out but could be improved and expanded. The country imports a lot of salt-fish and cured herring, which in part could be replaced by domestic production.

The Government of Grenada fisheries policy is aimed at the development of the fisheries sector and aims to increase its contribution to income, employment and foreign exchange earnings. The country is actively promoting the application of the FAO Code of Conduct for Responsible Fisheries in its fisheries management and is interested in the application of the Ecosystem Approach to Fisheries (EAF). The Government’s main efforts are currently concentrated on addressing the following challenging issues:

- How to increase production of the migratory oceanic pelagic resources in the medium and long-term. The current strategy encourages private entrepreneurs to use larger ice-boats (30-45 foot) that are proven to meet cost/benefit requirements.
- Utilization of capture fisheries as an avenue for agricultural diversification.
- Engagement in human resource development of fishers by administering training in appropriate fishing technology, safety at sea, business and financial management, and encourage participation in social security.
- Promotion of increased harvesting of underutilized and unutilized species for export and domestic consumption.
- Enhanced collaboration with the neighbouring island states in relation to their involvement in fisheries, through Grenada’s membership in the Caribbean Regional Fisheries Mechanism (CRFM) and the implementation of the Caribbean Common Fisheries Policy.

5.6.5 S. Lucia Fish Production, Trade and Utilization

Domestic production of fish in St. Lucia is stable at about 2,000 tonnes, with total capture production estimated at 2,019 tonnes in 2018 (**Figure 5.27**). Conch is the main species caught in recent years.

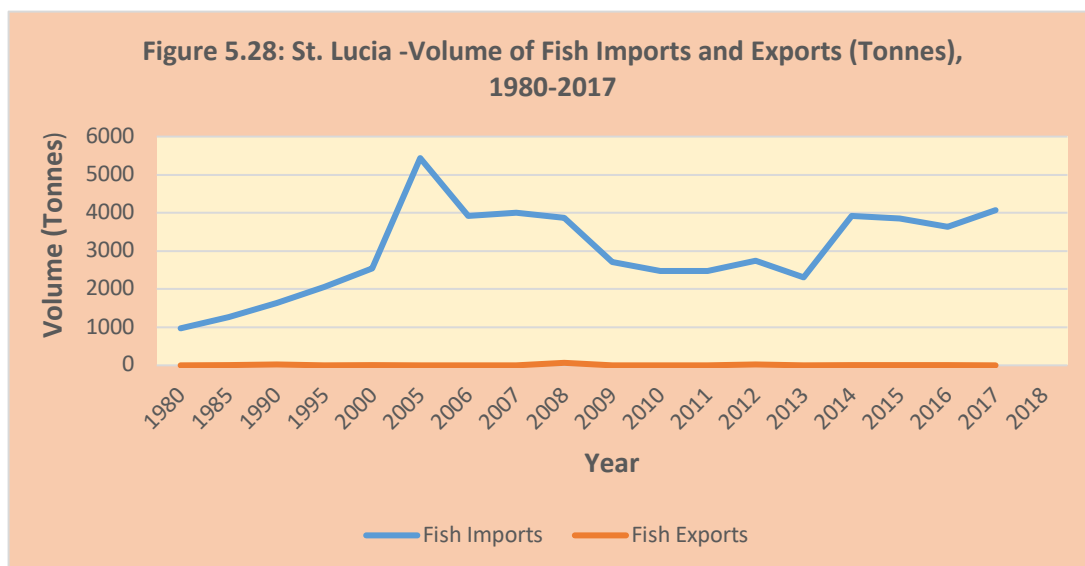


Source: FAO Statistics

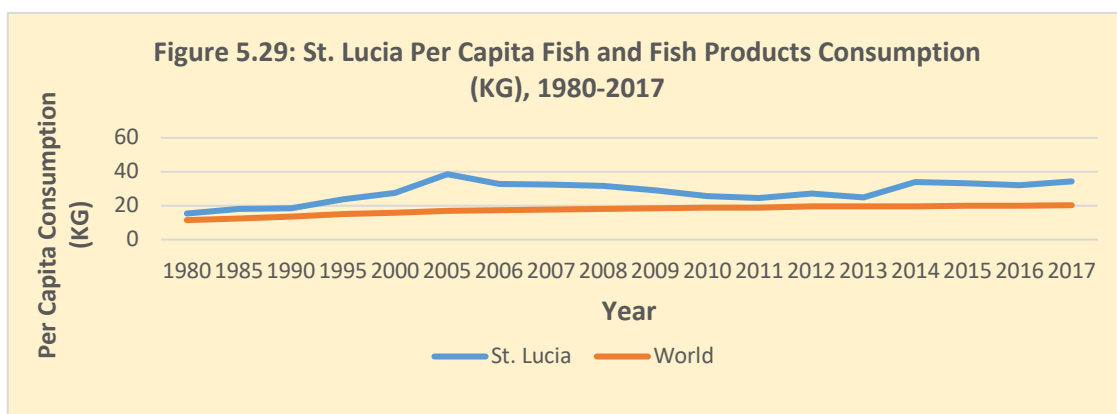
The increase in production of this species is notable, up from 150 tonnes five years ago to 500 tonnes at present. As the country is not exporting any conch, its production is not covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), but the important increase in production should stir up some apprehension about the sustainability of the resource.

Common mahi-mahi and Marine fish not specified also accounts for about one-quarter of production each, while tuna species, mainly yellowfin and skipjack, represent one-fifth of total fish production. No lobster production is recorded.

Fish imports are needed to complement domestic production and to satisfy the demand from the tourism sector, while fishery exports continue to be negligible. One of the main products imported is dried and salted fish, including salted cod, saithe, and herring. This product is mainly directed towards the local population. In recent years, canned tuna imports have become the main product imported. This product goes both to the tourism market and the local market. Frozen fish fillets include tilapia and pangasius, which are competing with local tilapia production. Smoked herring represents a niche, mainly directed towards the local consumers. **Figure 5.28** presents the quantities of fish imports and exports for the period 1980-2017 and **Figure 5.29** presents per capita fish consumption for St. Lucia for the period 1980-2017.



Source: FAO Statistics



Source: FAO Statistics

The annual per caput supply is estimated at 34.4 kg in 2017. In addition, fish imports are needed to complement domestic production and to satisfy the demand from the tourism sector. In 2016, imports of fish and fishery products were estimated at US\$8.9 million, while fishery exports continued to be negligible.

Saint Lucia faces a number of problems in developing aquaculture:

- An inability to produce sufficient quantities of fish fingerlings and prawn fry in support of a general increase in production; (2) a lack of aquaculture facilities and technology to stabilize supplies of fish and prawn fry; (3) a lack of aquaculture management skills among Saint Lucian fish farmers.
- Compared with other countries in the OECS, the fisheries of Saint Lucia are well managed - in fact, the country's experience with co-management dates to the last century. Overall the fish resources are not overexploited.
- The statistical system of data collection for fisheries is well established and working despite budgetary constraints.

5A.7 Food and Nutrition Security

5.7.1 Overview

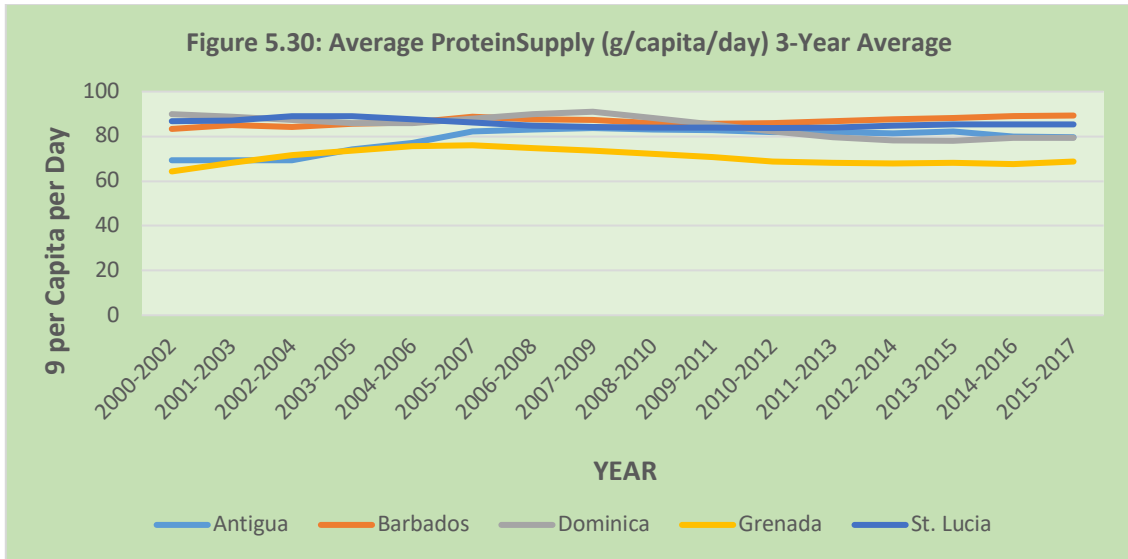
The impact of the FNS policy at the country level is evaluated by examining the following four dimensions and related indicators of FNS:

- **Food availability:** Average protein supply (g per capita per day); Average dietary energy supply adequacy (%).
- **Food access:** Gross domestic product per capita.
- **Food utilization/nutritional status:** Prevalence of Anaemia among women of reproductive age (15-49 years); Prevalence of obesity in the adult population 18 years and over.
- **Food stability:** Average value of food production.

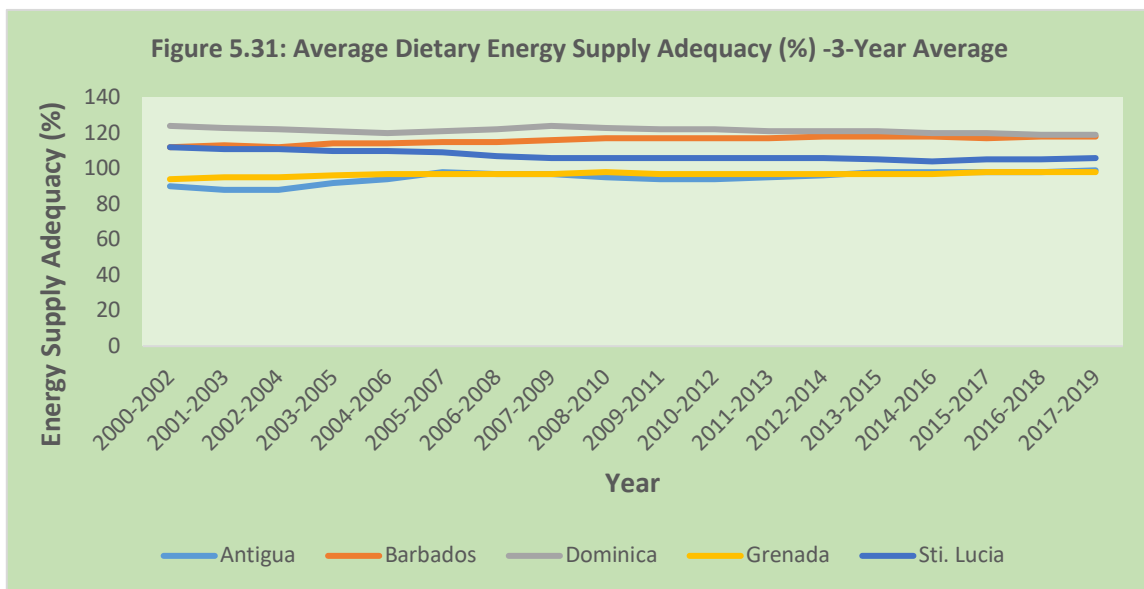
Data obtained from the FAOSTAT database and presented graphically in **Figures 5.30 through 5.32** show that the FNS policies implemented by the countries have had mixed results. While the FNS policies for the countries were developed between 2012 and 2015, it is important to recognize that most of the elements of the policies were being implemented long before the existing well-integrated coherent frameworks were developed. The results obtained must therefore be interpreted within this context. The main outcomes of the analysis of the impact of FNS on the countries are presented below.

Food availability: There were marginal changes in food availability as can be observed from the trends in the:

- Average protein supply (g per capita per day) – **Figure 5.30**; and
- Average dietary energy supply adequacy (%) – **Figure 5.31**.

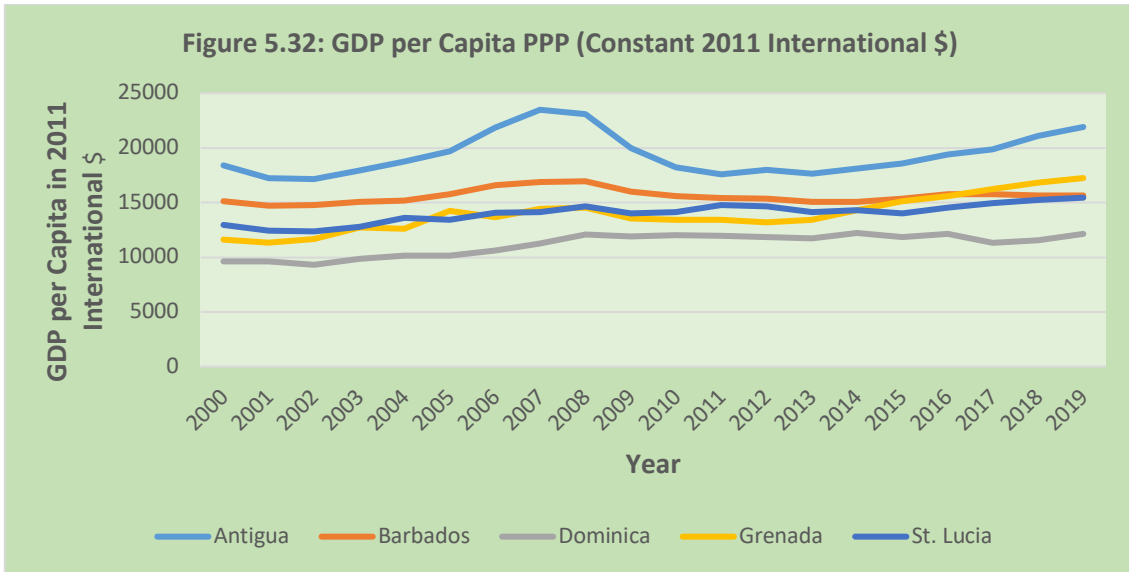


Source: FAOSTAT Database



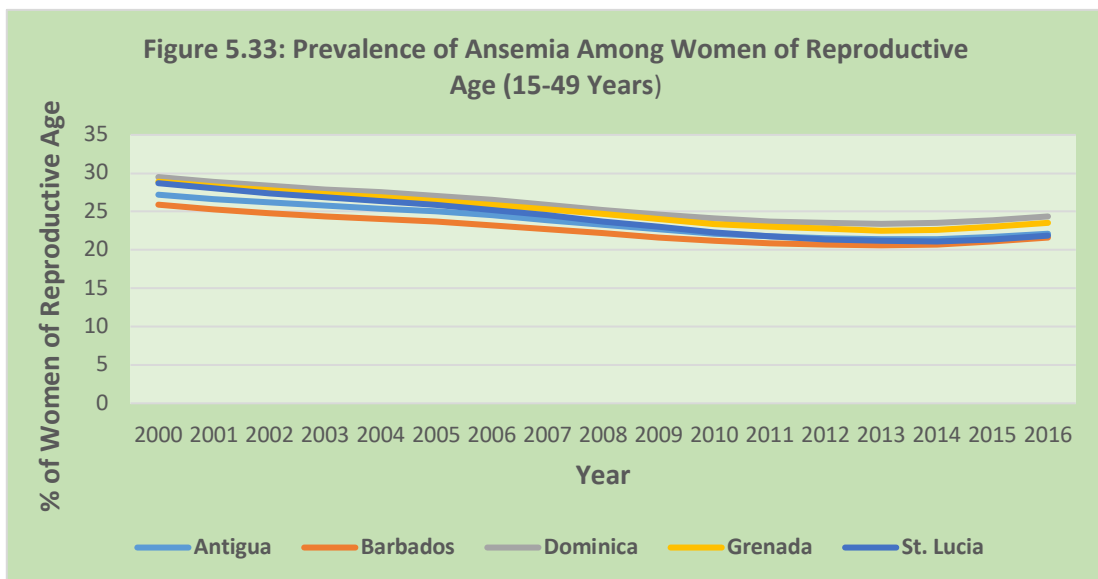
Source: FAOSTAT Database

Food Access: The situation with respect to food access has improved as measured by GDP per capita in constant 2011 international \$ (Figure 5.32).

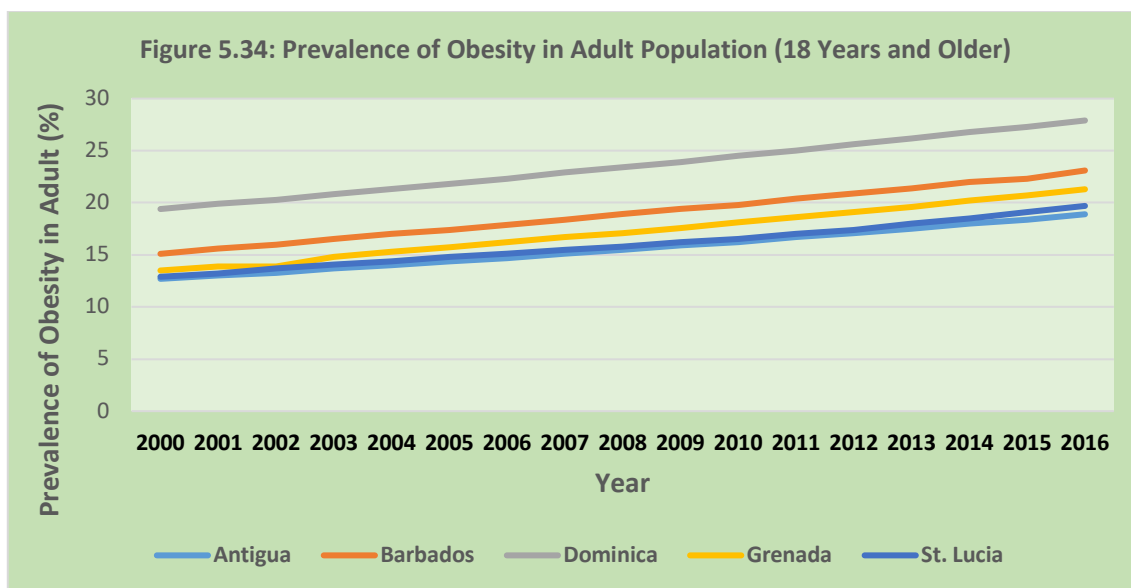


Source: FAOSTAT Database

Food Utilization/Nutritional Status: While declines prevalence of anaemia among women of reproductive age of 15-49 years can be observed, the prevalence of anaemia among women of reproductive age of 15-49 years (Figure 5.33) is a worrying upward trend observed in all countries for the prevalence of obesity in the adult population 18 years and over (Figure 5.34).

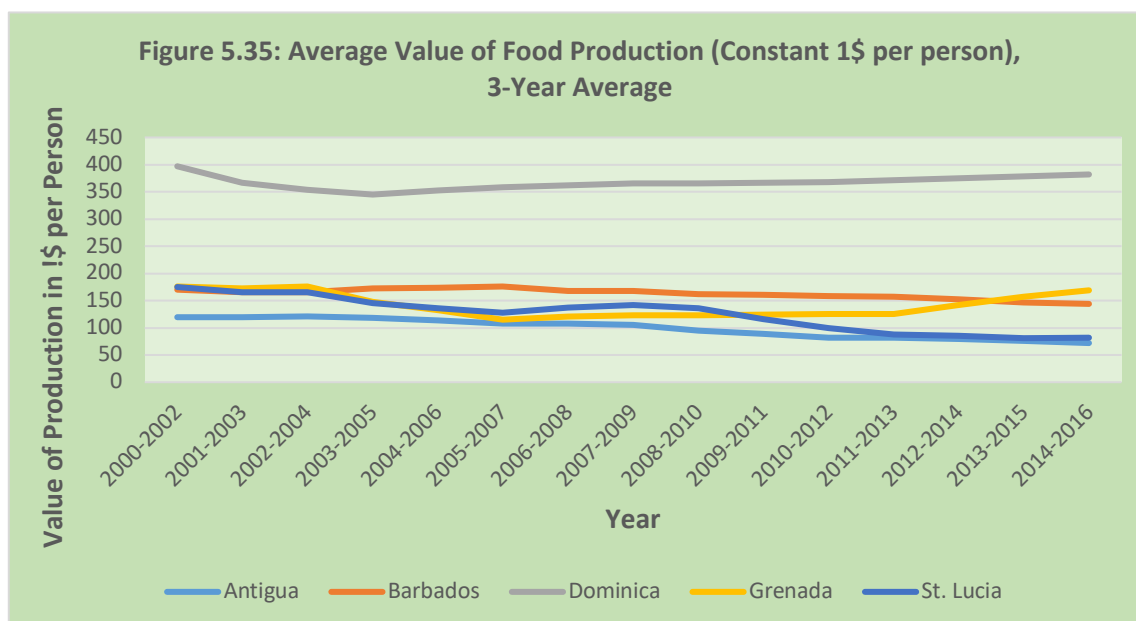


Source: FAOSTAT Database



Source: FAOSTAT Database

Food Stability: Most countries experienced marginal declines in food stability as measured by the average value of food production in constant \$ per person utilizing a three-year average (Figure 5.35). It should be noted that by utilizing the 3-year average, the yearly effects of natural disasters on food output in the countries may have been masked.



Source: FAOSTAT Database

5A.8 Impact of National Policies on Small Agro-Enterprises (SAEs)

The report of the FAO Roundtable on Small and Medium-sized Agro-enterprises (SAE) Competitiveness in the Caribbean¹²¹ held in Jamaica during March 2012,¹²² noted that most of the

¹²¹ FAO, 2012. SMAE Competitiveness in the Caribbean

SAEs in the Caribbean are involved in producing principally processed foods from fruit, vegetable, root and herbal commodities, although there are several fresh produce (fruit and vegetable) pack houses, wholesalers and producers of processed animal (eggs, dairy) and fish products. The products tended to be made from local perishable products, either capturing local recipes or traditional cuisine, preserving primary commodities for use in these cuisines or export, and most were careful to minimize or exclude additives and preservatives.

In some operations, the service component of the firms' offering was found to be an important part of the marketing mix, such as agro-tourism visits to condiment/preserve manufacturer's factories and farms, private labelling for exporters of canned fruit and vegetables, retail franchises for ice cream, and customer-driven flexible product/packing configuration for fish exporters. Branding often positioned the product as a Caribbean/national product and the labels made claims to be a combination of fresh, natural, preservative/additive-free content. The products came in a range of packaging formats, which are dependent on the nature of the commodity, level of transformation of the product and requirements of the target market. Target markets could be the domestic, regional or extra-regional markets. Product ranges varied from five for small operations to up to 50 products for larger operations, although some larger export-orientated operations had very narrow ranges in a focused export marketing strategy.

Quality was an important claim for almost all the SAEs, and food safety and, to a lesser extent, ethical product certification was especially important to exporters. Major shocks in the export market food safety regulation had been a driving force in the investment in international food safety standards by processors of the two major export products (ackee and fish/shrimp). The SAEs sold products to a variety of markets, including domestic retail, food-service and hospitality buyers and export markets. Small operators focused on the domestic retail, food-service and hospitality markets. Interestingly, several agro-processors, though relatively small in number, had significant shares of sales being exported into the USA, EU and Canada (and the rest of the world). Sales to regional markets seemed to be generally small.

The technologies used by the agro-processors could be divided into two groups: those which sought to principally preserve single commodities, such as dried herbs, chilled juices, chilled liquid eggs, frozen roots, dried, chilled and frozen fish and those which sought to combine commodities and add other ingredients to arrive at bottled preserves, condiments, canned mixed juices, fresh packaged fruit salads, tropical fruit ice creams and fruit-based alcohol drinks. There are a variety of supply chain and logistics configurations across the businesses. For outbound logistics, SAEs used combinations of traditional in-house direct distribution and sales; outsourced physical distribution and sales (private labelling); in-house retailing, franchising and agro-tourism and joint ventures with hospitality wholesalers. At the level of manufacturing, most processing is done in-house, but a few businesses are engaged in co-packing arrangements where they manufacture products to customer's specifications.

For in-bound logistics and procurement, several clear groups of arrangements presented themselves. For agriculture commodity input supply, most SAEs had longstanding arrangements with a core group of farmers who had a reasonable understanding of specifications and for whom processing planning was managed through telecommunications. For several key products, such as ackee, coconut water and, to a lesser extent, fish, procurement took place through a network of collector/wholesalers. For a few medium-sized processors, contracts are used to manage the procurement process.

¹²² Three of the five countries under review (Antigua and Barbuda, Barbados and Grenada) were represented at the Meeting by owners of SOEs in the countries

There was a rich diversity of organisational types at the Roundtable,¹²³ ranging from small sole traders and associations of small women's kitchens targeting local markets to quite sophisticated limited-liability medium-sized agro-processing enterprises focused on export markets. Many of the SAEs were established 20 to 40 years ago by women working out of their kitchens. Even in the larger enterprises, women held senior management and technical (food technology, food safety) positions, so that of the 18 business participants in the meeting, 60% were women. In addition, it was clear from discussions on the side-lines of the Roundtable¹²⁴ that women tended to dominate the workforce in most agro-processors and in some cases a large share of them were female small farmers. The number of permanent employees for SAEs at the Roundtable ranged from one to 200 employees, with the majority of them having fewer than 60 permanent employees.

The structure of the agro-food industry of the countries under review has changed over the last decades with the top four retailers, in most countries, controlling over 50% of the market share.¹²⁵ Similar concentrators are becoming evident in the large agro-processing or importing (international brand) sectors. Agriculture production in the countries is becoming more commercial. Notwithstanding, the SAEs have made major investments in serving the export market opportunities to the growing international market for Caribbean products marketed under the branding of cuisine and culture of the region, primarily to the North Atlantic Diaspora but increasingly to a larger global market. In this regard, key SAEs have very high export concentrations, primarily under wholesale and customer brands, to these markets. Smaller SAEs also serve this export segment by providing products and agro-tourism services to the domestic hospitality/cruise-ship segment.¹²⁶

However, the business environment for SAEs in the countries under review is challenging and characterized by a weak policy and institutional framework. Indeed, the agri-food sector, from farm to fork, is subjected to a lack of overarching policy and incentive framework, as these often fall under several ministerial portfolios. There tend to be low levels of dialogue and coordination among ministries with portfolio responsibility for the extended agri-food sector and, in particular, a lack of overall policy promoting SAE development. In terms of industry organisation, there is limited inclusion of the private sector, and especially of SAEs and producers in the policy dialogue.

¹²³ FAO, 2012. SMAE Competitiveness in the Caribbean

¹²⁴ Discussions with the Author of this Consultancy

¹²⁵ FAO, 2012. SMAE Competitiveness in the Caribbean

¹²⁶ Ibid

ANNEX 6

6A1 Budgetary Allocations by Countries to Agriculture, Fisheries, Small Business and Gender Affairs

Table 6A1: Antigua and Barbuda Recurrent Expenditures

Description	Recurrent Agriculture Budget (EC\$'000')						
	2010	2011	2012	2016	2017	2018	2019
Agriculture Headquarters	3,570	3,500	3,562	4,133	3,636	4,488	4,182
Agriculture Division	5,294	6,113	3,704	4,301	4,846	5,151	4,985
Veterinary and Animal Husbandry	1,739	2,218	1,818	1,541	1,552	1,903	1,752
Fisheries Division	1,144	1,352	1,369	1,331	1,328	1,537	1,665
Cotton Division	380	457	702	732	691	776	756
Lands Division	380	584	474	678	546	942	-
Agriculture Extension Division	1,182	1,984	1,284	1,118	1,134	1,257	1,336
Chemistry and Food Technology Division	401	578	521	568	476	665	761
Surveys Division	949	975	1,132	1,209	1,321	1,673	-
Environment	1,619	1,535	1,286				
Development Control Authority	460	563	528	803	1,089	2,251	-
Barbuda Administrative and General Services				335	487	578	589
Total	17,118	19,859	16,380	16,749	17,106	21,221	16,026
	Recurrent Agriculture Budget as % of Agriculture GDP)						
Total Agriculture Budget:	33.8	33.4	26.6	27.5	24.1	28.2	20.3
Agriculture Crop Division	10.5	10.3	6.0	7.1	6.8	6.8	6.3
Veterinary and Animal Husbandry	3.4	3.8	3.0	2.5	2.2	2.5	2.2
Fisheries Division	2.3	2.3	2.2	2.2	1.9	2.0	2.1
Agriculture Extension Division	2.3	3.3	2.1	1.8	1.6	1.7	1.7

Source: Ministry of Finance - Antigua and Barbuda

Table 6A2: Summary of Barbados Recurrent Budgetary Expenditure for Agriculture (BD\$ 'Million')

Description	Recurrent Expenditure Estimates (BD\$' million')						
	2014	2015	2016	2017	2018	2019	2020
Direction & Policy Formulation Services	59.93	10.43	12.49	12.32	4.26	8.07	8.03
Measures to Stimulate Increased Crop Production	4.55	64.74	32.06	34.67	35.50	15.54	15.41
Measures to Stimulate Increased Livestock Production	1.89	2.75	3.10	3.63	1.81	3.47	3.43
Resource Development and Protection	10.63	10.33	10.83	11.70	5.94	9.91	10.65
General Support Services	13.92	13.34	14.13	14.60	6.21	8.45	17.42
Ancillary, Technical and Analytical Services	6.24	6.56	6.79	8.17	5.26	7.72	7.97
Support of Major Agricultural Development Programmes	0.22	0.44	0.44	0.44	0.00	1.60	0.00
Human Resource Strategy	0.00	0.51	0.79	0.54	0.00	0.00	0.00
Total Fisheries	1.78	1.65	1.93	2.37	1.02	1.87	4.30
Total Agriculture	99.16	110.75	82.56	88.44	60.00	56.63	67.21
Total Agriculture Budget:	78.0	89.8	66.0	66.3	41.0	40.6	-
▪ Crop Development	3.6	52.5	25.6	26.8	24.3	11.1	-
▪ Livestock Development	1.5	2.2	2.5	2.8	1.2	2.5	-
▪ Fisheries Development	1.4	1.3	1.5	1.8	0.7	1.3	-
▪ Resource Development and Protection	8.4	8.4	8.7	9.10	4.1	7.1	-
Ancillary, Technical and Analytical Services	4.9	5.3	5.4	6.3	3.6	5.5	-

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Source: Ministry of Finance – Barbados

Table 6A3: Dominica Recurrent Expenditures

Description	Recurrent Budget (EC\$'000')						
	2014	2015	2016	2017	2018	2019	2020
Policy Formulation and Administration	863	880	894	863	926	1,124	838
Agriculture Planning and Administration	415	375	403	415	404	483	402
Agricultural Health, Food Safety	2,526	2,649	2,410	2,469	2,661	2,905	3,131
Agricultural Development	2,440	2,900	2,400	2,785	2,513	3,207	2,748
Management of Fisheries	1,086	1,044	814	870	880	986	870
Management of Forests, Wildlife & Parks	3,354	3,472	-	-	-	-	-
Energy	-	-	-	-	75	147	146
Total	10,684	11,320	6,921	7,402	7,459	8,852	8,135
	Recurrent Agriculture Budget as % of Agriculture GDP)						
Total Agriculture Budget:	5.7	5.5	3.4	3.9	4.5	4.3	
▪ Agricultural Health, Food Safety	1.3	1.3	1.0	1.3	1.6	1.4	
▪ Agricultural Development	1.3	1.4	1.0	1.5	1.5	1.6	
▪ Management of Fisheries	0.6	0.5	0.3	0.5	0.5	0.5	

Source: Ministry of Finance – Dominica

Table 6A4: Grenada Recurrent Budgetary Expenditure for Agriculture

Description of Expenditure	Recurrent Expenditure Estimates (EC\$'000')							
	2012	2013	2014	2015	2016	2017	2018	2019
Executive Direction and Administration - Fisheries	2,269	2,450	2,203	2,202	2,107	3,568	3,885	4,221
Marketing	1,348	1,394	1,371	1,323	1,298	2,561	2,669	3,076
Cooperatives Administration and Oversight	1,472	1,429	1,390	1,363	1,344	2,371	2,146	2,113
Crop Development	655	672	639	690	678	725	596	731
Information Management and Dissemination	1,065	1,074	494	452	1,795	1,573	1,086	1,086
Fisheries Development	244	272	279	264	221	214	218	440
Forest and Land Management	571	509	506	561	475	493	501	833
Livestock Development	-	478	478	479	442	651	579	786
Total	7,624	8,278	7,360	7,334	8,360	12,156	11,680	13,286
	Recurrent Agriculture Budget as % of Agriculture GDP)							
Total Agriculture Budget:	7.3	7.5	4.9	3.7	5.1	7.4	7.0	8.3
▪ Marketing	1.3	1.3	0.9	0.7	0.8	1.6	1.6	1.9
▪ Crop Development	0.6	0.6	0.4	0.3	0.4	0.4	0.4	0.5
▪ Information Management and Dissemination	1.0	1.0	0.3	0.2	1.1	1.0	0.7	0.7
▪ Fisheries Development	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3
▪ Livestock Development	-	0.4	0.3	0.2	0.2	0.4	0.3	0.5

Source: Ministry of Finance – Grenada

Table 6A5: St. Lucia Recurrent Budgetary Expenditure for Agriculture

Description of Expenditure	Recurrent Expenditure Estimates (EC\$'000')							
	2013	2014	2015	2016	2017	2018	2019	2020
Executive Direction and Administration - Fisheries	4,596	3,816	3,287	14,617	30,392	29,128	36,466	36,666
Marketing	158	145	111	144	159	158	148	151
Cooperatives Administration and Oversight	593	536	438	368	666	195	351	356
Crop Development	7,200	7,173	6,881	11,633	11,899	9,948	7,846	10,269
Information Management and Dissemination	232	223	209	224	221	225	218	226
Fisheries Development	2,393	2,354	2,202	2,772	2,462	2,213	1,352	1,292
Forest and Land Management	3,078	3,136	3,027	3,010	3,300	1,867	2,118	2,145
Livestock Development	2,410	2,354	2,386	4,005	3,584	2,652	3,663	3,218
Total	20,660	19,737	18,541	36,773	52,683	46,386	52,162	54,323
	Recurrent Agriculture Budget as % of Agriculture GDP							
Total Agriculture Budget:	17.5	18.8	17.6	35.1	55.7	46.4	45.3	-
▪ Marketing	0.1	0.1	0.1	0.1	0.2	0.2	0.1	-
▪ Crop Development	6.1	6.8	6.5	11.1	12.6	9.9	6.8	-
▪ Information Management and Dissemination	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-
▪ Fisheries Development	2.0	2.2	2.1	2.6	2.6	2.2	1.1	-
▪ Livestock Development	2.0	2.2	2.3	3.8	3.8	2.7	3.2	-

Source: Ministry of Finance, St. Lucia. stats.gov.lc



GENDER RESPONSIVE EVALUATION OF THE IMPACT OF RELEVANT NATIONAL POLICIES ON SMALL HOLDER FARMERS, FISHER-FOLK AND SMALL BUSINESS ENTREPRENEURS IN FIVE (5) CARIBBEAN ISLANDS



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