

GOVERNMENT OF SAINT LUCIA

FOOD AND NUTRITION SECURITY POLICY AND ACTION PLAN

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Acronyms

CAREC - Caribbean Epidemiology Centre

CBO -Community-Based Organisation

CBWMP - Caribbean Basin Water Management Project

CC -Climate Change

CCAP -Climate Change Adaptation Policy

CDB -Caribbean Development Bank

CEHI -Caribbean Environmental Health Agency

CIMH -Caribbean Institute of Meteorological and Hydrological Studies

DOE -Department of Environment

DOF -Department of Fisheries

Recommended Dietary Intakes (DRI).

EHD -Environmental Health Department

EU - European Union

GDP -Gros Domestic Product

GNI - Gross National Income

MCD -Ministry of Community Development

MCWT&PU -Ministry of Communications, Works, Transport and Public Utilities

MDI -Multi-lateral Donor Institution

MET - Meteorological Office

MOA -Ministry of Agriculture, Forestry and Fisheries

MOE -Ministry of Environment

MOH -Ministry of Health

MOL-Ministry of Labour

MOLA - Ministry of Legal Affairs

MOP-Ministry of Planning

MOT -Ministry of Tourism

NEMO -National Emergency Management Organisation

OECS - Organisation of Eastern Caribbean States

PAHO -Pan-American Health Organisation

people living with HIV/AIDS (PLHIV)

SIDS -Small Island Developing State

SLBS -St. Lucia Bureau of Standards

WASCO -Water and Sewerage Company

WRMU -Water Resources Management Unit of the Ministry of Agriculture,

Fisheries and Forestry

W&SC -Water and Sewerage Commission

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I. Executive Summary

In 2007, the population of St. Lucia was 0.17 million¹ and corresponding gross national income (GNI) per capita 5,530 USD/capita. St. Lucia external debt equals to 40% of GDP. The country exceeded the general regional trend of increased proportions of imported food as a share of national food consumption; 40.6% in St. Lucia, of all food consumed is imported, well-beyond the regional average of 20.4%².

The global economic crisis has delayed progress towards meeting the Millennium Development Goals. GDP has contracted and reduced public spending by almost one third. All of these have caused Saint Lucia to transition to a service based economy including communications, banking and insurance, distribution (wholesale and retail trade), transport and government services. Because of a high dependence on Agriculture, the island's economy has been impacted by the elimination of preferential Trade Agreements.

In 2012 approximately 20.6% of the population can be regarded as living below the poverty line. High unemployment and high food prices have left several households unable to earn incomes and procure foods to meet their nutritional requirements resulting in that 16% are indigent. Unemployment has also increased considerably, and the rates among young people (aged 15-24) and women are the highest. The Agricultural sector remains an important component of St. Lucia's economy. Household real income is essential to food and nutrition security in rural and urban communities.

At the level of the individual, the absence of development policies that support food availability, accessibility, utilization and stability of supply though not directly nutrition related impacts nutritional status in a big way. Individual Food Security is determined at the level of the household. While data for Saint Lucia reveals total per supply of energy continue to exceed the 2240kcal/per caput /day recommended for healthy individuals, and are critical components of food security, the definitive issue for many is access. Food available at the national level is clearly not available to everyone; many still lack the economic means to access food to meet individual Recommended Dietary Intakes (DRI).

Urban households are inadequately equipped, both in terms of income flows and assets, to cope with livelihood risks and thus may face major threats in their food security. In Saint Lucia, 67% of the urban poor group, reported weekly earnings less than 400 EC\$ (approximately \$150 US), while the corresponding proportion is just above 40% for farmers and fishermen and around 27% for hotel and construction workers. In the latter two groups, about 54% of households are concentrated in the middle income class (earning between 400 and 700 EC\$ or 150-264 \$US)³.

The urban poor and construction worker households size is significantly larger; the level of education of the head is lower, while a relatively higher proportion of those households are female headed. Participation of these groups in social organizations/associations is rather small; however, it is noteworthy that 90% of farmers and 43% of fishermen participate in such associations. Thus female headed households appear to be more vulnerable than male headed ones. Urban poor, farmers and fisher folks, appear as the livelihoods that face the most severe income constraint with respect to buying food, as 20 to 30% of the households within each of these livelihoods spends all or almost all their income on food. Lack of cash, is pointed as the major reason behind inadequate food consumption by all livelihoods but hotel

¹ World Bank, 2008

^{2 (}FAOSTAT)

workers. However, on average 32% of all households; report that either the food they would like to consume is not available or that there is no time to go shopping. The high importance of those non-cash factors across all vulnerable groups is likely associated with the changing consumption patterns of the households, which on their turn modify the nature of vulnerability in Saint Lucia.

The instability of food availability at the national and household level is a major cause for concern. The unpredictability of the international markets for food commodities has caused sharp declines in food production with implications for food availability and health/nutrition indicators. Factors affecting nutrition status are diverse and can impair optimal utilization of food. In Saint Lucia, an overview of the current situation has indicated that the scope and dimension of its nutritional problem can be analyzed under the broad umbrella of food, health, and or caring capacity.

Seasonality of production of crops and poor agro-processing of surplus crops are limiting factors to accessing food. The inadequacy of proper agricultural practices and technologies continue to affect nutrition through various mechanisms such as unemployment, lack of income generation, poor environmental and health outcomes. Saint Lucia's dependency on a single export to earn foreign exchange placed the country a high level risk when export prices and preferential markets changed. Services sector includes wholesale and retail trade; hotels and restaurants; transport and communication; financial intermediation; real estate, renting and business services.

Vulnerable households either have no access to land, or their land holdings are small and of a quality that restricts improving productivity in subsistence farming. In rural households, food security is threatened by the lack of economic access to food due to movement of farmers away from agriculture and the inadequate support to farmers engaged in food production both for income generation and for feeding of their families. Many rural farm households rely on their livelihood from off-farm employment. Land ownership systems are inefficient and are not reasonably equitable.

In urban households, poor quality of housing, lack of education, unemployment, and poverty are all factors that affect food availability. Typically, poor urban households do not rely on home food production plots or backyard gardens to supplement their daily diets. This inequity in the distribution of resources has contributed to varying food and nutritional health conditions of households. Unemployed persons tend to rely on remittances from relatives abroad, engage in seasonal work or migrate to find work within or outside the Caribbean.

Despite shifts to diversify, farmers have not been able to meet domestic demands of staples, vegetables and legumes. More is imported than is produced. This means that these farm households are net purchasers of food who buy more food on the market than they are able to sell. The unreliability of transportation and a poor functioning market results in high prices in real costs of marketing that raise consumer prices without lowering prices to producers. The levels of prevailing producer prices pose significant obstacles to raising production and a major contributor to food security at the household level.

Evidence suggests that social safety nets are themselves inadequate, especially for vulnerable groups such as senior citizens, single mothers and people living with HIV/AIDS (PLHIV). A number of social safety net programs do not reach even a majority of the income-poor and disadvantaged women and children. Factors contributing to this vulnerability include limited education, low socio-economic status, and a lack of skills, poor family structure, absence/inadequacy of caring capacity, poor living conditions.

At present there is insufficient data to correlate food insecurity and vulnerability. 50% of the population is women, many of which are female headed households and who live below the poverty line. Although there are a number of Social Safety Net Initiatives to address poverty among women many do not qualify them to certain programs based on their educational attainment and inability to qualify for support from financial institutions. There is a need to increase access to credit and other practical ways to extend equal access by women to agricultural inputs, credits and savings and extension services.

With respect to Food Utilization/Nutritional Status/Consumption by the population, Saint Lucia is experiencing a period of nutritional transition that is reflected in a shift in diets away from indigenous staples (starchy roots and cereals), locally grown fruits, vegetables, legumes, and limited foods from animals, to diets that are more varied and energy dense.

The result of this shift is an epidemiological transition manifested in a reduction of under-nutrition and infectious diseases, to an increase in the number of overweight and obese persons. Obesity is one of the main risk factors in nutrition related non-communicable chronic diseases. Sedentary lifestyles also contribute to the prevalence of these diseases, which are main Public Health problems for Saint Lucia. The risk factors for the chronic diseases begin in early childhood and are increasing with age. The persistence of iron deficiency/anemia especially in the 1- 4 year age group and in pregnant and lactating women is also a grave concern.

With respect to stability of Food Supply, Saint Lucia is a small twin island State that is vulnerable to shocks from external economic forces, hurricanes, droughts, invasive species, and wind storms. Changes in the global and regional climate bring more frequent and higher risks of natural disasters that have the effect of reversing several years of economic growth. There is therefore a critical need to strengthen disaster preparedness and risk mitigation strategies to protect agriculture, social infrastructure, the ecosystem, and housing. In order to support nutritional status, there is a need for the establishment and strengthening of institutions that manage risk and disaster preparedness, as well as for prevention and mitigation, of early warning systems.

According to the Composite Commonwealth Vulnerability Index lists Saint Lucia is among the most vulnerable in the world due to the prevalence of natural disasters, global warming and the susceptibility of the economies to external factors such as unfavorable trade agreements, fluctuating oil prices and unpredictable incomes from tourism. In 2010 Hurricane Tomas caused Saint Lucia at least \$3.3 million in damages.

In summary, many factors impact the status of nutrition and food security of the nation, but the more pressing need is for employment creation among groups of the population who are economically deprived and vulnerable. Environmental sanitation and availability of health services affects the nutritional status of people in a community. While potable water and sewerage are available in major urban areas not all areas have that facility. Moreover irrigation and water access to farms is a problem that inhibits farmer productivity.

At the national level some sort of structure in needed to identify appropriate actions to be taken collectively by various sectors to improve nutritional status. Time will be needed to achieve positive outcomes particularly those aimed at behavior change and difficult to reach people. Decision makers must be encouraged to incorporate nutrition considerations into development programs and policies based on the evidence presented and in light of resources available and trade-offs in adopting alternate policies.

II. INTRODUCTION

2. Introduction

Most developing countries are trying to improve their food security but are faced with difficult choices due to budgetary and other resource constraints. Typically the countries rely heavily on a narrow set of policy instruments such as food rationing, price subsidies, feeding and employment programs.

The nature of food and nutrition security has changed in the Caribbean. Globalization and trade liberalization has resulted in structural changes and their impact on food systems have for many countries and in particular the island states results in growing food import dependency, furthered by a general neglect of the agricultural and productive sector in favor of the services sector and in particular tourism. Increased economic development in the last decade has been accompanied by nutritional transition, resulting in a shift of dietary habits and changing lifestyles. The majority of Caribbean countries witness food shortage for specific vulnerable groups in the midst of aggregate national food supply beyond what is nutritionally required as a minimum. That such dichotomy exists within a country is nothing new, but there is growing evidence that undernourishment and overweight may even be co-existing within the same households.

In his 2012 World Food Day Address the Minister of Agriculture, Food Production, Fisheries and Rural Development summarized the efforts and objectives very eloquently: "In St. Lucia there is a significant imbalance in what we grow and what we eat. Much of what we eat comes from imported foods, resulting in an annual food import bill of over EC\$350 million! Much of these imported processed foods are known to contribute to the many illnesses and diseases affecting our people. This situation calls for action at the national level. The call to action is for all institutions, all Government departments, all families. The Ministry of Agriculture, Food Production, Fisheries and Rural Development will play a major and leading role in this call to action role and is vigorously trying to improve its position to tackle the issue of food and nutrition security for St. Lucia. "

"This Government has pledged to place Job Creation at the core of its Term. I pledge our Ministry's contribution to this action. We will continue to improve the skills of farmers and fishers so that their business practices may realize profits and may generate wealth. We are preparing the sector to receive new businesses at the individual farm level and at the medium enterprise level (in that regard we have assigned an officer who is dedicated to the development of the Farmer and Fisher Cooperatives). We will make Food Production more attractive so that the many jobless St. Lucians may see opportunities to get themselves sustainable jobs. What I am really saying to you is that we are also the private sector, the many farm enterprises, whether chicken farms, fish farms, rabbit, goat, sheep, vegetable farms banana farms, plantain farms, we are private businesses. We use resources as to inputs utilize labour, land and management to produce food and services! And our farmers and fishers if given the right incentives through their co operatives will help to turn this economy around and create jobs in a significant way. This sums up the focus of our Ministry. From Castries South to Anse La Raye to Choiseul, Laborie, Vieux-Fort North and South, Micoud and Dennery in the East, Babonneau in the north all of these are constituencies with major farmer and fisher small businesses employing hundreds of St. Lucians...we need to make it work!"

These developmental efforts are expected, over time, to contribute to everyone having access to sufficient and affordable quality food on a daily basis because Saint Lucia as a sovereign state has a core obligation to take the necessary action to mitigate and alleviate hunger, even in times of natural or other disasters.

III.Food and Nutrition Security Assessment

3.1 Physical Characteristics

Located at 60° 53' and 61° 05' West longitude and 13°43' and 14°05' North latitude, Saint Lucia is the second largest of four Windward Island situated 21 miles south of Martinique and 26 miles north of Saint Vincent. In the middle of the Eastern Caribbean, it lies north of the island of Trinidad and Tobago. The island is approximately 27 miles long and 14 miles wide, with a land area of 238 square miles (616 sq. km). The capital city of Castries is located in the northwestern part of the island.

The island is volcanic in origin, very hilly and mountainous. The topography is interspersed with valleys that owe their fertility to the infamous volcanic eruptions of the La Soufriere mountain range. Mount Gimie which is 3,145 feet above sea level is the island's highest peak. Situated on the southwestern coast of the island are two lofty coned shaped mountains in Gros-Piton at 2, 619 feet and Petit-Piton at 2,461 feet that rise abruptly from the sea to make the island a natural scenic feature of the Caribbean and renowned world heritage site.

Wet and dry seasons characterize the climatic conditions of the island with the driest months of the year being January to April and the wettest months between May and August. Saint Lucia is vulnerable to tropical cyclones and weather hazards. It has a tropical maritime climate and is cooled by the North East Trade Winds. Daily temperatures of the island range between lows of 22 degrees Celsius and highs of 32 degrees Celsius. Annual rainfall varies from approximately 160 centimeters in the north and southern extremities of the island to 350 centimeters in the mountainous region of the country at the peak of the rainy season.

According to the 2006 Agricultural Census, from a total land mass of 64,000 (ha) only 11,000 (ha) are classified as agricultural land, with 3000 (ha) or 5% as arable and 7,000 (ha) under permanent crops. A total of 9,972 small holdings occupying 12,224 hectares dominate the agricultural landscape. Of these 7763 holdings were less than 2 hectares for an aggregate area of 3958 hectares. Agricultural land refers to land that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops. Of the total land area 77 % is covered with forests mainly concentrated in a forested mountain range which runs from North to South through the central interior of the country.

3.2 Population

Preliminary estimates suggest that Saint Lucia's resident population reflected the highest population growth rate (1%) over the last decade. The island's population is homogeneous, made up predominantly of persons of African origin with a minority of persons of mixed races and Caucasians. The official language is English, and 80 percent of the population was considered literate in that language. A French Creole dialect, or patois, is also commonly used.

According to the population 2010 estimate, the population of St. Lucia stood at approximately 166,526 and increased consistently at a rate of 1.8 percent from 2001-2010 (Table 1). Saint Lucia's population distribution by age reveals that the largest proportion of population falls within the age groups 10-24 years. This age group account for 26.3 % of the total population, and indicate that Saint Lucia has a youthful population. Nonetheless, the smallest proportion of persons falls within the age group 80 and over and 75-79 categories which accounted for 3.7 percent of the total population.

Table 1: Estimated Household Population for Census 1991, 2001 and 2010

DISTRICTS	Estimated	Estimated	Estimated	Percentage	Percentage
	Household	Household	Household	Change: 1991 to	Change: 2001 to
	Population	Population	Population	2001	2010
	1991	2001	2011		
Castries	51,994	64,344	65,656	23.8	2.0
Anse-la-Raye	5,035	6,060	6,247	20.4	3.1
Canaries	1,799	1,788	2,044	-0.6	14.3
Soufriere	7,683	7,656	8,472	-0.3	10.7
Choiseul	6,405	6,128	6,098	-4.3	-0.5
Laborie	7,491	7,363	6,701	-1.7	-0.9
Vieux-Fort	13,140	14,754	16,284	12.3	10.4
Micoud	15,088	16,041	16,284	6.3	1.5
Dennery	11,168	12,767	15,599	14.3	-1.3
Gros-Islet	13,505	20,872	25,210	54.6	20.8
TOTAL	133,308	157,775	165,595	18.4	5.0

Source: Saint Lucia Population & Housing Census 1991, 2001, 2010

Population density was approximately 227 inhabitants per square kilometer in the late 1980s. In 2010 island wide population density was estimated at 796 persons per square mile calculated using a land area that excludes Saint Lucia's forest reserve areas. In 2001 to 2010, Saint Lucia recorded an overall household population increase of 5 percent. At that time, total population including non-resident persons was estimated at 173,720; the total number of non-resident persons was 7,194. There were 58,891 households on the island in May 2010 showing a 3% increase over 2001. Of the total, 49.8% or 82,926 were males and 50.2 % or 83,600 were females (50.2 %) (See Table 2).

Table 2: Population Indicators for 1999, 2001, 2010

Indicator	1991		2009		2010	
	No.	%	No.	%	No.	%
Total population*	133,308	-	172,370	_	165,595	_
Total females	68,663	52	87,905	51	83,675	51
Females 15–44	31,300	23	44,478	26	40,028	24
Females 10–19	15,445	12	16,709	10	15,244	9
Children (<15 yrs)	48,968	37	44,637	26	39,878	24

^{*}Estimated mid-year population (Source: Saint Lucia Government Statistics Department)

The Central Statistical Office defines household population to include all persons who reside in private households in Saint Lucia of which 165,595 individuals resided in private households, and 931 persons living at care institutions.

Preliminary counts from the St. Lucia 2010 Population and Housing Census show that the largest proportion of Saint Lucia's Population reside in Castries, and the estimated population stands at approximately 67,000 (2,139 persons per

square mile). Total population of Castries increased by 2% and represented approximately 40% of the total population. Approximately 26% or 43,545 persons of Census 2010's estimated population reside in rural Castries as compared to 17% or 26,795 persons in 2001, an increase of 9% over the nine year inter-census period. The population of Castries City fell to 2.5% of the total population in 2010 down from 7.9% in 2010. There has been substantial movement of the population away from Castries City and into rural Castries and Gros-Islet.

There were 58,891 households on the island in May 2010. Average household size in Saint Lucia declined significantly. The average household size for Saint Lucia stands at 2.8 persons from 4.0 persons per household in 1991. From a total of ten districts, household population reductions were reported in the districts of Laborie, Dennery and Choiseul. Laborie recorded the largest household population decrease. Soufriere is the least densely populated district, with a population density of 434 persons per square mile. The Northwest portion of the island (Castries/Gros-Islet) area has experienced the most rapid population expansion and recorded a population density of 643 individuals per square mile increasing from 532 in 2001. On the district level, the average household sizes ranged from 3.0 persons, recorded in the district of Choiseul, to 2.6 persons reported in the district of Gros-Islet. In contrasting the censuses of 2001 and 2010, all the districts in Saint Lucia experienced a decline in their average household size.

The town of Vieux-Fort in the southeast is the second most important concentration of urban population in Saint Lucia. The village of Canaries was the least populated at 1.2% of the total population. Household population in seven of ten districts expanded. In order of significance these were Gros-Islet (20.8%), Canaries (14.3%), Soufriere (10.7%), Vieux-Fort (10.4%), Anse-La-Raye (3.1%), Castries (2.0%) and Micoud (1.5%).

The agricultural population comprises a small fraction of the entire population and is largely rural and male dominated. From a total of 32,919 household members in holdings, two to three thousand are farmers between the ages of twenty-five and sixty. During 2011, the number of active farmers fell considerably to approximately 500 from the pre-Hurricane sum of 1,500. Agriculture, fishing, tourism and small scale manufacturing are key sources of production and sustenance in the rural population.

Data collected in the 2010 national census indicated that there were 1,528 persons with disabilities, 688 of whom were male and 840 female. By comparison, the 2001 census found 9,313 persons with disabilities, 43.7% males and 52.7% female. Of the population with disabilities in 2010, 31.6% had a sight disability, 12.1% had a hearing disability, and 56.2% had a physical disability.

Labor Force

A consequence of the current global economic and financial crisis which started in 2007 and the spike in commodity prices of 2008 has had deleterious effects on employment and continues to threaten food and nutrition security, primarily among the poor in the Caribbean. Preliminary data indicate that the average employed labor force in St Lucia increased from 67,704 (4.7 %) to 74,784 in 2012. The estimated labor force in 2010 was 67,704, with males accounting for 55% (37,293) and females for 45% (30,411). In the same year the unemployment rate was 20.6% (24.2% for males and 28.2% for females). Young people aged 15–29 made up 33% of the total unemployed population, as compared with 24.1% in 2001.

The expansion in the employed labor force coupled with a slowdown in the rate of increase of the total number of unemployed have resulted in a moderate reduction in the average unemployment rate to 20.6 percent in 2012 from

21.2 percent in 2011. In Saint Lucia changes in and low levels of food consumption together with decreased food production is a key factor in the increase of food insecurity especially along the agro- ecological belt.

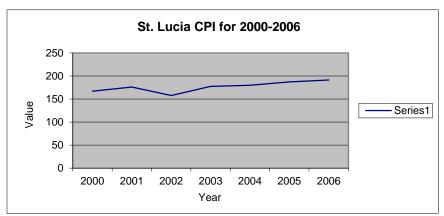
3.3 Macroeconomic Indicators

3.3.1. The Economy

In recent times the Caribbean has experienced problems in achieving and maintaining macroeconomic stability. St. Lucia, like others in the rest of the region has a small open economy which is heavily dependent on regional and international markets. GDP at Constant Prices (EC\$M) was 2,604.0 in 2012. Balance of payments is estimated to have recorded an overall surplus of \$44.1 million in 2012, representing 1.3 percent of GDP. Significant features of the economy include income inequality and a progressive shift from agriculture towards services. Services sector includes wholesale and retail trade; hotels and restaurants; transport and communication; financial intermediation; real estate, renting and business services.

The value for Consumer Price Index (CPI) (2005 = 100) in St. Lucia was 117.95 as of 2011. CPI reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.

Fig 1: Consumer Price and Index 2000-2006



Source: Social and Economic Review 2012

In 2012, Saint Lucia consumer prices increased notably, following the introduction of VAT. During that same year, Saint Lucia's economy contracted by 0.8%, from a growth rate of 1.5% in 2011. The decline in economic activity and the global economic crisis were mainly attributable to significant downturns in the distributive trades, construction, transport and communications sectors.

The rate of inflation increased to 4.2% in 2012 compared with 2.8% in 2011 (Fig. 2). Food prices which grew by 6.5%, contributed most significantly to the overall increase in the consumer price index in 2012. Reflective of increases in import prices, increases were recorded in the cost of all sub-categories of food except vegetables, coffee and tea. Notwithstanding the exemption of over one hundred food items from the value added tax, there were notable increases in the prices of meats, oils and fats (8.6 %), milk, cheese and egg (8.1%) and fish and sea food (7.8%). The main categories of the consumer basket affected by higher prices were clothing and footwear, recreation & culture, and food & beverages.

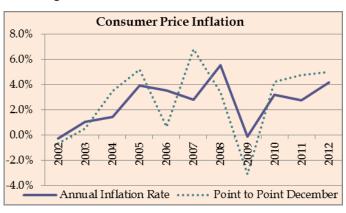


Fig 2: Consumer Price Inflation 2002-2012

Source: Social and Economic Review 2012

Saint Lucia's economic position strengthened during the period, due to a macro-level public policy entitled "The Road to Recovery: Engineering Growth, Engendering Social Cohesion and Building Resilience to External Shocks," adopted in 2010 following Hurricane Tomas . Per capita gross domestic product (GDP) increased from US\$ 3,070 in 2005 to US\$ 6,626 in 2010. GDP at constant prices rose from US\$ 496,481,000 in 2005 to US\$ 907,296,280 in 2010. Tourism remains the largest contributor to GDP, with hotel revenues accounting for US\$ 67.3 million in 2005 and US \$ 75 million in 2010. In 2005, agriculture contributed US\$ 16.7 million to the GDP while in 2010 that sector contributed US \$ 31.5 million. The public debt in 2010 was US\$ 677.7 million (63.8% of GDP) compared with US\$ 555.5 million (64.1% of GDP) in 2005.

Regarding tourism, total arrivals fell by 6.4% to 931,239 in 2012 as stay-over and cruise arrivals decreased by 1.8% to 306,801 and by 9.3% to 571,894 respectively. The performance of the manufacturing sector continued to be constrained by rising input costs. Value added in the sector is estimated to have remained constant in 2012. In light of changes in the global markets, exports declined which has impacted many sectors particularly the manufacturing sector.

Output in the agriculture sector expanded in 2012, as a result of recovery in the banana industry, from the damage caused by hurricane Tomas. Despite the downturn in the banana industry, the sector's contribution to GDP inched up from 2.9% to 3.2% in 2012. Notwithstanding challenges of diseases and the rising costs of inputs, banana production increased significantly reflecting the recovery from the effects of the hurricane. Exports to the UK grew by 85% to 12,126 tons with correspondingly higher earnings, by 40.1% to \$21.2 million.

Globalization and changes in the European market has set St Lucia's banana industry in decline. Bananas represent a major source of foreign exchange and employ a large proportion of the rural poor and contribute significantly to food security. The future of the industry now seems to lie in exporting under the "fair trade" label. 2000 saw the establishment of the Fair-trade movement in St Lucia This was made possible following the three-year collaboration between the Fair-trade Foundation and the Windward Islands Farmers Association (WINFA) to put in place the structures necessary to enable the banana farmers to meet Fair-trade standards, including organizing farmers into Fair-trade groups across St Lucia, St Vincent, and Dominica.

As trade liberalization strategies are geared towards increasing export production, women farmers in the subsistence sector are often neglected. Transforming the agricultural sector is also critical for food security, and for reducing Saint Lucia's growing food import bill. Under the BAM a total of EUR [10,350,000 (EU/EDF contribution)] has been directed toward an Agricultural Transformation Program for Saint Lucia.

The EU support will result in the following expected results:

Agro- enterprise for Youth Program:

- Develop a cadre of at least 150 young entrepreneurs in agriculture.
- Intensively incubate young agri-entrepreneurs and cultivate their critical thinking, leadership and entrepreneurial skills through mentoring and a series of practical competency based training programs offered by the National Skills Development Centre (NSDC).
- Adopt and introduce new and modern technology that assures a constant and reliable supply of farm and valueadded products for the domestic and export markets.
- Create sustainable rural livelihoods and incomes for communities in some of the more poverty prone areas in the country.

Agro- Enterprise Facilitation:

- Facilitate rural employment opportunities along selected agri-value chains through agro-industrial processing and services are facilitated.
- Establish a network of agricultural enterprise incubators on the island so that potential agro-processors will have access to facilities where they can develop or enhance production processes and products according to international food safety standards.
- Facilitate joint venture opportunities between the agro-processors and, the private sector and financiers from the early stages of enterprise creation or product development.

Disaster Risk Reduction:

- The on-going implementation of the management plan for the Black Sigatoka disease.
- The rehabilitation and/or construction of the farm community infrastructure farm roads, drainage and river bank/slope stabilization - vital for improving agricultural efficiencies and mitigating against the impacts of climate change and climate variability; and
- Interventions that will assist producers to adapt to the impacts of climate change or mitigate the effects of hazard events such as droughts and landslides.

Research and Technology Facilitation:

- Strengthening of the national quality infrastructure in Saint Lucia;
- Testing of food and agricultural commodities.
- Testing packages and packaging materials to ensure quality.
- Development of a Saint Lucian quality mark and code of good practice that builds on the country's "natural" image and fair trade record.

3.3.2. Health indicators

Life Expectancy

Life expectancy at birth increased from a low of 54 years in 1950 to reach a high of 73.8 years at the turn of the 21st century. In 2011 life expectancy averaged 75.5 with 73.5 for males and 77.6 for females. Despite gains in life expectancy for males, like in most developing and developed countries, it still lags behind that of females. In 1992 the life

expectancy for males registered at 68.7 years and in 2000 had remained constant, despite the slight increase between 1996 and 1998(9). Although women outlive men by as many as 5 years, the life expectancy for women declined by as much as a full year between 1992 and 2000. In 1992, female life expectancy at birth was put at 74.6 years compared to 71.1 years for males for the period 2000- 2005.

TABLE: 3 Summary of selected demographic indicators - 2006–2010.

Statistic	2006	2007	2008	2009	2010
Total Live Births	2174	2202	2233	2192	-
Crude birth rate per 1,000 population	12.7	12.8	13.1	12.2	ı
Adolescent birth rate per 1,000	17.4	18.1	16.1	15.7	1
Total fertility rate	14	15	15	15	
Crude death rate per 100,000 population	601.2	559.9	562.4	-	-
Infant mortality rate per 1,000 live births	25.8	15.9	13.9	1	1
Number of deaths among children aged 1–4	7	7	3	-	-
Annual Population Growth	1.3	1.2	1.2	1.2	1.1

Source: Ministry of Health, 2010

Birth weight.

Low birth weight is an important risk factor for under-nutrition. Low birth weight percentage recorded for 2009 was 5.8%. Available data for St. Lucia suggest that less than 10% of infants were below \leq 2500 grams at birth (Table 4).

Table 4: Percentages of Low Birth Weight Babies, 2001–2010

Total births	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total bil tils	2,882	2,688	2,524	2,471	2,220	2,174	2,243	2,265	2,202	1.907
Low birth weight	295	261	259	290	249	248	227	229	240	192
% of total births	10.2	9.7	10.1	11.7	11.2	11.4	9.3	10.1	10.9	10.1

Source: Ministry of Health

Table 5: Birth Weight by Age Group, 2010

	10-19)	20-34		35+		Unkn	own	All age	es.
	No.	%	No.	%	No.	%	No.	%	No.	%
<2500g	37	11.5	123	9.4	32	11.1	-	-	192	10.1
>2500g	284	88.5	1184	90.6	247	88.9	-	-	1715	89.9
Unknown	-	-	-	-	-	-	-	-	-	-
Total	321	100	1307	100	279	100	-	-	1907	100

Source: Ministry of Health

Crude Birth Rate

The crude death rate recorded for 2009 was 5.5. Saint Lucia recorded its lowest crude birth rate in 2010 from 28 per 1,000 live births in 1992 to 11.4 per 1,000 live births in 2010—birth rate among male and female was 11.2 and 11.5 per 1,000 respectively. The number of live births grew by 4.7 percent in 2010 (Table 5 and 6).

Table 6: Crude Birth Rate in Saint Lucia, 2001–2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	157,898	159,133	160,620	162,434	164,791	167,698	171,226	170,33	1 172,370	165,595
population*										
Live Births	2,836	2,646	2,475	2,440	2,187	2,124	2,202	2,233	2,192	1,882
CBR	18.7	16.6	15.4	15.0	13.2	12.7	12.8	13.1	12.7	11.4

^{*}Estimated mid-year population (Source: Saint Lucia Government Statistics Department)

Saint Lucia recorded its lowest crude birth rate in 2010 from 28 per 1,000 live births in 1992 to 11.4 per 1,000 live births in 2010—birth rate among male and female was 11.2 and 11.5 per 1,000 respectively. The number of live births grew by 4.7 percent in 2010. The birth rate in 2012 grew moderately to 12.4 per thousand from 12.0 per thousand in 2011. The number of male births, 1,062, exceeded the number of female births by 21, reflecting a 6.9% increase in male births. However, the number of female births grew by 2.5% to 1,041 in 2012.

The districts of Anse- la -Raye/Canaries had the highest crude birth rate. The regions with the highest crude birth rates were Region 3 (Dennery) followed by Region 6 (Choiseul/Soufriere) with crude birth rates of 15.5 and 10.2 per 1,000.

Table 7: Crude birth rates per 1,000 population by and Regions, 1992, 2009, and 2010

Region	Crude birt	h rate		Percent change		
	1992	2009	2010	1992/2009	2009/2010	
3 – Dennery	30.3	13.3	15.5	-55.4	16.5	
6 - Choiseul/Soufriere	40.9	13.6	10.2	-66.7	25.0	
7 – Anse La Raye/Canaries	76.5	23.8	24.0	-68.8	0.8	
Saint Lucia	27.1	12.2	11.4	-54.9	6.5	

Source: Ministry of Health

In 2009, teen births made up 15.7% of total live births, as compared with 20.0% in 1991, 17.4% in 2006, and 16.1% in 2008. Teenage births also decreased by 58.3% for the period 1992–2010 and also decreased by 6.9% for the period 2009–2010. In 2010, births by teenagers contributed to 16.8% of total births with age group 10–14 years old contributing 2.5% (8) of the total (321) teenage births.

In 2010, there was a decrease of 13.4% in live births when compared to 2009. This decreasing trend has been constant since 1992 and a total reduction of 49.1% has been noted from 3,750 in 1992. The proportion of births to women in their thirties has remained constant from 29.6%, in 2001 to 32.4%, 28.3% in 2007. The proportion of births to women in their twenties ranged from approximately 47.5%, in 2001 to 51.0% in 2010.

Trends in Mortality

Analysis for the years 1985, 1990, 1995 and 2000 show non communicable diseases (NCDs) were the commonest cause of death over the period, with heart diseases, cancers, cerebro-vascular diseases, and diabetes mellitus constituting four leading causes of deaths. There was a decrease in mortality rates from 1998-2002.

The crude death rate as well as the total number of deaths decreased to their lowest values in 2000. Between 1998 and 2002, the number of deaths decreased by 2.3% from 962 in 1998 to 940 in 2002; and by 5.6% from 993 in 2001. The number of deaths declined by 6.2% during the period 2012. The trend of higher male to female deaths continued in 2012, with the number of male deaths exceeding female deaths by 118. Nonetheless female deaths contracted by 7.6% as compared to 5.1% reduction in male deaths. An analysis of hospital data for the period 2007–2009 showed that diabetes and hypertension accounted for 27% of all admissions. Of those admissions, hypertension accounted for 50% (2,868 total; males, 1,122; females, 1,746), diabetes for 27% (1,564 total; males, 596; females, 968), and co-morbid diabetes and hypertension for 23% (1,275 total; males, 503; females, 772). Prevalence data for 2009 showed a rate of 26% for hypertensive conditions and 8% for diabetes.

Table 8: Ten Leading Causes of Death in Saint Lucia: 2009 - 2011

Rank	2009	2010	2011
1	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms
2	Cerebrovascular Diseases	Heart Disease	Diabetes Mellitus
3	Diabetes Mellitus	Diabetes Mellitus	Heart Diseases
4	Heart Diseases	Hypertensive Diseases	Cerebro-vascular Diseases
5	Hypertensive Diseases	Cerebrovascular Diseases	Hypertensive Diseases
6	Assault	Chronic lower Respiratory Diseases	Assault
7	Peri-natal causes	Assault	Peri-natal causes
8	Motor Vehicular Accident	Peri-natal causes	Motor Vehicular Accident
9	Chronic Lower Respiratory	Diseases of the Liver	Chronic lower Respiratory
	Diseases		Diseases
10	Influenza	Congenital Anomalies	Diseases of the Liver

Source: Health Information Division, Ministry of Health

Infant Mortality

Over the past 50 years, there has been tremendous improvement in infant mortality rate in Saint Lucia. From highs of 114 per thousand in the mid-1950, the infant mortality rate reached a low of 13.1 per thousand. The infant mortality rate has remained below the target of 30 per 1,000). Neonatal deaths represented 85% and 80% of all infant deaths in 2001 and 2002 respectively, decreasing by 4.3%. Between 1992 and 2000, the infant mortality rate fell by as much as 40% from 23 per 1000 births to a level of 13.4 per 1000. In 2000 the reported under-5 mortality rate for the country was 18.6 per 1000. Infant mortality rate per thousand live births for 2010 was 14.50, a slight decrease from 15.67 recorded in 2009. Infant deaths contributed 4.8% (fifty) of total deaths (1025) in 2006 with 2007 and 2008 recording 952 and 1039 respectively. The infant mortality rate (IMR) for 2006, 2007 and 2008 were calculated to be 23.5, 18.6 and 14.3 per 1,000 live births - an increase of 31.3% and 3.9% in 2006 and 2007 over the IMR rate in 1991 (17.9 per 1,000), and a decrease of 20.1% in 2008 over the IMR in 1991 rate. In 2012 the infant mortality rate increased by 0.5% to 20.2 per thousand.

Vaccination coverage among the under–1 population was 95.8% for the measles/mumps/rubella vaccine, 97.1% for BCG, 96.6% for the poliomyelitis vaccine, and 96.6% for the DPT/hepatitis B and HIV vaccines. Among children under 5, there were 63 deaths in 2006 (males, 33, and females, 30), 42 in 2007 (males, 25, and females, 17), and 34 in 2008 (males, 26, and females, 8). The three leading causes were respiratory disorders specific to the peri-natal period (34 deaths, 24.4%), with other conditions originating in the peri-natal period (28 deaths, 20.1%), and bacterial sepsis (10 deaths, 7.1%). Three of these deaths were of males in the 1–4 age groups, one each from pulmonary heart disease, intestinal infection, and a disease of the nervous system.

Children and Adolescents Mortality (5-19 years old)

In 2008 there were 18 deaths (16 males and 2 females) in the 10–19 age group; the causes of death were: land transport accidents, 8; drowning, 2; homicide, 2; meningitis, 2; carcinoma in situ, 2; diseases of the nervous system, 2; and 1 from an unspecified cause

Adults Mortality (20–59 years old)

In Saint Lucia, in 2010, there were ten thousand, seven hundred and six (10,706) recorded levels of people living with diabetes and hypertension. In 2011, this number increased to 11,129, an increase of 3.95%.

The Elderly Mortality (60 years old and older)

Deaths in this age group totaled 657 in 2008-331 males (50.3%) and 326 females (49.7%). Among males the leading causes were malignant neoplasms (81 deaths, 11.2 per 1,000 population), heart diseases (76, 10.5), and cerebrovascular diseases (34, 4.7). Among females the leading causes were heart diseases (95 deaths, 10.9 per 1,000 population), cerebro-vascular diseases (58, 6.7), and malignant neoplasms (55, 6.3).

Morbidity

Coding, tabulating, and dissemination of morbidity data from both the hospital and primary care institutions remained a challenge for Saint Lucia during the reporting period. Syndromic surveillance of childhood morbidity showed that gastroenteritis, undifferentiated fever, and respiratory. Admission records from two public–sector hospitals showed that non communicable diseases accounted for approximately 29.4% of admissions annually from 2007 to 2009.

Population Health and HIV/AIDS

The Ministry of Health has developed a new strategic plan for 2011–2014, with a renewed emphasis on decreasing the spread of HIV and mitigating the impact of HIV and AIDS on the population by focusing on three vulnerable groups: men who have sex with men, sex workers, and pregnant women. Under this policy 'Services shall be affordable and accessible to all people, regardless of their geographical location, economic status, gender, race, social condition, mental or physical disability, sexual orientation, religion, HIV/AIDS and health status'.

Between 2006 and 2010 Saint Lucia recorded 256 new cases of HIV infection-126 in males, 104 in females, and 26 in persons of unknown sex. The age group 25–49 was most affected, with 158 cases (males, 91 and females, 67). According to the country report submitted to the Special Session of the United Nations General Assembly on HIV/AIDS (UNGASS) in 2008, heterosexual transmission accounted for 44% of cases, sexual relations between men for 4%, and mother—to—child transmission for 3%. The mode of transmission was unknown in 50% of cases. There were 29 deaths from AIDS (21 of males and 8 of females) during the period 2006–2010. The number of new HIV cases moved from 63 in 2011 to 58 in 2012. Similarly, the number of new AIDS cases declined by 28.6% to 25 with a significant reduction in the number of

AIDS deaths of 60% to 10 persons in 2012. This decline is primarily attributed to widespread testing, more specifically in communities and government commitment to funding of social support to HIV patients.

Women and HIV/AIDS

The National AIDS Program Secretariat (NAPS) is responsible for the management of HIV/AIDS. Antenatal women testing for VDRL surveillance indicates that 14 of the 647 women tested were positive for HIV. In 2003, 12 women of child-bearing age (15-44) were HIV positive and 9 were AIDS positive indicating a rate of less than 0.5/1000 women of child-bearing age. There were two reported cases of HIV/AIDS—mother to child transmission in 2002. In 2001, there were four (4) reported deliveries of live born infants whose mothers were infected with the HIV virus and one (1) mother who had developed AIDS who subsequently died in 2001. Two were of the age group 35–39 years; the other two were between 25–29 years.

Health Service Coverage

Vaccination Coverage

Coverage among children aged one year with three doses of diphtheria, tetanus, toxoid and pertussis (DPT3) moved from 110.0 percent in 2011 to 96.0 percent in 2012. Similarly immunization coverage for three doses of Hepatitis B (HepB3) for children aged one fell to 96.0 percent from 110.0 percent in 2011.

School-aged Children

There is no established surveillance program for monitoring the health and nutritional status of school- aged children. The Child Vulnerability Study was conducted by UNICEF during 2005 revealed more than half the household population selected were "at risk" with vulnerably to poverty and chronic disease of a parent. During a nation-wide 2006/2007 study to assess the prevalence of overweight, obesity and underweight among 5-year-old children (n= 425) in Saint Lucia revealed overweight and obesity rates were high: 14.4% and 9.2% (WHO); 11.3% and 12.0% (CDC); and 9.9% and 7.1% (Cole et al.), respectively. Underweight estimates also varied: 4.7% (WHO); 11.3% (CDC) and 6.6% (Cole et al.). Obesity in the young subsample (15.2%; WHO) was more than 3 times the adjusted 1976 rate (4.3%). Prevalence of overweight, obesity and underweight were estimated by Centers for Disease Control (CDC), Cole et al. and new World Health Organization (WHO) methods.(Gardner et al.)

Breastfeeding

Information on the prevalence of breastfeeding is limited, but there are indications that initiation rates are high, followed by early weaning/supplementation within the first 2-3 months of life.

3.3.3 EDUCATION

The established education system in Saint Lucia provides education opportunities ranging from preschool to secondary and tertiary levels. The introduction of Universal Secondary Education (USE) in (2006/7) had as its goal to provide secondary school access to all students, to improve better health, higher wages and increased stability. There has been a consistent 100% transition rate from primary to secondary school following the Grade 6 National Assessment (Common Entrance). According to a national literacy survey (1990), 63% of the 15 to 24 age cohort attained a primary or incomplete secondary education. The national population recorded a 35.5% literary within that same cohort.

The objective of the Saint Lucia Education Act (1997) is to provide compulsory education for all students up to 16 years. Ministry of Education (MOE), has primary responsibility for the country's educational policies and programs The

Education Sector, is under the management of the Chief Education Officer (CEO). The system is organized into four principal levels: pre-schools, primary, secondary and tertiary education.

Early Childhood Education

There is an Early Childhood Education Care and Development program with organized educational activities for young children aged, 3 to 5 years. The Act makes provisions for different categories of schools, including all-age Primary to fit into the existing complex operating structure for basic education. Saint Lucia has already achieved both universal primary education and universal secondary. UNICEF supported a number of innovative developmental programs of a child-friendly school approach with an emphasis on alternative disciplinary practices in Saint Lucia.

The child to caregiver ratio for day-care centers and pre-school centers remained unchanged at 1:9 and 1:10 respectively, in keeping with the trend for the past six years. Pre-school education is voluntary. An estimated 91% of children participate in some pre-school program, (1-4 years) all of which are privately financed and delivered. Students commence their compulsory education cycle at around 5 years of age at the primary level, which is organized into two phases: an 'Infant' program comprising three grades 1 to 3 which most children complete in three years, followed by a four-year 'primary' education, comprising grades 4 to 7.

Public Primary and Secondary Education

The student population enrolled at primary schools has declined steadily for the past 15 years as the intake of students continues to be less than the numbers graduating from primary schools. Presently, there are eight education districts. The church plays a significant role in education.

Standardized/reliable standards exist to measure the quality of primary education, and uses Minimum Standards or benchmarks as a means of quality control. Two national examinations are written at the primary school level annually; the Minimum Standards Test (MST) in Grades 2 and 4 and the Common Entrance Examination (CEE) in Grade 6. Total student enrolment in 2011/12 declined by 3.9% to 17,276, representing a 36.6% decline from the academic year 1997/98. Of the 75 public primary schools on island, 71 schools are operating at surplus capacity ranging from 88.4 % to 1.6% with 41 schools operating at above 40% of surplus capacity. In 2012, 2,423 candidates (55% of total candidates) scored at or above the minimum standard of 60% at the Grade 2 level while 1,643 or 65% of the Grade 4 students scored at or above the minimum standard of 60%. The national mean performances for all examinations declined in 2012.

Table 9: National Mean Performances in Primary Level Examinations

M	lathematic	Englis	h Languag	je			
		Te	st/Subject	t			
2010	2011	2012	-	2010	2011	2012	
MST (Grade 2)	59.9%	57.7%	48.1%		59.7%	64.6%	62.6%
MST (Grade 4)	53.4%	57.7%	56.6%		52.3%	55.7%	54.4%
CEE (Grade 6)	59.4%	60.9%	60.1%		58.0%	58.2%	55.5%

Source: Social and Economic Review 2012

Secondary School Education

Students who obtain the best scores on the Common Entrance Examination taken at the end of Grade 7 are assigned to secondary schools where they pursue a five-year course of study, organized into Forms 1-5. Upon completion of Form 5, those who perform well enough in the Caribbean Examination Council (CXC) or General Certificate Examination (GCE) have the option of moving into tertiary education, the remainder might join the labor market. The number of secondary schools remains unchanged in 2011/12 at 23 albeit an increase in surplus capacity by 8.5% to 11.2% due mainly to a

5.7% decline in enrolment from by 2.8% to 14,381 students. Dropout rate was higher in males (66%) and predominant mainly in Forms 4 and 5 (78% of total dropouts).

Post-Secondary Education

The Sir Arthur Lewis Community College (SALCC) is the primary tertiary education institution. Within SALCC, courses are distributed across five units – the Departments of Nursing, Education and Midwifery, and of Continuing Education, and the Divisions of Arts, Sciences and General Studies, of technical Education and Management Studies, and of Teachers Education and Education Administration (DTEAA). Those students wishing to pursue more advanced studies attend overseas institutes, colleges and universities. Saint Lucia is part of the open Campus of the University of the West Indies. Total enrolment at the Sir Arthur Lewis Community College (SALCC) fell by 9.9% to 3,164 in 2011/12. The Post-Secondary Department of the Vieux Fort Comprehensive School recorded an 11.8% increase in total enrolment to 321 students compared to last year.

Special Education

The total enrolment at the five Special Education Centers increased by 18.8% to 360 in 2011/12, compared to the previous year with female students accounting for 41% of total enrolment.

Teacher Training

The Teacher Training Division of the Sir Arthur Lewis Community College undertakes teacher training at the local level. More female teachers are employed in the primary schools. The number of primary school teachers decreased from 998 to 989 in 2011/12 with the profession being dominated by 86% female teachers. The number of secondary school teachers increased from 963 to 968 in 2011/12. 65% were trained, while 62% of which were graduate teachers.

Government Financed Skills Training Programs

In 2011/2012, the average number of learners enrolled with NELP increased by 29.3% to 1,616 spread over sixteen centers. Trainees participating in this program are predominantly female and accounted for 73% of the learners. In the academic year 2011/12, 38.9% of the trainees did courses in CXC Mathematics and English, whilst 23.5% pursued courses in Basic Literacy.

Other Government financed skills training programs are administered through the National Skills Development Centre (NSDC). In 2011/12, the number of trainees enrolled in various areas of training under the Special Framework of Assistance (2004) Program increased by 14.8% to 629 due to the provision of the program at the Patience and Choiseul Training Centers, in addition to the Bisee Training Centre. In 2011/12, a total of 252 and 139 students were enrolled at the NSDC under the Caribbean Youth Empowerment Project and OECS Skills for Inclusive Growth Project, respectively. A total of 629 students graduated from the NSDC in the year under review, 72.5% of which were female. Total enrolment at the CARE Centers (Centre for Adolescent Renewal and Education) declined marginally by 1.9% to 156 in 2011/2012.

3.3.4 Poverty Indicators

Age Distribution/Poverty

The last Poverty Assessment (2005/6) carried out in St. Lucia indicated that 28.8% of the population was classified as poor, and 1.6% was considered indigent⁴. The poverty line was estimated at US\$ 5.22 per day or US\$ 1,904.37 per year, while indigence was estimated at US\$1.27 per day or US\$588.02 per year. Children aged 0-14 represents 39% of all poor persons, while the elderly aged 65 years and above, stood at 7 percent of the total poor population. Persons living below

⁴ This of course was before the 2008 spike in food prices.

the poverty line are disproportionately young. Children aged 0-14 represented 39% of all poor persons, while the elderly aged 65 years and above, represented 7% of the poor population.

Table 10: Distribution Poor Population by Age Groups

Age	% Poor Population
0-4	8.0
5-9	14.0
10-14	17.0
20-24	8.0
25-64	35.0

Source: Caribbean Development Bank (2006)

Table 24 reveals the levels of vulnerabilities that existed among the population between 1995 and 2005.

Table 11: Indigence inequality and Poverty 1995 / 2005/06(%)

Indicator%	1995	2005/06
Poor Households	18.7	21.4
Poor population	25.1	28.8
Indigent Households	5.3	1.2
Indigent Population	7.1	1.6
Gini Coefficient	0.5	0.42

Source: Survey of Living Conditions 1995/2006

Indigence fell substantially from 7.1% to 1.6% over the same period. The indigent are persons whose daily average consumption is too low to guarantee adequate nutrition to maintain good bodily health. This section of the report provides estimates of the poverty in St. Lucia in 2005/06 and is derived from the Survey of Living Conditions (SLC)/Household Budgetary Survey (HBS). In 2005/2006 the data revealed that 28.8% of the population of St. Lucia fell below the poverty line.

The Gini coefficient was 0.42 in 2006, down from 0.5 in 1995, indicating a slight reduction in financial inequalities in the country. The poverty line, as has been outlined above, provides a measure of the value of a lowest cost basket of goods that provide the minimum number of kilocalories needed for proper functioning by human beings on a daily basis. The Government of Saint Lucia has established a Basket of Essential Goods of key household necessities, the prices of which are strictly monitored by the Consumer Affairs Division. The Customs Service Tax has also been reduced on all items in the Basket. A value-added tax was introduced in 2012, but a set of essential commodities, including food items, have been 'zero-rated'.

High food prices and changing levels of poverty restrict access to food. The Definition of Poverty refers to a deficiency of resources while indigence refers to members of a household or an individual threatened with ill-health and even death. Poverty was more pronounced in the rural areas than in the urban. In the lowest expenditure quintile, 75.9% lived in rural areas, as compared to a population average of 64.3%.

High food prices and changes in global economy also have particularly adverse effects on the poor and indigent and food accounts for an unbalanced amount of expenditure (40%). The standard of living within Saint Lucian households

improved steadily over the ten years since 2001. Many more households, across the island, attained access to the basic amenities required to alleviate situations of poverty. Head Count shows the proportion of the population with a standard of living below the poverty line. Although there is a set basket of foods to guide the establishment of a minimum wage, households continue to experience difficulties in accessing food for a nutritional support.

Five of ten districts in Saint Lucia (Anse-le Raye (44.9%), Micoud (43.6%), and Choiseul 38.4%), Soufriere (42.4 %), and Laborie (42.1%) have exhibited prevalence rates for poverty in excess of 35%. It must be noted that Anse-la-Raye and Micoud recorded the highest rates of poverty, at 5.3% and 4.1%, respectively. Four (4) districts were described as the "most indigent communities". Micoud had the highest concentration of indigence (27.4%) and the second highest concentration of the non-indigent poor (15.9%). High concentrations of indigence exist in Vieux Fort (25.6%) and in Anse La Raye (20.4%).

Table 12: Head Count, Poverty Gap, Poverty Severity by District.

District	Population	Percentage	Percentage	Poverty Gap	Poverty
		Poor	Indigent		Severity
Castries City	16,594	13.1	1.7	3.4	1.8
Castries Sub-Urban	51,100	22.2	0.6	6.7	2.9
Anse-La-Raye/Canaries	10,287	44.9	5.3	17.7	9.6
Soufriere	9,329	42.5	0.4	12.4	4.8
Choiseul	5,401	38.4		9.7	3.8
Laborie	7,190	42.1		10.6	3.5
Vieux Fort	14,096	23.1	4.8	10.2	5.9
Micoud	18,071	43.6	4.0	14.1	6.8
Dennery	11,986	34.2		11.4	5.2
Gros Islet	20,787	24.4	0.4	5.8	2.2

Source: Caribbean Development Bank (2006)

Elderly

Older persons are particularly affected by poverty, and the status of the elderly is a growing concern for the Government of Saint Lucia. The proportion of older persons is growing. The elderly aged 65 years and above, stood at 7% of the total poor population.

3.4 Food Availability

3.4.1 Domestic Food Production

Despite changes in the EU import preferences and increased competition from Latin American markets, agriculture remains a pivotal anchor of the economy. In 2012, the agriculture sector registered strong growth of 8.4%, following hurricane Tomas recovery in the banana industry and other crops.

Agriculture
Real Growth and Contribution to GDP

40%

20%

10%

10%

Real GDP Growth

Share of GDP

Fig.3 Agriculture Real Growth and Contribution to GDP

Source: Social and Economic Review 2012

The following table (Table 13) gives an indication of the importance of the various sub-sectors to the GVA.

Table 13: Contribution of Agriculture to GVA at Constant Prices (2007-2012)

Sub-sector	2007	2008	2009	2010	2011	2012
Agriculture, Livestock, Forestry, Fishing	88.47	113.27	109.13	85.81	74.57	80.74
Bananas	38.80	56.81	52.29	27.92	14.53	22.19
Other crops	23.20	27.31	27.09	28.02	29.64	28.94
Livestock	8.12	8.75	8.96	9.22	9.35	8.70
Forestry	1.07	1.04	1.00	0.98	0.94	0.77
Fishing	17.28	19.36	19.79	19.66	20.06	20.14

Source: Government Statistics Department -St. Lucia

In 2001-2011 top three crops grown in Saint Lucia were banana, coconut and fresh fruit. While bananas has remained the leading crop of production for decades, fresh fruit production has remained at a constant low well below 5,000 tons throughout each year.

Table 14: Production Top Three Crops (2001-2011)

Year	Bananas	Coconuts	Tropical Fruits
2001	50,000	12,500	2,092
2002	65,000	13,200	1,839
2003	50,000	14,000	2,334
2004	45,726	13,000	2,317
2005	32,752	10,000	1,966
2006	36,909	14,000	3,150
2007	32,389	13,827	3,363

Food and Nutrition Security Policy for Saint Lucia 2013

2008	43,787	15,000	3,200
2009	39,726	12,087	2,901
2010	21,702	13,951	3,229
2011	23,810	14,938	3,403

Source: FAO www.fao.org 2011

Agricultural production has been altered by the effects of global climate change and other environmental events. The number of persons employed in the sector however declined from 7,684 to 7,451 in 2012. Although agriculture has been a major contributor to the economy, it has also historically been one of the most severely impacted sectors by disasters. Response and recovery interventions have always been minimal. In recent times, Saint Lucian farmers have been challenged by more hurricanes, droughts, flooding, major landslides and other invasive species. In 2008 Hurricane Dean destroyed almost 75-80% of banana holdings in St Lucia. The island realized a further reduction in the contribution of agriculture to the national economy following the passage of Hurricane Tomas in 2008.

Table: 15 Banana Productions (tons) (2007-2011)

Year	2007	2008	2009	2010	2011
Total	32,389	43,798	39,726	21,702	23,810

Source: FAO www.fao.org 2011

Many small farmers engage in a type of farm and uncompetitive primary crop production, on lands of varying soil types and topography prone to erosion by soil run-off. Average farm size is estimated at 3 acres. While smallholder productivity is crucial to the nation's food security, smallholder farmers dominate agricultural activity. The island's agricultural sector has depended on a traditional system of production with low use of modern technologies. Poor irrigation practices have a direct bearing on agricultural output, and limits food availability.

Family help is common on most farms, and labor or farm help employed is low skilled. The majority of farmers maintain the tradition of banana production mainly for export. This form of monoculture is in a large part responsible for both the sustained increases in the country's food import bill, and increased vulnerability to national and household food and nutrition insecurity. The influence of high global food prices and estimated low food production in Saint Lucia has caused an upward pressure on food prices in the country.

Through an agreement known as the Lome Convention of 1975 allowed both large and small scale farmers the opportunity to contribute to the region's banana export market for the United Kingdom. Notwithstanding a decade of declining productivity, Saint Lucia continues to maintain a leading position as the island with the highest productivity in the Windward Islands. Contribution of bananas to employment and foreign exchange during the 1980's and 1990's was significant. On a weekly basis export to the United Kingdom accounted for about \$750,000. During the period following (1990-2000), prices for bananas on the world market plunged, with banana revenues declining at an annual average rate of 11%, with the unit value of production falling at a rate of 4% per annum. Between 1992 and 2008, annual export volumes of bananas fell, and the number of banana farmers was reduced from 10,000 to around 1,500.

Saint Lucia's Banana Exports to the UK 80,000 100 90 70,000 80 60,000 70 50,000 60 50 J 40 S 30 J 40,000 30.000 20.000 20 10.000 10

Fig. 4 Saint Lucia Banana Exports to UK

Source: Social and Economic Review 2012

In 1999-2001, Saint Lucia still claimed a 58% share of total Windward Island production. In 2009 in both the Mabouya and Roseau valleys, poor weather conditions caused the proliferation of the leaf spot disease leading to even more losses in production to farmers and further declines of 24% and 21.2% respectively in exports to The United Kingdom. While declines were observed throughout the Windward Islands, Saint Lucia managed to remain the largest contributor of 71 percent of total production. Figure 4 shows trends for the period 2000-2012.

In 2011 total production of bananas stood at 23,810 tons compared to a total of 43,798 tons in 2009 following banana re-habilitation as a result of hurricane Dean in 2006. Production in the banana industry fell markedly post Hurricane Tomas, owing to widespread field infestation of Black Sigatoka (*Mycosphaerella fijiensis*) infestation which may proliferate throughout the decade if the fungal disease is not effectively controlled. Plants with leaves damaged by the disease may have up to 50% lower fruit yield.

Banana exports to Barbados & Trinidad and Tobago rose by 21.4% to 4,047.0 tons in 2011. This led to higher export earnings from the region by 19.8% to \$4.0 million. In 2011, domestic purchases of bananas increased by 11.4% to 1,173.5 million tons, valued at \$3.0 million in 2011. Of this amount, sales to supermarkets grew by 12.4% to 944.0 tons while hotel sales rose by 8.4% to 229.8 tons.

As early as 1993, new challenges of trade arrangements, forced further deterioration in banana production in St. Lucia. Of significance were the declines in the number and area of agricultural holdings and subsequent market share, as a result of the loss of preferential access to the European Market. 1996, following a joint undertaking between the governments of the Windward Islands, the Windward Island Banana Development Company (WIBDECO) acquired the banana operations of Geest Industries (with a turnover of US\$ 300 million) in partnership with the Irish-based Fyffes, to assume responsibility for marketing of the region's bananas. WIBDECO was streamlined for effectiveness and efficiency in preparation for the tariff-only system in 2008. The local banana industry was privatized, and, a number of private banana companies were formed to encourage mass production of bananas for export. Access to and certification by Fair-trade markets has facilitated export of the bananas. Most of the bananas exported by this arrangement go to the European Community (EC).

Following the WTO 1995 ruling, born out of the 1974 General Agreement on Tariffs and Trade (GATT) St. Lucia became a member of the WTO, and has a multilateral economic agreement with the European Union. Many changes in European Community (EC) trade policies were brought about by WTO rules and regulations which hindered the future growth of

the banana industry. High-cost production and the scale of farm holdings in Saint Lucia coupled with the larger Latin American producers (about 60%) on the market, and lower UK retail prices, Saint Lucia's market share has dwindled significantly making the potential for productivity gains from economies of scale almost unreal.

WTO/SPS measures are important for the protection of human, animal, or plant life or health. Like many developing countries, Saint Lucia's SPS standards, laws and institutions still need to be strengthened in order to comply with the WTO's SPS Agreement to benefit more farmers.

As more and more consumers in the major importing countries demand better quality assurance, local farmers face greater competition. Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF) received technical assistance from the European Union (EU) under the Special Framework of Assistance (SFA 2002) for:

- ✓ Upgrading legislation
- ✓ Developing human resources
- ✓ Providing of equipment for laboratories
- ✓ Reorganizing and strengthening of institutions

Notwithstanding those bottlenecks, banana cultivation in Saint Lucia is still the most important activity in the agricultural sector. In 2009 even when total domestic export stood at approximately EC\$187 million, total agricultural exports registered at EC\$70 million, with banana exports at 84% of total agricultural exports. Compared to the years 2005-2008 the banana sector experienced a 3.54% growth in performance.

Non Banana Crops

In 2011 production of non-banana crops, as measured by exports and domestic sales to hotels and supermarkets, was estimated to have increased by 2.4 % to 8,790.5 tons. Plantain, accounts for a significant share of non-banana crops and was affected by Black Sigotoka infestation led to reduced output. The post-Tomas vegetable crop rehabilitation program, the Consolidated Foods Limited (CFL) Farmer partnership for marketing and Certification Program and consumer demand for non-banana crops, supermarket purchases, which accounted for 67.1 5% of domestic purchases, grew by 31.9% to 2,806.8 tons.

Similarly, revenue earned from supermarket purchases rose to \$9.0 million in 2011, compared with \$7.5 million the year before. Supermarket purchases of bananas grew by 2.2 percent to 963 tons in 2012 while the revenue generated increased by 5.5% to \$2.0 million. Recorded hotel purchases show a 14.5 % expansion to 990.2 tons, increasing revenue by 17.2 % to \$4.9 million. In 2011 exports of non-traditional crops fell by 10.7 % moving export earnings from \$8.4M to \$5.5M.

Table 16: Food Balance Sheet Data for Saint Lucia 2009

Product	Production 1000	Import 1000	Export 1000	Feed/ Seed	Other net uses	Food
Category	tons	tons	tons	1000 tons		consumption
						1000 tons
Starchy roots	4.00	2.00	0.00	1.00	0.00	5.00
Bananas	40.00	0.00	37.00	0.00	0.00	3.00
Peas beans	0.00	1.00	0.00	0.00	0.00	1.00

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Nuts	0.00	2.00	0.00	0.00	0.00	2.00
Vegetables	3.00	4.00	0.00	0.00	0.00	6.00
Fruits	50.00	10.00	37.00	1.00	1.00	19.00
Spices	0.00	0.00	0.00	0.00	0.00	0.00
Meats	4.00	13.00	0.00	0.00	0.00	17.00
Milk	11.0	14.0	0.00	0.00	0.00	15.0
Fish	2.00	4.00	0.00	0.00	0.00	6.00
Cereal	0.00	24	0.00	0.00	0.00	0.00
Oil crops	12	1	0.00	0.00	0.00	1
Eggs	1	0.00	1	0.00	2	19

Source FAO www.fao.org. 2011

Livestock Sub-sector

According to the 2011 Social and Economic Review, value added in the sub-sector is estimated to have declined by 5.2% in 2011. Preliminary estimates show a contraction of 7% in the livestock sub-sector in 2012. Though the livestock industry has shown steady growth over the years, the cost of animal feeds and other over-heads continue to make it difficult to meet the demands of the retail market. All feeds are imported. According to the 2009 Saint Lucia Agricultural Census, the livestock sub-sector contributed about 0.7% to GDP.

Chicken production increased by 2.9% to 1,449 tons attributable to the establishment of an additional processing plant as well as improved organization by broiler producers. During the year, the government guaranteed market share for local poultry increased to 25% in October from 20% and this is expected to impact positively on output in 2013. Poultry production forms a significant part of the sub-sector and local production meets the domestic demand for eggs. Broiler production is relatively small. Birds are fed with imported feed which is costly. Chicken, pig meat and eggs are the three top livestock commodities produced in Saint Lucia.

Chicken production fell by 0.2% Chicken production to 1,392.5 tons in 2011, valued at \$16.3 million but notwithstanding these subsidies, the retail price of egg increased to \$7.50 per dozen from \$7.00 at the supermarkets in 2012. Saint Lucia is self-sufficient in egg production. All necessary support that the industry requires is given to the industry so as to keep the industry operating at a profit to the farmer as well as to provide a top product to the Saint Lucian public. Owing to increases in the laying brood, egg production grew noticeably by 9.6% to 1.3 million dozens, resulting in double-digit growth in earnings to \$7.6 million. Despite the soaring cost of feed, the price of eggs remained unchanged during 2011 at \$6.50 per dozen. Egg production declined by 7.0 percent to 1.17 million dozens in 2012.

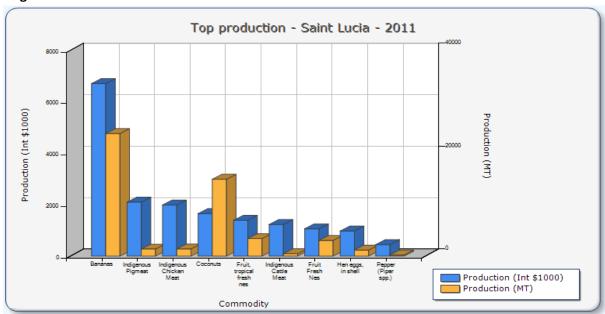


Fig 5: Food Production-2011

Source: FAOSTAT 2012

Chicken imports increased by 2.2% in 2009, turkey imports decreased by 11.1% (168 tons) and importation of whole chicken decreased by 1 ton. Egg production declined by 7.0 percent to 1.17 million dozens.

Table: 17: Production (tons) of Livestock (2007–2011)

Livestock	2007	2008	2009	2010	2011
Chicken meat	761.5	820.3	1006.6	1560	1560
Pig meat	1,311	1,368	1,368	1,368	1368
Hen eggs	22,000	24,000	24,000	23,000	23,000

Source: FAO www.fao.org. 2011

Pork production provides a significant income to a number of rural households. Producers experienced an increase of 8.5% in 2009. This increase in value was 11.4% (1.8 million). The last two quarters of 2009 saw almost a doubling of production equal to 52.81 and 42.35 tons respectively over the first two quarters of 2009. Pork production fell by 18.6% to 172.7 tons in 2011.

A number of factors influence the retail price of pork in Saint Lucia. According to a report of the Consumer Affairs Department (2010) the cost of storage is a key factor influencing the price at which pork is retailed to the consumer and saw retail prices varying between geographic locations. The Ministry of Agriculture, Fisheries and Lands has implemented a domestic policy to ensure the survival of the local pork industry, that requires an importer's total supply of pork must consist of forty percent (40%) of local pork for purchases. The Government of Saint Lucia has imposed import requirements in order to protect local production of pork and poultry.

A Pig Farmers Cooperative Society exists. In 2011, The Government of Saint Lucia provided support in the amount of EC \$150,000.00 to the St Lucia Pig Farmers Cooperative Society Ltd. to settle an outstanding loan commitment, to assist in

bulk purchasing of feed for retail to farmers, and enable the Cooperative to make early payments to farmers who sell pork to local dealers.

At present, Saint Lucia is not self-sufficient in beef production mainly because of inefficient animal husbandry techniques and the lack of pasture lands for the required amount of animals to graze. Beef cattle production is predominantly small scale and cash derived from the sale of meat augments family income usually at special times of the year. Approximately 446 tons of beef were produced between 2006-1011. Small ruminant production is subject to the same constraints as beef production. Poor animal husbandry, low quality pasture grasses to feed on, the high cost of imported food supplements etc. plague the industry

At present traditional production methods of production exist. There is no feed mill in Saint Lucia and raw ingredients to make feed such as corn is not grown locally, as a result, producers have no other alternative but to pay for imported feed. The price of feed continued to increase, reaching \$48.00 per 50 pound bag at the end of the year compared to \$40.00 in December 2011. In 2012, in response to the rising prices, the government subsidized the price of feed purchased by farmers in the last quarter by \$5.00, costing approximately \$0.5million.

Crop Diversification

Since the last census in 2006, the agricultural sector has experienced changes that have impacted the national economy in a number of ways. International market forces that ended protection for Windward Island bananas to Europe, plus the effects of extreme weather conditions, forced small farmers to diversify out of bananas into food crops. Limitations of the plant propagation system results in the inability of farmers to respond to market demand for tree-crop products. To a large extent, farm holdings on sloping lands, present peculiar technological and environmental challenges.

In 1983 the Government of Saint Lucia prioritized the need for agricultural diversification to reduce the country's dependency on banana exports by securing a US\$8M grant from United States Agency for International Development to encourage farmers in the practice of crop diversification, by taking steps to secure land title for a majority of farmers.

Given the seasonality in production, crops vary in availability. The marketing system that exists needs to be strengthened. The inadequacy of post harvesting product and quality assurance facilities, coupled with the underexploited potential for value-added products are all factors that have put farmers at a disadvantage. The paucity of trained food technology personnel and the absence of product development capabilities limit the range of products that can be developed. Inadequate systems of grades and standards, lack of storage facilities and costly transportation for domestic and export markets make it difficult for farmers to sell their perishable produce in a timely manner. For example, tree crop agriculture, one of the areas of diversification in St. Lucia - requires stringent laws and their strict enforcement to deal with the problem of praedial larceny. This is quite apart from the 'tech packs' that are necessary to assist farmers in other areas of agriculture that are different from bananas and require different technical regimes for production. In addition, there is the challenge of consolidation of acreages against the backdrop of inheritance rules that contribute to fragmentation.

The unavailability of planting material for the sustainable production of root crops resulted in shortages for local consumption and exports. To increase the availability of root crop planting material a project was initiated by CARDI, MALFF and IICA under the IICA/CARDI agreement to establish a system at its DTC with 0.25 hectares of cash-crop saplings to encourage small farmers in growing crops of yams, dasheen, tannia, sweet potato and cassava.

In 2008 the Ministry of Agriculture with assistance from the Taiwanese Mission continued its diversification thrust in the non-banana sector and in so doing, provided assistance to farmers in vegetable production. It is expected that these efforts will reduce imports through improved vegetable production systems. So far 37 greenhouses have been installed and 35 farmers have been trained in crop management

World Bank Report (2010) indicates value added (% of GDP) in St Lucia for Agriculture declined from 5.94% in 2002 to 3.43% in 2007, to 3.24% in 2010. Social and Economic review 2011 also showed that output in the agriculture sector declined for the third consecutive year, resulting in a contraction of 6.5% in its value-added in 2011. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs.

Fisheries Sub-sector

Information for the fisheries sub-sector is derived from the FAO document repository and the Fisheries Department of the Ministry of Agriculture. The Fisheries Act, No. 10 of 1984, and the Fisheries Regulations, SI No. 9 of 1994, form the basis of laws related to fisheries development and management.

Relevant Fishery Legislation

- Maritime Areas Act (1984)
- Public Health Act (1975)
- Solid Waste Management Authority Act (1996).
- Wildlife Conservation Act (1980)

- Land Development Control Act (1971)
- National Conservation Act (1999)
- Physical Planning /Development Act No. 29/ 2001

The Department of Fisheries of the Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF) in collaboration with the marine police unit and the district police of the Royal Saint Lucia police force is the public agency responsible for aquaculture policy making and for the coordination of all planning and development efforts directed towards the sector. In 2009, the fisheries sub-sector contributed 1% to GDP. Fish landings were 1,857 tons valued at US\$24.1 million. In 2008 there was a growth of 12.3% while in 2009 the sector expanded further by 9.6%, due to deployment of fish-aggregating devices.

Table: 18 Fish Landings and Quantity (MT) 2005-2009

Year	Tuna	Dolphin	King Fish	Flying Fish	Shark/ Black Fish	Others
2005	466	198	169	71	12	470
2006	410	382	187	30	7	425
2007	328	512	211	46	5	407
2008	492	341	180	249	9	424
2009	486	465	195	220	9	482
Total	1696	1898	942	616	42	2209

Source: Foreign Trade Report 2010

Fishing activities take place in all ten coastal villages in Saint Lucia and the vessels are operated by about one thousand nine hundred and ninety three (1993) registered fishers, 75% of these are full-time and the remaining 25% part-time, mainly employed in construction, shipping and farming. Even though fisheries remain small and artisanal throughout the island they play an important role in employing and feeding the country's population. Along with agriculture, both marine and inland fisheries remain vital to the economy of Saint Lucia. About 70% of these annual landings are made up of migrating pelagic species namely dolphin, kingfish, tunas which are captured in the December to June season. The other 30% of the landings are reef and bank species like snappers, groupers and jacks whilst conch and sea urchin fishery are also well-established and well-regulated. Most of the fish landed is consumed locally making a significant contribution to national food security. Fish landings rose by 1% to 1,709 tons as a result of repaired fish aggregating devices in 2012. Dolphin, accounted for 25.9% of the total landing. In that same year, 5% increase in the unit price while the unit price of all the other species of fish dipped.

Fishing is a major driver and safety net for economic development in rural livelihoods. Fishers still engaged in traditional fishing methods like trolling, netting and pots. Manually operated trolling gear and long lines set from small (5-9 m) fiberglass pirogues and wooden canoes are used. These vessels are mainly powered with 40-115 hp outboard engines. Government continues to provide technical support to fishermen's cooperatives. These organizations benefit from duty-free concessions on all fuel used by members for fishing. Duty-free concessions are also extended to fishermen, boat owners and processors, covering all imported fishing equipment and materials.

Major threats in the sector include exposure to extreme events, including cyclones, floods, and diseases. Following the passage of both hurricanes on the island, persons engaged in the fish sector, encountered a number of problems that caused reduction of the fishery. The loss of fishing gear mainly fish pots and fish aggregating devices (FADs), created setbacks for many fishers. Small fishers were affected to an extent by the coastal degradation caused by high seas, and large amounts of silt, mud and debris brought down by the rivers and other surface runoff. High rainfall level also increases the runoff of agro-chemicals from agricultural areas into the sea that results in algal bloom with the corresponding growth of algae that kills fish life.

There are a small number of fish farms on the island. With support from the Taiwanese Government, Saint Lucia expanded the local production of freshwater fish and shrimp to complement its quota of ocean fish and seafood. There is a Fishermen's Cooperative. A fish landing facility was established in Anse-la-Raye. Fish farms are owned by farmers and the two sites at Beausejour and Union are owned by the Government of Saint Lucia.

The aquaculture industry is seen as a valuable component of the agricultural diversification thrust. Regarding inland aquaculture the Asian freshwater prawn *Macro brachium rosenbergii* and the Nile tilapia *Oreochromis niloticus* are the two species cultured in St. Lucia in ponds that are usually fed by a continuous flow of pumped freshwater or gravitational flow-through from small streams (the water is often recycled for irrigation). In Coastal aquaculture, the only marine species which has received considerable attention and currently being cultured using a simple technology is a local strain of sea moss known as GT (*Gracilaria* sp.). Aquaculture technologies have developed and/or adapted in St. Lucia for the culture of the Asian freshwater prawn, tilapia and sea moss. The Government of Saint Lucia with the Government of Canada and Japan has invested in fisheries infrastructure throughout the island. The Fish Marketing Corporation undertakes fish processing, cold storage marketing of fish and fish products.

Organizations affiliated with the fisheries sub-sector in Saint Lucia include —The Castries Fisherman's Co Operative Society Ltd, Goodwill Fishermen Coop, Ministry of Agriculture, Lands, Fisheries, Forestry's Lucia Fish Marketing Corp Ltd, St Lucian Fishing Co. Ltd and the Superior Fish & Seafood Suppliers Ltd.

Most of the fish landed in Saint Lucia is sold fresh. This may involve direct sale of the catch to the Saint Lucia Fish Marketing Corporation, or to middlemen, householders, or to local hotels and restaurants. Presently, Saint Lucia does not export any fish but instead it imports a certain amount of the other fish products, which are not available locally. Total fish landings in 2009 showed an increase of 9.6% over that of 2008. Fishers from the village of Dennery landed 431.3 tons. Other fishers from Praslin, Marisule, River Doree, and Roseau landed a total of 403.5 tons. There was a decrease of 18.3% of fish imports in 2009.

Food Outlets

Food availability in Saint Lucia depends primarily on production and trade. Free Trade Agreements with CARICOM countries have increased trading of food from the Caribbean to Saint Lucia. Because of constraints and limitations with local production, St. Lucia imports the majority of its food needs. The United States is the principal supplier of food products to the island. The United Kingdom and the Caribbean are the other primary competitors. 65% of total food imports are available through the food retail sector, at local supermarkets, while the remaining 35% is for consumption by the food service sector.

Most staples such as cereals and cereal products are imported. While farmers were able to produce more starchy roots like sweet potato it was still necessary to import an amount of 3000 metric tons of Irish potato. Meats, seafood, fruits and vegetables are also imported in large amounts. There was a high demand for chicken and pork which accounted for 69% and 15% of the meat imports in 2009. Egg production has increased steadily between 2006 and 2011 and the country is now self-sufficient where eggs are concerned.

In general the national food availability profile for Saint Lucia may appear adequate in terms of quantity. However, there are major concerns over the high food import bill for sugar, fats and oils and the low levels of production of yellow and green vegetables. A total 2000 metric tons of dried peas, beans nuts and pulses were imported in 2009. Cereals and starchy foods and sweeteners are the most important contributors of energy. Contributing factors to overweight and obesity are sedentary lifestyle and overconsumption of kilocalories. Both problems of under- and over-nutrition interfere with the well-being of populations.

The two major supermarket chains, located throughout the island are direct importers and distributors of food products sold especially for their quality and competitive prices. Over the past years supermarkets have introduced marketing strategies like discount cards, and coupons deli and bakery spaces to encourage consumer buying. Both consumer demands for healthy food alternatives (fat free, sugar free etc.) and their supply have increased at most food outlets. Local farmer supply supermarkets with a variety of locally grown plant produce. A number of local importers and distributors supply supermarkets with food items also.

There are approximately 30 smaller supermarkets on the island with retail outlets in both rural and urban areas providing the population with a wide variety of food choices. Imported and processed food is also available for retail at other small food retail sites in both urban and rural locations. Smaller shops offer convenience and cater to lower income consumers. Items sold are limited to staples beverages and canned foods. High fat high calorie snacks, cheaper

meat parts such as chicken backs, necks are sold in amounts according to consumer need. Items for sale are obtained from local wholesalers. Other retail food sources are Gas Marts situated as an adjunct to Fuel Service Stations and exist throughout the island. Proprietors of these establishments purchase the bulk of their food items from local importers and food distributors

Sustainable Forest Development

The Caribbean Region is considered one of the world's most vulnerable regions to extreme weather events like hurricanes and droughts, rising ocean's temperature and sea levels. The Forestry Department of the Ministry of Agriculture is the principle agency responsible for managing forest and wildlife resources on the island of St. Lucia. It does so through legislative authority granted by the Soil and Water Conservation (1964/1983) and the Wildlife Protection Act (1980). Areas of focus of the management of the Forest Reservation (13%) are- Natural Resource Management, Utilization, Environmental Education, Wildlife Conservation, Co-Management, Research, Recreation, Aesthetics, and Forest Extension.

Notwithstanding existing environmental threats, a forest inventory in 2009 in St. Lucia determined the existence of 2.8 million cubic meters of wood available on forest reserves. Traditionally forest management had no focus on the supply of charcoal. Forests were only managed for the purpose of biodiversity, soil and water conservation, timber, recreation and tourism. Annual average rate of deforestation in 1994 was 500 ha per year. Estimated rate of deforestation for the period between 1994 and 2000 indicate it has fallen to approximately 100 ha per year. In 2009 Quillese and Northern range were the major locations for the charcoal business. The main difficulty expressed by charcoal producers was accessibility to areas with wood and the availability of wood for charcoal making. Though the charcoal industry was in existence since the 1800s, using the product cycle model, the industry could be characterized as in the growth phase and currently unplanned and uncontrolled from the point of view government policy and interventions to ensure sustainability for livelihoods and biodiversity conservation.

Between 2008/11 Caribbean Environmental Health Institute (CEHI) gave support to Saint Lucia for training in a number of programs and projects in water resource management. The 2001 and 2009 charcoal surveys of the Quillese, Millet North, Soufriere, Dennery and the Northern ranges-the data confirmed that there was a charcoal industry in St. Lucia and that there were distinct demographic groups, interests, and mode of operations of key stakeholders. The 2009 charcoal survey revealed a production of 290,168 kilograms (kg) in weight of charcoal by charcoal producers. The amount of wood necessary for this production was 8,290.5 cubic meters (m³). On a range level, the production of charcoal was 17,591 kilograms (kg), 1,227 kilograms (kg), 156941 kg, 70,609 and 43,800 kilograms (kg) in the Dennery, Millet North, Quillese and Soufriere ranges respectively.

In general most persons interviewed in this study of the charcoal industry were within the age range of forty one (41) to "more than sixty one (61)" years old. Sixty one percent (61%) of the persons had only a primary school level of education, followed by twenty three percent (23%) with "No formal Schooling" and twelve percent (12%) with only a "Secondary school" level of education. Seventy four (74%) (109 of 214) of the responses to income were in the income categories of "less than \$500" (34%) to "\$500 to \$1000" (47%). In both the 2002 and 2009 charcoal survey, the persons involved in the charcoal business had "more than three (3) years" experience Also a high proportion of farmers who were charcoal producers: in 2002 there were a total of 56 farmers out of 70 respondents (80%) whilst there were 106 farmers out of 160 respondents (66%).

Land Use Water Use and Irrigation

Saint Lucia depends solely on surface water to meet its water requirements. Rainfall is both spatially and temporally distributed, with annual values ranging from 1524 mm in the northwest and south-east, to more than 3048 mm in the mountainous interior.

In Saint Lucia, the Water and Sewage Company is responsible for the management, operation and maintenance of all water systems in the country. The Water and Sewerage Company (WASCO) was also established under the Water and Sewerage Act of 1999 to:

- ✓ Provide the people of St. Lucia with an adequate water service
- ✓ Provide the service for the removal of sewage by means of the sewerage system

As a result of poor land use practices and global climatic changes, the quality and quantity of St. Lucia's freshwater resources are on the decline. Further, with increases in population size, changing lifestyles, and the rapid development of the tourism industry which is associated with high water consumption rates, the demand for potable water is increasing at a significant rate, thereby increasing the demands on St. Lucia's freshwater resources.

Most small scale agricultural activity is rain-fed, as very little irrigation is used outside of this medium on large commercial farms. The main type of irrigation is the drip irrigation system. Presently freshwater resources are under threat from unsustainable farming practices. On the other hand the agriculture sector continues to depend on the availability of an adequate supply of water for adequate food production. Poor agronomic practices (such as cultivation on steep slopes and river banks) coupled with poor irrigation practices have threatened the supply of water to the agriculture and food sector. The practice of sourcing water from rivers during the dry season has resulted in reduced flows. A 2005 review of the situation in water resources in Saint Lucia, confirmed several weaknesses in the supply of water to the agriculture and food sub-sector:

- ✓ Poor cost recovery
- ✓ Low operating efficiencies
- ✓ High levels of wastage.

Hurricanes, droughts, and floods, Hurricane Allen (1980) Tropical Storm Debbie (1994) Hurricanes Ivan in 2004 Katrina in 2005 and Tomas in 2008 have each caused extensive flooding in low-lying areas and landslides, destroyed biodiversity and crops. Although several public sector agencies including the National Emergency Management Organization (NEMO), Water and Sewage Company WASCO and the Ministry of Communications, Works and Public Utilities have Disaster Management Plans to mitigate natural disasters, these focused primarily on post disaster mitigation rather than on measures to reduce the impacts of such disasters.

The MALFF established a three-year a Water Resources Management Unit (WRMU) to assure the viability of all forms of agricultural production on St. Lucia. Between 2008/11 CEHI gave support to Saint Lucia for training in a number of programs and projects in water resource management.

2011---Integrating Watershed and Coastal Areas Management

The Global Environment Facility (GEF)-Integrated Watershed and Coastal Areas Management (WCAM) project is a regional project which has the overall objective of strengthening the commitment and capacity of the participating

countries to implement an integrated approach to the management of watersheds and coastal areas. The St. Lucia Demonstration Project is based in the Fond D'Or Watershed.

Water Safety Planning (WSP) is an approach to water management that is promoted by the World Health Organisation. The WSP approach targets:

- ✓ Persons who engage in activities in the water catchment area.
- ✓ Consumers to ensure that they practice proper management for the storage and use of water for domestic use.

The water safety planning approach also requires the involvement of health, environmental health officials, water utilities companies and environmental agencies. CEHI has supported the St. Lucia Water and Sewage Company (WASCO) in implementing a Water Safety Plan (WSP) for the water supply systems that service the Mabouya Valley and Dennery communities in St. Lucia.

The Good Agricultural Practices (GAP) program supported by the European Union offers an opportunity for farmers to be encouraged to adopt sound water management practices. The demands of rapidly growing population for land and water for income generation has led to significant violation on sensitive water catchments and in some instances to unregulated abstraction of water (CANARI 2005).

Agro-Processing/Manufacturing

Mindful of the existing economic situation, the government embarked upon a series of initiatives to add value to the country's products and to increase its GDP. Manufacturing contributes around 6% of St Lucia's GDP (2008). With respect to agro–industrialization, the policy strategy includes the development of cottage industries with government support in the areas of quality control, product promotion, niche marketing and the adaptation of appropriate technology.

Access to the Caribbean Community and Common Market (CARICOM) countries has attracted a wide spectrum of international businesses from the United States., Europe, Canada the Caribbean and the rest of the world. A number of locally grown crops like plantain, bananas, cassava, nuts, legumes juices and spices are processed both for use at the local level and for export. Opportunities for agro-processing for potential investors exist in processed foods like fish, fruits and vegetables.

Preliminary data suggests that the value of food and beverages produced increased by 3% in 2011, after decreasing by 4.8% in 2010. This outturn was driven by increases in the value of output for both food and beverages. The value of food production grew by 7%, primarily due to increased output of bakery products, seasonings and spices. Similarly, production of mineral water and soft drinks grew by 6.4% to \$33.7 million. Growth in the food sub-sector was dampened by the challenges faced by St. Lucia Coconut Growers Association and the closure of one Pasta processing plant in the second half of 2011.

Rural Development

Rural Development policies and programs in agriculture are administered by the Extension Division and activities are conducted within the (8) eight Agricultural Extension Districts. In addition, there is significant collaborative work with Non-Governmental Organizations (NGOs), Regional International and Strategic Partners and local Farmer Organizations.

The Extension Division of the Ministry of Agriculture, Food Production, Fisheries and Rural Development in St Lucia is commonly known as "The Extension and Advisory Services". The main objective of the Extension Division is to improve the quality of life and increase the standard of living of smallholders and resource-poor rural households, particularly woman-headed households, to allow them the option to broaden their income base and reduce risk through a wide range of productive activities, agricultural educational and advisory services.

Trade and Agriculture Policies and Food Availability

The Food Production Sector is critical towards reducing Saint Lucia's approximately \$350 million food import bill. Increases in international prices have had a negative impact on existing high import bill.

The period 1985-2002 saw new developments in trade policy that affected the world banana economy and created social problems for banana farmers. Saint Lucia is committed to an open and liberalized trading system and has participated actively in several rounds of multilateral trade negotiation ever since it became a Member of GATT in 1995, and is a signatory to a number of bi-lateral agreements which are mainly in the form of "Joint Commissions" that help foster its integration in the global economy. In addition to membership in WTO and LOME' Saint Lucia is signatory to many Regional Trade Agreements offering preferential access to the wider Caribbean as well as the North and south American markets, and continues to cooperate and trade with its neighbors through:

- ✓ The Micro & Small Scale Business Enterprise Act #19 1998
- ✓ Caribbean Community and Common Market (CARICOM)
- ✓ CARICOM Single Market and Economy (CSME)
- ✓ Organization of Eastern Caribbean States (OECS)
- ✓ East Caribbean Common Market (ECCM),
- ✓ Regional Security System (RSS).

Saint Lucia participates in several trade arrangements including:

CARICOM, Caribbean Basin Initiative (CBI), CARIBCAN (Canada's preferential trade agreement for the Commonwealth Caribbean), CARICOM/Venezuela, CARICOM/Colombia agreements on Trade and Economic Cooperation and the CARICOM/Dominican Republic Free Trade Agreements.

All of these trade agreements have potential interlinks with all three pillars of food security and directly impact food production, and food availability and their stability. Foreign policy is conducted chiefly through its membership in the Organization of Eastern Caribbean States. Saint Lucia and the United States belong to a number of the same international organizations, including the United Nations, Organization of American States, International Monetary Fund, World Bank, and World Trade Organization that facilitate regional and multilateral integration efforts.

Tariffs continue to be a major source of government revenue in St Lucia, (estimated at 56.8% of total government revenue and 60.9% of tax revenue in 1998. St Lucia applies CARICOM's CET to imports from third countries at rates of up to 35% for industrial products and 40% for agricultural goods.

Trade Liberalization

The process of trade liberalization to eliminate import restrictions and reduce tariffs has provoked a level of competition with domestic agricultural products in favor of traditional preferential markets. Other factors such as threats to the region's environmental and natural resources, limits the coordination of regional policy and strategy initiatives in CARICOM, and changing food consumption patterns caused by an increased reliance on food imports have all raised levels of dietary—related health outcomes (particularly NCDs) among a wider cross-section of the region's populations.

Agricultural Land Issues

The country's *National Land Policy* seeks to enhance the contribution of land resources to food security, employment and revenue generation. Further, responsible and sustainable land use patterns are to be encouraged and rehabilitation, restoration and management of degraded lands are to be pursued. In this regard, institutional strengthening is also proposed.

3.5 Food Access (Household)

The Food and Agriculture Organization summarizes food supply is defined as: domestic production + (imports – exports) + changes in stocks. While access to affordable and nutritious food depends on supply (availability) and consumer demand, poverty is a major barrier to accessibility to adequate food. Ensuring continued access by all people to sufficient supplies of safe foods for a nutritionally adequate diet is the basic right of all people especially for the poor and other vulnerable groups.

For many, poverty is a major cause of food insecurity. A 2007 report of on Vulnerability and Food and Nutrition Security in the Caribbean, states that food security in the region is compromised not by lack of food availability, but by inadequate access to foods and dietary patterns that adversely impact on nutritional status (*CFNI, FAO, PAHO*). In Saint Lucia, exports improve the incomes of farmers, in turn enabling greater food access and food use. However the decline caused by external factors (trade liberalization) and climatic conditions (storm in 1994, drought in 2000 and 2001) have all contributed to a reversal of that situation.

Because income and food prices are key determinants of accessibility to food at the household and ultimately at the individual levels, the decline in the number of farmers in agriculture, has resulted in less household income to provide for basic needs including food. Poor diets contribute to obesity, heart disease, stroke, cancer, diabetes, osteoarthritis, and other health conditions that impose a substantial economic burden on individuals and society.

At the household level, much of the poverty that has been identified in the country has resulted from a combination of factors such as limited access to productive employment opportunities, inadequate physical assets, such as capital and credit even on a small scale, and poor access to markets. The worst affected members of the society are households headed by females, small farmers, urban slum dwellers, landless rural workers, fisher folks, street children, orphans, persons with disabilities, households headed by the elderly, pensioners, the unemployed, those in low-paying formal and informal employment, and persons living with HIV and AIDS.

The final list of vulnerable livelihoods in St. Lucia include: Fisher folk, Banana₃ farmers, Urban/peri-urban poor; Hotel workers, and Construction workers⁵.

3.6 Food Utilization

3.6.1 Nutritional Status

Food utilization refers to the utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. Factors impacting on the effective utilization of food include:

⁵ Panagiotis Karfakis, Christian Romer Løvendal and Kristian Thor Jakobsen, ESA Working Paper No.11-15.

- Nutrient losses associated with food preparation
- ✓ Poor knowledge and practice of health techniques, including those related to nutrition, child care and sanitation.
- ✓ Cultural practices related to food preparation.

In the Caribbean, the Recommended Dietary Intakes (RDI) for various age groups and sex has been established for healthy individuals. Based on these allowances, a level of 2,500 kilo-calories of energy and 43 grams of protein per person per population obtained from six (6) food groups viz. staples, legumes, foods from animals, fats and substitutes, vegetables, and fruits to ensure that nutritional balance is adequate. Nutritional balance is ensured from the contributions to energy by the six food groups.

Although domestic food supply over a number of years suggests that the Saint Lucian diet contains adequate amounts of calories, and recommended macronutrients based on the varied domestic food supply, the reality is that not all population groups have the wherewithal to acquire the needed quantity and variety of foods that are important for promoting and maintaining good health. The reason for this is because income and food prices are key determinants to the access of food at the individual level, and the poor, women and children, and the elderly who make up the vulnerable social groups, are more likely to be affected by marked changes in food supply or decline in their capacity to purchase food as a result of decline in food prices or loss of income.

Results of a qualitative survey on the eating habits of the population for the Development of the Food Based Dietary Guidelines in 2007 revealed that among younger persons, diets consisted of mainly cereals as staples with ground provisions being the staple of choice of older persons. Seasonality determined to a large extent the use of fruits and vegetables by members of any household. Younger persons consumed large quantities of sweets and high calorie snacks when away from home. In totality the composition of the diet was one of high calorie, high fat and low fiber.

Saint Lucians have increased their away-from-home share of caloric intake. Balance Sheets for Saint Lucia suggests that food consumption patterns have not changed significantly from that observed 10 years ago for foods that comprise the domestic food supply (Table 20). The majority of cooked meals are eaten at home. Given the change in working patterns (more women in particular taking up jobs away from the households) more persons purchased food out of the home. The traditional pattern of three cooked meals per day is still evident across the majority of households with the main meal being during the evening time.

Analysis of Food and Nutrient availability in countries utilizes Food Balance Sheet data of the Food and Agriculture Organization (FAO). Data from the Food and Agriculture Organization (FAO), the Food and Nutrient Availability profile for Saint Lucia for the period 1999 to 2009 showed an excessive availability of calories above the Recommended Dietary Intake (RDI) of 2,240 kilo calories and 43 grams of protein per day mainly due to the presence of increased amounts of oils, fats and sweeteners in food items. There is an absence of data on food habits and consumption for the population.

The Child Vulnerability Study was conducted by UNICEF during 2005 revealed more than half the household population selected were "at risk" with vulnerably to poverty and chronic disease of a parent. During a nation-wide 2006/2007 study to assess the prevalence of overweight, obesity and underweight among 5-year-old children (n= 425) in Saint Lucia revealed overweight and obesity rates were high: 14.4% and 9.2% (WHO); 11.3% and 12.0% (CDC); and 9.9% and 7.1% (Cole et al.), respectively. Underweight estimates also varied: 4.7% (WHO); 11.3% (CDC) and 6.6% (Cole et al.). Obesity in young subsample (15.2%; WHO) was more than 3 times the adjusted 1976 rate (4.3%). Prevalence of overweight,

obesity and underweight were estimated by Centers for Disease Control (CDC), Cole et al. and new World Health Organization (WHO) methods.(Gardner et al.)

Table 19: Prevalence of overweight, obesity and underweight among 5-year-olds

	Indicator	Indicator	Indicator
Classification	Underweight	Over-weight	Obesity
CDC	11.3%	11.3%	12%
Cole et al	6.6%	9.9%	7.1%
WHO	4.7%	14.4%	19.2%

Source: Centers for Disease Control (CDC), Cole et al.

Fruit availability exceeded population goals for this period, while the contribution of vegetables, dried peas, beans and nuts to available energy fell well below population goals. In addition, there is a trend towards increased importation of both fruits and vegetables to satisfy local demand which increases food cost and the ability of certain groups to access food.

Table: 20 Macro-Nutrient Availability (per caput/day)

Macro-Nutrient	1999/2004	2005/2009
Total food Calories	2683	2716
(Kcal/per caput/day		
Protein	88.7	89.5
(g/per capita /day)		
Fats/Oils	84.9	79.1
(g/per capita /day)		

Source: FAOSTAT www.fao.org (2010)

3.6.2 Food Safety

Food Safety with its agricultural links can adversely impact food security and nutrition. The farmer is a contributor to potential food hazards, inclusive of antibiotics that may enter the food chain through milk. Food safety lies on a continuum from the farm to the table and sometimes may only be appropriately addressed with the help of science (laboratory data, research, etc).

Saint Lucia has imposed various measures to provide safeguards against threats to food safety and plant and animal health. The Ministry of Agriculture also enacts product standards and testing and other technical requirements in order to minimize invasive species such as pathogens, pests, or weeds or contain high levels of chemicals such as pesticides or harmful additives. The availability of safe food is a critical element of food and nutrition security. Notwithstanding, in Saint Lucia, food safety is challenged, as microbial hazards and the food-borne diseases have become increasingly prevalent public health problems. Although most food preparation is done in the home, restaurants and fast food chains also prepare food for consumption. In addition food is often bought from street vendors.

Although the Ministry of Health has an established certificate quality assurance programs in food preparation and sanitation practices for food vendors, the challenge is in the monitoring. Also of importance to food safety is the globalization of the food trade which may challenge safe food distribution. Chemical contaminants are also a source of food borne illnesses. They include natural toxicants, environmental toxicants, and naturally occurring substances in plants. Most food safety concerns are related to inappropriate use of agricultural chemicals, poor storage of food, limited food inspection, insufficient awareness about food safety and time/temperature control, poor hygienic practices and insufficient information about the hazards and risks involved. There is the need to address food safety concerns in a much more systematic approach, in accordance with the HACCP guidelines.

The Occupational Health and Safety Unit within the Department of Labor is responsible for monitoring, investigating, and enforcing the Occupational Health and Safety Act of 1985 (revised in 2001) and other legislation relating to workers' health. The National Insurance Corporation deals with claims for work related accidents. The number of occupational accidents declined from 158 in 2006 to 84 in 2010, of which 29 involved females and 55 males, with the largest number occurring in the 30–39 age groups.

According to the population and Housing census (2010, Saint Lucia's entire population has access to drinking water of satisfactory quality, 80% through house connections, 8.5% through yard connections, 4.4% through public standpipes, and 7.1% from sources such as trucks and private tanks. The vast majority (92.5%) also has some form of sanitary facility, whether sewer connections (6.6%), septic tanks (62.8%), or pit latrines (23.1%). 7.5% of the population uses public facilities. The Food and Water Safety Unit of the Ministry of Health monitors and ensures compliance with the public sanitary and health standards established under the Public Health monitors and ensures compliance with the public sanitary and health standards established under the Public Health Act (1975).

To minimize trade distortions, Saint Lucia like other WTO members must adhere to the WTO Agreements on the Application of Sanitary and Phytosanitary (SPS) Measures and Technical Barriers to Trade (TBT). These agreements are the established rules and procedures for regulating trade flows across borders to protect human, plant, or animal life or health and the environment, and to regulate markets and safeguard consumers, among other objectives, while at the same time facilitating international trade. WTO/SPS measures are important for the protection of human, animal, or plant life or health. Like many developing countries, Saint Lucia's SPS (Sanitary and Phyto-sanitary) standards, laws and institutions still need to be strengthened in order to comply with the WTO's SPS Agreement to benefit more farmers.

As more and more consumers in the major importing countries demand better quality assurance, local farmers face greater competition. Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF) received technical assistance from the European Union (EU) under the Special Framework of Assistance (SFA 2002) for:

- ✓ Upgrading legislation
- ✓ Developing human resources
- ✓ Providing of equipment for laboratories
- ✓ Reorganizing and strengthening of institutions

The Environmental Health Department (EHD) of the Ministry of Health (MOH) is responsible for ensuring that food served or sold to the public is safe. Legislation for monitoring food:

- ✓ Food inspection.
- ✓ Certification of food establishments.
- ✓ Consumer Education.

- ✓ Enforcement of Legislation.
- ✓ Education for Certification of Food Handlers.

The Saint Lucia Bureau of Standards develops and enforces standards to govern food quality and environmental health. The Saint Lucia Pesticides & Toxic Chemicals Control Board (PTCCB) regulates and monitors the importation, and use of agricultural pesticides and other agro chemicals which may be used in food production. Saint Lucia is a member of the Coordinating Group of Pesticides Control Boards of the Caribbean (CGPC)

Food inspectors are responsible for ensuring food safety. Because there is no written policy on Food Safety, there is need for a comprehensive written Food Safety Policy. The absence of a Food Safety Act could also help address the issue of poor quality foods imported into the country. Due to an inadequate food safety monitoring system not all imported foods are inspected. Although the Ministry of Health has an established certificate quality assurance programs in food preparation and sanitation practices for food vendors, the challenge is in the monitoring. Also of importance to food safety is the globalization of the food trade which may challenge safe food distribution. Chemical contaminants are also a source of food borne illnesses. They include natural toxicants, environmental toxicants, and naturally occurring substances in plants.

Most food safety concerns are related to inappropriate use of agricultural chemicals, poor storage of food, limited food inspection, insufficient awareness about food safety and time/temperature control, poor hygienic practices and insufficient information about the hazards and risks involved. There is the need to address food safety concerns in a much more systematic approach, in accordance with the HACCP guidelines.

Education and certification of food handlers is ongoing and always needs improvement. Consumers are not always compliant with food rules and food choices; foods are exposed to contamination particularly during transportation; there is poor storage of foods; and the monitoring system for food and food establishments is inadequate. Cases of Food borne diseases (FBD) are generally under reported by the private sector doctors.

An abattoir facility has been built but is not yet operational. There are a number of fisheries facilities on island. Increased vigilance at food service establishments can help eliminate poor food handling and storage practices.

Many manufacturers lack basic skills in management and staff are not trained in Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Point (HACCP). There is a general lack of training in all areas and a lack of supervision.

3.6 Stability of Food Supply

3.6.1. Social Safety Nets

According to the United Nations International Children's Emergency Fund (UNICEF), in the Caribbean, a number of social safety net programs endeavor to ease particular vulnerabilities. However, due to governments 'financial constraints and political preferences, coverage of social safety net programs is far from universal. In Saint Lucia, they do not reach even a majority of the income-poor and disadvantaged women and children.

Traditionally, social safety nets have been an important public policy mechanism to assist poor and vulnerable groups. The Government of Saint Lucia has a number of public assistance and other social programs in place to assist St. Lucians considered being most vulnerable by giving priority to social development programs in its negotiations with donors, and

it has continued to allocate significant resources towards poverty reduction, health, small business development and short-term employment.

School Feeding Program

The Ministry of Education has introduced a number of "safety nets" aimed at facilitating education participation for disadvantaged students. One such program is the School Feeding Program. Saint Lucia has a total of 21 government day care centers. Each child is offered a cooked meal on a daily basis. Monthly cost is \$105 per month. Presently there are 80 infant and primary schools on island spread out through 8 school districts. 63 of a total of 81 schools are enrolled in the School Feeding Program. Participants of the program make a contribution of \$1.00 on a daily basis. The initial program was sponsored by the World Food Program (WFP). Currently the Government of Saint Lucia provides financial support for the program. The School Feeding Program provides one cooked meal to underprivileged students allowing them to attend school and improve their life chances. This is a critical service, (especially for households that are classified as poor, 42.5% of these households are headed by women), as many parents tend to keep their children at home if they do not have anything to give the children to eat while they are at school. In 2009, 7298 students from 76 primary schools around the island benefitted from this program.

The St Lucia Poverty Reduction Fund (PRF)

The St Lucia Poverty Reduction Fund (PRF) is a small social investment fund established to redress poverty in the small communities around the island. It is funded by the World Bank and the European Union through the European Union Special Framework of Assistance (SFA) in order to mitigate the negative impact of the liberalization of the European market. This is especially important in the rural areas where several small scale farmers were established and most of whom would be affected by the liberalization of the market.

Consumer Welfare

Consumer Protection has been institutionalized in St. Lucia from as far back as 1970 to control and monitor the prices and distribution of controlled goods as described within the Price Control Order. The Order was comprised primarily of basic food items, school text books, and cement and propane gas among others. Additionally, the department is responsible for the procurement of bulk rice, flour and sugar. The Consumer Affairs Department (CAD) now has the responsibility for the protection of consumer rights thus ensuring that the health, safety and economic welfare of consumers are given due attention.

Recognizing the need to provide one of the most basic needs – housing - the Government has sought funding from the European Union (EU) to assist needy and indigent persons who live in 'deplorable housing conditions' Special consideration is given to the elderly, persons with disabilities, households with young children, as well as households affected by natural disasters and fires.

The National Council of and for Persons with Disabilities

The National Council of and for Persons with Disabilities (NCDP), a not–for–profit organization, is the umbrella organization providing support for persons with disabilities. As of 2010, there were six government–subsidized homes offering resident care for older persons The National Council of and for Persons with Disabilities (NCPD), which receives an annual government subsidy, addresses the needs of the population with disabilities. The Government has improved the provision of special education by establishing centers for that purpose in Vieux Fort and Soufrière, bringing the total number of special education centers to four.

3.6.2 Government Public Assistance Program

The *Public Assistance Act*, of 1968, was revised in December 2005, and is the authority under which public assistance is delivered.

"The Public Assistance Act relates to the aiding of needy individuals and the administration of public assistance. The Act defines a needy person as, 'any and every person who by reason of infancy, old age, illness, disease, bodily infirmity or mental incapacity is unable to maintain himself or herself".

Between During 2006 – 2009, the Government expended \$10 million in financial support to roughly 2,500 recipients each month. The Ministry of Health, Wellness, Human Services and Gender Relations is the lead agency through which the Government of St. Lucia provides financial assistance to needy individuals. The Ministry's Division of Human Services and Family Affairs (the Division) is responsible for administration of the public assistance program. Monthly allowances in August 2008 ranged from \$135 to \$300 based on the number of individuals in the household.

In 2013 the Government increased the public assistance amounts paid to the elderly was increased to \$215. A report of the 2009 'Social Safety Net Assessment' (United Nations Children's Fund, World Bank, and the United Nations Development Fund for Women (2009), recommended the Modernizing of the *Public Assistance Act*.

Weaknesses of the Public Assistance Program include:

- ✓ Absence of indicators to measure and evaluate the performance of the public assistance program in Saint Lucia
- ✓ Program monitoring and evaluation were absent.

School Health Program

The School Health Program continues to focus mainly on physical assessments, immunization, and screening for health problems.

Student Support Services and Welfare Programs

Government provides assistance to primary and secondary school students in the form of Bursaries, School Feeding Program, Transportation Subsidy, and the Book Rental Program. In 2011/12, 12,062 students were beneficiaries to the various programs.

Table 21: Beneficiaries of Student Support Services

	School	Transportation	Text Book	Bursaries Program	
	Feeding	Subsidy	Rental	Male	Female
	Program	Program	Program		
2007/2008	6557	1082	1182	725	406
2008/2009	7149	2019	1118	875	253
2009/2010	7056	2542	651	979	417
2010/2011	7106	2645	554	931	411
2011/2012	7366	2558	287	1445	405

Source: Social and Economic Review 2012

Holistic Opportunities for Human Empowerment (HOPE) is a short term employment program designed to absorb surplus labor and protect the indigent, poor and vulnerable. HOPE is a major component of the Social Safety Net Initiative implemented by the government of St Lucia. 5,724 unemployed persons were registered under the HOPE program in 2009.

Koudemain Ste. Lecie'

The program, an adaptation of the 'La Puente program initiated in Chile, is a five year initiative undertaken by the Government of St. Lucia with support from the European Union. It takes into account St. Lucia's specific social and cultural issues, and is a family oriented project aimed at reducing the poverty among indigent families. The number of indigent households stood at approximately 600 in the last Country Poverty Assessment.

Basic Needs Trust Fund (BNTF)

The Basic Needs Trust Fund (BNTF) program is a direct targeted poverty reduction program of the Caribbean Development Bank. Its mission is "To be a community development program that supports health, education, water and sanitation, access and economic activities through skills training, organizational development and infrastructure and services". This initiative was launched in 1979 by CDB with financial assistance from the United States Agency for International Development (USAID). To date, there have been six replenishments of the BNTF. The seventh BNTF cycle started in 2012 and has three key development priorities:

- Education and Human Resources Development
- Water and Sanitation
- Community Access Roads and Drainage

The participating **Borrowing Member Countries (BMCs)** are: Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines and the Turks and Caicos Islands.

The James Belgrave Micro Enterprise Development Fund (BELFund)

In 2009 The James Belgrave Micro Enterprise Development Fund (BELFund) and the Basic Needs Trust Fund were amalgamated under the Saint Lucia Social Development Fund (SSDF) in order to eliminate duplication of efforts and promote the more efficient and effective utilization of resources, to reduce poverty and vulnerability of the most marginalized persons and attain social and economic advancement of the Saint Lucian society. This new entity falls under the management of the Ministry of Social Transformation, which espouses the St Lucia Poverty Reduction Fund (PRF).

The Small Enterprise Development Unit (SEDU)

The Small Enterprise Development Unit (SEDU) was established to facilitate the sustainable development of the **micro** and **small** business sectors. To that end, SEDU provides guidance, technical assistance and training to existing and prospective entrepreneurs. **The Micro & Small Scale Business Enterprise Act #19, 1998** (amended December 2001) gives guidance to SEDU.

National Industrial Policy (NIP)

The National Industrial Policy (NIP) is the first Industrial Policy for St Lucia which operates in tandem with, and is influenced by a number of other Government policies and institutions. These are relevant and necessary to create a supportive environment for the development and growth of competitive private sector businesses.

National Food Production Plan

The situation has increased Saint Lucia's food and nutrition security vulnerability, in view of the global situation with respect to the high prices of wheat flour, rice and other staples. It is important to note that the top seven categories of food imports are cereals, sugars, food preparations, dairy products, fishery products, meat and vegetables/fruits. To

help reduce reliance on the high food imports, the MALFF have embarked on a National Food Production Plan and have identified (16) sixteen crop types to form the nucleus of this program. The Food Based Dietary Guidelines are used as the basis for its development.

The National Insurance Corporation (NIS)

The National Insurance Corporation continued to carry out its mandate to ensure that every Saint Lucian enjoys social and financial protection. The Corporation receives contributions from persons aged 16 to 60 who are in the labor force and provides benefits such as insurance coverage for sickness, disability, maternity, and occupational injuries, as well as death benefits. The Corporation pays an annual fee to the Ministry of Health to cover in–patient hospital fees for its members. In 2010 the National Insurance Corporation had a total of 49,158, persons (72.6%) of the labor force. Male registrants totaled 23,571, 68.8% of the male workforce, while females totaled 25,587, or 84.1% of the female labor force. The National Insurance Corporation deals with claims for work related accidents. The number of occupational accidents declined from 158 in 2006 to 84 in 2010, of which 29 involved females and 55 males, with the largest number occurring in the 30–39 age groups.

Universal Health Care

Universal coverage model is a means of providing access to health promotion, disease prevention, and curative and rehabilitative health interventions in order to allow equity in the delivery and use of health care services.

Farmer Duty Free Concession

The government of Saint Lucia provides Duty free concession on farming equipment, vehicles and other farming tools.

Non-governmental organizations

Service clubs, private sector, and community-based, faith-based and non-governmental organizations alleviate poverty among the most vulnerable. Several church groups and service clubs, offer cooked meals, foods packages and certain basic items to the elderly, homeless and other disadvantaged persons. An important strategy for poverty reduction is the empowerment of at risk groups through education, skills training and personal development.

Food for the Poor is the largest international relief and development organization in the United States works in Saint Lucia primarily through donations of goods. The organization provides direct relief assistance helping the poor in the Caribbean and Latin America. In 2012 the organization provided:

- ✓ Fourteen containers in 2012
- ✓ Food
- ✓ Personal care items
- ✓ Educational supplies

Caritas Antilles is a member of the Catholic International humanitarian, relief development and social service network Caritas Internationalis. Caritas Internationalis is a confederation of 162 Catholic relief, development and social service organisations working to build a better world, especially for the poor and oppressed, in over 200 countries and territories. Saint Lucia is a beneficiary and obtains food for distribution to the poor on a regular basis. Caritas Antilles fights poverty, exclusion, intolerance and discrimination.

3.7 Cross cutting issues – Environment, Gender, climate change and Disaster Risk Mitigation (DRM)

3.7.1 Environment

Solid Waste Management

Saint Lucia Waste Management Authority is responsible for Solid Waste Management on the island. There were two sanitary landfills on the island, one in Vieux Fort and the other in Deglos, which receive the waste of 88% of households. The other 12% dispose of waste by composting, dumping, or burning. A total of 83,313 metric tons of waste was disposed of in 2010, with residential/institutional waste accounting for 33%, commercial waste for 20%, green waste for 12%, construction and demolition waste for 8%, soil for 8%, street cleaning for 6%, bulk waste for 5%, ship waste for 3%, and other waste for 5%.

3.7.2 Disaster Risk Management DRM Strategy in Agriculture

The Food and Agriculture Organization reports that in the last 10 years five major hurricanes affected the country, including Dean (2007) and Tomas (2010), with estimated damages at USD 40 million and USD 336.16 million respectively. The issue of protecting agricultural produce against weather-related disasters has assumed increasing importance across the agricultural sectors of the Region. For a while now there has been little success in developing a comprehensive disaster risk management strategy capable of providing an optimal crop insurance regime that could cover a wide range of risks while still remaining affordable to small farmers in the region.

Previously, WINCROP had recorded success in responding to damages in the banana industry in Dominica, Grenada, St Vincent and St Lucia during hurricane periods. However with the down turn of the economies and shift away from agriculture, new challenge emerged causing a reduction in premium income for WINCROP, partly due to a decrease in farmer population growth, and also to losses experienced in the banana sector. The loss of banana/plantain, root crops and livestock severely affected small scale farmers and fisher folk. In order to reduce on incidents of bailouts, support and expansion of crop insurance for farmer was necessary. Windward Islands Crop Insurance (WINCROP) had created a number of initiatives to service claims to banana farmers following losses by windstorm and volcanic activity. In 1978 WINCROP's premium objective was to provide crop insurance in order to "secure re-insurance against any and all risks assumed" by windstorm and volcanic activity.

In July 2010, The Caribbean Community (CARICOM), examined the possibility of adopting the Windward Islands Crop Insurance (WINCROP) models as a coordinated risk management agenda for agriculture. To this end, a 2 year FAO technical cooperation project for "Enhanced Capacities for Disaster Risk Mitigation in Agriculture, Fisheries & Forestry" was funded by the Government of St. Lucia to contribute to enhanced resilience of the agriculture sector against the impacts of natural hazards. Recently, in 2003, EC Global, a subsidiary of Eastern Caribbean Financial Holdings (ECFH) developed a Livelihood Protection Policy (LPP) for the Caribbean "to provide protection for the livelihoods of vulnerable persons, from perilous weather such as heavy rainfall and high wind speeds." High wind speed and rainfall are respectively monitored by the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and DHI (formerly known as Danish Hydraulic Institute). Minimum sum insured and annual premium vary from country to country.

3.7.3 Gender

Unemployment among women

In 2012 the unemployment rate stood at 20.9%. The rate of unemployment for women at the end of 2007 was 18.6%. The general rate of unemployment peaked at 20% in the year under consideration. Just over 50% of unemployed women fall between the ages of 15 - 34. Most of these women only have a primary school education and few marketable skills which seriously hamper any attempts to enjoy a reasonable standard of living and ultimately deprive them of enjoying their basic human rights.

Women's Economic Empowerment and Social Protection Programs

Recognizing the importance of responding to the needs of the greater part of the population - just over 50% of the population is female - various government agencies have implemented a number of social protection programs, which provides the skills training and micro financing necessary for women to create their own employment opportunities as well as to enter the non-traditional areas in the labor market.

The St Lucia Rural Women's Network

The St. Lucia Network of Rural Women Producers was formed in 2003 with support from the Inter-American Institute for Cooperation on Agriculture (IICA). The group was established in response to the need to equip women with technical, administrative and entrepreneurial skills as a means to improving their socio-economic status and create employment in the rural areas in which they live.

Equality of Opportunity and Treatment in Employment

The Equality of Opportunity and Treatment in Employment and Occupation Act of 2000 provides legal protection against discrimination in the workplace on the grounds of race, sex, religion, colour, ethnic origin, family responsibilities, pregnancy, marital status, or age. The Act makes provision for equal remuneration for men and women performing work of equal value.

IV. Issues and Priority Areas for Food and Nutrition Security (Policy)

4.1 Regional Context

CARICOM countries are recognized as Small Island Developing States (SIDS) and Low Lying Coastal States (LCS) by the United Nations. Their special characteristics make these countries particularly vulnerable to food insecurity. The factors and conditions impacting on vulnerability are economic, social and environmental. Economic vulnerability includes, *inter alia*, a high degree of openness of the economies, indicated by the high proportion of total trade (imports plus exports) in GDP, volatility of income and high concentration of a few commodities (i.e., limited diversification) in exports and imports. Social vulnerability in CARICOM countries takes expression in several forms, including the brain drain, educational performance and health services that have not kept pace with the requirements of a changing region and issues related to crime, unemployment and HIV/AIDS. CARICOM countries are also prone to natural hazards that are frequent and which result in direct losses in terms of deaths and significant damages to property and income generating assets.

Barriers to access to Food in CARICOM

Access is ensured when all households and all individuals within those households have sufficient resources to obtain appropriate foods for a nutritious diet in accordance with their needs and preferences. It is dependent on the level of household resources – capital, labor and knowledge, and prices. More important is the ability of households to generate sufficient income, which, together with own production, can be used to meet food needs.

In the Caribbean, the minimum wage and tax burdens, as they reduce disposable incomes, make it difficult for persons to afford, the often higher priced, healthy foods. Limited incomes also impact the incidence of poverty, which in turn, limits access to food. Despite considerable economic progress in post-independence CARICOM, poverty and inequalities in income and access to resources are at unacceptably high levels, and continue to be major challenges in this region. An estimated 25% of the population of CARICOM is said to be living below the poverty line. In CARICOM (excluding Haiti), it is estimated that over 600,000 persons are under-fed or hungry ever day due largely to the poverty levels, which range between 8 - 33% in the region. Income inequality in the Region is among the highest in the world and this is also expressed in inequality in consumption, where for some countries (e.g., Jamaica) the lowest 10% of the population consumes 12 times less than the top 10% of the population. This means that these persons do not have adequate income to purchase a standard basket of goods that meet daily dietary energy requirement.

Poverty in the Region is compounded by poor communication/marketing, storage, and transportation infrastructure. The issue of rising prices (which reduce the ratio of wages to prices), constrain the ability of the population, especially the poor and vulnerable groups, to purchase food and basic non-food items. The poor tend to be the most affected since expenditures on food usually account for between 35 and 40% of the household budget. Food consumption patterns among the poor are often characterized by the utilization of diets that have a high proportion of the relatively more affordable processed carbohydrates and limited quantities of fruits and vegetables and meat and dairy products. Soft drinks, sweet biscuits, pastries and cakes are among the highly consumed products – often called 'junk food'. Inefficient and inequitable distribution networks due to inadequate national and regional marketing, transportation infrastructure and marketing information systems limit the flow of local foods internally and in trade around the region.

The discussion on food and nutrition security must always consider the development challenges that CARICOM countries face in terms of their small size, vulnerability to natural disasters and a challenging new economic environment characterized by, *inter alia*, international competitiveness, loss of preferential markets for traditional agriculture and a rules-based approach to agriculture policy. Income distribution in the region is highly unequal, with some countries among the most unequal in the world. These challenges are further complicated by high international debts in many countries, which divert resources away from government investments, especially social programs, and place severe pressures on the fiscal side of government policy.

4.2 Critical Food and Nutrition Security Challenges Summary of Major Factors affecting Food Availability

- ✓ Absence of agricultural policies in respect of land tenure, and national food and nutritional security systems.
- ✓ Insufficient budgetary allocation for infrastructural support for agricultural feeder roads.
- ✓ Limited access to affordable credit.
- ✓ Anti-credit land policies.
- ✓ Inadequate irrigating methodology.

- ✓ Climate and ecology.
- ✓ Absence of organized markets for sale of produce.
- Competition from imported produce.
- ✓ Quality of farm labor.
- ✓ Unavailability and cost of inputs.
- ✓ Low priority given to research and development.
- ✓ High incidence of praedial larceny on agricultural holdings.
- ✓ Absence of clear agricultural land use/ zoning.
- √ High incidence of and susceptibility to natural hazards/disasters, during periods of heavy rainfall.
- ✓ Poor organization among farmers due to weak farmers' organizations.
- ✓ Inadequacy of Food Science methods to promote the value added component in agro-processing.

Diversification /value added challenges include:

- Poor market information
- Food hygiene and quality requirements
- Limitations of technology to upgrade production.
- Risk involved in accessing new market opportunities
- Unstable market demand and staying profitable

4.3 Guiding Principles and Concepts that underpins the FNSP

WHAT IS FOOD SECURITY

In the Caribbean, in reference to Food Security the definition that "all people at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996) is agreed on6.

This definition goes beyond the traditional narrow vision of both food sufficiency and the physical availability of food supplies over time and space, to include the socio-economic, nutritional aspects of having adequate economic and physical access to safe and nutritious food supplies. From this perspective, therefore, food security is an integral part of a process of nutrition and health development and embodies four major pillars: Food Availability; Food Accessibility; Food Consumption; and Stability of the previous three components. Food security, in all its dimensions, is under constant threat in the Caribbean. Essentially, food security can be described as a phenomenon relating to individuals. It is the nutritional status of the individual household member that is the ultimate focus, and the risk of that adequate status not being achieved or becoming undermined.

Food insecurity exists when people do not have adequate physical, social or economic access to food as defined above.

Linking individual food security to national and regional policy - dimension of entitlements

The approach developed by Amartya Sen is helpful, since it emphasises the different ways in which individuals can acquire food. The entitlement relationships Sen identifies enable individuals to acquire food in one of four ways.

• They may produce it for themselves (production-based entitlement), which may be particularly important, for example, for small farmers who aim for self-sufficiency. It can be affected by policies altering the demand and supply of factors used in production, some of which will relate to international trade.

⁶ Overview Vulnerability and Food and Nutrition Security in the Caribbean CFNI August 2007

⁷ Sen. 1981. op cit.

- They may sell or barter physical assets (trade-based entitlement). Many farmers will augment their own
 production by exchanging either a surplus of some crops or an own-food product. The amount of food they can
 acquire will be influenced by policies that affect the level and variability of prices for food relative to what they
 are able to exchange.
- They may sell their labour power (labour-based entitlement). Rural landless labourers and urban employees all need to buy or barter food in the market. Their food security is determined by the level and location of employment opportunities which, in turn, may be altered by trade policy.
- They may receive informal gifts from individuals and formal transfers from government (transfer-based entitlement). These are important for those lacking other adequate means. Formal transfers such as food aid may be influenced by multilateral trade agreements.

Contrasting Food Security and Nutrition Security

Food security, as against food productions, is concerned with access to food. A household is food secure if it can reliably gain access to food in sufficient quantity and quality for all its members to enjoy a healthy and active life. Food security is a component of nutrition security. However, nutrition security is as concerned with the utilisation of the food obtained by a household as it is with access to this food. A household achieves nutrition security when it has secure access to food – that is, food security – coupled with a sanitary environment, clean drinking water, adequate health services, and knowledgeable care to ensure a healthy life for all household members. In St. Lucia the problem is access to food that is exacerbated by malnutrition, particularly over nutrition resulting in obesity and NCDs9. It is clear then that the immediate, urgent problems concern household access and nutritional adequacy. This means a departure from equating food security with food availability.

GOAL AND OBJECTIVE OF THE POLICY

Food and Nutrition Security (FNS) is a cross-cutting issue, and the many linkages between the various national development policies, strategies and programmes and FNS call for these concerns to be incorporated into the formulation and implementation of the latter. Indeed, the resolution of these issues calls for a multi-disciplinary and holistic approach and measures that are a composite of policy, legislative, and institutional realignment actions, enhanced professional and technical capacity, improved processes, infrastructure and client-service orientation, and public-private sector partnership arrangements.

This is the context in which the National Food and Nutrition Security Policy (NFNSP) has been prepared.

The development goal of the NFNSP is **to contribute to ensuring long-term food and nutrition security in Saint Lucia**. The two major objectives are to:

- 1) Reduce hunger especially in the vulnerable groups by increasing access to affordable, nutritious, safe and quality food.
- 2) Shifting to sustainable food production systems where the producers receive adequate remuneration for their products enabling them to have an adequate standard of living.

⁸ There is a clear distinction between an FNS Policy and an agricultural policy.

⁹ Overview Vulnerability and Food and Nutrition Security in the Caribbean CFNI August 2007

Guiding Principles

The formulation of this Policy Framework is considered on the following principles:

Evidence-based

A concise and detailed FNS situational assessment was undertaken to ensure that the Policy and its subsequent Implementation Plan are evidence-based and can be monitored on a continuous basis. The analysis has provided the basis to clearly indicate what the key FNS issues and challenges and their causes are and which population groups/households are most vulnerable to the aforementioned.

Good Governance Practices/Right to Food Principles

The FNS Policy will incorporate good governance practices and Right to Food principles, including issues related to Participation, Accountability, Non-discrimination, Transparency, Full Respect for Human Dignity, Empowerment, Rule of Law, Inclusion and Considerations of Equity, and Responsiveness to Needs and Priorities.

Policy Coherence

The FNS Policy and Action Plan will be coherent with underlying goals of regional policies and actions and initiatives such as the RFNSP, the RFNSAP, the CARICOM Community Agricultural policy, the Jagdeo Initiative, the Liliendaal Declaration, Caribbean Cooperation in Health III, etc. and relevant *national* policies, and focus on translating into action these political statements and policies related to and supportive of good health and nutrition, rural and food crop/livestock/fisheries and agro-food production, processing, marketing and distribution.

Protection of the Natural Resources

Recognizing therefore that the forests and fisheries constitute substantive resources for food and nutrition security to be protected through adaptation to climate change, also special consideration will also focus on water given the importance in St. Lucia.

Agriculture and Food Production

Recognizing the vital role of the food and agriculture sector in the quest for national food and nutrition security and the need to strengthen its ability to attract youth and entrepreneurship as well as adequate investment in agricultural production, post-harvest handling, storage, distribution and exchange as an integral part of the private sector of St. Lucia and a major source of employment and incomes for a large segment of the population.

V. Food and Nutrition Security Policy Framework and Instruments (Policy)

5.1 Overview

The need exists for policy-oriented growth strategies aimed at providing an economic environment conducive to broad based development, poverty reduction and access to food.

During the 1990s, the food security research tried to address market oriented economic growth, agricultural development, poverty reduction, demographic trends, rising incomes, changing food consumption patterns, gender issues, and the environment. In particular, market oriented economic growth became *sin qua non* for reducing poverty and improving food security. Development experience suggests the need for a greater emphasis on markets, removing anti-agricultural policy bias, and emphasizing trade to promote growth, improve welfare, and provide greater access to food. Specific development experiences, however, point to important caveats. First, the manner in which development strategies achieve economic growth and the number of people who participate and benefit are as important as the increased economic growth itself. Second, economic growth alone is insufficient to eliminate hunger. Third, a complete definition of food security needs to incorporate three dimensions of access to food: (1) sufficient food to meet every individuals' needs; (2) individuals must have the ability to generate sufficient food without sacrificing their endowments and (3) societies must be able to protect individuals from shocks, such as loss of job, disasters, financial crisis, etc.

The important role of food security is challenging governments to modify and adjust sectoral policies to accommodate new demands for safeguarding the opportunities of future generations by protecting the earth's natural resources. The food insecure consists of heterogeneous groups, characterised by location, occupational patterns, asset ownership, race, ethnicity, age and gender. Programs to improve food security need to be tailored to the need and circumstances of each group.

Successful development experiences suggests that significant, complementary improvements in both food security, poverty reduction and sustainable development can be made when policymakers: (1) seek policy portfolios suited to broad-based growth and build in flexibility to adjust this portfolio over time in response to new needs and priorities; (2) remove unfair market privileges, input subsidies and price incentives which, decrease competition in output, input and credit markets, raise costs to consumers and taxpayers, and encourage overuse and misuse of resources; (3) ensure that equity and gender play a central role in decisions about appropriate responses to food security and sustainability concerns; (4) focus public sector actions on those rural development services under-provided by the private sector; and (5) mobilize public and private investments in agricultural research to encourage new technologies for sustainable development.

Targeted interventions to accelerate the hunger reduction process are becoming an important component in the growth-based food security strategy to deal with the wide range of shocks faced by households, including loss of job, crop failures, seasonal food shortages, economic crisis or recession, natural or human caused disasters, etc. Two approaches to direct interventions are used: the growth-mediated security policy and the support-led security policy. In the first approach, as the benefits of economic growth accumulate, they are targeted to low income groups through

public work programs, food subsidies and job training projects. In the second, investments in income transfer programs, health care and education are initiated even before the proceeds from economic growth are captured.

Successful development best practices indicate these public investments and policy attention should concentrate on resource-poor, high poverty rural areas where food security depends on increasing production and resilience through diversification of production systems and of economic activities. For example, growth strategies should promote diversified farming systems and diversified economic activities.

In resource-poor rural areas, important food security activities for the public sector include: providing educational, technological and financial support to encourage mixed farming systems that mitigate environmental consequences by integrating livestock, tree crops, and annual crops; establishing training programmes on soil fertility and organic matter management, moisture conservation, erosion control and nutrient recycling; encouraging diversity in research and extension efforts to accommodate site-specific differences in resource poor and fragile areas and involve farmers in the process; establishing secure property rights for both private and common property resources including forests, pastures and watersheds; and providing nutrition-related extension services to increase food availability through home gardens, urban agriculture, food processing and preservation.

In high potential agricultural areas with fertile soils and favourable climates, environmentally-friendly intensification and specialisation require competitive markets, good management practices and timely information. Policy reforms alone can often lower costs and improve environmental incentives for small scale processors, transporters, and traders. Other low-cost measures include adjustments in extension programmes and information systems to incorporate environmental production approaches such as integrated pest management, integrated plant nutrition systems and rural energy use. In specific cases, funds must be allocated to rehabilitate, conserve and monitor resource use. As the supply of high potential agricultural land dwindles in developing countries, per capita food production gains rely increasingly on expanding output per unit of land.

Over time, the extensive land margin shrinks and the costs of further expansion become too high relative to intensification. To compensate for this shrinking crop land base in both absolute terms and relative to population size, countries are turning to land-saving technologies to underpin their advances in food productivity growth. The development, use and appropriateness of land-saving technologies depend on a number of factors including: large amounts of private and public sector investments in human capital and physical infrastructure; a national and regional system of research in biological, physical and social sciences; institutions to develop and extend new technologies; and well-developed local, domestic and regional markets for both factor and product markets.

5.2 Existing Policies/References

Implementation of the FNSP will be undertaken with due recognition and consideration to, the following and other relevant legal and policy instruments currently existing:

- The Fisheries Act
- ❖ The Forest & Wildlife Act
- The Physical Planning Act
- National Land Policy
- St. Lucia Tourism Strategy
- Watershed Management Project Report
- Biodiversity Country Study Report of St. Lucia

- National Biodiversity Strategy & Action Plan
- Land Conservation & Improvement Act
- St. Lucia Health Sector Plan
- Fisheries Management Plan
- Environmental Health Plan
- Northwest Coastal Conservation Project Reports
- Public Sector Improvement Plan
- Climate Change Issues Paper
- St. Georges Declaration of Principles for Environmental Sustainability in the OECS
- The SIDS Programme of Action
- Saint Lucia's Initial National Communication on Climate Change

Health Policies/Legislation

Due to the relative importance of health to FNS the expansion below is for information. Health policies ensure equitable, high-quality health care for the entire population. The policies and programs of the Ministry of Health are guided by a number of legal instruments:

- The Public Health Act (1975) covers health care services and practices, occupational health and safety, veterinary services, health risk factors, and notification of certain diseases.
- The Mental Health Act (1957 for mental health care services.
- The Hospital Ordinance (1992) covers charges and fees for hospital services and establishes responsibility for payment.
- The Nurses and Midwives Act (1993) amending the Registration of Nurses
- Midwives Ordinance of 1966 governs nursing services
- Family Nurse Practitioners Act (1993) authorizes family nurse practitioners to prescribe certain drugs
- Pharmacy Act (2000) regulates registration of pharmacists, labeling of pharmaceuticals, and general pharmacy services.
- The Health Practitioners Act 2009.
- Waste Management Act was amended in 2007.

Sectoral Health Policy

The Sectoral Policy of the Ministry of Health was reviewed in 2010, by the Pan American Health Organization (PAHO). Recommendations:

- Revision of the organizational structure to better reflect the functions of the Ministry and to facilitate supervision and coordination.
- Revitalization of the primary health care system to relieve the burden on secondary and tertiary services.
- More aggressive use of health promotion strategies.
- Development of a health information system capable of supplying the information needed for evidence-based planning.

The National Health Strategic Plan

The National Health Strategic Plan for 2006–2011 is designed to:

- Improve and sustain health gains and enhance residents' well-being.
- Achieve greater equity, cost effectiveness, and efficiency in the allocation and use of health resources.
- Ensure a cadre of well trained and motivated staff.

- Develop an effective health information system
- Implement a quality improvement system.
- Strengthen health infrastructure

An Industrial Policy of Saint Lucia has been developed to outline a broad framework for policy intervention aimed at stimulating growth in the manufacturing sector.

5.2 Vision and Strategic Objectives of the Food and Nutrition Security Policy

In this context, the FNSP aims to achieve four overarching food and nutrition security objectives:

Food Availability - Promote the sustainable production, processing, preparation, commercialization and consumption of safe, affordable, nutritious, high quality Caribbean/local food commodities/products.

Food Access - Ensure regular access of households, especially the poor and vulnerable, to sufficient quantities of safe, affordable, quality food at all times, particularly in response to diverse socioeconomic and natural shocks.

Food Utilization/Nutritional Adequacy - Improve the nutritional status of the national population, particularly with respect to NCDs including diabetes, hypertension, overweight and obesity.

Stability of Food Supply - Improve the resilience of the national communities and households to natural and socio-economic crises.

This will entail the formulation and implementation of the activities and programmes set out below in order to:

- Increase household food production and trade
- Improve income generation and job creation opportunities
- Improve nutrition and food safety
- Increase safety nets and food emergency management systems
- Improve analysis and information management system
- Provide capacity building
- Ensure stakeholder dialogue and consultation

5.3 Food Availability

Agricultural Policies and Food Availability

Table 22: Current Policy Areas and Policy Objectives

Policy Area	Policy Objectives
o Agricultural trade facilitation	To establish private sector led marketing system, identify and
	explore domestic and external market opportunities and provide a
	mechanism for ensuring integrity of agricultural produce.
o Marketing system development	To facilitate marketing of agricultural commodities. Retail operations
	of the marketing board to be privatized and a new marketing agency
	to be established. A new system of grades and standards to be
	developed. New marketing opportunities will be explored.
o Marketing infrastructure development	To facilitate efficiency in the marketing and distribution of high-
	quality products. Improvements in infrastructure. Farm access roads

	, , , , , , , , , , , , , , , , , , , ,	
		to be rehabilitated. External funding agencies, e.g., CDB. To
		participate in rehabilitation of farm infrastructure.
0	Grades and standards development	Bureau of Standards will be strengthened to ensure compliance with
		established standards. National campaign of public information and
		education to sensitize the public on importance and adherence to
		grades and standards.
o F	Food security	To stimulate domestic production and consumption.
	Agricultural health/food safety	To facilitate trade through strengthening animal and plant
	, , , , , , , , , , , , , , , , , , , ,	protection and quarantine systems. Effective certification and
		inspection systems will be implemented.
o P	Pest and disease management	inspection systems will be implemented.
	Integrated pest management	To involve out a community of the second out of
0 I	integrated pest management	To implement a comprehensive program to reduce use and cost of
		agro-chemicals.
o A	Agro-industries/ processing	To facilitate development of medium scale viable agro-industrial
		enterprises and cottage industries. Support measures include access
		to credit and required inputs, quality control, product promotion,
		niche marketing and appropriate technology.
o A	Agricultural Investment Facility	To enhance capital inflows, provide services by the private sector,
		institutional strengthening of rural organizations and lending
		institutions
	Rural organizational institutional strengthening	To strengthen the administrative capacities of rural organizations to
S	screngthening	become effective carriers of projects, loans and allied support
		services.
o P	Public education and sensitization	To induce demand for domestic foods and stimulate local
		investments. To induce the demand for services and benefits and to
		sensitize the general public on the agricultural diversification
		program.
o I	Infrastructural developments	To improve and establish appropriate physical structure to support
		agricultural development. Port facilities will be enhanced.
		Strategically located reception and distribution centers will be
		developed. On-farm storage facilities will be established where
		feasible and cost effective.
o I	Irrigation	To enhance productivity through the provision of facilities for on-
		farm irrigation. Establish drainage and irrigation unit to provide
		technical assistance. Legislation to be enacted to protect water
		rights and regulate water abstraction.
		To explore feasibility of establishing technology trust fund.
o T	Technology advancement	To facilitate generation, adoption and transfer of new and
		appropriate technologies. National research and development
		capacity to be strengthened. Develop linkages with regional and
		international technology institutions.
		To develop, acquire and disseminate appropriate technologies by
	Technology transfer service, research	Try Try Trong appropriate technicogies by

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	and development. establishing a NARS.		
		-	
	and use management policy and land	To ensure optimal utilization and management of scarce agricultural	
	zoning	land.	
		To strengthen land use legislation and demarcate productive uses	
		based on land capability.	
	Market access	To complete the process of commercializing the St Lucia Marketing	
0	market access	Board. To seek new markets in other OECS and CARICOM countries.	
		To assist local produce markets and standardize sale procedures.	
		To establish an inland reception and distribution centre to improve	
0	Post-harvest quality	product consolidation, inspection, certification and distribution.	
		Enactment of stronger legislation to reduce levels of praedial	
0	Praedial larceny	larceny.	
o Incentives		To create and implement a new sector incentive regime to reward	
	Incentives	productivity, stimulate entrepreneurship and encourage innovation.	
		To improve and increase access to agricultural credit. Existing credit	
0	Credit	facilities to be enhanced to promote investments in irrigation and	
		drainage. The Rural Economic Diversification Incentives Program	
		(REDIP) to be broadened and strengthened.	
		To develop public/private sector partnerships and make extension	
0	Extension services	services more relevant.	
	Public/private sector partnership	To encourage a higher level of cooperation and collaboration	
o P		amongst stakeholders.	
		To introduce new crops and varieties for all markets.	
0	Non-traditional crops	To facilitating the provision of incurance for agricultural activities	
0	Agricultural Insurance	To facilitating the provision of insurance for agricultural activities.	
		Enhancement of multi-partite relationships within the sector.	
0	Institutional capacity building	Institutional reviews of MALFF. Strengthening of farmers'	
		organizations.	

Source: Agricultural Diversification Plan 2002–2005, St. Lucia: Budget Speeches 2002–2003, Review of Economy and other Sector reviews -- 2000–2004.

Commodity-Specific Policies

Fisheries

- ✓ To promote self-sufficiency through increased production of Marine and Aquaculture products and to develop the fishing industry and implement measures to ensure its sustainability.
- ✓ To establish a vibrant and viable regional and extra-regional fish trade in the medium to long-term.
- ✓ To expand aquaculture and mari-culture to offer supplemental fish products.

Livestock

In pursuance of the country's agricultural diversification objectives, the policy proposal with respect to livestock is to aim at self-sufficiency in poultry, eggs and pork. Among the various interventions, the following two are specifically targeted to the livestock sub-sector:

✓ Construction of a state-of-the-art meat processing facility.

✓ Develop and implement a mechanism to allow quality local livestock products to compete favorably with imported products.

Domestic Crops

With respect to the other crops, the policy goal is to increase the production of food crops including, cabbage, lettuce, tomatoes, sweet pepper, cucumber, dasheen, sweet potato, yam and plantain.

Agro-Industry

✓ To develop of cottage industries with government support in the areas of quality control, product promotion, niche marketing and the adaptation of appropriate technology.

Science and Technology / Research and Development

✓ To develop, acquire and disseminate appropriate technologies to enhance agricultural competitiveness.

Fiscal Measures

- ✓ According to the Fourth Schedule to the Customs Duties Act No. 23 of 1990, banana exports were subject to a 5% customs duty, however this tax is reportedly not applied. A GCT is applied on all goods, including imports. It is applied mostly to nonagricultural goods on an *ad valorem* basis. Rates vary between 0% and 45%.
- ✓ Products subject to price controls include flour, powdered milk, condensed and evaporated milk, packaged rice, baby foods, cereals, dried peas and beans, onions, potatoes, garlic, certain bread loaves, copra (for local consumption), refined sugar and brown sugar (price controls for copra may not be enforced).

Policy Framework

The main goal is how to obtain: (1) a balanced combination of short and long term interventions and (2) how to achieve in practical terms a balance among cautious macroeconomic measures, effective compensatory social policies and a lasting supply side stimulus without distortions.

The exclusive use of compensatory social measures will address one dimension of the problem, but will not tackle its productive or macroeconomic side. A combination of responsible and cautious macro policies, on the one hand, and measures that effectively support agricultural diversification and competitiveness, on the other, must accompany efforts to create and expand a social protection system that is really effective in dealing with present and future crises. The crisis should be treated as an opportunity that requires continuing implementation of wide ranging social and productive reforms rather than as a passing shock that requires exclusively short term measures specially directed to protect the price of and/or access to food. Beyond that, *food security is a difficult and multidimensional issue that will require not only long term policies in a wide number of areas, but also substantial changes to what have been the usual actions in a number of public policies directly related to food production and availability*. These transformations will not be easy and a number of contradictions and dilemmas are evident.

The Government of St. Lucia will ensure that the following steps are taken in order to achieve the fulfillment of the goals, objectives, principles and directives of this policy:

Policy Direction 1: Establishment of an effective legal and institutional framework for the maintenance and enhancement of National Food and Nutrition Security.

Policy Instrument 1:

Enact a **Food and Nutrition Security Law** to ensure domestic production of a minimum threshold of a selected basket of foods (crops and livestock) for which the resource endowment will guarantee production capacity and capability as well as national comparative advantage. This law should be supported by adequate production and trade policies to increase

production and productivity of the domestic agriculture and agro-processing sectors and protect local industries from unfair external competition. It should also ensure the right to food of all the citizens.

The trade policies should aim to promote the development of and access to domestic and regional markets for domestic food products and are needed both in terms of reducing food prices and income and employment instability and increasing the sector's profitability.

Policy Direction 2: Encourage local production of food commodities with a view to reduce the food import bill while ensuring availability of food for all its citizens.

Policy Instrument 2:

The Government will actively **promote "Eat local and healthy" Campaign** by increasing availability of safe, affordable, nutritious, good quality food commodities/products with an emphasis on nationally and regionally produced foods through the identification and promotion of the same in which:

- ✓ Priority commodities will be selected on the basis of a nutritionally balanced diet comprised of local food products and guided by the Dietary Guidelines for St. Lucia. Criteria for selection of the commodities/products will be based on factors such as market demand, competitiveness, nutritional composition/elements, domestic resource endowment and their strategic importance.
- ✓ Small producers (farmers, fisherfolk, foresters, cottage food processors etc., with a focus on gender and youth) shall be critical in the production of the identified food commodities/products.

Policy Instrument 3:

The Government will promote an aggressive *food import replacement programme* to reduce the dependency on imported foods identified as critical to contributing to food and nutrition security in the country. This will be implemented by:

- ✓ Identifying commodities that can be produced on a national scale competitively and in required quantities based on resource endowment and comparative advantage as well as providing trade and other policy support for selected commodities/products.
- ✓ Conducting value chain analyses to diagnose and address gaps/constraints in the development of the identified commodities and developing action plans for the selected industries, with participation of all actors along the value chain and facilitating dialogue among all relevant stakeholders to ensure consensus building and ownership on strategic actions to be implemented.
- ✓ Formulating and implementing of a comprehensive set of policy support measures to address identified challenges and facilitating an enabling environment for agro-industrial development.

<u>Policy Direction 3: Promote Production and Technology Policies for Sustainable Agricultural Production to enhance food availability</u>

Policy Instrument 4:

The Government of will promote *intensified sustainable production and productivity* of selected crops, livestock and fishery products by:

✓ The building of an Agricultural Diagnostic Facility to address research regarding crops, livestock and fish production to generate and transfer appropriate sustainable technology in food products (eg. crop cultivation and livestock

- management) through market led research programmes at existing institutions and in cooperation with international development partners such as FAO, IICA, CARDI etc.
- ✓ Identifying, documenting and disseminating best practices for sustainable production of identified food crops, livestock, fish and other food products.
- ✓ Develop an improved seed and genetic material plan, seed bank and implementation mechanism for the production/importation, conservation, evaluation and distribution of high quality planting and genetic material looking for characteristics related to climate change adaptation and resiliency.
- ✓ Finding creative ways to stimulate growth in the livestock sub-sector, especially in ruminants and promoting the adoption of new/improved technologies in livestock breeding and production to ensure the preservation of existing and where necessary, the improvement of genetic stock.
- ✓ Promoting the production and utilization of local raw material in livestock feed production.
- ✓ Promoting the sustainable management of the country's fisheries and forestry resources and exploring greater investments in aquaculture to increase the availability of fish and fish products.
- ✓ Promoting on-farm mechanization through greater use and improved access to modern and appropriate small-scale equipment/tools.
- ✓ Promoting and utilizing Good Agricultural Practices (GAPs) by producers to include, inter alia:
 - Promoting and utilizing appropriate fertilizer practices through proper soil and leaf analysis and application types and levels
 - Promoting and utilizing soil conservation practices to reduce soil loss, enhance soil fertility and facilitate increased land productivity on a sustainable basis
 - Encouraging more effective, efficient and sustainable use of agro-chemicals and pharmaceuticals in agri-food production systems.
 - Promoting and utilizing Integrated Pest Management in agri-food production systems
 - Promoting and utilizing traceability in agri-food production systems.
 - Promoting and utilizing effective and efficient land and water management practices in agri-food production systems
 - Promoting and utilizing environmentally sound waste disposal and recycling systems in the production processes
 - Promoting and utilizing sustainable fisheries and forestry management practices

Policy Instrument 5:

The Government will formulate and implement sustainable management of natural resources (land and water) management systems by:

- ✓ Implementing the National Land Use Policy to create a system of land allocation to serious interested farmers so as to expand on production and ensure the adoption/utilization of production systems that are appropriate to production zones and sizes of enterprises taking into consideration climate change
- ✓ Focus on sustainability and low external input systems promoting the adoption of efficient, effective and sustainable soil and water management practices including:
 - o Drainage and irrigation
 - Water harvesting
 - Soil and water conservation
 - Watershed management

- o Adoption of practices to mitigate land based sources of water pollution and land degradation
- Establishing an institutional mechanism for better integration and coordination of water management initiatives

Policy Direction 4: Establish Policies to Enhance Productive Investments in Agriculture to ensure food availability

Policy Instrument 6:

The Government will **create an "enabling environment"** for intensified sustainable production and productivity and improved marketing of identified crops, livestock and fish commodities/products through:

- ✓ Establishing a modern pragmatic, efficient and effective institutional structure and mechanism to facilitate growth and development of the sector by:
 - Finalizing the restructuring of the ministry so that the focus will be creating successful agribusinesses at the farm and cooperative levels; in order to provide more effective and efficient support to producers
 - Strengthening the institutional and technical capacity for research and development so that it is demand driven and responsive to the needs of producers through the development, adaptation and adoption of appropriate technologies and methods to improve agricultural productivity
 - Fostering greater synergies between extension and research and development to ensure the effective dissemination of new and existing technologies to stakeholders
 - 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
- ✓ Strengthening the institutional mechanism for improved coordination and inter-sectoral linkages (agriculture, environment, tourism, health, education etc.) to prevent duplication of effort and wastage of resources
- ✓ Strengthening the capabilities of the Ministry of Agriculture and related Agencies to provide market intelligence and information to producers and end users, thereby reducing information asymmetries and creating greater marketing opportunities along the value chain and encouraging greater use of market intelligence information among value chain actors.
- ✓ Promoting increased Resource Mobilization to the sector by:
 - Increasing Government budgetary allocation to the sector
 - Aggressively accessing and securing Overseas Development Assistance (ODA) and FDIs
 - o Improve "ease of doing business" to facilitate and provide critical support services to expand and attract new foreign direct and domestic investments to the sector through investment promotion actions
 - Expanding the pool of credit funds and supporting the creation and implementation of innovative financial instruments
 - Facilitating the accessibility and affordability of credit to producers, including agro-processors to enable them to invest in new agri-business ventures and technologies
 - Facilitating the delivery of credit to the agri-food by financial institutions and micro-credit agencies, by supporting the strengthening of existing institutions and, where necessary, creating new ones
 - Providing access to low cost funding and risk management facilities and mechanisms to targeted farming population and processors
- ✓ Reducing the incidence of praedial larceny through the implementation of a holistic approach involving legislation, traceability systems, monitoring, surveillance, enforcement and public awareness

- Strengthening the overall agricultural education framework and increasing the effectiveness and responsiveness of the relevant institutions in providing leadership in education, research, training and policy formulation and planning to support the sustainability of the agricultural sector
- ✓ Effectively managing trade policies to ensure that they are conducive to agricultural development by providing local producers with a level playing field on which to compete with their foreign counterparts
- ✓ Improving the access and availability of land to producers in order to facilitate the expansion of agricultural production by creating a single, viable and sustainable approach to the development of agricultural lands through the promulgation of an Agricultural Land Use Policy

Policy Instrument 7:

The Government will facilitate the "fiscal policies and incentives" framework to foster an enabling environment for the production and marketing of local foods by:

- Providing improved incentives to nationals to attract investment in agriculture
- ✓ Identifying and progressively closing the infrastructure investment gap required to meet the food and nutrition security needs of the most vulnerable group
- ✓ Improving market access for small producers through improved market information and buyer/seller coordination and by promoting the value chain approach
- ✓ Facilitating improved access to land through a comprehensive Land Use Policy
- ✓ Developing/Strengthening national/training curricula with a strong practical element to certify relevant workers at various levels aimed at improving management and technical capabilities
- ✓ Improving access and establish a farmers' revolving fund for production inputs
- Rationalizing the credit policy to enhance access, improve governance and provide affordable interest rates
- ✓ Supporting regional and international initiatives that benefit national agricultural development and food and nutrition security

Policy Instrument 8:

The Government will put in place **Quality Management Infrastructure** (Systems and Measures) and establish the related legislative framework (Hazard Analysis and Critical Control Point-HACCP, ISO 9001:2008, ISO 17025, ISO 14001) throughout the food production and processing sector to meet market requirements (FDA Food Safety Modernization Act (FSMA) and similar legislation in the European Union) and to ensure the certification of farmers and agro processors by:

Accessing and facilitating technical assistance for HACCP certification and also seeking as far as possible to assist entities through institutional support and financing to attain ISO certification. Supporting systems that improve equipment, quality, and food safety management that are more affordable to increase access to small companies

Policy Instrument 9:

The Government will promote **value adding through cost efficient technology** for locally produced and imported semi-processed foods and livestock products by:

- An Agri-Enterprise Facilitation Project to encourage value added activities in agriculture.
- ✓ Facilitating the creation of production clusters and value chains to satisfy increasing sophistication of consumer demand.

- Strengthening Producers' Organizations and sustained capacity building of rural producers to facilitate collaborative production planning, supply to intermediaries, and marketing of foods with a new focus on Farmer/Fisher co-operatives to improve their operations and to foster an integrated rural development focus.
- ✓ Mobilize resources for the constructing and operation of critical infrastructure such as post-harvest facilities, abattoirs, cold storage, packing houses through strategic public/private sector partnerships.
- ✓ Promoting and implementing systems for food safety- traceability, residue testing, standards and grades.
- ✓ Providing assistance in strengthening the linkages among the actors along the value chain (processors, importers, hotels, restaurants, fast food, etc.) through dialogue, coordination and technical support and advice from the Ministry of Agriculture and its Agencies.
- ✓ Increasing efficiency of value addition in food processing, based on regulated (using necessary safeguards) levels of imported raw materials, in order to impact the cost of production and the price of food to consumers.
- ✓ Implementing measures to reduce post-harvest losses.

Policy Instrument 10:

The Government will ensure that all trade related agreements benefit domestic agriculture by:

- ✓ Identifying elements of trade-related agreements that can benefit domestic agriculture
- ✓ Developing mechanisms and strategies to derive benefits from trade-related agreements

5.4 Food Accessibility

Policy Direction 5: Establishment of an effective institutional framework for the maintenance and accessibility to Food and Nutrition Security.

Policy Instrument 1:

The Government will **improve the socio-economic conditions** of the food insecure and nutritionally vulnerable groups by:

- ✓ Implementing improved mechanisms for measuring and monitoring food insecurity and poverty, including:
 - o 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
 - Compiling a basic dataset of food insecurity/vulnerability indicators
 - o Enhancing data collection and storage methodologies
 - Utilizing evidence-based research, such as Surveys of Living Conditions and Household Budget Surveys as a basis for food insecurity and poverty measurement, planning and monitoring
 - Strengthening the capacity and capabilities of relevant agencies to monitor food insecurity and poverty vulnerability factors
 - Building national capacity in the use of Food Insecurity and Vulnerability Information Mapping Systems in order to identify food insecurity, under-nutrition and malnutrition at the household level
- ✓ Ensuring that economic opportunities for sustainable livelihoods are created, enhanced, and/or expanded by:
 - o Improving rural livelihoods, especially that of small producers, agricultural labourers and marginalized urban dwellers, through the promotion of entrepreneurship and home food production (vegetables, root crops, poultry, small ruminant rearing), utilizing backyard/container/protected gardening technology

- Expanding production processes along the food chain to include post-harvest handling, storage, food processing and preparation, as well as strengthening the linkages with other alternative livelihood activities, in order to expand employment opportunities for producers and broaden the household income base
- Revising poverty reduction programmes to encompass productive safety net mechanisms/interventions and complementary measures to preclude a dependency syndrome and promote sustainable livelihoods, and food and nutrition security
- Developing and implementing appropriate measures and programmes for transition and absorption of displaced workers, especially in rural areas
- Promoting human capital development among poor and vulnerable groups through the widening of the scope and reach of vocational training programmes, adult learning certification programmes, and continuous learning programmes
- The expansion of the Youth Agricultural Entrepreneurial Programe to encourage young people to be involved in agricultural production as well as expanding apprenticeship and other welfare-to-work programmes, in collaboration with the private sector to equip relevant groups with the necessary skills in preparation for entry into the workforce
- ✓ Promoting increased access of affordable and innovative means of credit to vulnerable groups through new and existing microfinance credit schemes and other relevant business support services to finance new and existing business ventures
- ✓ Implementing the Agricultural Land Use Policy in order to promote increased access to land
- ✓ Developing and implementing interventions to enable vulnerable individuals and households to formalize asset ownership
- ✓ Enhancing coordination and strengthening of community support systems through capacity building of Community Based Organizations (CBOs), Non-Governmental Organizations (NGOs), Faith-Based Organizations (FBOs) and Producer Organizations to provide greater support to their members and communities for livelihood creation and enhancement
- Improving and ensuring equitable access to basic public goods and services (such as water, electricity, sanitation, education, roads, healthcare, etc.) and community infrastructure through existing programmes and institutions to improve human welfare and facilitate investment
- ✓ Ensuring access of the population to minimum basic food items providing recommended dietary allowance by:
 - Introducing appropriate fiscal measures
 - Using 'moral suasion' in collaboration with private sector business interests
 - Implementing statutory regulations and appropriate market interventions as necessary
 - Promoting a minimum cost nutritious food basket to inform the setting of minimum wage, healthy eating, and monitoring food prices, including the list of zero-rated items
 - Facilitating comprehensive and accurate market information dissemination to the population, including the aggressive use of various media and social networking tools

Policy Instrument 2:

The Government will improve the efficiency and effectiveness of the food marketing and distribution system by:

- ✓ Making marketing of local food a focal starting point in the planning of food system
- ✓ Upgrading of the Marketing Corporation and the establishment of retail market facilities and packaging centres of public goods to facilitate efficient markets and food safety/hazard control and to improve food availability and lower market prices
- ✓ Strengthening the capacity and capability of Production Marketing Information System (PROMIS) for the implementation of a National Market Intelligence system in order to facilitate greater linkages between buyers and sellers and reduction of information asymmetries
- ✓ Improving farm to market channels, e.g. access roads and post-harvest grading and handling (Support the rehabilitation and maintenance of the farm/feeder road network)
- ✓ Establishing a national network of strategic food stock reserves in partnership with the private sector as a risk mitigation response mechanism
- ✓ Promoting greater market integration through the construction, rehabilitation, and operation of postharvest, storage, and distribution facilities, utilizing public and private sector partnership arrangements
- ✓ Establishing and supporting producer organizations to assist in the collective marketing of agricultural produce
- ✓ Encouraging community bartering of agricultural produce in the absence of monetary provisions
- ✓ 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
- ✓ Improving port facilities and logistics and reducing bureaucratic rigidities
- ✓ Ensuring that food imports conform to all public health and commerce regulations and standards of food safety, including storage and transportation
- ✓ Facilitating island-wide access to food
- ✓ Developing emergency response mechanisms to assess and address general food accessibility at times of ad hoc shocks, such as natural disasters and price increases
- ✓ Ensuring that appropriate licenses and other standards are enforced throughout the food distribution system by collaborating with health, national security and industry and commerce authorities

<u>Policy Direction 6: Establishment of an effective institutional framework for social safety nets to ensure food access to the vulnerable groups.</u>

Policy Instrument 3:

The Government will improve the **social protection system**, including the strengthening of the safety net system which provides coverage for vulnerable groups (women, elderly, children, youth, and persons with disabilities) by:

- ✓ Preparing and implementing a modern Social Protection Plan, utilizing a strategic approach which details the country's medium to long-term priorities and actions in relation to social protection
- ✓ Establishing a National Social Protection Commission to oversee coordination, strategic planning and monitoring and evaluation of social protection
- ✓ Evaluating and restructuring of the social safety net programmes to allow for proper identification, targeting and provision of services for the vulnerable. A life cycle approach and gender mainstreaming will be key to

- other planning and decision-making processes in respect of the restructuring of the programmes, and in the consideration of food security status in the identification of social assistance beneficiaries
- ✓ Improving the coordination and collaboration among stakeholder agencies to ensure that efforts are not duplicated, resources are properly apportioned, information is shared, gaps are better identified and bridged and that efforts are mutually supported
- ✓ Establishing a National Management Information System database to provide details of each recipient and the benefits to be derived from the various programmes, which would allow for real-time evaluation of the impact of the programmes and better targeting, and to avoid abuse of the system
- ✓ Promoting general awareness of the existence and provisions of social assistance programmes, using various forms of media and social networking tools
- ✓ Establishing reliable measures for sustained financing of the requisite range of welfare support programmes. In this regard, in addition to traditional means of funding, seek to promote and encourage multi sector partnerships between public and private sectors to address the needs of the vulnerable
- ✓ Encouraging and strengthening the capacity of households to provide for their vulnerable members
- ✓ Fostering general awareness about the needs of vulnerable groups so as to engender greater participation by civil society in helping to meet their food and other needs
- ✓ Improving and expanding the school feeding programme in order to provide adequate and nutritious food for the children
- ✓ Providing appropriate access to food for all wards of the state in institutional care

Policy Instrument 4:

The Government will **ensure that persons made vulnerable and food insecure during emergencies** caused by natural hazards, economic shocks and food shortages, **have access to food** by:

- ✓ Develop a National Food Emergency Plan and Strategy for collaboration with the private sector, NGOs, CBOs, FBOs, donor agencies and disaster relief agencies for temporary assistance to meet the basic food needs of vulnerable and food insecure persons
- ✓ Integrating food security provisions into emergency assistance strategies for extremely vulnerable groups under existing social welfare programmes and social safety nets
- ✓ Making provisions for the special dietary needs of certain groups, including the chronically ill, infants, the elderly, pregnant women and persons with disabilities
- ✓ Using fiscal measures and trade policy to ensure the accessibility of low cost baskets of nutritious food to the vulnerable population

5.5 FOOD UTILISATION

Promote healthy lifestyles and the commercialization and consumption of safe, affordable nutritious and good quality food commodities/products.

<u>Policy Direction 7: Establishment of an effective institutional framework for the promotion of the best food utilization</u> based on nutrition values.

Policy Instrument 1:

The Government will increase consumer awareness of nutritional standards and food safety by:

- ✓ Promoting, good nutrition practices, wise purchasing, storage and utilization of food products by:
 - Implementing a national mass media campaign that emphasizes the health and nutritional benefits of selected national foods
 - Utilizing outstanding National personalities to promote the consumption of nutritious national/regional foods
 - Increasing awareness among policy makers and planners of the extent and severity of nutritional problems and of their causes, of the economic benefit of interventions, and of how activities under their control can affect the nutritional status of different socio-economic groups
- ✓ Encouraging and supporting the inclusion of the community in the identification of their own nutritional problems and the implementation, monitoring and evaluation of programmes
- ✓ Promoting and facilitating linkages with civil society, private sector and consumer advocacy groups to increase their participation in the process of food and nutrition security planning and implementation
- ✓ Ensuring prevention and management of infectious diseases through standardized food safety programmes including inspection of restaurants and food shops and certification of food handlers
- ✓ Promoting public awareness of nutritional standards by:
 - o Protecting appropriate infant (breastfeeding) and young child feeding practices
 - Supporting the development of population dietary (nutritional) goals
 - o Sensitizing the public about food based dietary guidelines.
- ✓ Analyzing and disseminating data and information on the cost of a nutritionally balanced economical food basket with a view to monitoring access to food for vulnerable groups
- Encouraging, assisting, developing and promoting standards of care for the elderly, mentally and physically challenged and persons living in institutions

Policy Intrument 2:

The Government will promote consumer protection through improved food quality and safety by:

- ✓ Strengthening existing legislation and regulations and enacting new laws, where necessary, to foster the implementation and enforcement of food safety standards in keeping with international standards
- ✓ Coordinating national guidelines for maintaining food safety and traceability programmes along the food value chain
- ✓ Reviewing and upgrading the Food and Drug Act to incorporate standards for food and nutrition labelling
- ✓ Developing and enacting consumer protection legislation to include accurate labelling of food for nutrition content and redress measures
- ✓ Harmonizing national food standards based on the Codex Alimentarius and CARICOM and international standards
- ✓ Developing and disseminating information on food safety and health hazards and standards for food and nutrition labelling
- Promoting and increasing its investments in potable water, sanitation and waste disposal especially for vulnerable populations by:
 - Strengthening the monitoring of water and sanitation in communities and institutions
 - o Providing facilities to communities for waste disposal
- ✓ Upgrading the abattoir, fish, and meat market facilities, on a regular basis as well as training of abattoir, fish, and meat market personnel in Hazard Analysis Critical Control Points (HACCP)

Policy Instrument 3:

Government will promote and support appropriate diets, physical activity and other healthy lifestyle behaviours in recognition of the challenges facing the national population with respect to increasing levels of obesity, non-communicable chronic diseases (NCDs), persistent iron deficiency anaemia and pockets of under nutrition, through:

- ✓ Promoting, protecting and supporting appropriate infant and young child feeding practices by:
 - Developing, implementing, monitoring and evaluating a comprehensive national policy and national plan of action on infant and young child feeding
 - Identifying and allocating adequate resources human, financial and organizational to ensure the plan's timely and successful implementation
 - Establishing a multi-sectoral body (government, private sector, and civil society body with the requisite expertise to perform an advisory role on all matters concerning infant and young child feeding
 - Ensuring that every facility providing maternity services implements international best practices and follows the Ten Steps to Successful Breastfeeding set out in the joint WHO/UNICEF statement "Protecting, promoting and supporting breastfeeding: the special role of maternity services"
 - Undertaking necessary actions to give effect to the aim and principles of all Articles of the International Code of Marketing of Breast-Milk Substitutes and subsequent relevant World Health Assembly resolutions in their entirety
 - Reviewing/upgrading and enacting legislation to protect the breastfeeding rights of working women and establish means for its implementation and enforcement
- ✓ Developing and implementing a framework and/or measures for promoting the responsible marketing of foods and non-alcoholic beverages to children, in order to reduce the availability to them of foods high in saturated fats, trans-fatty acids, free sugars, and salt
- ✓ Promoting consumption practices consistent with national population dietary goals and in line with international standards through:
 - Establishing and implementing food-based dietary guidelines and healthier composition of food by reducing sodium/salt levels, eliminating industrially produced trans-fatty acids, decreasing saturated fats, limiting free sugars
 - Developing the technical capability within the relevant ministries for operating an updated system for monitoring the cost of a nutritionally balanced food basket
- ✓ Implementing programmes of incentives and dis-incentives, where appropriate, for nutritious and less-nutritious foods, respectively by providing accurate and balanced information for consumers to enable them to make well-informed, healthy choices by implementing social marketing programmes (school workplace, community)
- ✓ Strengthening the national nutrition surveillance systems in accordance with WHO standards, to monitor the nutritional status of the population and to identify those at risk of nutrition-related disorders by:
- ✓ Implementing a strategy of universal assessment for all children (0 to 18 years old) to identify those at risk for malnutrition (deficiency diseases, overweight, obesity and non-communicable diseases)
- ✓ Ensuring supervision of dietary intake, physical activity, and the related burden of disease to include food borne illnesses and behavioural risk factors for under/over-nutrition
- ✓ Developing and implementing national guidelines on physical activity and dietary intake to promote health and wellness in schools, workplaces and communities
- ✓ Providing nutritional standards and guidelines to strengthen programme development and implementation in all sectors through:

- Incorporating nutrition principles into competency development and core curricula in schools and in professional and industry training
- Increasing the proficiency of persons giving nutrition information to the public
- Strengthening training programmes for nutrition and dietetic professionals to meet the needs of the national population by establishing, on a sustainable basis, an internship programme as an integral element of the curriculum, and ensuring a successful outcome to the collaborative efforts between MOH and the relevant training institutions
- Promoting nutrition training among food producers to assist the development and promotion of healthy, desirable food products and the development of standardized portions and labelling
- ✓ Implementing policies and programmes to detect, prevent and manage micronutrient deficiency by:
- ✓ Promoting healthy practices among women of child bearing age and in the prenatal period, placing emphasis on micronutrient rich foods such as iron, folate, zinc, etc.
- ✓ Monitoring and strengthening the distribution system for iron/folate tablets in antenatal clinics
- ✓ Implementing food and nutrition supplementary programmes for vulnerable groups such as women of childbearing age, pregnant and lactating women, the elderly, children and adolescent girls
- ✓ Conducting systematic reviews of available evidence on effective approaches to food fortification of staple products
- ✓ Undertaking pilot fortification of commonly used staple foods based on available evidence and best practices
- Reviewing and strengthening food fortification programmes and legislation

Policy Instrument 4:

The Government will promote and support the use of schools and other institutions to provide entry points for interventions aimed at the prevention and control of identified nutrition conditions and factors that influence food tastes and preferences. In this context, the policy will seek to address the following critical areas:

- Developing and implementing a national comprehensive school nutrition policy through:
 - Supporting the development of curricula at different levels of the education system teacher training, early childhood institutions, primary and secondary schools - that include nutrition and health and family life education for good health and lifestyle choices
 - Developing national guidelines for the preparation and sale of meals that promote health and wellness to school children
 - Adopting a policy that the local content of the meals provided under national school feeding programmes should increase in line with the national food import replacement policy/strategy
 - Reviewing the school gardening programmes to identify strategic areas for intervention, including the provision of technical support, promotional and other relevant materials, focussing on nutrition, growing food, and dietary choices
 - Developing national social marketing campaigns to encourage nutritious dietary/food choices in schools and communities
 - Recruiting qualified nutrition officers, in adequate numbers, to monitor implementation of school nutrition policy
 - Promoting, supporting and protecting appropriate infant and young child feeding practices
 - Promoting the development and implementation of national school health and nutrition policies
 - Establishing mechanisms for the effective monitoring and evaluation of school health and nutrition programmes

- Ensuring that the meals provided under national school feeding programmes have a high input of local/regional foods
- ✓ Encouraging and supporting an environment conducive to increased physical activity in schools, work places and the wider community in compliance with WHO guidelines
- ✓ Influencing food tastes and preferences in the education sector starting at the level of pre-schools through tertiary level to prevent and militate against identified nutrition-related conditions
- ✓ Supporting the expansion and promotion of competitions about food and nutrition in schools
- ✓ Reviewing the school gardening programmes to identify strategic areas for intervention such as the provision of technical support and promotional materials
- ✓ Supporting the development/strengthening of curricula at the Department of Teacher Education and at preschool, primary and secondary school levels to include nutrition and Health and Family Life Education (HFLE)
- ✓ Enhancing the human resource capital within the relevant Ministries to promote healthy diets and lifestyles
- ✓ Promoting the availability of foods in line with recommended national population dietary goals through:
 - o Promoting the use of food-based dietary guidelines
 - o Promoting domestic production and aligning food imports in keeping with national dietary food goals
 - Strengthening the nutrition surveillance system to monitor the nutritional status of the population (throughout the course of life) and identify those at risk of nutrition related conditions
- ✓ Analyzing and disseminating data on the cost of a nutritionally balanced economical food basket with a view to monitoring access to food for vulnerable groups
- ✓ Utilizing pre-schools, primary and secondary schools as entry points for interventions to prevent and mitigate some of the identified nutrition conditions, and to influence food tastes and preferences in the education sector
- ✓ Supporting actions against substance abuse

Policy Instrument 5:

The Government will promote early health care including nutrition counselling services for PLHIV by:

- ✓ Strengthening nutrition programmes to enhance its capacity to manage infectious diseases such as HIV/AIDS
- ✓ Promoting early health care and counselling services for people with HIV/AIDS

Policy Instrument 6:

The Government will promote nutrition and other preventative measures to control micronutrient deficiencies by:

- ✓ Strengthening nutrition surveillance programmes to better identify those at risk for micronutrient deficiencies
- ✓ Intensifying interventions for the management of micronutrient deficiencies
- ✓ Promoting nutrition education programmes to reduce micronutrient deficiencies

5.6 Stability of Food Supply

Create an effective disaster preparedness and management system that can efficiently deal with the immediate and short-to-medium term food and nutrition security consequences of economic and financial shocks and natural disasters (hurricanes, drought, flooding, and earthquakes) while at the same time strengthen the resilience to those consequences among the most vulnerable population groups.

Policy Direction 8: Establishment of an effective institutional framework for the maintenance and accessibility to Food and Nutrition Security to ensure stability especially during crisis or emergency situations.

Policy Instrument 1:

The Government will support adaptation and mitigation strategies as a means of enhancing the stability of food and nutrition security over time among the vulnerable groups as a result of financial and economic shocks through:

- ✓ A Disaster Risk Reduction Project to address risk mitigation measures in agriculture and to establish a system for the long-term sustainable management of Black Sigatoka in plantains and bananas.
- ✓ Facilitating the establishment of a National Information Early Warning System (NIEWS), as part of a Regional Information Early Warning System (RIEWS), that ensures, inter alia, the national capability for the timely detection, prevention and resolution of threats to food and nutrition security as a result of economic and financial shocks
- ✓ Improving national capacity for and conducting vulnerability mapping by:
 - o Identifying national vulnerability/social protection policies and associated relevant legislative provisions as well as an analysis of the institutional framework for their implementation
 - Compiling a basic dataset of vulnerability/food insecurity indicators
 - Analyzing on-going social welfare/food access programmes and their inter-linkages, within the framework of the Right to Food Assessment Guidelines
 - Building capacity at the national level in the use of the Food Insecurity and Vulnerability Information Mapping Systems (FIVIMS) to identify food insecurity, under-nutrition and malnutrition at the household level
 - o Conducting food insecurity and vulnerability mapping of vulnerable populations
- ✓ Improving human capacity for the translation of information and data into policy decisions and the design of intervention strategies to address financial and economic threats by training a critical mass of personnel from various sectors, including the private sector, development partner institutions, universities and other academic institutions, in critical aspects of food and nutrition security issues, data analysis and interpretation, policy analysis and planning
- ✓ Forging stronger relationships with other member states and international agencies to improve information sharing especially during crises
- ✓ Encouraging and participating in mechanisms to reduce poverty levels and provide increased opportunities for women and youth to become more involved in the food and agricultural sectors by:
 - Creating a Venture Capital Fund, with a particular focus on women and youth, to support innovative and creative value addition activities for traditional and non-traditional commodities along the supply value chain
 - Establishing a Nation-wide inventory of vulnerable groups (farmers, producers groups, communities) and the levels of vulnerability (vulnerability analysis and mapping)
 - Expanding (where needed) and linking of relief interventions with longer term structural improvement measures
 - Establishing a food crisis fund that will cater to the needs of the most vulnerable
 - o Identifying and establishing a portfolio of social welfare programmes, safety nets and other policy prescriptions (e.g. protecting breastfeeding) that can be applied in times of crises
 - o Promoting the establishment of additional safety nets for extremely vulnerable groups

• Establishing a mechanism that is triggered when there is a food crisis and consensual agreement on procedures to be followed at country level after a disaster (preparedness strategy)

Policy Instrument 2:

The Government 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:

- ✓ Developing and implementing Agricultural Disaster Risk Management and climate change adaptation and mitigation strategies including risk management schemes for the agriculture, fisheries and forestry subsector
- ✓ Pursuing 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 will also support a reduction in deforestation, improved watershed management and protection of carbon reservoirs
- Promoting and encouraging capacity enhancement within relevant ministries and public entities, research institutions and the hydro-meteorological departments and fostering links with Institutions such as the University of the West Indies (UWI), the Caribbean Emergency Disaster Management Agency (CEDMA), the Caribbean Institute of Meteorology and Hydrology (CIMH), the Caribbean Community Climate Change Centre (CCCCC) and the National Meteorological Office so that they can provide accurate and timely climate information to the farming community. In this area, within the framework of the FNS, the Government will seek technical and financial assistance for institution building and capacity development at the national level from bilateral and multilateral partners and the International Finance Institutions.
- ✓ Integrating climate management considerations into the National Agricultural Disaster Risk Management Programme as well as into programmes to develop farm management and build industry and farming community capacities to increase resilience by:
 - o developing dynamic farm/agricultural management tools that integrate climate change risks into existing and emerging farm management systems
 - developing, where possible, environmental management systems for the agricultural sector
 - o identifying and building on successful indigenous knowledge and strategies for adaptation
- ✓ Promoting the inclusion of adaptation and mitigation strategies in the curricula of all training institutions and extension training mechanisms for farmers and other producers e.g. farmer field schools
- ✓ Reducing the impact of climate change on food production, incomes and livelihoods by:
 - Adopting an Integrated climate change management approach
 - Developing and adapting sustainable land and water management practices to mitigate and adapt to climate change
 - Retraining and retooling farmers in appropriate production practices (e.g. conservation farming, zero tillage etc.) to adapt to the changing environment
- ✓ Developing sustainable land, water, forest and fishery management systems inter alia to address shortages and excessive rainfall and protect the natural resource base in the face of climate change
- ✓ Zoning of agricultural production as necessary to reduce vulnerability
- ✓ Developing and implementing a national cropping plan, taking into consideration prevailing weather hazards, in order to reduce overall production risks
- ✓ Promoting cost-effective alternatives to fossil fuels that improve energy efficiency in agriculture

- ✓ Integrating climate adaptation into agricultural adjustment programmes through a risk management approach
- ✓ Supporting and funding increased water use efficiency across irrigated agriculture.
- ✓ Investing in new or existing water management and control infrastructure
- ✓ Supporting the improvements in national monitoring and forecasting systems for weather and natural phenomena and endorsing the development of a regional monitoring and forecasting system for the same
- ✓ Facilitating continuous training of stakeholders in preparedness and mitigation strategies
- ✓ Strengthening capacity at the local/community level to adapt to the changing climate
- ✓ Conducting public education campaign using a multiplicity of media forms to raise awareness of climate change and its implications for livelihoods to effect behavioural change
- ✓ Introducing systems of governance to empower communities to adapt to climate change
- ✓ Developing and implementing a communication plan to disseminate accurate and timely climate and weather information to the farming/fishing community
- ✓ Improving the systems for the collection of agro-meteorological data (for key climate variables such as rainfall, river flow/levels, temperature, sea level rise and the incidence of extreme weather events (e.g. hurricane, flood, drought) at the national and parish levels
- ✓ Improving harmonization and better coordination in the collection and collation of information inter alia on markets, production-type and level, income sources and reliability, policies affecting trade and distribution of food products, baseline information on food availability, access, utilization, population numbers and distribution, infrastructure, rainfall information, crop and livestock diseases, monthly state of crops in the fields, and security conditions such as the extent of praedial larceny, etc.
- ✓ Constructing resilience indicators and developing comprehensive risk profiles for the main economic and food crops
- ✓ Developing comprehensive agricultural insurance and risk transfer schemes

VI. Institutional Framework for Implementation of the FNS Policy

6.1 Overview

Effective leadership and good governance are essential elements for effectiveness and efficiency in the implementation of the Food and Nutrition Security Policy. Leadership must be exercised, and building political awareness of the benefits of a food and nutrition secured nation as well as of the deleterious effects of malnutrition on human welfare and on economic development efforts at the national level are critical. The message that poverty is an intrinsic component of food and nutrition insecurity must be disseminated widely.

It is important that the profile of food and nutrition security be raised. In fact, a key element of an advocacy effort will be raising the general level of knowledge among the population at large of the importance of good nutrition so that malnutrition becomes apolitical issue for which political leaders, the government, and individual sectors of government are held accountable by the general public.

The Food and Nutrition Security Policy implementation process must incorporate good governance practices or Right to Food principles, including issues related to participation, accountability, non-discrimination, transparency, full respect for human dignity, empowerment, rule of law, and inclusion and considerations of equity.

The empowerment of duty-bearers and rights-holders must become an essential component of the policy implementation process. Duty-bearers must be assisted to recognise their responsibilities and have sufficient capacity to fulfil them, while rights-holders must be assisted to recognise their rights and engage in the policy process to argue for their fulfilment. Capacity and knowledge must be built among local government leaders and officers so that they are able to carry out their duties effectively in order to ensure that the right-to-food of all individuals is respected with human dignity. Ultimately, food and nutrition security needs to be attained by households and individuals where they live. The devolution of action under this policy to local governments is therefore essential.

The issues to be addressed by this Food and Nutrition Security Policy 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. Existing and emerging international and regional responses seek to promote and reinforce integration, coherence and consistency of national level efforts. The drive for greater policy and implementation coherence is also evident in the efforts of donor coordination through the Paris Declaration and the Accra Agenda for Action.

6.2 Proposed Institutional Framework

It should be noted that there is at present no entity or body responsible for coordinating food and nutrition security policies and programmes as these issues are normally considered to be the responsibility of the agricultural ministry due to the lack of awareness of the multi-sector and inter-disciplinary nature of the issue.

The Ministry of Agriculture is seen as being responsible for food security which is often equated to production/availability while the Ministry of Health is viewed as being responsible for nutrition. It is important to emphasize that Food and Nutrition Security is more than Availability and Utilization. The Food and Nutrition Security Policy will facilitate the paradigm shift towards a more integrated and holistic approach by all stakeholders, towards implementation – taking into consideration the inter-related and inter-dependent nature of the entire process.

The role of the private sector, civil society, and educational, research and development organization should not be underestimated. Working together, these stakeholders can contribute more effectively towards eliminating chronic hunger, food insecurity and malnutrition and preventing future food security crises from occurring.

The attainment of food and nutrition security entails actions in areas that fall within the purview of diverse ministries and institutions in the public and private sectors. The diversity in the scope and nature of the issues to be addressed underscores the need for a holistic, multi-disciplinary, uniformed and coordinated approach for their resolution.

It is evident, that in order to make a significant dent on poverty, hunger and malnutrition, within the context of a Food and Nutrition Security Agenda, there is need for an institutional entity/mechanism vested with statutory powers to

direct actions effectively on these issues across sectors. Such an entity must be given responsibility for coordinating and overseeing necessary actions against malnutrition and hunger at the level of the relevant sectors. It should also engage in the budgeting and planning processes that guide the allocation of the resources required for the various technical sectors concerned, while holding those sectors accountable for the use of their resources.

The entity's principal role lies in ensuring that the sectors responsible for food production, importation, distribution, trading, and food crisis management fulfil adequately their mandated tasks that contribute to food security. Similarly, it will ensure effective joint action by the health, education, and water and sanitation sectors, in particular, towards the attainment of optimal nutritional status for all citizens.

6.2.1 Planning and management mechanisms

- 1. Establishment of a national FNS database and information system to be used by all relevant agencies.
- 2. Incorporation of FNS considerations into Government's budgetary process.
- 3. Collaboration between the Ministries of Agriculture, Health and Education, and other stakeholders, especially private sector and civil society in order to formulate and implement a comprehensive national public awareness and education programme on FNS;
- 4. Development and implementation of joint programmes for the monitoring and conservation of ecosystems and natural resources through collaboration between the Departments of Fisheries, Agriculture, Forestry and communities and resource users.
- 5. Development and use by the Public Health Department, of appropriate monitoring methods and indicators to determine the impacts of FNS on human health;
- 6. Development of an Agriculture Land Use and Management Plan by the Ministry of Agriculture which embraces FNS and Climate Change concerns and which will be integrated in a comprehensive National Land Policy.
- 7. Incorporation of FNS concerns by the National Emergency Management Office into the national disaster planning and response process.
- 8. Development of mechanisms to ensure that the information generated through research and monitoring is incorporated into the decision-making process.
- **9.** FNS is a responsibility of all and as such, Civil Society and Private Sector is encouraged to collaborate with Government in the development of appropriate measures for accountability.

6.2.2 Coordination and Implementation of the National Food and Nutrition Security Policy

National Advisory Council on Food and Nutrition Security

In light of the cross cutting nature of food and nutrition security, its importance in national affairs and the need to coordinate the budget allocations, activities and expenditures of several ministries as well as public and private entities, it is recommended that the implementation of the food and nutrition security policy be placed under the chairmanship of the Min of Agriculture. In the initial stages, the coordinating mechanism will take the form of a multi-sector Cabinet Sub Committee (inter-ministerial committee) and the advisory group comprising the relevant agencies, civil society and the private sector, with the transformation of this body into a National Food and Nutrition Security Advisory Council (NFSAC) (appointed by Cabinet) as a medium term goal.

In light of these considerations, the joint and concerted actions of this Cabinet Sub Committee on Food and Nutrition Security will be implemented under the Food and Nutrition Security Policy and Action Plan, with the following Terms of Reference:

Provide Policy Advice

- a. Recommend policies, strategies, programmes and projects to address the identified issues and problems in food and nutrition security that are compatible with the national strategic development plan.
- b. Formulate policy measures (fiscal, trade, tariff, educational, quality assurance, market location and management etc.).
- c. Prepare legislation to be submitted to the Attorney General for approval (including the amendment of existing laws and regulations) and the proposal and implementation of changes in the institutional/administrative framework, processes and procedures of the relevant departments and agencies that may be required for the achievement of food and nutrition security as well as the modernisation of agriculture at all stages of the value chain, with continuous reviews and modifications as necessary.

Inter-sectoral Coordination and Institutional Capacity Strengthening

- a. Continue and promote inter-sectoral collaboration in programme planning and implementation among all sectors involved in food, nutrition, and health activities.
- b. Initiate the development of a national food and nutrition co-ordinating mechanism.
- c. Co-ordinate resource personnel and mobilize resources (physical and financial) for the advancement of food and nutrition at the national level.
- d. Promote the co-ordination of the implementation of projects and programmes of the various agencies and ministries influencing food and nutrition.
- e. Identify research and training needs and make recommendations for satisfying such needs (human, material and financial) that may be needed by the various ministries and other agencies.

Food and Nutrition Security Planning

- a. Develop national food and nutrition plans and act as the advisory body on the interface of food and nutrition.
- b. Implement the National Policy and Action Plan.

Awareness Raising, Education and Advocacy

- a. Increase the awareness among decision-makers of the importance of the integrated relationship between food, nutrition and health and the vital need for integrating food and nutrition into development planning.
- b. Advocate for the implementation of corrective measures to improve the nutrition and health status of vulnerable groups, and for the maintenance of adequate food and nutrition surveillance.
- c. Make representation to Cabinet for additional financial assistance that may be needed from time to time, and for the issuance of special orders, regulations or proclamations.
- d. Consult and communicate with the wider national community on the issues involved.
- e. Create understanding of food and nutrition security issues among all relevant stakeholders and the general public through appropriate social communications strategies, such as focus group discussions.

Food and Nutrition Security Monitoring

a. Gather all information regarding the planning and implementation of projects relevant to food and nutrition.

- b. Collate and disseminate data for effective decision making in food and nutrition security.
- c. Monitor the implementation of projects and programmes and re-define policies and strategies.
- d. Ensure that all its policies, as approved and promulgated by Cabinet are carried out by the relevant departments of the country's implementing and regulatory agencies and stakeholders.
- e. Report to Cabinet every six months.

Composition of the National Food and Nutrition Security Advisory Council:

Core membership of the National Food and Nutrition Security Committee (NFNSC) would comprise of representatives from the following government ministries and departments and the private sector at the level of a director:

- (1) The Ministry of Health (including the Chief Nutrition Officer, Chief Medical Officer, Heads- of Health Information Division, Social Policy Unit)
- (2) The Ministry of Agriculture (including the Director and the Deputy Director of Agriculture)
- (3) The Ministry of Education (including Education Officers Early Childhood, Physical Education and Home Economics, and School Meals, curriculum development)
- (4) The Ministry of Tourism -
- (6) Bureau of Statistics
- (7) St. Lucia Marketing Corporation (CMC)
- (8) Chamber of Commerce
- (9) Investment Promotion (FDI) Authority
- (10) Fishermen Cooperatives
- (11)Agro-Processors Association
- (12) Agricultural Cooperative Society

Individual NFNSAC members will have the responsibility of keeping their permanent secretaries and staff in their respective ministries fully informed of NFNSAC decisions and activities.

Besides the core membership of the NFNSAC, there will also be a Technical Advisory Group (TAG) to advise the NFNSC which will comprise representatives from the Ministries of Agriculture, Health, Education and:

- (1) Bureau of Standards
- (2) The Attorney General, Ministry of Legal Affairs
- (3) The Ministry of Public Works and Transport
- (4) The Plant Protection Unit
- (5) The Veterinary and Livestock Division
- (6) Board of Health

The advisory membership will have observer status and will be consulted on technical issues related to policy implementation

Implementation

A National Food and Nutrition Security Structure (see Fig.) will be established to facilitate the implementation of the FNSP and AP. It will comprise at the lowest level by the National Advisory Council/Committee who will report and advise the Cabinet Sub Committee (Ministers of Agriculture, Health and Education) who in turn will report to the Prime Minister and the information with respect to FNS will be facilitated to the OECS through the OECS Ambassador.

The main activities to be implemented by the FNSAC will be:

- ✓ Public advocacy and awareness campaign to all Ministries (Officials and Ministers), relevant institutions and general public
- ✓ Coordination, management and facilitation through the relevant Ministries and related institutions, key associated institutions, and key stakeholders from the private sector
- ✓ Accessing and facilitating technical support
- ✓ Facilitating capacity building
- ✓ Monitoring and Evaluation
- ✓ Dissemination of information
- ✓ Resource mobilization

The tasks of the FNSAC will include:

- Ensuring compliance with agreed work plans,
- Maintaining linkages with national/regional institutions/other partners to ensure synergy with other programme
- Facilitating the obtaining of information/data required to meet policy needs
- Assisting with the administrative management and support for all project components
- Planning and organizing national training activities
- Participation in national and regional activities
- Procurement of services (consultants, experts)
- Maintaining financial records of national programme activities

Public Education and Awareness Communications

Success in the implementation of the National Food and Nutrition Security Policy will require the creation and maintenance of a clear understanding by all stakeholders of the goals and objectives established and the ways and means by which they are to be achieved. An effective communication and public information programme (CPIP) is required to create the widest possible public awareness of what the National Policy intends to achieve and on strategies and activities which will be used to realise the identified goals. Special efforts should be made to reach out to grass root levels especially the vulnerable groups and those who are suffering hunger or are food insecure and/or malnourished.

The CPIP should also serve to keep all stakeholders continuously informed about progress in the Policy implementation and its effects and impact. This is an important instrument for holding those responsible for implementation accountable, while it provides transparency for the decisions that are made based on the periodic review of progress.

Social communication and monitoring and evaluation should go hand-in-hand, with the latter providing information for the former.

VII. Monitoring and evaluation

The region's vulnerability to natural disasters, exacerbated by the effects of climate change, and its dependence on external markets for the greater part of its food supplies, has underlined the importance for governments of having access to timely, reliable and accurate information on domestic food output, availability and prices, the nature, extent and geographic distribution of vulnerability and food insecurity as well as the state of the crops and livestock in the fields, so as to have early warning of the probability of crop failures etc. Therefore, the need, for an M&E system at national level exists for two purposes: to inform the national decision-making process for disaster management, mitigation and response through an Early Warning System; and to inform the oversight and management of the process of implementation of the FNSP.

Measuring Progress in Food security

The two most common measures of food security are: (1) whether adequate food supplies are available, and (2) whether individuals have sufficient access to those food supplies. Food availability is measured in calories available per person per day at the country, regional and global levels. Both the mean and the variance of available supplies matter. The total quantity of foodstuffs produced in a country are added to the quantity imported and adjusted for changes in stocks, seed, wastage, livestock feed and non-food usages.

Earlier in the assessment it was noted that the weaknesses of the Public Assistance Program include:

- Absence of indicators to measure and evaluate the performance of the public assistance program in Saint Lucia
- Program monitoring and evaluation were absent.

Overview

The FNSP and the FNSAP shall be reviewed periodically and their effects and impacts evaluated at the end of the first five year period in 2019, or more frequently as deemed necessary. The reviews will be guided by the FNSP implementation principles, including those with respect to the right to food and good governance, while taking into account dynamic regional and global developments during the implementation period. The reviews will be conducted by an independent external institution and the results will serve to define remedial actions as needed in the implementation process. The final impact evaluation will be conducted by an independent external institution and will focus on the achievement of the FNSP/AP objectives.

Monitoring the Implementation of the FNSP&AP

As the Food and Nutrition Security Policy points out, to facilitate effective decision making the Action Plan implementation process will need to be monitored as well as the Plan's impacts on food security, nutrition and the protection and realization of the right to food. In addition, the vulnerability to natural disasters, exacerbated by the effects of climate change, and its dependence on external markets for the greater part of its food supplies, underline the importance of access to timely, reliable and accurate information on domestic food output, availability and prices, and the nature, extent and geographic distribution of food security and nutrition vulnerability, including crop yields and areas planted, as part of an early warning system of probable crop failures, sharply rising food prices and other shocks.

There is, therefore, a need for monitoring systems at national level to fulfill three objectives:

• inform national and regional decision-makers and stakeholders in relation to disaster management, mitigation and response through early warning systems

- inform the oversight and management of the process of implementation of the FNSP and the Action Plan in order to decide on remedial actions in the implementation process performance monitoring
- provide information about the impacts of the FNSP in achieving its time-bound overall and operational objectives as a basis for assessing the need for additional actions to be included in the Action Plan impact monitoring.

With respect to establishing a monitoring system, steps will be taken to harmonise data collection and analysis of agricultural and climate statistics and applying uniform criteria to prepare and provide updates, analysis and recommendations relating to preparedness for shocks.

Performance and impact monitoring will be closely tied to the objectives of the FNSP and Action Plan. Performance monitoring will be a continuous process and will involve the implementation of periodic work plans focusing on outputs to be produced, activities, planned resource flows and the application of good governance practices. By continuous monitoring of the implementation process, information is generated for decision makers and other actors on the remedial actions to be implemented to keep the Plan on track if this should prove necessary.

Impact monitoring links up directly with the overall and operational objectives and their achievement. It assumes that certain minimum baseline information is available. Time is needed to produce measurable and meaningful changes in the conditions described in the objective statements. Consequently, impact monitoring will take place periodically, perhaps every two or three years, at the same time broadly keeping track of external changes that also impact on food and nutrition security, and on the protection and realisation of the right to food.

Thematic evaluations

In addition to monitoring and making use of FNS monitoring information, the FNSAC will commission thematic evaluations of policy and strategic issues relevant to food and nutrition security and to the protection and realisation of the right to food. The purpose is to conduct an in-depth analysis of current national issues allowing food and nutrition security to be cast in a broader development context. These thematic evaluations will be designed to produce concrete recommendations to decision makers and actors for actions that need to be included in the Action Plan updating.

Information flows

Both horizontal and vertical information flows need to be considered and this requires close coordination among national sector agencies and international organisations. Food and nutrition security issues and actions are multi-sector and multi-disciplinary in nature. Thus, at both regional and national levels, information from different sources (such as ministerial information management systems, research studies, national surveys and those conducted by non-governmental organizations) needs to be brought together to support comprehensive measurement of FNSP impacts over time. This issue will receive special attention through the setting up of an information-sharing and exchange mechanism for the collation of information from different sources.

Monitoring and evaluation of the FNSP at regional level will largely depend on information produced by the OECS. Thus, a mechanism will be set up to facilitate the flow of information from national to regional level guided by the monitoring framework established at regional level. The return flow of information from regional to national levels will consist of integrated and comparative information analysis of interest to Member States, while also informing about extra-regional developments that affect the OECS Region and its Member States.

Implementation of the FNSP and AP M&E Process

Special attention in setting up monitoring systems will be given to the following M&E principles:

The monitoring process consists of collecting, collating, processing, analyzing, interpreting and disseminating
information, thus adequate capacity needs to exist and adequate resources need to be allocated for each of these
monitoring activities. Dissemination of well-targeted monitoring information is critical to have an impact on decision
making.

- Development of a <u>monitoring framework</u> is an important first activity that is to be undertaken in direct consultation with targeted users of the monitoring information.
- The monitoring frameworks will cover the following items: (a) performance and impact indicators that are SMART¹⁰, (b) frequency of measurement of each indicator, (c) information/data needed for each indicator, (d) information/data transformations required to construct the indicator, (e) source(s) of the needed information/data and methods of obtaining the information/data, (f) responsibilities for producing, analyzing and disseminating each indicator. An assessment of information/data availability and comparing the results against the monitoring framework will identify information/data and/or capacity gaps.

In implementing the monitoring framework, an incremental approach will be used, that is, in a first phase, a minimum set of core indicators will be defined guided by the assessment of information availability. The analysis of the minimum set of indicators will nevertheless tell a meaningful story. In time and in subsequent phases the set of indicators can be expanded, as it becomes clear where to invest to fill information gaps and enhance monitoring capacities.

The implementation of this *Food and Nutrition Security Policy* shall be monitored by the broad-based National Food and Nutrition Security Advisory Council/Committee. Government shall review the Mandate, Terms of Reference and composition of this entity with a view to better equipping it to fulfill its mandate. The Committee shall report to the Cabinet of Ministers through the Minister of Agriculture as deemed necessary. The Committee shall keep this policy under regular review, and shall monitor implementation of the directives of this policy. The Committee shall present to Cabinet an annual report on measures that have been undertaken to implement this policy. On the fifth anniversary of the date of this policy, the Committee shall conduct a public review of this policy to determine its effectiveness in achieving its goals.

The main task will be implementing 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
- Compiling a basic dataset of food insecurity/vulnerability indicators
- Enhancing data collection and storage methodologies
- Utilizing evidence-based research, such as Surveys of Living Conditions and Household Budget Surveys as a basis for food insecurity and poverty measurement, planning and monitoring
- Strengthening the capacity and capabilities of relevant agencies to monitor food insecurity and poverty vulnerability factors
- Building national capacity in the use of Food Insecurity and Vulnerability Information Mapping Systems in order to identify food insecurity, under-nutrition and malnutrition at the household level

¹⁰ Specific, Measurable, Achievable, Reliable and Time-bound.

VIII. ACTION PLAN

8.1 Vision and Strategic Framework

This Action Plan should facilitate 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 people of St. Lucia.

The development goal of the Food and Nutrition Security Action Plan 2014-2024 is to contribute to ensuring long-term food and nutrition security and the enjoyment by all of the right to food in St. Lucia. This will be pursued through the following four specific food security and nutrition objectives that simultaneously increases agricultural and rural development and reduce poverty:

- To strengthen agricultural production, marketing systems and enterprises including strenghtening institutional capacity to support their development. (FNSP Objective 1-Food availability)
- To improve the capacity of policy and programme frameworks for managing key challenges to food and nutrition security. (FNSP Objective 2-Food access)
- To promote the consumption of safe and nutritious food. (FNSP Objective 3-Food utilization/Nutritional adequacy)
- To ensure stability of food supplies. (FNSP Objective 4-Food stability).

Specific Objectives

- 1. Supporting a healthy start Good nutrition and safe food during the first five years of life pays dividends throughout life. Good maternal nutrition promotes optimal foetal development, and this reduces the risk of chronic diseases in adulthood.
- 2. Ensuring a safe, healthy, consistent and sustainable quality food supply Increase the capacity of individuals and households to access food with balanced nutrition needed for healthy living. Policies in agriculture and fisheries influence public health by affecting the supply, local availability, safety, affordability and accessibility of foods.
- 3. Providing comprehensive information and education to consumers Increase knowledge, attitude and influence behaviour of the general public to benefits of healthy living with public health and nutrition education and awareness campaigns as part of the efforts for improvement of people's nutrition.
- 4. Integrated action to address related determinants Ensuring nutritional well-being and preventing diet-related non-communicable diseases requires "integrated action on risk factors and their underlying determinants across sectors to be combined with efforts to strengthen health systems towards improved prevention and control."
- 5. Strengthening nutrition and food safety Increase security, quality and hygiene of food consumed by the people by reducing food safety risks and increasing research in order to provide safer and more nutritious and affordable food for the poor, vulnerable and marginalized groups.
- 6. *Monitoring, evaluation and research* Process, outcome and output indicators are necessary for assessing the impact and effectiveness of policies or programmes.

8.2 The Nutritional Targets

Nutrition, food safety and food security goals should be established at the National level setting suitable targets with respect to the proportion of their populations that will be able to achieve the goals in 2024, in light of considerations of feasibility and resources.

- National population nutritional goals should be adopted in line with CFNI/PAHO/FAO/WHO recommendations:
 - <10% of daily energy intake from saturated fatty acids</p>
 - <1% of daily energy intake from trans fatty acids</p>
 - <10% of daily energy intake from free sugars</p>
 - ♦ ≥ 400g fruits and vegetables a day
 - ❖ <5g a day of salt
- Increase the consumption of food per capita to meet the need for a balanced nutrition with adequate energy of 2,000 kcal/day and protein of 52 grams/day and sufficient micro nutrients.
- 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 with reference to the current incidence of food-borne diseases and the prevalence of microbiological and chemical contamination in the food chain, based on adequate surveillance systems.
- A food security goal should be established in line with Millennium Development Goal 1, to reduce by 50% 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 over nutrition.
- 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.

8.3 Strategic Framework

The Action Plan will comprise of six Components, four of which correspond to the four policy objectives of the FNSP; the remaining two cover cross-cutting issues and organizational matters. They are distinct but highly interrelated in nature to facilitate cooperation in addressing food insecurity and malnutrition. The components are further supported by eight corresponding Strategic Pillars as follows:

Component 1: Food Availability – (a) Promotion of increased availability of locally produced, safe, quality nutritious food (looking at the whole supply chain from farmer to consumer) at remunerative market prices so as to increase production, productivity and returns to farmers through agricultural innovation. (b) Removal of non-tariff barriers to trade (SPS-TBT barriers) to decrease marketing costs and facilitate access to and distribution of food within the OECS Region. (c) Development of strategies to address national transportation so as to reduce distribution costs and improve the movement of food commodities throughout the island and region.

Strategic Pillar 1: Promote sustainable production of local, safe and nutritious foods by providing incentives and support for their production by small-scale producers

Strategic Pillar 2: Promote conducive and efficient food marketing systems and trade to increase the availability of nutritious and safe foods in areas and locations where food insecure and vulnerable persons and households reside.

Component 2: Food Access – Establish programmes to help rural farming households diversify away from direct production of food commodities to becoming agribusiness entrepreneurs dealing with non-food and high value commodities, non-farm agricultural enterprises, especially in the value-addition processing industries, and non-agricultural rural enterprises such as cultural/agro-tourism, forestry and services. (Investments must be linked to creating greater opportunities (employment, incomes) in food industries for the needlest households, and be linked to small-scale food production).

Strategic Pillar 3: Encourage greater investment in food and agro-based industries in such ways as to increase incomes, employment and access to food by the most vulnerable households and population groups.

Component 3: Food Utilization/Nutritional Adequacy - Promotion of healthy Caribbean diets and optimal nutrition, making maximum use of locally grown, nutritious foods to reduce significantly the incidence of non-communicable diseases (NCDs) such as hypertension, diabetes and heart failure, and the prevalence of obesity and malnutrition, especially targeting children and adolescents.

Strategic Pillar 4: Promote public education and undertake advocacy aimed at sensitizing and educating relevant governmental stakeholders, national civil society organisations, commercial food sectors and the public at large about the importance of good nutrition and about the health consequences of current food consumption patterns among all households including those that are resource-poor.

Component 4: Stability of Food Supply - Food Security and Emergency/Shortage Relief/Sustainable Food Trade Development. Building resilience to the recurring threats to food security bearing in mind that the Region is prone to the risks posed by climate change and natural disasters, through the establishment of a National Information and Early Warning System for Food and Nutrition Security, the construction of risk profiles for the main crops in support of emergency preparedness, agricultural risk management and crop insurance and preparation of a Disaster Management and Mitigation Plan. The risk of losing crops, livestock or other products is a major disincentive to small scale agricultural producers. Shocks in the form of natural disasters such as hurricanes, droughts or pest all reduce incentives to produce, as do man-made risks, in particular praedial larceny. Often, markets do not adequately allow for managing such risks, because of price competition and perceived high administrative costs by private insurance companies in dealing with small farmers. This is associated with difficulties in designing appropriate insurance products or in the case of small economies, insufficient insurance market sizes to spread risk across participants.

Strategic Pillar 5: Strengthen capacity to deal effectively with emergency conditions and minimise their negative short- and long-term impacts on food security and nutrition, especially among food-insecure households and those most vulnerable to food insecurity.

Strategic Pillar 6: Establish a National Food and Nutrition Security Information System to Effectively Forecast, Plan and Monitor Basic Food Supplies, Nutrition Conditions, Intra- and Inter-Regional Food Trade and Identify the Food Insecure and Those Vulnerable to Food Insecurity.

Component 5: Crosscutting Issues – Climate Change Adaptation and Mitigation Strategies, Bio-fuels and technology

Strategic Pillar 7: Identify and address emerging food and nutrition security issues, particularly as these threaten the food security and nutrition status of the most vulnerable, disadvantaged and marginalised households and population groups.

Component 6: Institutional and Organizational Development and Capacity-Building

Strategic Pillar 8: Institutional and Organizational Development for Good Governance of National Food and Nutritional Security Actions.

Priority Activities:

The first activity to be carried out at the start of the implementation of the FNSAP will be a baseline survey to determine the current state of food insecurity in the country. This will provide the basis for agreement on a common framework for priority setting and outcome targets and the current position on a measurable scale of food security as a basis for determining the rate and extent of progress towards the goal of food security over time in successive plan periods. Follow-up surveys will be done periodically after the start of operations under the FNSAP

The second activity (Policy Direction 1) would need to be the enactment of a Food and Nutrition Security Law to facilitate the framework as well as the creation and legal establishment of the proposed structure to implement and monitor the FNSP and Action Plan.

Detailed information on AP Components (and corresponding Strategic Pillars), and a chronogram of activities to be carried out appear in Annex 1.

8.4 INSTITUTIONAL FRAMEWORK AND COORDINATION MECHANISMS

Advocacy for Good Leadership and Governance

To improve food security and general nutrition levels, effective leadership, development, and good governance are central elements of any strategy. Leadership must be exercised and policymakers need to engage with the issues of food and nutrition security. Building political awareness of the deleterious effects of malnutrition on welfare and on development prospects at the local level is crucial. The message that poverty is an intrinsic component of food and nutrition insecurity must be disseminated widely. Advocacy is a critical element of any effort to raise the policy profile of food security and nutrition. Indeed, a key component of the advocacy effort will be raising the general level of knowledge among the population at large of the importance of good nutrition so that malnutrition becomes an important issue for which political leaders, the government, and individual sectors of government are held accountable by CSOs and by the general public.

Coordination

Food and nutrition security are cross-cutting issues. With no strong sector advocates responsible for seeing that attention is paid to these issues, they can easily be ignored or addressed in an uncoordinated piece-meal fashion.

A national institution or mechanism should be vested with statutory powers to direct action effectively on these issues across sectors. It must be given responsibility for coordinating and overseeing necessary actions against malnutrition at the level of the relevant sectors, engage in budgeting and planning processes that guide the allocation of the resources

required to the various technical sectors concerned, holding those sectors accountable for the use of their resources. The principal role lies in ensuring that the sectors responsible for food production, importation, distribution and trade and food crisis management fulfill adequately their mandated responsibilities and tasks that contribute to food security. Similarly, it will ensure effective joint action by the health, education, water and sanitation sectors, in particular, towards the attainment of good nutritional status for all citizens.

Empowerment

Based on a human-rights based approach to food and nutrition security, empowerment of duty-bearers and rights-holders is an essential component of the strategy. It is important that the comparative strengths and weaknesses of various actors be recognised. Each group of actors needs strengthening to differing degrees and in different ways. Duty-bearers must be assisted to recognise their responsibilities and have sufficient capacity to fulfill them, while rights-holders must be assisted to recognise their rights and engage in the policy process to argue for their fulfillment. Capacity and knowledge must be built among local government leaders and officers so that they are able to carry out their duties effectively in order to ensure that the right-to-food of all citizens is respected adequately.

Decentralisation

Ultimately, food and nutrition security needs to be attained by households and individuals where they live. The devolution of action under this strategy to local government level is therefore essential.

Gender Targeting

It is crucial to mainstream gender within the Action Plan. Improving nutrition inherently requires a strong gender perspective to achieve lasting success. In the end, all children born in the country will be raised so that they are enabled to attain their full potential over their lifespan. It is the care that they receive from conception through the first two years of life that is biologically the most critical for them in this regard.

Human Resource Capacity Building

Improved nutrition requires access to knowledge on how to prepare and maintain a proper, balanced diet and how to provide proper feeding, care and medical attention to children and other dependents. All levels of policy implementation must be empowered to know how to make use of available resources to achieve good nutritional status and a healthy, active life. The nutrition education messages that need to be learned include: components of a balanced diet and information on how locally available foods can be used to build balanced diets, the value of exclusive breastfeeding, the importance of prenatal care and regular child growth monitoring, maintaining clean water, sanitation and a healthy environment, and the control of infant and childhood illnesses.

ANNEX 1.

	STRATEGIC ACTIONS (PRIORITY AREAS)						
NO	Programme Component	Priorities	Specific Activities	Timelines	Responsible/Lead Agencies	Comments	
1	Food Availability-					(Policy Direction 1-4 of FNS Policy)	
	1.1 Promote sustainable production of local, safe and nutritious foods by providing incentives for their production by small-scale and other producers	1.1.1 Identification of the supply of selected priority commodities and linking food producers, suppliers to markets (pilot project driven by farmers/private sector and supported by MOA to reduce the imports of fruits, vegetables and root crops).	Commodities selected on the based on a nutritionally balanced diet of local food products and guided by the Dietary Guidelines. Criteria for selection of the products based on factors such as market demand, competitiveness, nutritional composition, domestic resource endowment and their strategic importance.	March 2014	MOA, MOH, CARDI, IICA, FAO, farmer organization		
		1.1.2 Adoption of the value chain approach for selected commodities taking into account lessons learnt.	Conducting value chain analyses to diagnose and address gaps/constraints in the development of the identified commodities and developing action plans for the selected industries, with participation of all actors along the value chain and facilitating dialogue among all relevant stakeholders to ensure consensus building and ownership on strategic actions to be implemented.	June 2014	MOA, IICA, FAO, CARDI, producer organizations, suppliers, buyers –Supermarkets		
		1.1.3 Improve agricultural infrastructure to secure the production system, minimize post-harvest losses and reduce transaction costs.	1.1.3.1 Development of physical infrastructure strategically placed to facilitate storage and distribution for both the domestic and export market segments. 1.1.3.2 Training and development				

		programme to improve post-		1
		harvest handling, grading and		
		storage and warehouse		
		management for food		
		commodities.		
		1.1.3.3 Improvement of animal		
		slaughtering and processing		
		infrastructure and the		
		management along Hazard		
		Analysis Critical Control Point		
		(HACCP) principles.		
		1.1.3.4 National programmes		
		encouraging linkages between		
		livestock and crop production as		
		well as the value addition of in		
		the livestock industry through		
		improved cutting and processing		
		techniques and the expansion of		
		the range and quality of by-		
		products.		
		1.1.3.5 Promote public and		
		private sector partnerships to		
		foster efficient and sustainable		
		food production, food		
		consumption, post-harvest		
		practices & loss reduction,		
		marketing and trade.		
	1.1.4. Efficient	1.1.4.1 Conduct an assessment		
	utilization of land and	on development of potential		
	water resource	arable and irrigable land		
	potential for	resources available for food		
	agricultural	production.		
	development (in	1.1.4.2 Encourage		
	specific targeted	initiatives/supporting systems for		
	locations with	greater access to agricultural		
	concentrations of	inputs (including environmentally		
	small-scale producers).	friendly systems such as organic		
		fertilizer), particularly seeds,		
		animal breeds, agro-chemicals		
		animai bi eeus, agi b-ci lei ilicals		_

		and irrigation facilities for food		
		production in areas with farming		
		potential.		
		1.1.4.3 Develop a holistic land		
		and water management plan to		
		support agricultural development		
		and growth.		
		1.1.4.4 Promote the optimal		
		utilisation of land and other		
		natural resources for food		
		production through improved		
		coordination of independent		
		agencies at national level with		
		responsibility for the		
		construction, management and		
		maintenance of water control,		
		management and storage		
		infrastructure up to the farm		
		gate, in the context of a master		
		plan to guide irrigation		
		development projects within a		
		framework of priority areas for		
		irrigation development, including		
		establishment of water user		
	4455	groups and a system of charges.		
	1.1.5 Promote closer	1.1.5.1 Promote the adoption of		
	collaboration to	new appropriate technologies.		
	accelerate the transfer	1.1.5.2 Support initiatives to		
	and adoption of new	promote greater access to land		
	technologies (to be	and water resources, agricultural		
	adopted by small-scale	inputs and capital, particularly		
	producers).	among small-scale farmers, to		
		support food production.		
		1.1.5.3 Strengthen development		
		of agricultural cooperatives and		
		farmers' organisations to		
		enhance small-scale farmers'		
		resilience to market shocks.		
		1.1.5.4 Forum among private		

	1.1.6 Promote agricultural innovation through CARDI and national agricultural research institutions, to focus on research and development on improving agricultural output and productivity targeted at small-scale producers.	sector stakeholders and associations involved in production, marketing and trade. 1.1.6.1 Support initiatives to minimise postharvest losses of main food products. 1.1.6.2 Promote research to improve agricultural productivity and production as well as storage characteristics of major food crops and fruits and vegetables. 1.1.6.3 Promote alternative approaches and practices for sustainable food security.		
1.2. Promote conducive and efficient food marketing and trade systems to increase the availability of nutritious and safe foods in areas and locations where food insecure a vulnerable peopreside.	e nd	1.2.1.1 Full compliance with and implementation of the CARICOM Single Market and Economy (CSME) provisions with respect to trade in food products. 1.2.1.2 Collect, review and analyse international/regional trade information, including prices, quantities traded, distribution and logistics.		This will require location targeting for the development of local food marketing and trade syster
	1.2.2: Improve terms of trade between traditional crop exports and food imports and exports.	1.2.2.1: Facilitate stronger linkages between buyers and sellers and reduction of information asymmetries through the linkages to Regional Market Intelligence system. 1.2.2.2: Improve food safety systems and harmonisation of food standards to increase exports.		

1.2.2.3: Encourage OECS to	
establish a regional network of	
reserve food stocks in	
partnership with the private	
sector as a Risk Mitigation	
Response; and CDEMA should	
take the lead in mobilizing	
resources for this purpose.	
1.2.2.4: Improve port logistics	
and reduce bureaucratic rigidities	
at ports.	
1.2.2.5: Provide tariff protection	
for locally produced crops (inter	
alia starches, roots and tubers) in	
direct competition with imported	
convenience foods e.g. frozen	
potato chips etc.	
1.2.2.6: Remove non-tariff	
barriers to trade (SPS-TBT This will also ha	ave a
barriers) that lead to higher positive impact	on
transaction costs and hinder availability.	
access to and distribution of	
food, especially for the identified	
basket of food commodities.	
1.2.2.7: Develop strategies to	
address regional transportation	
problems so as to reduce	
distribution costs and improve	
movement of food commodities.	
Public/private partnerships to	
deal with maritime and air	
transport and port infrastructure	
should be fostered.	
1.2.2.8: Implement trade	
facilitation measures to improve	
intra-regional trade in food OECS level	
products (raw and processed as	
well as beverages). In this regard,	
emphasis will be placed on the	

			improvement of port logistics and		
			reduction of bureaucratic		
			rigidities at ports.		
2	Food Access- 2.1 Address the removal of non-tariff barriers to	2.1.1 Approve and implement the SPS protocols for trade	2.1.1.1 Strengthen capacity building for adoption of international standards for food		(Policy Direction 5-6 of FNS Policy) The establishment of this mechanism will ensure the effective
	trade (SPS-TBT barriers) that increase marketing costs and hinder access to and distribution of food within the Region, as well as the development of strategies to address transportation so as to reduce distribution costs and improve the movement of food commodities.	facilitation and fast track the Food Safety Legislation.	safety and quality assurance and certification systems. 2.1.1.2 The adoption and incorporation of international and CARICOM food safety standards into national law and the streamlining and reconciliation of the current legal framework and institutional arrangements for enforcement 2.1.1.3: The establishment of a single agency or mechanism at national level to regulate and manage all aspects of food safety.		enforcement of plant protection and animal health certification systems and food standards; promotion of public awareness of the standards; training of producers, wholesalers, retailers, processors, restaurateurs and food caterers in the practical application and observance of the standards; compliance of all producers/processors (cottage and commercial) with the Codes of Practice and HACCP principles to be established under the above-mentioned legislation, in respect of food crop, fisheries and
	2.2. Encourage greater	2.2.1 Promote food and agro-based industry	2.2.1.1 Encourage public investment in food and agro-		livestock products.
	investment in food and agro- based industries in such ways as to increase incomes,	development.	based industry.		

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employment and access to food by the most vulnerable households and population groups.				
	2.2.3 Increase employment among the most vulnerable.	2.2.3.1 Develop/access to Microcredit and carbon credit schemes to encourage diversification of economic activity in rural and urban areas will be promoted. 2.2.3.2 Widening and deepening vocational training programmes for artisans, farmers, fishermen, forest workers and vulnerable groups (women, youth) to improve their skills and employability.		
	2.2.4 Diminish inequality in income distribution.	2.2.4.1: Implement social safety net programmes. 2.2.4 2 Implement specific food distribution programmes for persons with disabilities. 2.2.4.3 Ensure that provisions to target the food insecure and vulnerable are included in relevant legislation, in accordance with the state obligations related to the right to food. 2.2.4.4: Promote equitable access by all nationals to the country's resources.		
	2.2.5 Increase earnings from food production	2.2.5.1: Improve the livelihood of the rural population, especially		

			4
	small producers and marginalized		
	urban dwellers, through the		
	promotion of entrepreneurship		
	2.2.5.2: Promote home food		
	production		
	(backyard/container/protected		
	environment gardening and small		
	ruminants rearing)		
	2.2.5.3 Establish programmes to		
	pay stakeholders for good		
	environmental practices and		
	services which provide a national		
	good e.g. in watershed		
	conservation and water pollution		
	in rivers etc.		
	2.2.5.4 Promote urban gardens		
	and agriculture		
	2.2.5.5 Improve farm to market		
	channels, for example, access		
	roads and postharvest grading		
	and handling.		
	2.2.5. 6 Upgrade local food		
	storage facilities		
	2.2.5.7 Develop wholesale and		
	retail market facilities and		
	packaging centres as public goods		
	to facilitate efficient markets,		
	which will improve availability		
	and lower market prices.		
	2.2.5.8: Consider adjusting the		
	CET on agricultural inputs along		
	the value chain in agriculture		
	sector		
	2.2.5.9: Purchase of agricultural		
	inputs in bulk to obtain		
	economies of scale.		

	2.2.6 Reduce the	2.2.6.1: Identification and	
	incidence of poverty	mapping of vulnerable groups ¹¹	
	and diversify rural	(taking a gender-sensitive	
	incomes.	approach) that are prone to	
		chronic or transitory food	
		insecurity and establishment of a	
		national database, recognizing	
		that each group may require a	
		different intervention, to ensure	
		their access to livelihoods based	
		on self-sufficiency and	
		sustainable income earning	
		activities.	
		2.2.6.2: Promote the broadening	
		of the income base of poor rural	
		households through	
		income/livelihood diversification	
		programmes.	
		2.2.6.3: Implement Poverty	
		Reduction Programmes	
		encompassing safety net	
		mechanisms/programmes and	
		complementary measures to	
		preclude a dependency	
		syndrome.	
		2.2.6.4: Incorporate nutritional	
		considerations - a minimum	
		nutritious food basket in setting	
		the national minimum wage.	
		2.2.65: Develop policies to	
		ensure that the food distribution	
		services industry (including fresh	
		food markets, supermarkets,	
		institutional food services etc.)	
		operates in a cost efficient	
		manner and delivers the targeted	
		basket of foods at minimal prices.	

¹¹ Households that cannot meet basic food needs- including people living with HIV/AIDs, children and the elderly.

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			2.2.6. 6: Strengthen legal entitlements of vulnerable households and individuals to social assistance and security through legislative reform and improved recourse mechanisms. 2.2.6.7: Improve social protection of the most vulnerable population groups. 2.2.6.8: Promote the establishment of child care facilities in workplaces and in communities so as to enable women to participate fully in the			
			workplace, and in learning and			
			training activities. 2.2.6.9: Prepare Poverty			
			Reduction Programmes			
			encompassing safety net			
			mechanisms/programmes and			
			complementary measures to			
			preclude a dependency syndrome			
3	Food Utilization/			MOH, MOE	(Policy Direction 7 of FNS	
	Nutritional				Policy)	
	Adequacy				Promotion of healthy Caribbean diets and	
	3.1 Promote	3.1.1 Promotion of	3.1.1.1 To encourage a school		optimal nutrition to	
	public education	school feeding	policy on selling more nutritious		reduce Non-	
	and undertake	programmes based on	products and the removal of		Communicable Diseases	
	advocacy aimed	appropriate dietary	'junk food' products (targeting in		(NCDs), obesity and	
	at sensitizing and educating	guidelines using local foods	the first instance the pre-primary, primary and secondary levels).		malnutrition, especially at all stages of the	
	relevant	10003	primary and secondary levels).		education system	
	governmental	3.1.2 Promote and	3.1.2.1 Breastfeeding			
	stakeholders, national civil	support appropriate	Assess status of BFHI			
	society	infant and young child	2. Design of			
	organisations,	feeding practices at	communication strategy			

		Toda dila Walikon Occarry Folicy for Carric Ladia 2010	
commercial food	public/private	on breastfeeding	
sectors and the	hospitals, clinics, health	3. Conduct training of	
public at large	centres and schools	health workers in	
about the		breastfeeding practices	
importance of		3.1.2.2 Young Child Feeding	
good nutrition		(YCF)	
and about the		1. Assess feeding practices	
health		2. Design communication	
consequences of		strategies for execution	
current food		on YCF practices.	
consumption			
patterns among			
all households			
including those			
that are resource-			
poor.			
	3.1.3 Develop and	3.1.2.3 Develop an evaluation	
	implement	tool to assess the levels of	
	programmes to	inclusion of nutrition and health	
	influence food tastes	in the present curricula.	
	and preferences in	3.1.3.1 Advocate that at least	
	schools and other	50% of food used in school meals	
	institutions	should come from local	
		production.	
		3.1.3.2 Review current school	
		gardening programmes to	
		identify challenges and	
		opportunities.	
		3.1.3.3 Develop national	
		standards and guidelines on	
		meals served in school cafeterias	
		and sold on school compounds.	
		3.1.3.4 Support for the development of curricula at	
		teacher training colleges and at	
		pre-school, primary and	
		secondary school levels that	
		include nutrition and family	
		education for good health and	
		Education for good health and	

	Toda and Ivalition Security For	-,	
3.3 Promote current national recommended population dietary goals in line with international standards.	lifestyle choices. 3.1.3.5 Develop guidelines on school health and nutrition as a guide in school meal preparation and in respect of the foods allowed to be sold in schools. This may include the development of manuals (e.g. recipes, food safety and food service etc.). 3.3.1 In-depth assessment of the dietary consumption patterns of the poor and vulnerable, the constraints they face in accessing, preparing and consuming foods, cultural food beliefs as a basis for designing culturally sensitive education and demonstration programmes. 3.3.2 Development of population dietary (nutritional) goals in line		
3.4 Agree on appropriate nutritional targets at national level.	with international standards 3.4.1 Collection and dissemination of recipes for local food preparations. 3.4.2 Identification of existing best practices in this regard across the region.		
3.5 Encourage physical activity in line with WHO recommendations.	3.5.1 Promotion of campaigns to emphasize benefits of PA. 3.5.2 Design educational material. 3.5.3 Promote PA/wellness programmes in work places.		
3.6 Consider Taxes and labeling on selected items – highly non nutritious foods			

a,7 Mutrition education campaign for preparation and use of locally produced foods, use of school curriculum – making available the nutritional content of locall produce — use of labels on value added products sold in supermarkets, etc. 3.8 Enlist national media to highlight regularly the use of local foods etcrecipes, 3.9 Dialogue with chefs and promotion of national and regional competitions for best local dishes. 3.10 Regional models and messaging for disseminating information for use for campaigns. 3.11 Encouraging as national policy the use of a specified percentage of domestic agricultural commodities in the food service sector. 3.12 Development of standards of care for the elderly, mentally challenged and necrops					
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information for use for campaigns. 3.11 Encouraging as national policy the use of a specified percentage of domestic agricultural commodities in the food service sector. 3.12 Development of standards of care for the elderly, mentally		and messaging for	organizations for delivering		
anational policy the use of a specified percentage of domestic agricultural commodities in the food service sector. 3.12 Development of standards of care for the elderly, mentally		disseminating	nutrition information to		
3.11 Encouraging as national policy the use of a specified percentage of domestic agricultural commodities in the food service sector. 3.12 Development of standards of care for the elderly, mentally		information for use for	vulnerable groups		
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food service sector. 3.12 Development of standards of care for the elderly, mentally					
3.12 Development of standards of care for the elderly, mentally					
standards of care for the elderly, mentally		food service sector.			
standards of care for the elderly, mentally					
		•			
		the elderly, mentally			
chancinged and persons		challenged and persons			

		living in institutions e.g.			
		orphanages, prisons etc			
		3.13 Review the school			
		gardening programmes			
		to identify strategic			
		areas for intervention,			
		e.g. the provision of			
		technical support,			
		promotional materials,			
		distribution of			
		seedlings in schools to			
		be grown at home etc.			
4	Stability of Food				(Policy Direction 8 of FNS
	Supply				Policy)
	4.1 Improve the	4.1.1 Building of	4.1.1.1 Carry out a baseline study		Who are the food insecure
	food and nutrition	resilience to the	of the state of food insecurity		and malnourished, where
	security resilience	recurring threats to	and vulnerability.		are they located and why
	to natural and	food security, bearing	4.1.1.2 Encourage/establish crop		are they food insecure
	socio-economic	in mind that the Region	mapping systems (using existing		and malnourished.
	shocks and	is prone to the risks	technology including GPS) as a		
	climate change.	posed by climate	major tool to assist in forecasting		
	Identify and map	change and natural	production and gathering		
	food insecure and	disasters, through the	information on harvest		
	vulnerable	establishment of an	estimates, losses and		
	households with	Information and Early	compensation.		
	special focus on	Warning System for	Follow up on the		
	women, children,	Food and Nutrition	recommendations of the Disaster		
	the elderly and	Security, the	Risk Management Workshop		
	persons with	construction of risk	including the proposal for		
	disabilities, for	profiles for the main	agricultural crop insurance.		
	the purpose of	crops in support of	4.1.1.3 Praedial Larceny		
	formulating,	emergency	Legislation implementation/		
	implementing and	preparedness,	enforcement (including farmer		
	monitoring	agricultural risk	registration and introduction of a		
	targeted food and	management and crop	farmer and warehouse receipts		
	nutrition security	insurance.	system etc.).		
	interventions that		4.1.1.4 Sharing of best practices		
	protect and		for disaster preparedness –		

-		Took and Tvathien Cecarity Ton	 	
contribute to the		livestock care, crop damage,		
realisation of the		infrastructure.		
right to food.		4.1.1.5 Initiate action to establish		
		a pilot project on agricultural		
		insurance.		
		4.1.1.6 Expand the FAO		
		programme on building national		
		community resilience to		
		disasters.		
		4.1.1.7 Promote the		
		incorporation of insurance in		
		agricultural loans.		
		4.1.1.8 Start the project for seed		
		and other germ plasm collection.		
		4.1.1.9 Improve the innovative		
		use of ICT in extension/training in		
		Good Agricultural Practices		
		(GAPs) and pest and disease		
		management.		
	4.1.2 Identification and	4.1.2.1 Complete the definition		
	mapping of vulnerable	and quantification of the		
	groups (who are the	vulnerable groups and		
	food insecure, why are	identification (based on work		
	they food insecure and	currently being done by FAO		
	where are they	under the Food Security Project)		
	located?) with special	for defining national programmes		
	emphasis on	and policies.		
	marginalised groups	and pondies.		
	including women,			
	children, the elderly			
	and persons with			
	disabilities, and			
	establishment of a			
	national database of			
	this information.			
	4.1.3 Increase the	4.1.3.1 Promote the creation of		1
	capacity for food crisis	an Information System for Food		
	prevention and risk	and Nutrition Security at national		
	management	level for food security		_

		development as well as food		
		crisis prevention and risk		
		management and the		
		construction of adequate risk		
		profiles for the main crops ¹² .		
		4.1.3.2 Establish programmes for		
		capacity enhancement within		
		Ministry of Agriculture (extension		
		services in particular), Research		
		Institutions and Hydro-		
		Meteorological Departments so		
		that they can provide accurate		
		and timely climate information to		
		the farming community.		
		4.1.3.3 Promote non-distorting		
		trade policies and programmes to		
		be applied in times of food crises		
		to reduce the risk to the most		
		vulnerable and reduce market		
		uncertainty.		
4.2 Improve the	4.2.1 Develop national	4.2.1.1 Increase storage		
capacity to	food security reserve	infrastructure as part of a		
forecast, plan and	initiatives and	national and regional system of		
monitor basic	mechanisms.	emergency food reserves;		
food supply,		4.2.1.2 Support the		
nutrition, regional		establishment of a long-term		
food trade and		mechanism for an OECS		
identify the food		emergency food reserve.		
insecure and		4.2.1.3 Development of a food		
those vulnerable		aid policy consistent with		
to food insecurity		national food security and		

This will entail the harmonization and coordination of the collection and collation of information *inter alia* on : a) markets – sources and volume of commodity supply to the market, number of traders and prices of commodities, agricultural labour and livestock and terms of trade including trends; b) production-type and level; c) income sources and reliability; d) government policies affecting trade and distribution of food products; e) Baseline information on food availability, access, utilization; f) Population numbers and distribution; g) Infrastructure – roads, financial institutions, etc. h) Household coping mechanisms; i) Rainfall information (volume, water deficit, flooding, drought and climate outlook; j) Crop and livestock diseases; k) Monthly state of crops in the fields; l) Security conditions-extent of praedial larceny; m) Health and nutrition situation; n) areas affected by food crises and/or chronically food-insecure; o) the number of food insecure persons; p) level of food insecurity (long term or short term); q) major causes of food insecurity (structural and cyclical) etc.

		agricultural policies. 4.2.1.4 Enhance targeted food assistance programmes for foodinsecure households and those vulnerable to food insecurity and malnutrition. 4.2.1.5 Establish (within OECS) a capability for the compilation, management and dissemination of statistics and information within the region on food and food security as a basis for effective planning of food production and trade. 4.2.1.6: Recommend a study on the possibility of establishing a OECS Fund for Food Security. 4.2.1.7 Advocate for the establishment of additional safety nets for extremely vulnerable groups.		
4.3 Development of insurance schemes for farmers	4.3.1 This programme, building on the findings of the Caribbean Regional Symposium on Disaster Risk Management will in particular focus on supporting the development of multiperil insurance schemes with regional insurance companies and promote incentives to general insurance firms to insure farm assets.			
4.4. Establish an	4.4.1: Establish an	4.4.1.1: Using a harmonised		

		Toda and Traintion Cecanty Te		
Integrated Food	Integrated Food and	methodology, conduct a food		
and Nutrition	Nutrition Security	security assessment and identify		
Security	Information and Early	underlying causes of food		
Information and	Warning System on a	insecurity.		
Early Warning	sustainable basis and a	4.4.1.2: Integrate (or where		
System	Disaster Management	appropriate create in line with		
	and Mitigation Plan to	regional efforts) a national early		
	forecast, plan and	warning, monitoring and		
	monitor basic food	surveillance information system.		
	supplies, nutrition	4.4.1.3: Collect and periodically		
	conditions, intra- and	update and share information on		
	inter-regional food	supply and demand/utilization		
	trade and identify the	for main food commodities and		
	food insecure and	maintain food security related		
	those vulnerable to	baseline data (including data on		
	food insecurity.	sources of financing, income and		
		insurance).		
		4.4.1.4: Develop vulnerability		
		analysis and mapping to provide		
		timely nutrition and socio-		
		economic information on		
		vulnerable population groups to		
		decision-makers to enable the		
		design of more effective		
		emergency and relief responses.		
		4.4.1.5: Assess the national		
		capability (in National Statistical		
		Offices, Ministries of Agriculture,		
		Industry and Trade as well as		
		private sector Industry and		
		Commerce Associations) to		
		produce timely, reliable and		
		accurate information on		
		domestic agricultural production		
		and manufactured food (plant,		
		livestock and fish produce)		
		output, market availability and		
		prices; the nature, extent and		
		geographic distribution of		

	vulnerability and food insecurity;		
	and the state of the crops in the		
	fields, to have early warning of		
	the probability of crop failures		
	and livestock epidemics etc.		
	4.4.1.6: Assess capacity		
	enhancement needs within such		
	entities as Ministries of		
	Agriculture (extension services in		
	particular), Research Institutions		
	and Hydro-Meteorological		
	Departments so that they can		
	provide accurate and timely		
	climate and weather information		
	to the farming community.		
	Identify the gaps and		
	shortcomings at national levels in		
	the institutional capability and		
	technical capacity for the		
	collection, collation and analysis		
	of the above-mentioned data		
	sets.		
	4.4.1.7: Construct adequate risk		
	profiles for food commodities,		
	including fisheries and forestry		
	resources. This will entail the		
	harmonization and coordination		
	of the collection and collation of		
	relevant socioeconomic		
	information as well as data on		
	soil, water and meteorological		
	conditions, food and agricultural		
	production, processing,		
	marketing and trade.		
	4.4.1.8: Assess the extent of the		
	need for harmonization and		
	coordination of systems and		
	criteria for the collection and		
	collation of food production,		
<u> </u>	condition of food production,		

				_
		trade, processing and marketing,		
		agro-meteorological and social		
		vulnerability data.		
		4.4.1.9: Identify the gaps and		
		shortcomings at national and		
		sub-regional levels in the		
		institutional capability and		
		technical capacity for effective		
		monitoring and evaluation		
		activities to assess the impact of		
		actions and programmes aimed		
		at raising food production,		
		processing/manufacturing and		
		availability and ensuring stability		
		of supplies.		
		4.4.1.10: Provide animal health		
		and food safety information to		
		producers, consumers, private		
		sector and community		
		organizations. There are several		
		institutions established in the		
		region to address animal health		
		and food safety issues but little		
		activity takes place in terms of		
		diffusion of information to the		
		critical stakeholders. As a result		
		there is need for information		
		system activities that transfer		
		information products from such		
		entities as CROSQ, CAHFSA and		
		CFNI to both the direct users of		
		the information and the general		
		public.		
		4.4.1.11: Develop effective		
		disaster preparedness and		
		mitigation systems/plans.		
		4.4.1.12: Develop a crop,		
		livestock and fisheries plan for		
		the sub-region, taking into		
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			consideration hurricane patterns,		
			in order to reduce overall		
			production risks.		
			4.4.1.13: Identify and monitor		
			regional and international		
			supplies of key staple food		
			commodities/products for		
			storage at an agreed minimum		
			level and managed by an		
			institution with a specific		
			mandate, which would be		
			available for distribution in times		
			of crisis. This would include		
			public/private partnerships and		
			build on the system already in		
			place with WFP assistance.		
5	Emerging/Crossc				1
	utting Issues				
			5.1.1.1 Initiate discussions on a		
	5.1 Climate	5.1.1 Develop and	plan for expanded food storage		
	Change Bio-	implement their	reserves – to be supported by		
	technology Water	Disaster Risk	improved agro processing		
	Resource	Management plans for	techniques so that there is an		
	Development and	drought and floods.	increased range of processed		
	Management		food products to enhance		
	Food Reserves.		availability over a longer period		
			of time		
			5.1.1.2 Promote Climate Smart Agriculture		
			5.1.1.3 Identify areas where		
			rainwater harvesting is feasible		
			and promote the establishment		
			of RWH pilots.		
			5.1.1.4 Capacity building in		
			Irrigation scheduling		
			5.1.1.5 Capacity building in		
			irrigation and drainage		
			technology (esp maintenance and		
			operation of irrigation systems)		

	 	1 000 and Natifical Security For	 20,0	
		and Rainwater Harvesting		
		technology		
		5.1.1.6 Establishment of National		
		Water Information systems		
		5.1.1.7 Promote water reuse and		
		recycling for agriculture		
	5.1.2: Increase national	5.1.2.1: Include adaptation		
	capacity for adaptation	strategies in the curricula of all		
	to Climate Change	training institutions and		
		extension training mechanisms		
		for farmers and other producers		
		e.g. farmer field schools.		
		5.1.2.2: Retrain farmers in		
		appropriate production practices		
		(e.g. conservation farming, zero		
		tillage etc.) to adapt to the		
		changing environment.		
		5.1.2.3: Integrate climate		
		adaptation into agricultural		
		adjustment programmes through		
		a risk management approach.		
		5.1.2.4: Promote cost-effective		
		alternatives to fossil fuels that		
		improve energy efficiency in		
		agriculture.		
		5.1.2.5: Increase understanding		
		and integration of scientific		
		knowledge of climate change into		
		farm management decisions.		
		5.1.2.6: Promote more efficient		
		water and land management		
		systems <i>inter alia</i> to address		
		shortages and excessive rainfall.		
		5.1.2.7: Invest in new or existing		
		water management and control		
		infrastructure.		
		5.1.2.8: Re-zone agricultural		
		production as necessary to		
		reduce vulnerability.		
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		5.1.2.9: Develop farm			
		management tools/practices and			
		build industry and farming			
		community capacities to increase			
		resilience through: (i) developing			
		dynamic farm/agricultural			
		management tools that integrate			
		climate change risks into existing			
		and emerging farm management			
		systems; (ii) developing, where			
		possible, environmental			
		management systems for the			
		agricultural sector; (iii) identifying			
		and building on successful			
		indigenous knowledge and			
		strategies for adaptation.			
		5.1.2.10: Integrate the pest,			
		weed and disease implications of			
		climate change into strategies			
		that minimise their impact on the			
		agricultural and natural resources			
		systems.			
		5.1.2.11: Foster the development			
		of an early warning system and a			
		preparedness strategy (short-			
		medium-long term) dealing with			
		climate change parameters.			
		5.1.2.12: Conduct a study to			
		identify possible impacts of			
		climate change on the food			
		security of vulnerable and			
		marginalised households.			
		5.1.2.13: Identify measures to			
		mitigate/adapt to impacts of			
		climate change on food security.			
		5.1.2.14: Develop collaboration			
		with other Sector Bodies (CCCCC			
		etc), which address the impact of			
		climate change and ways and			
 •	•	· · · · · · · · · · · · · · · · · · ·	•	•	_

			means of adapting to and mitigating its effects. 5.1.2.15 Promote the harmonisation of agrometeorological data; 5.1.2.16 Facilitate the development of innovative financial instruments through partnerships (e.g. Forest Carbon Partnership Facility, Carbon Partnership Facility, Global Environment Facility, etc.).		
		5.1.3: Increase the capacity for Mitigation of the effects of Climate Change	5.1.3.1 Provide incentives for the reduction of Greenhouse Gas. 5.1.3.2 Include mitigation strategies in the curricula of all training institutions and extension training mechanisms for farmers and other producers e.g. farmer field schools. 5.1.3.3 Develop collaboration with other Sector Bodies, which handle the development renewable energy.		
6	Institutional and Policy Development 6.1 Strengthen the capacity at national level to implement multisector FNS programmes as well as to deal effectively with emergency conditions and minimise their	6.1.1 Coordination and Management to Implement the RFNS Action Plan in effective, efficient and timely ways applying good governance practices	6.1.1.1 Establishment of a coordination mechanism for interventions/initiatives in the agricultural sector – agricultural organisation cluster and in other relevant sectors; establishment of the management mechanism to manage the implementation of the FNSP through a national coordinating mechanisms 6.1.1.2 Initiate the strengthening		

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	negative short-	of small farmers' organisations	
	and long-term	and 'clusters' to improve the	
	impacts on food	availability of food - targeted at	
	security and	the household and individual	
	nutrition,	levels. This will need to proceed	
	especially among	in tandem with the strengthening	
	food-insecure	of extension services' delivery of	
	households and	"tech packs" including	
	the most	innovations.	
	vulnerable to	6.1.1.3 Develop a work plan for	
	food insecurity.	the first year, and subsequent	
		annual work plans that take into	
		account the results of	
		performance monitoring of the	
		RFNSAP.	
		6.1.1.4 Assess the capacity of the	
		FNSP implementation	
		arrangements, identify any	
		capacity gaps and formulate a	
		plan to fill those gaps.	
		6.1.1.5 Undertake a governance	
		assessment of key institutions	
		and organisations to identify	
		current governance practices and	
		the need for changes therein, and	
		develop an action plan based on	
		the assessment results with the	
		aim of improving governance of	
		food security, nutrition and right	
		to food actions.	
		6.1.1.6 Reach agreement among	
		key decision makers and actors at	
		different levels about practices to	
		be considered good and	
		appropriate, and widely	
		disseminate these governance	
		norms to all stakeholders	
		including population groups that	
		are to benefit from actions under	

		the FNSP.			
		6.1.1.7 Develop a monitoring			
		framework covering two major			
		components (a) performance			
		monitoring and reporting, and			
		(b) impact monitoring, in			
		accordance with the general			
		outline included in the M&E			
		section;			
	6.1.2: Monitoring and	6.1.2.1 Assess the institutional			
	Evaluation-Regularly	capacity and internal and			
	collate, analyse and	external information flows to			
	disseminate the	implement the monitoring			
	necessary information	framework, and develop an			
	for decision makers,	action plan to implement the			
	key stakeholders and	monitoring framework;			
	other actors about	6.1.2.2 Support the			
	progress in	establishment and the utilisation			
	implementation and	of an electronic platform for the			
	impacts of the FNSP	dissemination of monitoring			
	compared to its time-	information, integrating national			
	bound objectives.	and regional levels.			
		6.1.2.3 Undertake an institutional			
		capacity assessment as part of a			
		comprehensive Right to Food			
		assessment at regional and			
		national levels.			
	6.1.3 Institutional	6.1.3.1 Identify areas where			1
	Capacity Strengthening	institutional capacity			
	- Ensure that national	strengthening is needed and			
	institutions and	develop appropriate			
	organisations that	corresponding action plans.			
	participate in	6.1.3.2 Organise face-to-face			
	implementing the FNSP	training events as well as e-			
	have adequate	learning courses			
	capacities (mandates,	icarring courses			
	human resource				
	capacities, and internal				
	capacities, and internal		1	1	ı

	organisation) to			
	assume their roles and			
	responsibilities in the			
	implementation of the			
	AP.			
	6.1.4 Provision of	6.1.4.1 Draw up an inventory of		
	Technical Support-	available relevant local expertise		
	Identify technical	6.1.4.2 Mobilise short term		
	support needs at	technical expertise as needed,		
	national levels and	subject to financial resource		
	organise and manage	availability;		
	timely technical	6.1.4.3 Establish an agenda for		
	support responses	South-South and intra-regional		
		technical cooperation, and make		
		the necessary contacts in other		
		countries to initiate discussions		
		about cooperative arrangements.		
	6.1.5 Resource	6.1.5.1 Establish an RFNS Donor		
	Mobilisation and	Fund group coordinated by the		
	Administration-	FNSAC. Develop profiles of donor		
	Mobilise adequate	and financial institutions (their		
	resources from	policies, areas of interest and		
	different sources and	requirements) to be made		
	manage those	available to relevant stake		
	resources in an	holders.		
	effective and	6.1.5.2 Prepare informational		
	transparent manner in	materials targeted at different		
	support of the	donor groups as well as at		
	implementation of the	national budget decision makers		
	FNSP.	about the aims, goals and		
		objectives of the FNS Policy and		
		Action Plan and their main		
		strategic actions, and how these		
		relate to internationally agreed		
		goals such as the MDGs, Rights of		
		the Child, Progressive Realisation		
		of the Right to Food and other		
		economic, social and cultural		
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	rights. 6.1.5.3 Develop capacity in project cycle management utilising available web based training materials 6.1.5.4 Establish legislative and institutional frameworks to facilitate cross border investments.
6.1.6 To strengt capacities for portion and programme analysis at natic level to implem national FNS Portion Plan as with the design of an institutional frast bringing together relevant staken from the public private sectors oversee and main implementation periodic updations.	en 6.1.6.1 Establish an appropriate icy national institutional framework, vested with the requisite legal al authority and technical capacity for managing FNS programmes. cy and 6.1.6.2 Programme to support efforts to implement FNS policies and Action Plan and strengthen the capacities to: ework the capacities to: all or Implement FNS policies and programmes; nd or Design and set up institutional mechanisms, which provide space for civil society participation, to
	national level; • Fast-track ongoing actions to harmonize policies and procedures on FNS issues (food safety and agricultural

	public health, nutrition and			
	lifestyle choices training and			
	education, food access and			
	stability of supply (early			
	warning systems, agricultural			
	risk management trade etc.)			
	in the context of			
	strengthening the operations			
	of and deriving the benefits			
	from the OECS and CARICOM			
	Single Market and Economy			
	(CSME).			1
	6.1.6.3 Programme for capacity			1
	building to strengthen national			1
	food security programmes,			1
	including management of			1
	national food reserves, planning			
	of potential land use for			
	agriculture, and technical support			
	for preparing national food			
	balance sheets.			
6.1.8 To foster	6.1.8.1 Assessment of			-
integrated institutional	governance practices by		The responsibility is as	
and organizational	institutions involved in designing		much private as it is	
development, at	and implementing FNS actions,		public and therefore both	
national level, cutting	identifying gaps as the basis for		types of institutions are	
across all components,	development and		focused on in the	
strategic pillars, action	implementation of a capacity		activities. The past	
programmes and	strengthening programme;		experience has indicated	
activities of the FNSP. It	6.1.8.2 Development of national		that premature public	
is equally critical for	public/private and		withdrawal of critical	
food and agricultural	private/private sector linkages.		services in the hope that	
enterprise	This is essential to ensure that		the private sector would	
development and for	the production factors that need		supply them has	
the establishment and	to be connected for success in		undermined	
implementation of	the development of products		development of the	
policies and programs	from an idea (farmer/university		agricultural and rural	
for addressing	lab) to commercial development		sectors. Thus, the	

	vulnerability and	(entrepreneur/processor/market		synergies between public
	ensuring availability of	er) to the consumer are linked.		and private institutions
	safe foods and the	6.1.8.3 Training and education to		and organizations, and
	practice of improved	increase capacity of		the phasing and gestation
	food consumption	entrepreneurs, government		periods of activities are
	habits.	policy planners and community		critical elements in
	Habits.	organizers in all areas relevant to		ensuring that the
		the FNSP. Persons should also be		
				anticipated results are
		trained in improving research and		realized.
		development skills. This would		
		include areas such as -		
		entrepreneurship and enterprise		
		management; employment		
		creation; leadership; strategic		
		planning workshops; risk		
		assessment and management		
		training; community risk		
		response mechanism		
		development; social protection		
		framework planning; food		
		security information system		
		development.		
		6.1.8.4 Facilitating incentive		
		policy development and		
		incentives for product and		
		market development, including		
		the provision of on-going funds		
		for market studies, income and		
		price analyses; feasibility		
		analyses, and assistance to		
		mentor youth who are interested		
		in establishing new enterprises.		
		Preparation for trade and market		
		negotiations at the bilateral and		
		multilateral levels, particularly as		
		these relate to the development		
		of policy space for non-traditional		
		exports and products important		
		to food security, rural		

		development and livelihood		
		systems.		
		6.1.8.5 Community organization		
		and rural producer organization		
		development and training to		
		enable community members to		
		better access public services and		
		establish relationships with the		
		private sector to further		
		development of the community.		
		6.1.8.6 Policy analysis training, at		
		national level, in food security		
		and policy analysis, macro/micro		
		policy analysis, sector linkages		
		analysis, commodity, market and		
		terms of trade analysis,		
		investment analysis, social and		
		environmental analysis.		
	6.1.9 Integration of	6.1.9.1 Advocacy through public		
	Right to Food concepts	awareness campaigns and		
	and principles and good	workshops at national levels to		
	governance practices in	sensitize policy-makers,		
	national legal and	parliamentarians and legal		
	institutional framework	draughtsmen in the public sector		
	for food security and	and civil society and private		
	nutrition and related	sector organizations on the scope		
	programmes (poverty	and nature of the right to food		
	reduction, social	and mechanisms for its		
	development/welfare	implementation.		
	and social and	6.1.9.2 Conduct a baseline survey		
	productive safety nets).	to assess the situation		
	' '	(institutional framework and		
		capability) with respect to		
		vulnerability mapping and		
		analysis, social welfare		
		programmes, social and		
		productive safety nets and the		
		existing policies, legal		
		instruments and recourse		

	mechanisms, to provide the basis for recommendations on the way forward. 6.1.9.3 Strengthen the capability of the Legal Division to deal with RTF issues and the drafting of guidance notes including model legislation on RTF and on the roles of the Ombudsman institutions.		