



# GOVERNMENT OF REPUBLIC OF SEYCHELLES

(Proposal For) NATIONAL FOOD AND NUTRITION SECURITY (NFNSP) Multi Sector Implementation Plan

Scaling Up Multi-Sectoral Efforts for a Healthy and Competitive Human Capital

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## Foreword- Minister

## Statement of Commitment-Relevant Ministries

## Acknowledgement-PS

## Acronyms

ADF-Agriculture Development Fund  
ARVs- Antiretroviral  
BFHI-Baby Friendly Hospital Initiative  
BMI -Body Mass Index  
BP – Blood Pressure  
CAADP – Comprehensive Africa Agriculture Development Plan  
CDCU- Communicable Disease Control Unit  
CESCR - International Covenant on Economic, Social and Cultural Rights  
CLISSA - Competitively Local Innovations for Small Scale Agriculture  
CVD – Cardio Vascular Disease  
DBS - Development Bank of Seychelles  
ECD - Early Childhood Development  
EAF - Ecosystem Approach to Fisheries (EAF)  
FAO – Food and Agriculture Organization of the United Nations  
FIQCU - Fish Inspection and Quality Control Unit  
GDP – Gross Domestic Product  
GoS – Government of Seychelles  
HBP – High Blood Pressure  
HIV- human immunodeficiency virus  
IYCF - Infant and Young Child Feeding  
IEC - Information, Education and Communication  
IDC – Island Development Company  
IRRI - International Rice research Institute  
MOE - Ministry of Education  
MOH – Ministry of Health  
MFTBE - Ministry of Finance, Trade and Blue Economy  
MDGs – Millennium Development Goals  
HDI – Human Development Index  
MNCH - Maternal, Newborn and Child Health  
NAFSIP - National Agriculture and Food Security Investment Plan  
NATCOF - National Consumers Forum  
NFNSSC - National Food and Nutrition Security Steering Committee  
NCD – Non Communicable Disease  
NFNP – National Food and Nutrition Security Policy  
NGO – Non Governmental Organization  
PUC - Public Utilities Corporation  
RtF-Right To Food  
SAA - Seychelles Agriculture Agency  
SAHTC - Seychelles Agricultural and Horticulture Training Centre  
SADC – Southern Africa Development Community  
SBS – Seychelles Bureau of Standards  
SES - Socio Economic Status  
SEYFA – Seychelles Farmers Association  
SFA – Seychelles Fisheries Authority  
SBC - Social and Behavior Change  
SNAIP – Seychelles National Agriculture Investment Plan  
SP - Social Protection  
STC - Seychelles Trading Company



TCP - Technical Cooperation Programme  
ToT – Training of Trainers  
VG-Voluntary Guidelines  
UN – United Nations  
UNDP-United Nations Development Programme  
WTO – World Trade Organization

## Executive Summary

The Seychelles, an island state in the Indian Ocean, finds itself at a cross roads. Having successfully reached high income country status (2014, World Bank, GDP (PPP) per capita) and having performed with admirable exception in its Millennium Development Goal (MDGs). Within the Indian Ocean Commission Membership, it has been an ideal example of positive economic and social transition. This economic transition driven by growth has increased domestic fiscal resources which have been utilized to increase services that address health, education and social protection. In this transition however, its population has also experienced significant changes in dietary and lifestyle patterns which have been linked to a rise in non-communicable diseases like diabetes, heart disease, cancer and renal failure. All of which are the main causes of death, illness and disability among adults (Bovet et.al. Seychelles Heart Study IV, 2014). In addition, sedentary lifestyles have become more common leading to the prevalence of combined overweight (i.e. moderate excess of weight, BMI: 25-29 kg/m<sup>2</sup>) and obesity (marked excess of weight, BMI ≥30 kg/m<sup>2</sup>) doubling in men (from 28% to 57%) and in women (from 51% to 72%), (Bovet et.al. Seychelles Heart Study IV, 2014). This also applies to children, with overweight and obesity in school children and adolescents doubling between 1998 and 2014(School Screening Program 2014). In 2014, 19.2% of all boys and 23.9% of all girls aged 5-16 years had combined overweight or obesity, and 7.6% of all boys and 10.0% of all girls had obesity in 2014 (School Screening Program in 2014). As a result, amongst children, overweight and obesity have also been associated with high blood pressure and other detrimental cardio-metabolic conditions. In addition to this, there are also incidences of undernutrition amongst vulnerable groups with 8% Vitamin A deficiency amongst pre-school aged children. There is a 21% rate of Anemia within the women of reproductive age populous.

Traditional diets consisting of fresh fish, root crops, breadfruit and local fruits and vegetables have been increasingly replaced by imported, often highly processed foods such as refined white rice, flour, instant noodles, canned foods, fatty low grade meats and soft drinks with a high sugar content and imported poultry. Hence *Seychelles is becoming nutritionally insecure* which is a threat to sustainable economic development and is conclusively also suffering from the double burden of nutrition, a situation which in turn renders unsustainable implications on the national budget (NSNFP, 2013). These implications are not only monetary in nature but also social, the high

occurrence of the stated chronic illnesses (NCDs) impact on children's learning abilities and require high and unsustainable child and adult health and welfare support, therefore also disrupting social harmony. (NSNFP, paragraph 11)

In light of all the aforementioned, the government has demonstrated a commitment to address all the underlying stated challenges through a Food and Nutrition Security Plan multi sector implementation plan, with the intention of providing the Seychellois with a sustainable supply of nutritious, affordable and safe food. The National Food and Nutrition Security (FNS) multi sector implementation plan has not replaced other sectoral policies, but has instead brought additional value in terms of defining and utilizing synergies and complementarities across sectors whilst ensuring a more coherent and systematic implementation of existing national and sectoral policies and strategies to effectively address issues of nutrition insecurity and malnutrition in Seychelles. Addressing food and nutrition security is inherently multi-sectoral, dealing with complex and not necessarily aligned interfaces. It is therefore, understandable that a large number of Acts, policies and strategies, all of which impact directly or indirectly on food and nutrition security, must be carefully considered in the translation and implementation of this policy. (NSNFP, 2013).

This implementation plan integrates the major goals, policies and actions related to food security and nutrition into a cohesive whole, and provides a mechanism through which the government will facilitate in a comprehensive and coordinated manner the implementation of the stated strategic programs.

The main goal of the FSN multi-sector implementation plan is to provide safe, healthy and adequate food at all times and to satisfy the nutritional needs for optimal health of the Seychellois by;

- i. Ensuring the food security for all Seychellois through efficient and effective agricultural production, sustainable fisheries and balanced by importation of healthy and nutritious food. This first goal will be addressed by programs which focus mostly on the role of agriculture in improving household resource/input productivity and improved national food availability toward food sovereignty
- ii. Improving and optimizing the nutritional status, health and wellbeing of all Seychellois. This second goal will be addressed through an improved food safety and quality control programme in addition to improved nutrition in public institutions and among consumers, improved food and nutrition in schools
- iii. Strengthen and aligning institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base. The third goal will focus on food security and nutrition in crisis and emergency, and improved food and nutrition information and research

To achieve the aforementioned goals, the FNS multi sector implementation plan aims to utilize a series of programs and priority areas as follows:

**Program 1: SECURING FOOD AVAILABILITY AND ACCESSIBILITY FOR THE PEOPLE OF THE SEYCHELLES**

**Priority Area:**

- a. Securing national sovereignty in food and nutritional needs
- b. Strengthening agriculture and fisheries as key players in food and nutrition security
- c. Promoting the agricultural value chain
- d. Enhancing the fisheries value chain
- e. Home gardens and peri-urban farming
- f. Mariculture: Opportunities for a new industrial sector
- g. Food imports
- h. Access to food
  - i. Job creation and poverty alleviation: Incomes and food prices
  - ii. Access for the vulnerable sections of the population

**Program 2: NUTRITION SECURITY FOR THE PEOPLE OF SEYCHELLES**

**Priority Area:**

- a. Understanding and providing for nutritional security in Seychelles
- b. Nutrition and Health Care
- c. Education and public awareness on Food Nutrition
  - i. Nutritional education in schools
  - ii. Nutrition and public awareness
  - iii. Nutrition and local cultures and social systems

**Program 3: Food Safety, Standard and Quality Control**

**Priority Area:**

- a. Food safety and public health
- b. Quality Management and Certification Services
- c. Enhanced Food Management and Control Systems
- d. Promoting Quality Food Production, Storage, Handling and Processing Practices along the value chains

**Program 4: Alignment and Harmonization with Regional and International Food and Nutritional Security Policies, Standards and Framework**

**Program 5: Preparedness and Managing Risk and Uncertainty**

**Priority Area:**

- a. Food and Nutrition Security Information
- b. National Data and Information Systems
- c. Research and analytical capacity on food systems and nutrition
- d. Strategic food reserves, early warning, safety nets and emergency management

- e. Insurance and risk management
- f. Food security and climate change
- g. The role of gender in food and nutrition security

**Program 6: Institutional and Legal Framework for Policy Implementation, Monitoring and Evaluation Financing**

**Priority Area:**

- a. Institutional and legal framework for implementation
- b. The National Food Security Steering Committee
- c. Monitoring and Evaluation, Accountability and tracking policy implementation and review

**Outline of FSN Multi Sector Plan.**

This document is divided into five chapters. Chapter One presents the background information, establishes the nutrition situation of the country through a Situation Analysis, and then presents the existing relevant policies and interventions that have been developed to address the stated challenges within the Situation Analysis.

Chapter Two presents key elements of the FSN multisector implementation plan by providing the Goal, Rationale and key considerations for the Program of implementation, this chapter also gives some Overarching Conceptual Frameworks which serve as a theoretical and evidence based guide and justification for the selected programs, this is followed by details on the coordination mechanism which will be used as tools to transform the programs into actions

Chapter Three presents the reader with an outline framework towards the development of a Social Behavioral Change Campaign strategy. Chapter 4 provides a Monitoring and Evaluation plan/strategy which includes the rationale and objectives. This is followed by the scope and approach, a guide to the selection of the indicators and finally key elements to consider in a risk assessment. The document ends with a list of references in Chapter 5

## Chapter 1: Introduction

The Government of Seychelles has engaged, with committed promptness, the development of a Food and Nutrition Security (FSN) multi-sector plan that is set to address and improve the current nutrition status of the Seychellois people. The FSN plan is expected to be instrumental in retaining the progress made across all sectors through the MDGs and other national and international commitments, and has the goal to ensure that the population has access to adequate, safe and healthy foods that reflect the local culture and economic climate in order to maintain optimal nutritional status and therefore healthy and competitive human capital.(NFNSP, paragraph 27) The FSN multi sector plan has been formulated as a guide for action to implement the Food and Nutrition Policy (NFNP) but also builds on other strategic documents such as the Medium Term National Development Strategy (MTNDS) 2013 -2017 , Seychelles National Agriculture Investment Plan (SNAIP) and the Health Strategic Framework for Seychelles. The Food and Nutrition Security Policy in itself states that a large number of Acts, policies and strategies , all of high impact directly or indirectly on food and nutrition security , must be carefully considered in the translation and implantation of this policy. (NFNSP, paragraph 31)

In translating the objectives articulated in the NFNSP, through implementable programs and priority interventions, the FSN multi-sector plan will also foster action to address sectoral priorities, such as those laid out in the aforementioned strategic documents and other sectors that have an effect and contribute to the overarching nutrition outcomes of the country. This is because sustained improvements in these nutritional outcomes will require the implementation of evidence based, high impact, cost effective nutrition interventions as well as the integration of nutrition into health, agriculture, education, employment, social welfare and development programs that have indirect impacts on nutritional status. It is therefore critical that these sectors undertake the nutrition-related activities for which they are responsible and are held accountable for doing so. This will be achieved by intensifying national efforts through scaling up the implementation of a package of proven and cost-effective interventions.

A multi-sector organizational arrangement will coordinate and monitor the food and nutrition activities proposed in the plan at the national and district level. Given the multi-divisional nature of

food security and nutrition, an Inter-ministerial National Food and Nutrition Security Steering Committee (NFNSSC) is expected to coordinate and oversee input from relevant ministries and institutions. This will help ensure appropriate linkages among diverse sector and multi-sector policies and that each would contribute to achieving immediate and longer-term food security and nutrition.

The implementation plan is for a period of 5 years from 2016 to 2021.

## Country Background

### Geography, population & human development

The Republic of Seychelles is composed by 115 islands spanning an archipelago in the Indian Ocean, approximately 1,500 km east from the African coast, northeast of Madagascar. It has no indigenous people and the current population - estimated at 90,000 are concentrated in Mahé and are composed by descendent of African, French, Indian and Chinese immigrants. It is the smallest of any African State and is classified which holds the second highest GDP and the highest HDI (ranked 46 of 187 nations). The Seychelles has also successfully reached most of its MDGs in the fields of health, education, poverty eradication and environment.

### Agriculture and Fisheries Sector Description

The Agriculture sector contributes approximately 3% towards the national GDP and remains an important sector in terms of food production. It is also important in terms of employment and as a means of livelihoods. The main farming systems are registered commercial farmers and household gardens. Production of local vegetables and fruits decreased from 65% in 1995 to 54% in 2011 and 50% in 2012. The sector is characterized by rain-fed production and relatively low levels of productivity. Coconuts, vegetables and bananas are the main crops produced in terms of volume, while nuts and prepared fruit are the main export crops based on value. Local poultry production also once held a significant role in the agriculture sector however production fell from 80% in 2008 to 10% in 2012. This fall is due in part to the WTO demands to drop tariffs and taxes on imported foods in 2008 hence cheaper and imported poultry from Brazil, France, Denmark and UAE now dominate the local market.

The fisheries sector in Seychelles consist of the industrial large-pelagic fishery, the semi-industrial fishery and the artisanal fishery. Fisheries is one of the two most important pillars of the country's economy and fish play a hugely important role in the nutrition of the people, comprising 35-40% of all protein consumed in the Seychelles(NFNP, 2013). Fish for local consumption is obtained from the semi-industrial and the artisanal fisheries. The semi-industrial fishery has a large-pelagic longline and a demersal line fish component. The artisanal fishery targets a diverse array of species ranging from hook and line caught demersal and semi-

pelagic fish, small semi-pelagic fish caught in nets, small demersal fish caught in traps, and lobsters, octopus and sea cucumbers caught by divers. The artisanal fisheries provide the bulk of all fish consumed locally. While the semi-industrial fishery has been modernised in recent times and is attracting young entrepreneurs, the artisanal fishery has remained stagnant in terms of development, diversification and technological advancement and is characterised by an ageing fleet of vessels, declining catches, and a large proportion of ageing fishermen with low entrepreneurial skills, many uncontrolled and unsanitary points of sale, the absence of value addition and post-harvest losses.

### Other Relevant Factors Influencing the Agriculture Sector

- a) Key and immediate drivers for agriculture development in Seychelles: Limited capacity and systems to develop a fully-fledged agriculture sector. Therefore, the key driver for Seychelles' engagement to develop its agriculture sector is primarily to:
  - i. Generate the "public good" in terms of ability for increased resilience of the country to mitigate adverse impact that may come with the dependence on global food systems, and
  - ii. Optimise local food production to expand the dietary range of available food, and contribute to improved nutrition efforts linked to public health.
- b) Implication of being a high income country: This situation compels the country to plan largely on the basis of its own resources. Both local and international private sector will also be important in rallying investment financing into the country's agricultural sector.
- c) Import vis-a-vis local production: With the aforementioned factors and the food sovereignty objectives in mind, Seychelles will remain with a significant portion of its food requirement imported from outside the Island.
- d) Potential local production capacity: taking into account local ecosystems circumstances, potential arable land size and quality as well as farming systems, there is a significant local production capacity which has to be harnessed from urban/peril-urban home gardens
- e) Private sector will play a critical role in developing and sustaining Seychelles' optimal ability and capacity of the local agriculture production systems (also taking into account intensification objectives). This involves stimulating and nurturing private sector drive and involvement (through e.g. public-private partnerships) in actual production implementation through to local value addition activities (agro-processing) and investment financing.





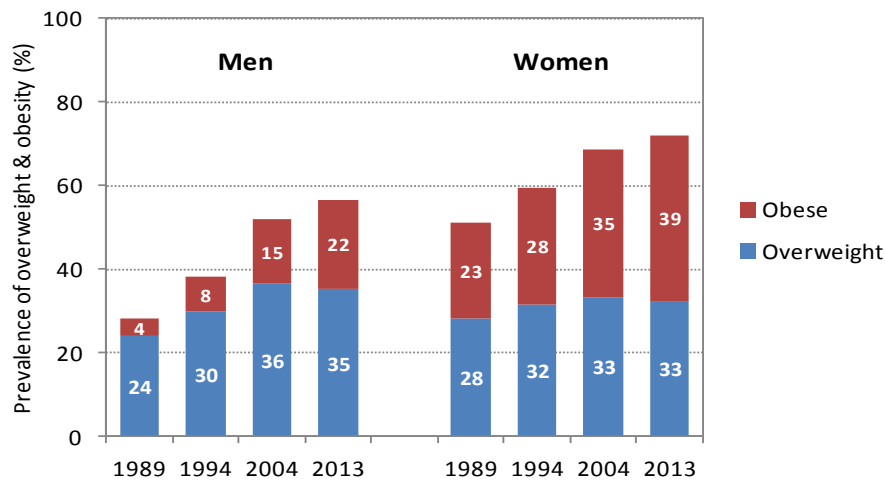
## Seychelles Nutrition Situation Analysis

The 2006/2007 household expenditure survey revealed that 18% of Seychellois households are not able to meet basic caloric requirements (2100Kcals per day) and at the same time there is the presence of over nutrition where more than half the population is overweight due to poor eating habits. In Seychelles, 21% of household income is spent on food as compared to 45% in Kenya, 28% in Mauritius and 25% in Brazil. (NFNSP, 2013)

With socio economic improvements and lifestyle shifts, Seychellois have been decreasing their consumption of traditional food such as fresh fish, cassava, sweet potatoes and breadfruit and have increased consumption of imported food (refined white rice, meat, poultry, high calorie snacks, sugar and salt). Adding to this is sub-optimized food utilization, which involves deep frying and over cooking vegetables which not only elevates the fat content but reduces nutritional value. And despite its access to an array of local tropical fruits and indigenous vegetables, there is a very low consumption of these. In addition to what the Seychellois are eating, transition to a much more economically viable industrialized country has resulted in lifestyle choices which are much more sedentary and include limited physical activities. Adding to this is a high prevalence of smoking.

The resulting effects on the population is both adults and children being overweight and obese. The most recent Seychelles Heart Study (2014) shows that over 60% of the adult population is overweight as well as 22% of children.

Age-standardized prevalence of overweight and obesity by sex and survey year, age 25-64 (Bovet et.al. Seychelles Heart Study IV, 2014)



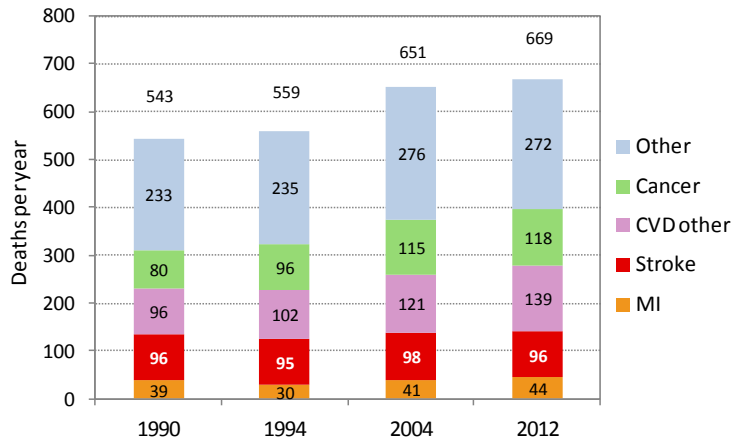
Between 1989 and 2013, the prevalence of combined overweight (i.e. moderate excess of weight, BMI: 25-29 kg/m<sup>2</sup>) and obesity (marked excess of weight, BMI ≥30 kg/m<sup>2</sup>) has doubled in men (from 28% to 57%) and also has markedly increased in women (from 51% to 72%). (Bovet et.al. Seychelles Heart Study IV, 2014). The high rates of overweight and obesity has impacted the prevalence of Non Communicable Diseases (NCD) such as Cardio Vascular Disease (CVD), which accounts for 40% of deaths (Bovet et. el). This is followed by diabetes and hypertension where rates are at 14% and 40%. NCDs, particularly CVD, are also strongly related to lifestyles and physiological risk factors such as high blood pressure (HBP), blood lipid disorders (e.g. high blood cholesterol) and diabetes. It is well established that up to 80% of cases of premature CVD, and a substantial proportion of other chronic diseases (e.g. lung cancer, renal failure) could be prevented or delayed if these risk factors were kept at more favorable levels throughout life in the population, using strategies targeting both the entire population and high risk individuals. Moreover the Seychelles Child Development study found that pregnant mothers were not obtaining their optimum nutritional needs during pregnancy. (Bonham, 2009). Due to the fact that the country has moved away from the malnutrition context, there has been no micronutrient analysis conducted across all age groups in order to know which deficiencies exist in the population.

### Non Communicable Diseases (NCDs)

The global burden of NCDs such as Cardiovascular diseases (CVD) , cancer and diabetes, account for more than 70% of all premature deaths in most middle income countries, including the Seychelles. The burden of NCD is largely attributed to four “physiological” risk factors (body mass index, blood pressure, blood lipids and diabetes) which are themselves largely determined by four major modifiable risk behaviors (smoking, insufficient physical activity, unhealthy diet, and excess alcohol intake . Results from the previous population-based surveys in the Seychelles of NCD risk factors conducted in 1989, 1994 and 2004 have shown

contradictory trends of NCD risk factors over this period of time, including a downward trend for smoking, unchanged or decreasing trends for high Blood Pressure (BP) and high blood cholesterol but largely upward trends for diabetes and obesity.

Total numbers of cardiovascular disease, cancer and other broad causes of deaths between 1990 and 2012 (Bovet et al. Seychelles Heart Study IV, 2014)



### Trends in Childhood Obesity

The School Screening Program, 2014, has shown that there are significant cases of obesity in children. This is a major challenge to children’s health as it has been linked to a change from traditional diets high in fish protein to more processed foods. Easy access to junk food, sugary and fatty foods and a school feeding program in need of dire revision make the fight against obesity in children all the more challenging. A study conducted by the Unit for the Prevention of Cardio Vascular Diseases (UPCCD) in 2006 found that the prevalence of ‘excess weight’ in school children is at 19 %. This shows an increase from 8.7% to 13.5% in boys, and from 11.8% to 18.6% in girls from 1998 to 2004. The prevalence of ‘obesity’ increased from 2.1% to 5.2% in boys and from 3.1% to 6.2% in girls. Physical activity decreased over calendar years and was inversely associated with excess weight. (Bovet et al).

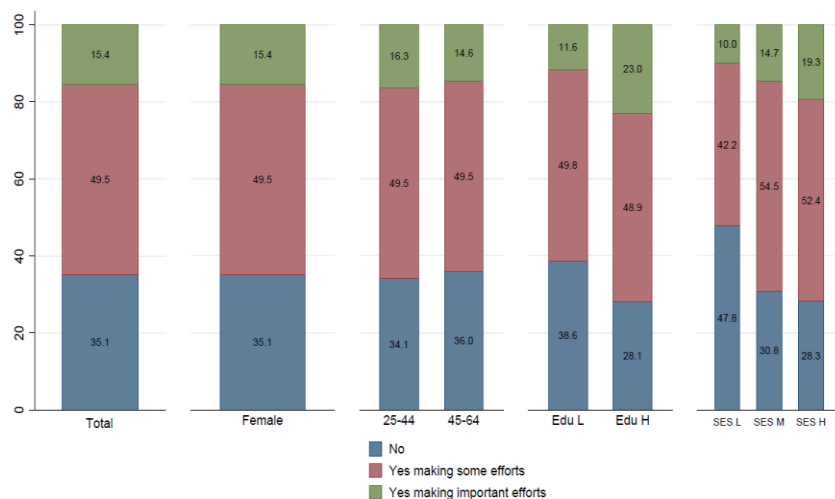
	1998	2004
<b>Excess weight</b>		19%
<b>Boys</b>	8.7%	13.5%
<b>Girls</b>	11.8%	18.6 %
<b>Prevalence of Obesity</b>		
<b>Boys</b>	2.1 %	5.2%
<b>Girls</b>	3.1 %	6.2 %

### Overall trends of NCDs in Seychelles

Vital statistics in Seychelles show that CVD and cancer account for the largest share of premature mortality and morbidity in Seychelles (Bovet 2015). On the positive end of the spectrum, age-standardized rates of CVD are decreasing in Seychelles (Bovet, 2015), consistent with trends in high income countries. This favorable downward trend is likely related to the many programs and policies implemented over the past 2-3 decades in the Seychelles to address NCDs, particularly strong tobacco control measures (e.g. comprehensive tobacco control legislation in 2009), and free health care allowing all high risk persons to receive treatment. Seychelles is also experiencing a rapid demographic transition so that the total number of NCDs will be stretched over time given that patients are often middle or older age, a key consideration for long term intervention projection and success/indicator measurements.

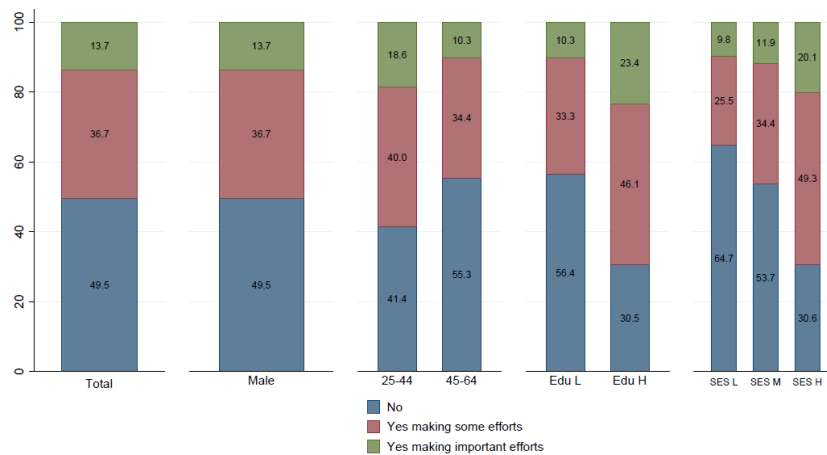
Despite the aforementioned challenges, The 2014 Heart Study also shows positive indicators in terms of willingness to address health and nutrition issues on an individual level.

Proportions of women taking concrete measures to control their body weight, by age, sex and SES, age 25-64



Substantial proportions of women report to take measures to control their body weight, with roughly 65% of women making some or important efforts to control their body weight. (Bovet et.al. Seychelles Heart Study IV, 2014)

Proportions of men taking concrete measures to control their body weight, by age, sex and SES, age 25-64



Substantial proportions of men report to take measures to control their body weight, with roughly 50% of men are making some or important efforts to control their body weight. (Bovet et.al. Seychelles Heart Study IV, 2014)

The above statistics therefore demonstrate a fertile and receptive environment for any interventions geared to address the stated issues of nutrition in the Seychelles, making it a most opportune time in the developing of the FNS multisector implementation plan.

### Infant Young Child Feeding

Infant and young child feeding encompasses the set of feeding practices needed to protect against malnutrition and establish nutritional wellbeing of infant and young children. These practices are essential for the nutrition, growth, development and survival of infants and young children. Infants should be breastfed within one hour of delivery, exclusively breastfed for the first six months of life, and thereafter should receive nutritionally adequate and safe complementary foods while breastfeeding continues up to two years and beyond.

In the Seychelles a total of 8,987 children fall in the age group 0-5 years, represent 11.2% of the total population of Seychelles. Over the past years, the total number of births has been around 1,500 births per year. Maternal death is not a regular occurrence and *maternal mortality rates* do

not exceed more than one case per year. No cases have reported in 2006, 2007, and 2009. The *infant mortality rate* (IMR) has also stabilized for the past decade with an average of 11 per 1000 live birth.

In 2008 the main causes of infant mortality were<sup>1</sup>:

- Respiratory Distress of the new born (14)
- Pneumonia (8)
- Haemorrhagic and Haematological Disorders of Foetus and Newborn (6).

### **Breastfeeding Data**

Data collection on breastfeeding both on maternity and in the community is routine and ongoing. Statistics from the maternity unit surveillance indicate that exclusive breastfeeding rate upon discharge at maternity was at 78% in 2009. This indicates an increase of 20% from 58% in 2008.

However, data from community surveillance shows that exclusive breastfeeding rate quickly declines after discharge. In 2008, only 28.6% of babies were being exclusively breastfed at 6 weeks but this has increased in 2010 to be 43%.

### **Complementary feeding**

Complementary feeding in some cases is reported to begin early as 2 to 3 months. However the majority of babies (90%) are introduced to complementary feeds at 6 months. (2010 MOH data)

	2008	2009	2010
<b>Breastfeeding rate at discharge from hospital</b>	58 %	78 %	83 %
<b>Exclusive breast-feeding rate</b>			
- At discharge	58 %	62 %	78 %
- At 6 months	1.5 %	-	2 %
<b>Breastfeeding at 6 weeks</b>	28,6 %		43 %
<b>Initiation of breastfeeding</b>	60%	52%	60 %
<b>Continued breastfeeding</b>			
- At 12 months			46 %
- - At 2 years			19%

### **Ante-Natal and Post Natal Care**

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All expectant mothers are targeted for ante natal care and for delivery in the maternity unit. In 2008, the attendance rate for ante natal care was 98.8 per cent and 99.1 per cent of deliveries took place in the maternity unit. In 2009, out of 1,538 deliveries, only 8 mothers did not turn up for ante natal care (0.6 per cent) and 3 (0.2 per cent) deliveries took place outside the maternity. (Register of cases, Maternity)

After discharge from the maternity, the mother and her baby are automatically referred for post-natal care and follow up in their respective district health centers. Domiciliary post-natal care is scheduled to take place within the first week after discharge. However, this is delayed most of the time due to staff shortage or transport problems. By the time domiciliary post-natal care is initiated, breastfeeding is already disrupted in the majority of cases.

**Maternal and Child Health** All babies 0 – 4 years are targeted for the Maternal and Child Health services. The first visit is at six weeks and this is followed by subsequent monthly visits for the first year of life. The main focus of the child health services being: growth monitoring, immunization, developmental assessments, dental care and nutritional guidance. The care of the mother is integrated and she has access to reproductive health care when she visits the health center with her baby. The immunization programme covers 100% of children aged between 0 – 15 years and of pregnant women.

#### **HIV and infant feeding**

*The National Health Strategy Framework (2006-2016) was adopted in 2007 and includes a section dedicated to children and adolescents, especially those from dysfunctional families. In terms of HIV and AIDS, the National HIV and AIDS Strategic Plan 2005-2009 is intended to guide the country's response, and makes special reference to the needs of children infected and affected by HIV.*

In an effort to address Prevention of Maternal to Child Transmission of HIV (PMTCT) all pregnant women attending antenatal care are counseled and encourage to do the HIV test. Provisions are made for clients to board on antiretroviral and to follow PMTCT management guidelines.

There are a total of 480 cumulative cases of HIV/Aids in Seychelles. As of January 2011 there were 11 confirmed cases of maternal to child transmission, 1 case through sexual contact and 1 unconfirmed source of infection. All mothers detected with HIV are referred to the Communicable Disease Control Unit (CDCU) for counseling and management of infant feeding. The CDCU protocol, which applies only to hospitals, stipulates that children of HIV positive mothers should be fed exclusively on formula feeds as a measure to prevent PMTCT. The mothers are assisted with a supply of 10 tons of formula per month for a period of six months. Those falling in the low socio economic bracket are further assisted up to one year and over if necessary.



## Undernutrition and Micronutrient Deficiencies

The main causes of malnutrition related to care and infant feeding practices, sociocultural...although there are no statistics confirming the rate of under-nutrition in Seychellois children, a few cases of both micro- and macronutrient deficiencies have been detected. (Seychelles Nutrition Country Profile, 2013).

Micronutrient deficiencies in school age children in Seychelles has been shown to affect school aptitudes, enrolment, concentration and attentiveness (early childhood), (*Seychelles Nutrition Country Profile, 2013*). Children with a history of severe undernourishment have shown to perform less when tested than children in matched comparison groups. Undernourishment also impairs the ability to concentrate, learn and attend school regularly. A child who is malnourished and subsequently suffering from poor health cannot adequately take advantage of instructional and learning materials. Thus, good nutrition is needed to strengthen the learning potential of children, to enable them to learn effectively and maximize investments in education. Poor dietary choices including over-consumption of poor nutrient dense foods can also lead to the development of other conditions such as iron deficiency anemia and dental cavities. Anemia carries implications for both mental and physical performance all of which impinge greatly on school performance.

Currently, there is no recent national information or reports on the percentages of under nutrition or percentages of micronutrient deficiencies in the Seychelles (MOH, IBAN 2013). The last measurements were conducted in 1991 and then 2006. As reported in the 2013 MDG report by UNDP, based on assessments in 1991, approximately 11% of the Seychellois population suffered from some sort of under-nutrition. The MDG Status Report, also stipulated that it was reduced to 7.8% in 2006. The Household Food Expenditure' survey conducted in 1993 showed that the nutritional requirements such as fiber, iron and B-Vitamins were not being met. Similarly, the growth monitoring statistics indicate that whilst 10.2% of children of less than five years old are overweight, 7.9 are stunted, 4.3% are wasted and 3.6% are underweight.

## Policies and Programs That Address Food and Nutrition Security

### Medium Term National Development Strategy (MTNDS) 2013 -2017

The objective of the MTNDS is to reduce vulnerability, increase resilience and provide the basis for a sustainable development. To do this, there is a focus on five main areas:

1. Climate change, renewable energy and water
2. Human resource development
3. Economic infrastructure
4. Food security, trade and diversification
5. Development of national statistics. Furthermore there are national agricultural production targets for the main food items consumed locally.

### National Food and Nutrition Security Policy

The Seychelles National Food and Nutrition Security Policy (FNNSP) was specifically developed to align and strengthen the country's capacity and ability to deliver on its food and nutrition security objectives and targets in a manner that ensures efficiency and sustainability in resource use, able institutions and human capacity and resilience in the face of internal and external shocks as well as progressive change in key parameters such as population size. The National Food and Nutrition Security Policy is an essential and integral part of the Seychelles Government/WHO strategy "Health for All". The National Food Security and Nutrition Policy will be the key instrument in helping and guiding Government to translate its constitutional obligations to support and facilitate the right to food for the Seychellois people. There are sections of the community who for various reasons require special support to ensure continued access to food. Most critical and highly vulnerable groups include pregnant women, under five year old babies, school going children especially in the earlier years of schooling and the elderly. Therefore, within the context of safety nets and other strategies, the Government will ensure that all the likely vulnerable groups have fallback arrangements for continued food and nutrition security. This will also relate to health and medical support provisions and initiatives. Food and nutritional aspects related to people with HIV/Aids and those on ARVs will be reviewed as many of these people may not be able to afford desired levels of nutrition.

Launched by the Government of Seychelles in 2013, the FNNSP provides the primary basis for Government policy with respect to:

1. Ensuring that programs and investment interventions are consistent and supportive of short and long term agricultural development and growth priorities, goals and objectives;
2. Ensuring coordination, coherence and comprehensiveness in strategies and programs on food security and nutrition;
3. Strengthening resilience and capability within Seychelles' internal systems to anticipate and respond to internal and external shocks and changes in the food systems, including weather and climate change extremes, price volatility, etc., and;
4. Strengthening accountability in food security and nutrition support systems including inclusive decision making, multi-sectorial approaches and reinforcement of collective responsibility among the various players and stakeholders.

### Seychelles Agriculture Investment Plan (SNAIP)

The primary objective of the SNAIP is to create a conducive environment to ensure that Seychelles is producing enough food to complement imports and ensure availability of food to meet the country's food security and nutrition needs and reduce risks and vulnerability in the event of local and/or external factors which may limit or hinder access to global food markets (NFSNP, 2013).

The SNAIP will also stimulate and guide investments in building and sustaining a desired level of local food production as part of the strategic food supply/availability system. The food production system will:

- a) Support Government efforts to expand the domestic food supply base
- b) Bring about the local production of food that has higher nutritional value
- c) Enable Seychelles to optimise on the use of its natural resources with opportunity to create jobs across the agriculture and food value chain.

The SNAIP will pursue the following specific objectives:

- i. Factors of production (land and water) secured and sustainably used
- ii. Factors of productivity (land, labour, capital) in crops, livestock and fisheries sustainably enhanced;
- iii. Commodity-specific value chains developed and functioning (including agro-processing and local market linkages);

- iv. Fisheries and aquaculture revenue is increased while preserving the sustainability of the resource base;
- v. Facilitate and sustain a favourable legal, policy and institutional environment to enable a private sector driven local agricultural system, providing viable and predictable needs for business as well as social benefits for the public;
- vi. An appropriate knowledge and technological support system strengthened and supporting enhanced agricultural transformation and performance;
- vii. Institutions in the sector are strengthened and improved coordination allows Ministry of Fisheries and Agriculture and its agencies/authorities to provide effective service delivery.

### Fisheries Policy

The long-term policy for the fisheries is “the promotion of sustainable and responsible fisheries development and optimizing its benefits for present and future generations. The main objectives of the Fisheries Policy are:

1. To promote the conservation and sustainable management of marine resources
2. To maximize employment, revenue and foreign exchange earnings
3. To promote safety at sea, and to maintain Port Victoria as the major tuna landing and transshipment port in the West Indian Ocean.

### School Nutrition Policy

Healthy eating habits established in childhood is detrimental to cognitive development which thus affects educational potential. The National School Nutrition Policy in the Seychelles was designed to address this by representing efforts to utilize schools as sites for improving the nutritional well-being of all school children. It provides a framework for implementing nutrition strategies which would ensure that students receive nutrition education messages that are reinforced within the school environment. The policy is used to coordinate all aspects of school nutrition including the curriculum, the school tuck shop, provision of school meals, and training of school personnel, establishing linkages with families and school personnel as well as evaluation. The policy has a very wide reach, targeting not only students but teachers, school personnel, families and other

community members, all of which are directly or indirectly part of the school community. Diet is also a key in preventing both numerous short-term and long-term diet related diseases in children and adulthood. Adequate nutrition is also necessary for children to become fit and productive adults. The policy is implemented jointly by the Ministries of Health and Education,

With the aim to improve the nutritional well-being of school children in Seychelles by:

1. Implementing nutrition education from crèche through to secondary schools as part of a sequential comprehensive school curriculum
2. Harmonizing the school's food provision and environment with nutrition education in the curriculum
3. Building the capacity of staff involved in nutrition education and provision in the principles of healthy eating
4. Involving the Parent's Teachers Association and the community in supporting and reinforcing nutrition education

## Seychelles Dietary Guidelines

The Seychelles Dietary Guidelines are implemented by the Ministry of Health, Nutrition Unit, with the aim to summarize and bring together knowledge regarding individual nutrients and food components into recommendations for an overall pattern of eating that can be adopted by the general public. The Seychelles Dietary Guidelines (SDGs) has been produced as a guide for the population in consuming a balanced diet which would meet the dietary goals that are critical for promoting well-being and preventing diet related diseases. Although the target is mostly adults, specific advice on breastfeeding under twos has also been included. During their development, there was special attention given to various factors that impinge on customary diet patterns including lifestyle, culture and the NCD trend currently prevailing in the population. The SDGs will therefore be an important tool for all educators including dietitians, nurses, doctors, teachers, social workers, food caterers and manufacturers.

## Infant Feeding Policy

The aim of the Infant Feeding policy is to improve, through optimal feeding, the nutritional status, growth, development and health of infants in Seychelles, additionally the policy seeks to;

1. To ensure that the health advantages of breastfeeding are discussed with all women and their families as appropriate, so that they can make an informed choice about how they will feed their babies
2. To implement best practice standards for breastfeeding. The Baby Friendly Hospital Initiative's Ten Steps to Successful Breastfeeding for Maternity Services are recognized as standard statements. We aim to provide best practice in the promotion and support of breastfeeding
3. To create a conducive environment for women to breastfeed their babies; and where women are given support and information to enable them to breastfeed exclusively for 6 months, and then as part of their infant's diet through the first year, and beyond if they wish
4. To enable all health staff who care for mothers and their babies to provide accurate information about the benefits and management of breastfeeding; and to enable staff to support women to breastfeed their children confidently and successfully
5. To foster liaison with all health care professionals to ensure a seamless delivery of care, together with the encouragement and support of a breastfeeding culture throughout the local community
6. To increase the incidence and duration of both exclusive and continued breastfeeding in Seychelles

## Chapter 2

### Food and Nutrition Security Multi-Sector Implementation Plan

#### Goal

The goal of the FSN multi sector plan is to enact a series of programs which focus, integrate and coordinate effectively all the food and nutrition related interventions across sectors. Furthermore, it is to advance a national nutrition agenda that will recognize and respond effectively to the specific needs in accordance with the National Food and Nutrition Security Policy (NFNSP) in the Seychelles. A detailed logical framework and action plan for each sector (budgeted) is expected to be developed.

In this context the primary goals set by the National Food and Nutrition Security Policy (NFNSP) are:

- a. Ensuring the food security for all Seychellois through efficient and effective agricultural production, sustainable fisheries and balanced by importation of healthy and nutritious food. This first goal will be addressed by programs which focus mostly on the role of agriculture in improving household resource/input productivity and improved national food availability toward food sovereignty
- b. Improving and optimizing the nutritional status, health and wellbeing of all Seychellois. This second goal will be addressed through an improved food safety and quality control program in addition to improved nutrition in public institutions and among consumers, improved food and nutrition in schools
- c. Strengthen and aligning institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base. The third goal will focus on food security and nutrition in crisis and emergency, and improved food and nutrition information and research

### Rationale for the FNS Multisector Implementation Plan

The Seychelles Food and Nutrition Security Implementation Plan is being developed to align and strengthen the countries' capacity and ability to deliver on its food and nutrition security objectives and targets in a manner that ensures efficiency and sustainability in resource use, able institutions and human capacity and resilience in the face of internal and external shocks as well as progressive change in key parameters such as population size. (NFNSP, paragraph 24). The development and implementation of the FNS multi sector implementation plan will enable the Seychelles Government to provide leadership with regards to:

- i. ensuring program and investment interventions that are consistent and supportive of short and long term development and growth priorities, goals and objectives
- ii. ensuring coordination, coherence and comprehensiveness in strategies and programs on food and nutritional security

- iii. Strengthening resilience and capability within Seychelles' internal systems to anticipate and respond to internal and external shocks and changes in the food systems, including weather and climate change extremes, price volatility, etc....
- iv. strengthening accountability in food and nutrition security support and facilitation systems including inclusive decision making and reinforcement of collective responsibility among the various players and stakeholders

The National Food and Nutrition Security Policy is an essential and integral part of the Seychelles Government/WHO strategy "Health for All". Food Security and Nutrition policies are necessary to ensure that the population has access to adequate, safe and healthy foods and to maintain optimal nutritional status of the population.

### Guiding Principles

The Seychelles FSN multi sector plan is primarily driven by key principles which are based on the concept of food sovereignty (NFNSP, paragraph 45):

- i. **Focusing on Food for People:** Food sovereignty puts the right to sufficient, healthy and culturally appropriate food for all individuals at the centre of food, agriculture, livestock and fisheries policies.
- ii. **Valuing Food Providers:** Food sovereignty values and supports the contributions, and respects the rights of farmers, fishers and agricultural and fisheries workers, including migrants, who cultivate, grow, harvest and process food. Policies that undermine and threaten their livelihoods are rejected.
- iii. **Localising Food Systems:** Food sovereignty brings food providers and consumers closer together and puts them at the centre of decision-making on food issues. It protects providers from the dumping of food in local markets and consumers from poor quality and unhealthy food. Governance structures, agreements and practices that promote unsustainable and inequitable international trade are rejected.
- iv. **Putting Control Locally:** Food sovereignty places control over land, water, seeds, livestock and fish populations into the hands of local food providers and respects their rights.
- v. **Builds Knowledge and Skills:** Food sovereignty builds on the skills and local knowledge of food providers and their local organisations that conserve develop and manage localised



- food production and harvesting systems and develop appropriate research systems to support this. Technologies that undermine, threaten or contaminate these are rejected.
- vi. **Works with Nature:** Food sovereignty uses the contributions of nature in diverse, low external input agro-ecological production and fish harvesting methods that maximise the contribution of ecosystems and improve resilience and adaptation, especially in the face of climate change. Food production methods that harm beneficial ecosystem functions and which damage the environment and contribute to global warming are rejected.

## PROGRAMME IMPLEMENTATION

The implementation of activities under the FSN multi sector Implementation plan will be carried out in an integrated manner by the relevant ministries. For each strategic intervention, the plan will identify a lead ministry to coordinate and service the implementation. A critical component of implementation is the partnership and coherence amongst the implementing ministries in all the programme activities. With oversight from the National Food and Nutrition Security Steering Committee (NFNSSC), the FSN implementation plan provides opportunities for multi-stakeholders' involvement in programme design and implementation including resource mobilization. Implicit in this is the principle of cost-sharing, where necessary to encourage ownership and sustainability and avoid duplicity. To maximize impact, programme implementation is undertaken in a systematic manner targeting the most vulnerable groups through a fully participatory process. The critical role of public private partnership in the implementation of programme activities has been duly recognized, where relevant.

### Critical Assumptions

- 1) Low levels of funding for follow up activities
- 2) Inadequate supervision of key activities and quality control
- 3) Human resources deficiencies.
- 4) Excessive bureaucracy, with the failure to involve the community in programme implementation.
- 5) The willingness of the ministries and other partner's to participate in the multisector response to nutrition.

- a. A disconnect of institutional mandates between the relevant ministries in addition to whether there are agreed upon shared visions.
  - b. The different degree of what is considered accountable, expectations that accompany this and the broad but agreed upon understanding of key roles and responsibilities (please see TOR below of the Inter-ministerial National Food and Nutrition Security Steering Committee (NFNSSC ))
- 6) The belief that nutrition is the sole responsibility of the health sector

### Emerging Issues

The stated rationale of the FSN multi sector implementation plan above is based on the established situational context in addition to a series of emerging internal and external dynamics that have influenced and may influence the further outlook and efforts made by the Government of Seychelles pursuit of ensuring food and nutrition security for all Seychellois. These emerging issues are namely;

- a. The global food crisis of 2008-09 which brought to the fore the impact of external food systems on the availability and accessibility of food within Seychelles at all possible levels. In addition, the changes and decisions made in other countries and continents with regards to the amount of food imports they choose to let leave. This has ultimately lead to the re-emergence of discussions on the role of national food sovereignty and how to get there.
- b. The increase, frequency and severity of adverse weather and climate change on crops, livestock and fisheries production in addition to the growing pressure on land, water, crops, fisheries and livestock resources and consequently on food security.
- c. The rise of the middle class and increased purchasing power which came with the new found social economic status.
- d. Growing opportunities and volumes for intra-regional and trans-boundary trade.

### Scope

The scope of the FSN multi sector implementation plan will be based on the dialogue and consultations which will inform action and programs based on the following key issues (NFNSP, paragraph 43)

- a. the reorientation and revitalization of the agriculture sector and industry including market and trade incentives
- b. efficient management and diversification of the artisanal and semi-industrial fisheries
- c. facilitation of necessary education and public awareness on healthy eating
- d. support and facilitation of appropriate food safety net interventions
- e. promoting locally produced food
- f. clearly defining and facilitating the risk sharing role of government in partnerships with food producers/ago-processors
- g. galvanizing dialogue and consultations on national food sovereignty and to negotiate these under WTO rules and regulations
- h. enhance investments in demand based applied and adaptive agricultural and fisheries research, ensuring biosecurity and food safety
- i. encouraging the expansion of household and school gardens
- j. assessing the short, medium and long term agricultural land requirements to ensure food security of all Seychellois juxtaposed with current agricultural production efficiencies, appropriate budgeting and resource allocation and managing the dependence and risks associated to having a significant portion of food needs acquired through imports
- k. a politically and technically sound strategic food reserves strategy and programme

## Overarching Conceptual Frameworks

### [Integrating Nutrition Into Value Chains in the Seychelles– guiding principle #1](#)

The integration of nutrition into preexisting value chains can be implemented through food utilization, adopting nutrition-sensitive value chain analysis, analyzing the implications of project design on nutrition (projecting that nutrition is the ultimate outcome), diversifying diet and leveraging relationships to improve household nutrition practices, supporting nutrition-sensitive processing upgrading, and identifying win-win opportunities to enhance food safety and value chain efficiency.

- a) **Integrate nutrition into value chain selection:** value chains can be implemented through food utilization by targeting the foods that the noted vulnerable segments of the population will consume or produce.

- b) **Adopting nutrition-sensitive value chain analysis:** Considering the nutritional implications of upgrading strategies and mapping nutritional changes along the value chain can reveal opportunities and create positive nutritional outcomes. These strategies are particularly suited to the value chain approach, given its focus on understanding the flow of the product to the final consumer and the incentives and disincentives for maintaining food nutrition values.<sup>2</sup> Nutritional opportunities may exist at multiple levels of the value chain.
- 1) **Market- level opportunities:** this point of entry focuses on producers and buyers to engage in food fortification, private sector partnerships and legal frameworks. It also engages local business enterprises in local food fortification initiatives.
  - 2) **Household- level opportunities:** this point of entry focuses on the links between farmers and the community. Farmers engage in the production of diverse crops for diverse diets. For this, there needs to be information on the dietary and consumption patterns.
- c) **Diversify diets.** Individuals need to consume a diversified diet to ensure adequate amounts of different nutrients.<sup>3</sup> There is a risk that the value chain approach may inadvertently have a negative effect if it is applied to a single value chain. However, implementers can use the approach to address a lack of dietary diversification with the following interventions:
- **Build demand for more nutritious products.** New varieties of more nutritious crops and products are being developed by internal research organizations. However, consumer demand may not immediately exist for these products if they are not part of the traditional diet or lacking in palatable taste, quality or texture differences. A major benefit derived from improved varieties is that they can improve the nutritional status of large portions of the population, including those who are not directly engaged in government assistance programs and those who do not buy processed foods. In some cases, interventions that build demand for these products through branding/labelling (to denote local origin), changes in policy (procurement rules), product formulation, and education and exposure can yield very positive

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<sup>2</sup> [Corinna Hawkes and Marie T. Ruel, Value Chains for Nutrition, 18.](#)

<sup>3</sup> Infant and Young Child Nutrition project, Achieving Nutritional Impact and Food Security through Agriculture, Feb 2011, 1

results. The value chain approach will support such initiatives because of its focus on understanding and building market systems.

- **Support new product formulation.** New product formulation can contribute to increased consumption of nutritious products while also creating new lines of business for processors.
- **Promote mixed allocation of production increases.** Promoting the mixed allocation of increased food production to consumption and sale supports both improved nutrition and higher incomes. Farmers can be encouraged not only to sell their produce but to also consume it.

**d) Diversifying diet and leveraging relationships to improve household nutrition practices:**

Value chain initiatives that can improve food utilization leverages tools like behaviour change communication and nutritional counselling to reach households and the individuals within them, particularly if they are otherwise not working at these levels. Leveraging value chain relationships, such as those that exist between farmers and extension officers or millers, is one approach to delivering nutritional messages directly to households.

The Seychelles FSN multi sector implementation plan will strongly promote the value chain based context in addition to food-based strategies within its key program areas. Attention will be given to food-based interventions that promote dietary diversity and the consumption of nutritionally rich foods. Food and agriculture-based strategies (including food production, dietary diversification) will focus on food as the primary tool for improving the quality of the diet and for overcoming and preventing nutritional deficiencies. The FSN multi sector implementation plan will also take strong consideration of the role of local food consumption preferences and individual lifestyle factors.

[Supporting Private Sector Roles for Sustainability, Scale and Impact: guiding principle#2](#)

There is a growing understanding that sustainable improvements in food security and nutrition will remain challenging without a role for the private sector. Most goods and services that impact on food security and nutrition typically involve the private sector and new partnership paradigms that put the private sector at the center of driving for improved food security and nutrition are imperative.

The private sector has a great role to play in making nutritious foods available to all citizens through the interaction of agriculture and the food systems for nutrition. This involves engagement through the value chain from production, through processing, transport and marketing, and services that

promote consumption. The private sector also plays a role by availing diverse nutritious food in the marketplace through their products and services, this is particularly relevant to the high amount of imported food coming into the country. The brands that private sector stakeholders promote are powerful and are important vehicles for social change and improved nutrition and wellbeing by virtue of their reach and influence. When brands embrace the proposition of health and wellbeing and fortify their foods with essential micronutrients reaching many of the vulnerable groups while conforming to the highest regulatory standards in all respects, such brands will contribute meaningfully to promoting the rights of all Seychellois to adequate, safe and nutritious food.

The FSN multi sector implementation plan, however, also recognizes that the private sector requires some level of regulation. Effective regulation means a positive relationship that promotes good business and nutritional outcomes while conforming to the highest national and international standards expected from that business.

Food and Nutrition Security as a Human Right, Utilizing Nutrition, Food Safety and Consumer Protection: guiding principle #3

*The Constitution of the Republic of Seychelles implicitly guarantees the right to adequate food through broader human rights and has a constitutional recognition of the Right to Food (FAO, 2013)*

*Without the right to food one cannot guarantee life, dignity or the enjoyment of other human rights. The ESCR- International Covenant on Economic, Social and Cultural Rights states that the right to adequate food implies the right to food in quantity and quality sufficient to satisfy the dietary needs of individuals, the right to food that is free from adverse substances and acceptable within a given culture, as well as sustainable access to this food. The Committee also established that the ESCR Covenant is violated when a country does not ensure the satisfaction of, at the very least, the minimum essential level required for its citizens to be free from hunger; in this sense, it defined the nature of their obligations on three levels: to respect, to protect and to fulfil . "While only states are parties to the Covenant and are thus ultimately accountable for compliance with it, all members of society...have responsibilities in the realization of the right to adequate food. (Seychelles was part to the ESCP in 1992)*

The dietary changes in the Seychelles has included an increase in the consumption of sugars and fats and declining levels of physical activity and have led to a significant rise in obesity-related

diseases (FAO, 2006). In adopting the Right to Food (Ruff) and its human rights based approach, the Government of Seychelles has recognized their obligation in ensuring safe, nutritionally adequate and culturally acceptable food. This is primarily in its formulation of both the NFNSP and SNAIP. In addition, to respect and protect consumers; and to promote good nutrition for all, Voluntary Guidelines (VGs), in particular Guidelines 9 (Food safety and consumer protection) and 10 (Nutrition), provides guidance in the and maintenance of sound food and nutrition policies and programs, thereby increasing the protection of the Seychellois from unsafe food and diets insufficient with the right nutrients while helping to combat overweight and obesity.

The Right to Food Voluntary Guidelines (VGs) tool kit advocates for the establishment of a comprehensive food control system to reduce the risk of food-borne diseases and to ensure that all food, whether produced locally or obtained through trade, is safe and consistent with national food safety standards. The VGs also encouraged the adoption of scientifically based food safety standards that comply with maximum permitted levels for pathogens, contaminants from agricultural and industrial processes, residues from veterinary drugs and growth promoters and naturally occurring toxins. Food should remain safe at all times including during its production, processing, storage, transport, distribution, handling and sale. The VG makes the following other recommendations that apply to the Seychelles context:

- a. The VGs encourage cooperation with all stakeholders including consumer organizations (NATCOF) and the private sector, when establishing food safety systems.
- b. Food packaging and labelling should provide consumers with accurate information that is sufficient to enable them to make well-informed food choices.
- c. Providing consumers with access to information and education about safe storage, handling and utilization of food, as well as ways to prevent food-borne diseases.
- d. Regulations should be placed for the marketing and sale of food to children and adolescents in order to protect against unbalanced diets and the growing problem of obesity.
  - i. Example Legislations: United States of America: Legislation banning or restricting advertisement and sale of fatty and sugary foods and soft drinks to children in schools have been enacted.

- ii. United Kingdom: The Children's Food Bill Campaign calls for a ban on marketing and sale of junk foods and fizzy drinks at schools, for mandatory quality guidelines regarding school meals, and for providing food and nutrition education



## Target Profiles

- i. **Pregnant and lactating women.** From conception through to 24 months is a vital period for a child's future development. Targeting pregnant women will help to increase future birth weight as well as to support the mother in this critical time. Lactating women will also be supported with additional nutrients to assist recovery from pregnancy and exclusive breastfeeding for infants from birth to 6 months. To maximize effectiveness, mothers identified as being anaemic will be priority.
- ii. **Children 6-59 months.** The FSN multi sector implementation plan will focus on how to improve complementary feeding and continued breast feeding for children between 6 to 24 months and improved access and consumption of diverse and nutritious foods for older children.
- iii. **Pre- and school-aged children.** Provision of adequate and diverse nutritious foods to address overweight and obesity will be prioritized for this group. School based interventions that promote healthy diets and lifestyles as well as linking to local producers to the school meal program. Nutrition education and behavioural change initiatives would be promoted.
- iv. **Adolescent girls and boys of school age:** Will be targeted with behavioural change strategies that encourage them to adopt healthy nutrition practices before they become mothers and full adults. Addressing the nutrition of adolescent girls coupled with adolescent girl's nutrition programmes offer a critical window of opportunity to substantially reduce over nutrition and low birthweight.
- v. **Households participating in food security programmes.** Targeting and scaling up households currently participating in targeted nutrition relevant agricultural programmes and other targeted programmes provides a vehicle to reinforce and scale up nutrition support and training to the wider population particularly if activities have shown success or demonstrate great potential and positive impact on nutrition outcomes.
- vi. **Vulnerable groups:** Single female headed homes, pensioners, pregnant teens and recovering drug addicts. Seychelles has a social security facility targeted at venerable groups. In 2010, the total number of beneficiaries from this facility was 10,133. In the same year, an estimated total of 12.8 million Rupees was spent by government on social security.

## Implementation Institutions and Partners

### Public sector

#### *National level*

The sectoral ministries and institutions which operate at the national level are responsible for ensuring that nutrition is adequately reflected in sector policies, strategic plans, legislation, regulations and guidelines that lie within their mandate and jurisdiction. They are also responsible for identifying and allocating human, financial and organization resources for implementation of the Strategy, donor coordination, and quality assurance for nutrition at all levels. To enhance fulfilment of this commitment, the Government of Seychelles institutionalize the National Food and Nutrition Security Steering Committee (NFSSC).

#### *Local Government Authority- District Level*

The Seychelles has local appointed administrations which run each of the 25 districts and through which the government facilitates community-based services and agencies. Local administrations have no powers to raise revenue and are funded by the central government. The Minister of Local Government is positioned within the Community Development Department (CDD), part of the Ministry for Community Development, Youth and Sports (MCDYS), is responsible for monitoring local administration in the 25 districts. In addition, district community councils were reintroduced in 1999; 12 members of each district community council are appointed by the minister of local government for two-year terms. The councils are advisory and bring forth the expressed wishes, aspirations and day to day concerns of the community. The District Social Committee and the District Team coordinate local programmes and encourage community development work. Seychelles' 25 administrative districts comprise all of the inner islands: eight districts form the capital and are referred to as Greater Victoria, another 14 districts make up the rest of the main island of Mahé, two districts on the island of Praslin and one on La Digue. Given the lack of inhabitants in the outer islands, they do not have administrative districts or formal government.

The LGAs will be responsible for integrating components/activities of the FSN multi sector plan and can supporting district communities to initiate, implement and monitor nutrition activities at community levels.

#### Higher learning and training institutions

Higher learning institutions can facilitate basic community based nutrition training modules to be available at all relevant tertiary and non-tertiary institutions e.g. pre-service training courses and

Certificate/Diploma/Advance Level in Nutrition at the Seychelles Polytechnic, School of Advanced Level Studies, Seychelles Institute of Technology, the Horticultural Training Centre, National Institute for Health and Social Studies and the University of Seychelles. This also includes integrating academic training courses with practice and on-the-job training and other types of sustainable training initiatives for health, agriculture and community development workers. This may also include nutrition modules and training materials for extension officers from MFA (SAA and SFA), MOH, and Division of Disaster Risk Management

#### Private Sector

The government recognizes the contribution of the private sector in the provision of social services, including nutrition. The private sector can provide support government and community actions and efforts geared towards implementing the FSN multi sector implementation plan. It will invest resources for the implementation of the FSN multi sector implementation plan in line with laws, regulations and guidelines.

#### Development Partners

The implementation of the FSN multi sector implementation plan requires the involvement and support of various development partners including UN agencies. The development partners can advocate for nutrition as a human development issue, and provide support through human (technical), financial and institutional resources for implementation of the FSN multi sector implementation plan; mobilizing resources for implementation of the FSN multi sector implementation plan; provide technical assistance for the development of policies, standards, guidelines and legislation; and supporting capacity building at various levels.

#### Civil society

Civil society includes NGOs (Non-Governmental Organizations), Community Based Organizations(CBOs) and Farmer Based Organizations(FBO) can advocate for nutrition as a national development issue, mobilizing resources for implementation of the FSN multi sector implementation plan providing technical and financial support to LGAs in the implementation of the plan and supporting LGAs in capacity development and management of nutrition activities. They will incorporate nutrition interventions in community-based programs and ensure effective linkages to the health care system and other relevant sectors.

## Media

The media, including the print, radio, television and online media can highlight the nutrition challenges faced by the Seychelles, advocate for action, and report on progress, failures and successes. The SBCC team will work closely and in tandem with the media.

## Community

The participation of the community is crucial to the successful implementation of the FSN multi sector implementation plan. Individuals and families hold the key to maintaining and improving their own health, and are actors in their own development. In the implementation of this FSN multi sector implementation plan, the community will be responsible for mobilizing resources, initiating, implementing and monitoring the implementation of nutrition activities in line with plan.

## Coordination Mechanism

The National Food and Nutrition Security Steering Committee (NFNSSC) will act as the national coordination platform to guide common actions in addressing the challenging issues of nutrition in the Seychelles. Its institutional aim is to foster an enabling environment for the harmonization of food and nutrition related issues. It will be a mechanism used to collaborate and enhance joint coordination and complementarities that will augment the individual and collective ability of the various relevant sectors to deliver not only food security needs but nutrition targets. The NFNSSC will consist of the key stakeholders involved in food and nutrition; Agriculture & Fisheries, Food Processing, Food Safety, Health, Finance and Trade, Industry, Education, Social Welfare, Civil Society and Private Sector. The committee will allow for inclusive cross-sectoral consultations and dialogue, driven by a shared vision, common policy goals and objectives, and collective responsibility towards tackling the multi faced causes of Nutrition challenges in the Seychelles. The NFNSSC will coordinate and monitor the implementation of the Food Security and Nutrition multi-sectoral implementation plan. The Steering Committee will meet on a regular basis based on the national budget allocation schedule. The national budget is submitted at the end of every fiscal year with allocations conducted on a quarterly basis. These allocations will fall in line with projected activities and will allow for the NFNSSC to meet and report based on ongoing actions. For example, the NFNSSC will not need to meet on a monthly basis but rather on a quarterly basis. However, if technical input and know how is needed from the NFNSSC by independent projects from external donors (IFAD or Fad), the NFNSSC can consider convening accordingly.

*The Proposed Terms of Reference is as follows:*

#### Terms of Reference: National Food and Nutrition Security Multisector Steering Committee

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The Food Security and Nutrition multi-sectoral implementation plan is being proposed for Seychelles to guide actions to improve nutrition in the country. This plan is expected to highlight the responsibilities for implementing actions to improve nutrition throughout the life cycle by multiple sectors. In recognition of the need for concerted efforts to address the nutrition challenges in Seychelles, the multisector steering Committee will work with the consultants (Local and International) to facilitate technical dialogue across all relevant sectors and will be responsible for overseeing the development of the Food Security and Nutrition multi-sectoral implementation plan

The mandate of the National Food and Nutrition Security Steering Committee (NFSSC) will be to:

1. Oversee national plans, programs and projects that promote food security and nutrition.
2. Develop a joint implementation plan for the FNS Policy with functional institutional arrangements for joint operations while activating district level multi-sectoral committees on food and nutrition security to support operational roll out of the plan.
3. Serve as an advisory body to the government on issues relating to food and nutrition and how to meet its national and international commitments.
4. Undertake coordination with stakeholders and provide all the necessary information to stakeholders.
5. Receive and review monitoring reports of food security programs and projects.
6. Create and manage a databank on food security and nutrition interventions.
7. Provide overall leadership, guidance and oversight to ensure successful implementation of all planned activities.
8. Conduct periodic meetings or provide platform to identify issues that require addressing in the National FSN Policy.

#### Deliverables

- A final draft of the Food Security and Nutrition multi-sectoral implementation plan
- Successful implementation of the all planned activities by the proposed 2020
- A comprehensive report providing recommendations on actions considered necessary to be improved or enacted to improve the nutrition environment in terms of prevention, promotion, protection and hospital services

### *Composition of Steering Committee*

Members of the National Food and Nutrition Security Steering Committee (NFNSSC) will include individuals who are senior officers/decision makers from different partner institutions with relevant strengths in the issues to be considered. Members include representation from the key Governmental, non-governmental organizations, the private sector and civil society organizations as listed below. Membership to national Steering committee will be by nomination, voluntary and endorsed by consensus among the group. The steering committee will be co-chaired by 2 representatives, one from the Ministry of Health and one from the Ministry of Agriculture and Fisheries. Membership shall be based on institutional representation with a designated focal person who is expected to participate actively in the activities of the group. Additional members or participants for specific meetings will be co-opted as when required.

#### Proposed Members:

- Public Health Commissioner
- Director Family Health and Nutrition
- MOH Nutrition unit
- UPCCD
- WHO Focal Person
- Food Control Unit
- FTC
- National Bureau of Statistics
- Local Government Representation
- Health promotion –
- Ministry of finance
- Department of Natural Resources
- Ministry of Education
- Social Affairs
- Media
- FAO Focal Point. for Seychelles

### *Other Considerations*

1. Only a core of key affected agencies and ministries (health, agriculture and education) should be appointed standing/permanent members to the National Food and Nutrition

Security Steering Committee (NFSSC). Any absence from meetings should be followed up to ensure that all interested group members remain involved.

2. Meeting agenda's should be planned in advance. Important decisions should not be made at meetings to which key hierarchical authorities have not attended.
3. The National Food and Nutrition Security Steering Committee (NFSSC), should invite participation by and explore cooperation with member of the food industry.

#### *Communication*

- The Steering Committee will aim to meet every budget quarter at the Ministry of Health and Agriculture interchangeably
- Individual consultations and communication among Steering Committee members and the consultants will occur on need basis.

## FSN Multi Sector Programmes: Implementation Framework and Proposed Interventions

FSN multi sector plan has been developed to address three main goals that would improve and stable food security and nutrition. A number of multidimensional and cross-sectoral programs and sub-programs that are either on-going and require continued support and strengthening or are new and need to be initiated were identified in a consultative and participatory process. These programs are detailed in the next sections.

<p><b>National Food and Nutrition Security Policy Objective: Ensuring the food security for all Seychellois through efficient and effective agricultural production, sustainable fisheries and balanced by importation of healthy and nutritious food.</b></p>
<p style="text-align: center;">In Alignment With:</p>
<p><b>National Food and Nutrition Security Policy Programme 1 : SECURING FOOD AVAILABILITY AND ACCESSIBILITY FOR THE PEOPLE OF THE SEYCHELLES</b></p>
<p>Priorities</p> <ul style="list-style-type: none"> <li>a. Securing national sovereignty in food and nutritional needs</li> <li>b. Strengthening agriculture and fisheries as key players in food and nutrition security</li> <li>c. Promoting the agricultural value chain</li> <li>d. Enhancing the fisheries value chain</li> <li>e. Home gardens and peri-urban farming</li> <li>f. Mariculture: Opportunities for a new industrial sector</li> <li>g. Food imports</li> <li>h. Access to food             <ul style="list-style-type: none"> <li>iii. Job creation and poverty alleviation: Incomes and food prices</li> <li>iv. Access for the vulnerable sections of the population</li> </ul> </li> </ul>
<p><b><u>SNAIP</u> : SNAIP Impact Indicators for Subprograms</b></p> <ul style="list-style-type: none"> <li>i. 3.1 and 3.1</li> <li>ii. 4.1</li> <li>iii. 4.2</li> <li>iv. 5.2</li> </ul>

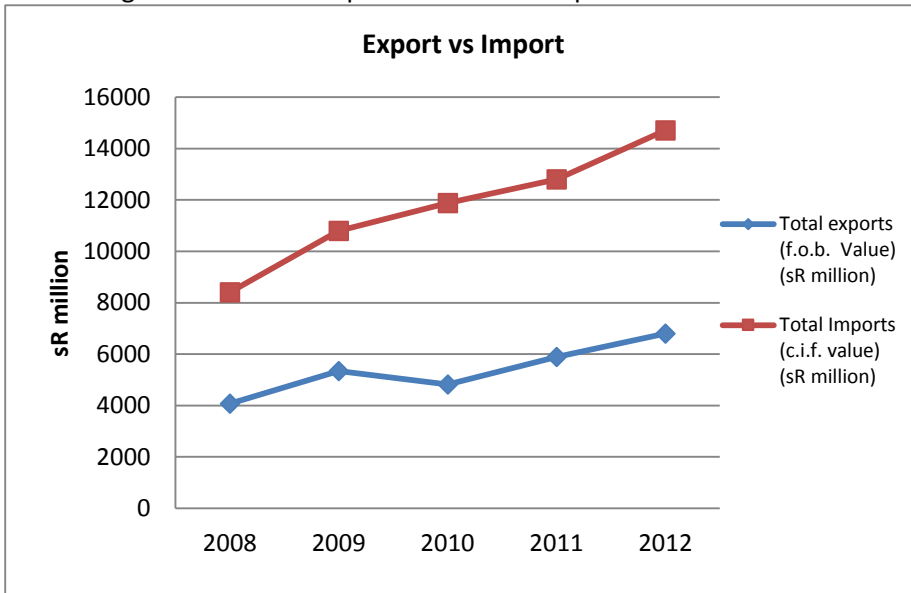


**Priority Area:** Securing national sovereignty in food and nutritional needs

<b>The Issue</b>	<b>Strategic Interventions</b>
<ul style="list-style-type: none"> <li>• Because of the demand from other sectors there has been an unprecedented loss of agricultural land during the last two decades. More recently, the land allocated for intensive agriculture decreased from 600 ha in 2007 to 350 ha in 2012. However, recognizing the important role of agriculture for national food security the new policies and the pending State Land Bill are both geared towards reversing this trend and to seek additional land for efficient crop and livestock production.</li> <li>• Seychelles relies heavily on imports for almost all raw materials, products, and specialized services. Due to its size, the demand level for food is not significant enough to command any form of loyalty from suppliers. Over the last ten years, the Seychelles has been importing up to 70% of its food requirements. Rice, the food staple, is not produced in Seychelles and all domestic requirements need to be imported. Export of fish and fish products remain the bulk of exports for Seychelles. The volume of products exported increased by 0.34% in 2012, whilst the value of exports increased by 12.5%. This translates to 39,154 MT with a corresponding value of SR 3.6 billion exported in 2012 as compared to 39,023 MT valued</li> </ul>	<ul style="list-style-type: none"> <li>• To exercise food sovereignty the government of Seychelles has to promote sustainable and healthy food production, reorienting the agricultural development model; establish incentives for productive use of the land within the framework of the social economy.</li> <li>• Supporting farmer based organizations and associations of micro, small and medium producers to participate in better conditions in the process of diversified food production, storage, transformation, preservation and marketing.</li> <li>• Adopting fiscal policies, tax, duty, etc. to protect the national food industry; and promote social participation. <ul style="list-style-type: none"> <li>○ All measures adopted in this regard should ensure some level of local production to enable the country to guarantee a minimum level of food and nutritive security for its population and visitors</li> </ul> </li> <li>• While imports of food and agriculture products may remain significant for Seychelles, due to a number of limitations and constraints related to the geography of the islands, the Government is committed to increase and optimise the local production of agriculture and food.</li> </ul>

at SR3.2 billion exported in 2011 (Figure 2).

Figure 2: National Export vs National Import



Source: Seychelles in figures 2013

- There is no preferential treatment for farmers to access finance, either from the Development Bank of Seychelles (DBS) or the commercial banks, high interest rates, high input costs and the level of risk makes it difficult to attract investment to the sector.

**The Issue/s**

**Strategic Interventions**

Priority Area/s: :

- Strengthening agriculture and fisheries as key players in food and nutrition security
- Promoting the agricultural value chain
- Enhancing the fisheries value chain

- ***Underdeveloped value chains:*** the various stakeholders involved in value chains are in need of support to better define their place due to poor market information flow; weak and or/absence of mechanisms that would involve the various actors; inadequate and an absence of resources to facilitate effective participation by actors in the various stages of the value chain, and; lack of effective coordination.
- ***Stigma and Inadequate appreciation of the place of agriculture in society:*** Given previous history which was based on a plantation economy, agriculture is socially stigmatized as a job for the uneducated and the poor. In addition farmers do not have access to finance from the Development Bank of Seychelles (DBS) or the commercial banks and if given, it is with high interest rates. The high input costs and the level of risk makes it difficult to attract investment to the sector. In addition the 2008 policy on the liberalization of imports for meat and meat products made significant impact on the livestock sector and many local producers were not able to compete and closed down production.
- **The dependence of Seychelles on tourism and export fishing**

- Despite the stated challenges, the Government of Seychelles is committed to maximizing and harnessing its agriculture sector potential given the launch of its Agriculture Investment Plan (SNAIP). Production to ensure that food is available from local sources must be viewed from a value chain perspective, taking into consideration productive capacity and marketing from farm gate/catch landing to consumption. The points of entry will be two-prong: household level through backyard & community gardens(including schools) and building the capacity of small, medium and commercial scale farmers (including fisheries). There should also be consideration to the role of gender and how to incorporate cross cutting opportunities.
- Fisheries: Increasing the profitability of artisanal and semi industrial fishing in the long run can be achieved through increasing the value of the catches, rather than their quantity. Value addition also creates a much more stable and reinforced service sector in terms of employment and skills development. The following key recommendations should be considered:

industry has had a negative impact on the country's prioritization in terms of the place of agriculture in the country's economy. A considerable proportion of stakeholders perceive the agriculture sector to be irrelevant in the light of adequate resources generated from tourism and fishing which go towards the importation of the bulk of the country's food requirements.

- ***Declining production and productivity of major crops:*** The analysis during the development of the SNAIP has shown a considerable decline in the production as well as productivity of the major crops grown locally. This is primarily on account of a number of reasons including inadequate injection of the required resources to the sector (technology, funds, etc.).
- Considerable quantities of seasonally fresh local produce such as fruit and tomatoes is lost seasonally, with substantial economic losses. March to October (SE Monsoon season) is the most productive farming season. The rest of the year has far less production, but as a consequence of the poor and inadequate storage and agro-processing, post-harvest losses are high. Minimizing the gap between the two seasons remains a challenge.
- The decline in traditionally reliable capture fisheries and the rise in demand for fish in Seychelles is cause for concern in terms of economic and food security. In 2007/8 the Government of Seychelles

- Technical support to assess the local artisanal and semi industrial fisheries potential and development of a marketing strategy
    - i. Providing the appropriate infrastructure such a fisheries auction house, which will provide a secure and hygienic area for artisanal fishers to process their daily catch, preserving and adding value to it, in addition to stabilizing prices.
    - ii. Continued capacity development support to the artisanal fisheries associations
  - b. Study of micronutrient values of marine resources to help understand the nutritional content and value of different and most popular species
  - c. Regulatory action on the sale of by-catch fish
  - d. Need for a national consumer survey on fish consumption
2. Gender integration and women's participation in the fishing sector.
- a. Assessment to better understand the role of women in the fisheries sector in Seychelles
  - b. Supporting specific projects/initiatives for women that build on existing skills whilst increasing knowledge in area where skills are lacking.
  - c. Supporting innovative pilot actions that aim to pen doors

took a decision to assess the potential of aquaculture and to establish a framework that would allow the sector to grow in a sustainable manner while simultaneously addressing the concerns regarding the future availability of fish.

- **Local Fish Production:** includes Artisanal fisheries and semi-industrial fisheries which are vital for food security, providing fish for consumption in the local market in addition to being a source of livelihoods for the Seychellois. With artisanal fisheries, the key issues are that there is a current demise in the stock, the local supply chain is not well defined and there is high post-harvest loss with the fisherman not having the sustainable means to keep catch fresh (access to ice is very expensive). Because of high losses from catch and capacity deficiencies in quality and handling, fish prices are additionally not stable and or regulated based on specific market trends.
- **The role of women in the fisheries sector**

to a larger role for women in the fishing sector and to dispel any pre-existing myths

- Crops: There is an urgent need to build marketing infrastructure, and particularly fresh produce market centres, able to absorb the local produce, ensure that post-harvest losses are minimized and improve the marketability of the local produce.
  - d. Strengthening the national marketing system for selected agrion value chains with a focus on addressing the lack of processing infrastructure for small to medium scale commercial farmers, improving the earnings and accessing high value domestic markets (tourism industry).
  - e. Technical support towards the establishment of a fresh fruits and vegetables marketing centre which will in the long run strengthen the domestic marketing systems for the selected value chains and provide employment.
  - f. The market centre will provide local commodities to the tourism industry plus include retail stalls for the local market (also creating jobs).
  - g. The expansion of high-tech intensive production systems for high value crops. This will include ensuring appropriate provisions to enable investments in high-tech systems, such as green houses and fertigation systems. Handling

	and packaging of local produce will also be improved to ensure healthy products and to enhance competitiveness.(NFNP, 2013)
<b>The Issue/s</b>	<b>Strategic Interventions</b>
<b>Priority Area/s: Support Agriculture Institutions Capacities</b> <b>SNAIP Subprogram 5.2</b>	
<p>The Seychelles Farmers Association(SEYFA) suffers from a number of constraints that can be roughly grouped into three areas:</p> <ul style="list-style-type: none"> <li>• <i>Strained human, financial, and organizational capacity:</i> Weaknesses in business and organizational skills and capacity of both leadership and members hinder responsiveness to new opportunities, the development of business efficiency, capitalization, group management, and solidarity, capacity to use management information systems and information technology.</li> <li>• <i>Limited access to markets and productive assets:</i> SEYFA needs support to enable their members to access national and international markets. Building the capacity of SEYFA to mobilize input, credit, and support for marketing and negotiation is critical for more equitable benefit sharing and increased returns to primary producers along the value chain. Lack of market information and awareness about</li> </ul>	<p>SEYFA is a very relevant partner in the production of food nationally. Small to medium holder farmers as entrepreneurs that invest and innovate, are the basis for agricultural development and the provision of both advisory and commercial services to their membership particularly in the area of agribusiness development. Considerable support is needed to develop SEYFA as a viable and sustainable entity. Its capacities need to be reinforced, particularly with respect to the provision of business services for their members and to strengthen farmer-buyer (both local markets and hospitality industry) linkages. Effort is needed to formalize a seemingly informal functionality structure and ensure that they are professionally sound and well-functioning. Previous support by the Government of Seychelles in supporting SEYFA did not result in much success. In this new initiative, it will be critical for the Government to establish expectations and require returns in investments. The Governments renewed efforts</p>

international instruments, trade and marketing standards and other international guidance restrict their capacity to respond to new opportunities, to assess costs and implications of involvement, and to manage their resources effectively. Poor access and capacity to manage financial capital is also a constraint and access to infrastructure like cold storage.

- *Weak influence over policies, partners, and rules and regulations:* Another issue is that of empowerment. SEYFA is currently seen as peripheral, albeit very important, service provider towards the sustainable development of the Seychelles agriculture sector, instead of a catalyst, which is an important point given their role as the food producers.

The limited capacities of SEYFA in business management and marketing are important constraints working against stronger linkages between farmers and markets. Seasonal, often low quality and irregular supply from small farmers makes it difficult for agro-processors and other buyers in the country to access raw material. Few farmers have the required skills needed to plan for markets and produce products that meet buyer requirements. Small scale and fragmented production units result in lack of economies of scale. However, most members of the association (approximate 200 to 300 members) lack the requisite marketing and business skills to ensure the economic benefits.

through the SNAIP Sub-Program 5.2, 'focusing on supporting agriculture sector institutions' capacities, demonstrates a desire to continue supporting SEYFA. In turn, SEYFA, as a registered organization (with SAA) will need to organize its members so that they can generate profits and make cost savings through collective action in response to demand for the kind of services that the association could provide members. This would represent one form of revenue generation critical for longer term sustainability. It is recommended that in order to create income revenue and achieve sustainability, the following approaches taken:

- The *first* is focusing on agribusiness related activities that help the membership become efficient and reliable suppliers.
- The *second* is to strengthen their institutional capacity and develop networks that link members to information on new technical ideas, markets and funding opportunities.
- The *third* is to attract other stakeholders willing to invest in agro-processing and market infrastructure, ensuring maximum profit from farm gate to point of sale.

<p>** no meeting was held with the Fisheries Association and can be considered in a follow up mission when finalizing implementation matrix</p>	
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The Issue/s	Strategic Interventions
<p>Priority Area/s: <b>Improving the capacity to address Food and Nutrition Security Problems – Institutional capacities and human resources development for sustainable nutrition sensitive programming</b></p>	
<p><b>SNAIP Subprogram 5.4</b></p>	
<ul style="list-style-type: none"> <li>• Building human resources and the relevant institutional capacities to deliver sustainable nutrition sensitive interventions should be given critical priority. There have been allocated focal points with the technical know-how from the health and education sectors, however, the agriculture sector does not have any expertise that focuses on Nutrition, with managerial, technical and expertise capacity to provide all nutrition related support. In addition, the SNAIP through its Program 5, the Human and Capacity Development, addresses this to some degree but not fully. There can be no scale-up in nutrition sensitive agriculture actions without the presence of relevant capacities to act consequently. The other ministries such as health and education face a similar challenge. There have been nutrition officers with the MOH but these have been overstretched, moved on to other positions without substitutes or alternates to follow up on activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Streamlining the SNAIP program 5 budget line item or through FAO technical support, the placement of a Nutrition Officer in the MFA to backstop all Program 4 related activities in nutrition in addition to being the primary focal point on the National Food and Nutrition Security Steering Committee, the position would run initially with the six year SNAIP time period.</li> <li>• A comprehensive capacity assessment across ministries and institutions relevant to nutrition sensitive agriculture to establish a skills gap analysis. This analysis will include district level HR gaps.</li> <li>• Based on the skills gap analysis, there will be specific actions to strengthen the planning and managerial capacity of nutrition technical experts to provide the relevant expertise. <ul style="list-style-type: none"> <li>i. There should be training and re-training of Nutritionists, Nutrition Desk Officers, and other relevant service providers to improve their capacity for food and nutrition programme management. Ultimately, the long term outcome will be the provision of adequate staffing of relevant ministries implementing sectorial nutrition programs with skilled and qualified nutritionists (clinical, program based, community based and health promotion)</li> </ul> </li> </ul>

<p>The Ministry of Education MOE, has a Health Promotion Officer but again is the sole person working on issues relating to school nutrition with no alternate. Without skilled people who possess the right tools, working in the right places, and are doing the right things as part of a broader institutional structure appropriately designed and oriented to work towards a clear mission, policy statements and action-plans to address the Seychelles Nutrition Situation will continue to be unfulfilled.</p>	<ul style="list-style-type: none"> <li>• Support towards providing adequate staffing of relevant ministries implementing sectorial nutrition programs with skilled and qualified nutritionists. This will be through support of post graduate training by making available scholarships for nutrition positions in relevant ministries/agencies in addition to better integrating academic training courses with practice and on-the-job training and other types of sustainable training initiatives through partnerships with relevant tertiary institutions(internal or external).</li> </ul>
<p><b>National Food and Nutrition Security Policy Objective: Improving and optimizing the nutritional status , health and wellbeing of all Seychellois</b></p>	
<p>In Alignment With</p>	
<p><b>National Food and Nutrition Security Policy Objective Programme 2: NUTRITION SECURITY FOR THE PEOPLE OF SEYCHELLES</b></p>	
<p><b>Priority Areas</b></p> <ul style="list-style-type: none"> <li>A. Nutrition and Health Care</li> <li>B. Education and public awareness on Food Nutrition</li> <li>C. Nutritional education in schools</li> <li>D. Nutrition and public awareness</li> <li>E. Nutrition and local cultures and social systems</li> </ul>	
<p><b>The Issue/s</b></p>	<p><b>Strategic Interventions</b></p>
<p>Priority Area/s:</p>	

- Nutrition and Health Care
- Reduced burden of non-communicable disease and addressing incidence of under nutrition and micronutrient deficiencies

- The 2014 Seychelles Heart Study showed that over 60% of the adult population in Seychelles is overweight as well as 22% of children. This has resulted in a high prevalence of Non Communicable Diseases (NCD) such as Cardio Vascular Disease (CVD), which accounts for 40% of deaths followed by diabetes and hypertension where rates are at 14% and 40% for adults. (Bovet et. el). NCDs, particularly CVD, are also strongly related to lifestyles and physiological risk factors such as high blood pressure (HBP), blood lipid disorders (e.g. high blood cholesterol) and diabetes. It is well established that up to 80% of cases of premature CVD, and a substantial proportion of other chronic diseases (e.g. lung cancer, renal failure) could be prevented or delayed if these risk factors were kept at favourable levels throughout life in the population, using strategies targeting both the entire population and high risk individuals. Moreover the Seychelles Child Development study found that pregnant mothers were

- Enacting nationwide long term social and behaviour change campaign (SBCC) actions. SBC actions are essential for increasing optimal nutrition practices, demand for services and commodities, and ultimately, increasing utilization of services. Effective behaviour change approaches support activities that target women’s nutrition as well as their children’s health while addressing the complex determinants that lead to improved behaviours. An SBC strategy will target other family members including elders, men, and school children, along with community leaders in order to reinforce consistent behaviours and promote healthy food, and nutrition practices. The basis of any successful SBCC program is using formative research to systematically identify barriers to behaviour change and to identify appropriate targeting, communications, training, and legislative actions to effectively change harmful practices and encourage sustainability of positive ones.
- The case of childhood obesity at 22% in the Seychelles is alarming given the islands population size and no single action alone will reverse childhood obesity, although there is no question that improving eating habits and increasing physical activity are two critical strategies. As with tobacco prevention and control, comprehensive, multi-sectoral approaches are

not obtaining their optimum nutritional needs during pregnancy. (Bonham, 2009).

- The rise of obesity in children and teens has led to the following health problems, noted by the MOH; heart disease, type 2 diabetes, asthma, sleep apnea and social discrimination. Obese children may experience immediate health consequences which can lead to weight-related health problems in adulthood. Obese children and teens have been found to have risk factors for cardiovascular disease (CVD), including high cholesterol levels, high blood pressure, and abnormal glucose tolerance. In addition, studies have shown that obese children and teens are more likely to become obese as adults (CDC, 2014)
- There are deficiencies in nutrition assessments, with currently no routine micronutrient analysis conducted across all age groups. Routine tests for iron status are conducted for pregnant women and infants. Iron status for other population groups is by request of physicians or other health professionals for investigations rather than a routine test. In addition the current growth charts used in Seychelles is based on data collected from Seychellois

needed to address the many behavioural risk factors associated with obesity.

These risk factors fall into three general categories:

- material incentives, such as the cost of food or the desire to avoid poor health
  - social norms, such as the nutritional and physical activity habits of friends and family
  - The broader environment, such as food choices in the schools, the proximity of fast food establishments to the schools and peripherally, the distance to grocery stores and playgrounds. Changes in each of these risk factors are possible. For example, with sound information, parents and caregivers will be able to seek out the most nutritious foods to improve their children's health; changes in social norms can be brought about through nationwide protracted SBCC.
- Although at 7 %, stunting in Seychelles is not as heavy a burden as that of obesity, it is still pertinent that actions are taken to address this. There is thus a need for thorough assessment to help define the picture of who is stunted in Seychelles. The government and its extensive social protection nets plus the income level of the country makes the definition of stunting in the Seychelles different from other African states. It will be critical to thus help formulate and understand what precursors are leading to the 7% rate, though small is quite significant given the population size of the country.

children. This chart only enables the collection of information on weight. There is no chart to document height and head circumference in younger children. This implies therefore that the true growth status of children is unknown.

- Internally the MOH has said that there are no figures on micronutrient deficiencies but yet according to the 2014 Global Nutrition Report, there is an 8% Vitamin A deficiency in preschool age children
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- Increasing access to micronutrient rich foods through the production and promotion of local indigenous foods. Indigenous vegetables, besides being micronutrient-rich, have the added advantage of possessing other desirable traits. These vegetables are often easier to grow, resistant to pests and diseases, and are quite acceptable to local tastes. However, indigenous vegetables are at risk of extinction as they are being replaced by high-yielding commercial varieties. When an indigenous variety is lost, it can never be recovered. There is need for intervention to avoid such a situation. This strategic Intervention is designed to address vitamin A and iron deficiencies through increased production and consumption of indigenous local foods. A major thrust of the priority is to encourage production of different varieties of indigenous local vegetables, many of which are seasonal, so there is continuity of supply throughout the year
- Promoting home gardening and smallholder farming on small plots in peri-urban areas in order to contribute to both food security and nutrition objectives in the NFNSP.
- Linking beneficiaries with the appropriate technologies including seed and fertilizers, some training and access to information. Majority of the householders doing some farming in their backyards are also selling excess in the local markets extending the catchment of households and population that benefit in terms of food and nutrition
- Scale up and streamline all urban and peri-urban horticulture programs led

	<p>by the MFA.</p> <ul style="list-style-type: none"> <li>• Develop and implement nutrition module/training component in all ongoing home garden related interventions in order to ensure that gardening related activities translate into improved nutrition status, not just a focus on access and food consumption</li> <li>• Provide technical and supply inputs to households and small scale farmers to grow vitamin A rich vegetables (orange flesh sweet potato)</li> <li>• Train individuals and community groups in post-harvest handling and storage techniques/technologies</li> </ul>
<b>The Issue/s</b>	<b>Strategic Interventions</b>
<p>Priority Area/s:</p> <ul style="list-style-type: none"> <li>• Nutrition and public awareness</li> </ul>	
<p>There is some, albeit limited, national awareness on lifestyle changes of the Seychellois relating to diet and Non –Communicable Diseases (NCDs) however policy makers across all sectors need to be better informed of its implications to the national economy. The Seychelles has been successful in achieving its Millennium Development Goals, having invested in health, education and social</p>	<ul style="list-style-type: none"> <li>• Policies and programs that are sensitive to nutrition are required in order to reduce the double burden of diet and lifestyle related diseases NCDs and undernutrition (limited) that the Seychelles faces. In this regard, to ensure successful realization of nutrition outcomes, nutrition actions will need to be well reflected in policies and programs of all sectors that impact nutrition. Relevant line ministries will incorporate nutrition objectives into sectoral policies and plans while key nutrition indicators will need to be reflected in the national policies and</li> </ul>

<p>protection. Recently, it has scaled up this commitment through the 2015 Seychelles Agriculture Investment Plan (SNAIP) and the 2013 National Food and Nutrition Security Policy (NFNSP).</p>	<p>action plans e.g. Seychelles Agriculture Investment Plan (SNAIP) running through 2021</p> <ul style="list-style-type: none"> <li>• There is a need to engage and sensitize national level policy makers and programme planners (Government and partners) on their role under the multi-sectoral efforts of mainstreaming food and nutrition security across sectors</li> </ul>
<p><b>The Issue/s</b></p>	<p><b>Strategic Interventions</b></p>
<p>Priority Area/s:</p> <ol style="list-style-type: none"> <li>Maintain/expand programmes to improve maternal infant and young child micronutrient status( after establishing it)</li> <li>Implement/scale up maternal infant and young child feeding through a comprehensive approach</li> </ol>	
<ul style="list-style-type: none"> <li>• There are very low exclusive breastfeeding rates at 6 weeks and 6 months and additionally low rates of continued breastfeeding in the Seychelles</li> <li>• The <i>Seychelles Hospital Infant Feeding Policy</i> was drafted in 2014-2015, however it is still in the draft form and has been endorsed by the Central Management Team (CMT) which is the highest body in the Ministry of Health. Even though comprehensive, this policy applies only to hospitals.</li> <li>• The Family Health and Nutrition Unit in the MOH is body responsible for the implementation and monitoring of the International Code of Marketing of Breast Milk Substitute's.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring maternal nutrition is the first step to guaranteeing sound nutrition and health status of the mother and the baby, and requires specific emphasis on the first 1000 days from conception to two years of age.</li> <li>• The FSN multi sector Strategy will aim to ensure that key elements of the Seychelles Infant Feeding Policy (2010) are captured in the proposed Program activities. In addition skilled behaviour change counselling and support for infant and young child nutrition should be integrated into all points of contact between mothers and health service providers during pregnancy and the first two years of life of a child. Every health facility that provides maternity services should successfully and sustainably practice all</li> </ul>

It should be noted that none of the team members have undergone formal training or exposure to deliver such a task.

- The main violation concerns is the acceptance of donation of breast milk substitute, by the Seychelles Trading Company (STC), which is a distributor of Nestle products. The donation went to the Communicable Disease Control Unit (CDCU), which is responsible for the care of infants whose mother is HIV positive. However this violation has occurred only once. The free samples were then offered by the CDCU staff to normal new-born babies (who should be breastfed) as the donated stock was reaching expiry date. The incident was reported to the Family Health and Nutrition Unit in the MOH by health workers and the artificial milk was then used for other purposes than feeding infants.

the requirements of the Baby Friendly Hospital Initiative (BFHI).

Community-based support networks are also needed to help support appropriate infant and young child feeding at the community level through the establishment Baby Friendly Community Initiative (BFCl). The BFCl will also act as a support system for new mothers amongst other mothers.

- The legislation needed to protect appropriate infant and young child feeding practices should be reviewed, implemented, monitored and enforced. This includes the National Regulation for Marketing of Breast Milk Substitutes and Designated Products, relevant Codex Alimentarius and national standards
- Monitoring relevant follow up needed on how The International Code of Marketing of Breast Milk Substitute is being upheld in the Seychelles. Currently the code is included within **National Food Act 1992**. However the Act is now under review.
- The enforcement of the Code of Hygienic Practice for Foods for Infants and Children to ensure that processed infant and complementary foods are safe and nutritionally adequate;
- Maternity Leave Legislation to protect the breastfeeding rights of working women.
- Lactation Support Program for women, particularly as they return to work. Women should feel like they have the option to continue providing their babies with breast milk even after returning to work. A basic lactation



	<p>support program includes providing a breastfeeding employee time and a location where she can privately, comfortably, and safely express milk during the workday. Policy components include written policies to support breastfeeding women; allowing flexible scheduling to support milk expression during work; and giving mother's options for returning to work, such as teleworking, part-time work, and extended maternity leave</p> <ul style="list-style-type: none"> <li>• An increase in health worker, community based caregivers' knowledge on nutrition and to address practices relating to infant and young child feeding and care, a minimum package of maternal, infant and child nutrition interventions will be developed and integrated into existing MNCH services and delivery platforms. The minimum nutrition package includes activities that target training, supervision and mentoring of health workers, national and district level communication interventions, community based activities and expanding traditional IYCF counselling into Early Childhood Development initiatives.</li> <li>• Complimentary feeding: Improving the knowledge and skills to select, prepare, utilize and store more optimally a variety of local nutritious foods for improved infant child and family feeding</li> </ul>
<b>The Issue/s</b>	<b>Strategic Interventions</b>

Priority Area/s:

Education and public awareness on Food Nutrition

Nutritional education in school

- Healthy eating for school age children is about getting a balance right in order to provide enough of the important nutrients (such as vitamins, minerals and protein) and fibre without too much fat (especially saturated fat), sugar and salt. Imbalances in diet have contribute to children and young people developing a number of serious diet-related diseases and conditions in the Seychelles(MOH) .Therefore improving the diets of children and young people can positively influence their current and future health.
- Although much emphasis and education has been given on the health benefits of school meals, there are still a large percentage of students who are not eating school food. For an enrolment of about 19,000 students in public schools in 2015, only 38% of students were taking school meals (MOE). To date, there are approximately 7,652 students registered for school meals in state schools, from which only 4% are from secondary schools. This is a very low percentage as

\*\*\*\*As a point of entry, interventions should consider piloting specific schools/district then scaling up nationwide.

- Drastic changes are need to the school meal program in order to attract students into the schools' dining halls.
  - The urgency of the problem means the Executive Level action is needed from the government
- Extensive analysis of the ongoing school meal program is needed in order to understand how it works and how to improve it. What incentives are there?
- Proposing that the school caterer who is paid through government subsidies is to
  - Ensure that the school menu follows Seychelles Dietary Guidelines and that payment/reimbursement of delivered services should be based on compliance with Seychelles Dietary Guidelines
    - Human resources will be needed to manage this process
  - A request to overhaul current menu and making its design and use based on its effectiveness, if there is a high

compared to primary schools (with crèche combined) which is 94%.

- No research has ever been conducted in Seychelles to find out what deters adolescents from eating the school meal, but some possible factors have been identified based on studies conducted in other countries. According to a pilot Health Promoting Schools needs assessment conducted in one primary and one secondary school (2013), students mentioned that they do not eat school meal because
  - The menu is monotonous
  - The food does not look attractive and appealing
  - The dining hall is dirty, disorganised and not welcoming
  - Those who eat school meals are ridiculed or bullied by other students
- The source of food is a designated caterer who has been the prime contractor since the government enacted the free meal school program. The caterer has said that the low quality in commodities used for meals is due to the expense level of food items and that there

percentage of students not eating government subsidized school meal, then it is not effective

- Availability of free cold water in all schools through water fountains (as an alternative to soft drinks and fruit juice packets);
- Regulations to ban the marketing in the mass media of energy dense junk foods
- Introducing stay-on-site policy that compels students to remain on the school premises at lunchtime.
- Improving quality of school meal should also go hand in hand with improving the environment in which food is served – both should be tackled simultaneously for effective results.
- In line with the principles of the Health Promoting Schools concept, the schools have to provide an environment which promotes the physical, social, mental and emotional health and wellbeing of students in attendance in the school.
- The school dining halls provide opportunities for students to develop their social skills and it is therefore important for the schools to acknowledge these benefits and do their utmost best to encourage students to eat school meal.
- Build school gardens in schools operating the School Meal Program in order to improve teachers and children's knowledge and skills in food security,

<p>is no choice but to use cheaper quality commodities</p> <ul style="list-style-type: none"> <li>• Secondary students who do not eat the school and are allowed to leave the school premises at lunch time to buy food from fast-food. Fast-food pre-ordered by parents is brought into the school and distributed by teachers.</li> <li>•</li> </ul>	<p>gardening and nutrition</p> <p>The development of a Comprehensive School Physical Activity Program to</p> <ul style="list-style-type: none"> <li>• Provide a variety of school-based physical activities to enable all students to participate in 60 minutes of moderate-to-vigorous physical activity each day.</li> <li>• To maximize the understanding, application, and practice of the knowledge and skills learned in physical education so that all students will be fully physically educated and well-equipped for a lifetime of physical activity.</li> <li>• To promote physical activity in the school setting, particularly strict implementation of 2 (or if possible 3) periods of physical activity per week for all students (with a focus on physical activity suitable to all children, including obese children, rather than sportive performance) <ul style="list-style-type: none"> <li>○ ****Further development of PA programs in different settings outside of school hours. Attention should also be paid to urban shaping, e.g. measures and incentives that enable students to come to school by foot or by bike, including safe side-walks, or where possible, bike lanes (e.g. between Pleasance, Perseverance and Victoria).</li> </ul> </li> <li>• Continued monitoring of overweight/obesity in schools is essential to guide health policy related to obesity and related conditions (e.g. diabetes). The</li> </ul>
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	<p>prevalence of overweight/obesity in children is one of the 25 indicators that countries are requested to regularly report to the World Health Organization, to assess a country's progress towards reaching the WHO target of a 0% relative increase of obesity between 2010 and 2025. This target, and related indicators, was agreed by all countries, including Seychelles, at the 2013 World Health Assembly along the Global NCD Action Plan 2013-2020.</p> <ul style="list-style-type: none"> <li>• Adequate resources are needed to maintain the smooth functioning of the School Screening Program in Seychelles. In particular, it is important that the school health nurses can dedicate sufficient time for effective implementation of all the components of the School Health Program.</li> <li>•</li> </ul>
The Issue	Strategic Intervention
<b>Priority Area</b> a. Education and public awareness on Food Nutrition iv. Nutrition and public awareness	
<ul style="list-style-type: none"> <li>• There is inadequate knowledge and awareness among the general public about good nutrition required to lead healthy</li> </ul>	<ul style="list-style-type: none"> <li>• The development of interventions across all sectors to improve the availability of, and access to, healthy foods for all people and in different</li> </ul>

<p>and active lives</p> <ul style="list-style-type: none"> <li>• A high number of Seychellois are consumers of fast food/take away on a daily bases, usually whilst away from home (mostly whilst at the workplace. The fast food/take away is usually purchased from public vendors who may not be regulated or following the Seychelles Dietary Guidelines.</li> </ul>	<p>possible settings (schools, workplaces, etc.). Addressing adequate food labelling, ban on advertising of unhealthy foods in mass media, subsidies/taxes on healthy/unhealthy foods, reformulation of manufactured foods in terms of salt, sugar and fats, etc. Interventions in all sectors are also needed to promote physical activity in different settings.</p> <ul style="list-style-type: none"> <li>• There is a need to initiate awareness campaigns, using a multimedia approach to reach all Seychellois, to influence informed decision-making and behavioural lifestyle changes (please see SBCC Strategy)</li> <li>• Promoting workplace health checks. Employers including government ministries should offer their staff biannual spot health checks, blood pressure, cholesterol and weight.</li> <li>• Promoting workplace healthy policy/ initiative. Workplaces can promote healthy eating among employees by providing nutritious foods in a cafeteria located on sight as well as worksite functions. Initiative to ensure healthier food options such as salad, lean sandwiches with whole-wheat bread, low sugar fruit juices and fruit, be served at meetings or other employee events <ul style="list-style-type: none"> <li>○ Worksite nutrition can be improved when developing contracts with food venders. Suppliers can be required to include specified percentages of healthy food in recommended portion sizes. The Seychelles Dietary Guidelines provide guidance on food, snack and beverages which should be applied</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>• The development of interventions across all sectors to improve the availability of, and access to, healthy foods for all people and in different possible settings (schools, workplaces, etc.). Addressing adequate food labelling, ban on advertising of unhealthy foods in mass media, subsidies/taxes on healthy/unhealthy foods, reformulation of manufactured foods in terms of salt, sugar and fats, etc. Interventions in all sectors are also needed to promote physical activity in different settings.</li> </ul>
<b>National Food and Nutrition Security Policy Objective: Improving and optimizing the nutritional status , health and wellbeing of all Seychellois</b>	
<p style="text-align: center;">In Alignment With</p>	
<b>National Food and Nutrition Security Policy Objective Programme 3: : Food Safety, Standard and Quality Control</b>	
<b>Priority Areas</b> <ol style="list-style-type: none"> <li>Food safety and public health</li> <li>Quality Management and Certification Services</li> <li>Enhanced Food Management and Control Systems</li> <li>Promoting Quality Food Production, Storage, Handling and Processing Practices along the value chains</li> </ol>	
<b>The Issue/s</b>	<b>Strategic Interventions</b>
<b>Priority Area:</b> Food safety and public health + Promoting Quality Food Production, Storage, Handling and Processing Practices along the value chains + Enhanced Food Management and Control Systems + Promoting Quality Food Production, Storage, Handling and Processing Practices along the value	

chains	
<ul style="list-style-type: none"> <li>• Despite a Biosecurity Policy, there are still concerns about the level of contaminants (pesticide residue, disease causing organisms, antibiotics and other additives and contaminants or even radioactive substances) along with live organisms such as bacteria, fungi, viruses, protozoa myco-plasma etc. In foods produced locally and imported. This a cause for concern for the health of humans, livestock, plants and the environment.</li> <li>• Presently the Seychelles does not have any sanitary and phyto-sanitary regulations that apply to locally produced commodities ( esp. livestock)</li> <li>• Poor hygiene and inappropriate food (including livestock feed) handling and storage which contributes to spoilage and post-harvest losses</li> <li>• Lab for food testing standards with Seychelles Bureau of Standards (SBS) needs controls and consistent follow up after initial certification, there is no regular follow up testing after initial testing.</li> </ul>	<ul style="list-style-type: none"> <li>• An initial point of entry should be a review towards harmonization of a food safety and quality regulatory and institutional framework to improve coordination and enforcement.</li> <li>• Addressing food safety along the value chain: Acceptable levels of food quality and safety can be achieved by implementing and monitoring quality assurance measures along the entire food chain. Food control measures are diverse and complex; the technical dimensions involved are different for nearly every food product, for the various technologies used in food preparation, processing and manufacturing and for the many types of facilities in which food is produced. The various measures range from good agricultural practices and good veterinary practices at the farm level to good manufacturing practices and good hygienic practices applied in food processing. In view of the many concerns of consumers and the scope and dimensions of food quality and safety problems, technical assistance is often needed. Through enhanced food control management systems, the Government of Seychelles can ensure that the food imports and the local food industry produces safe food and that the risks to human health and economic fraud or unfair trade practices are minimized</li> <li>• The food industry is responsible for developing and managing systems to ensure that the food supplied complies with the requirements set by the competent authorities. The food business operator has primary responsibility</li> </ul>



	<p>for food safety.</p> <ul style="list-style-type: none"><li>• Review and harmonize food safety and quality regulatory and institutional framework to improve coordination and enforcement.</li><li>• Provide guidelines and sensitize the public on production and utilization of genetically modified products.</li><li>• The Seychelles Bureau of Standards, Veterinary Services and Department of Health, will provide a range of goods and services as well as establish and adhere to quality standards for improved national food output and hence achieve a better national food and nutrition security status. To achieve this goal it is necessary to clearly identify the role of all available laboratory services and to harmonize service delivery.<ul style="list-style-type: none"><li>○ Infrastructure investment on lab testing infrastructure( plus human resources) needed for assessing the shelf life of commodities in order to test and certify products</li><li>○ A lab specifically for food nutrient content testing needed in order to provide certification</li></ul></li><li>• SAA and Seychelles Customs Authority to work in partnership in order to ensure implementation of labelling regulations<ul style="list-style-type: none"><li>▪ Controls are needed at point of arrival in Seychelles, therefore Customs Authority should be included in any Nutrition/ related Multi sectoral Platform</li></ul></li></ul>
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	<ul style="list-style-type: none"><li>▪ Meat standards do not meet criteria for international and local standards</li><li>▪ Additional information needed to understand the process of certifying local produce as being organic, what is organic versus ecological (for example)</li><li>▪ National accreditation needed for organic and ecological products'</li></ul> <ul style="list-style-type: none"><li>• Establishment of a Food Safety Management Committee comprising all competent authorities, who will have the responsibility to verify and provide assurances on food safety standards and the associated production systems.</li><li>• Review and Revision of current Food Labelling Regulations<ul style="list-style-type: none"><li>▪ Ensuring that there is a penalization process for retailers who don't comply. Addressing human resources constraints to suitably carry this out.</li></ul></li><li>• Improving the capacity to test imported foods for domestic markets, especially frozen and chilled poultry which is highly consumed. Testing would verify levels of pathogens, levels of growth hormones and antibiotics in the meat, whether food additives have been used and the brine content.</li><li>• Develop and promote a new set of national food and feed safety standards, which will include locally produced and imported food and animal feed and feed ingredients and with particular regard to the use of GMO foods, and hormonal and anti-biotic residues.</li></ul>
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	<ul style="list-style-type: none"> <li>• Developing a list of imported food products which will be subject to regular inspection and testing for <ul style="list-style-type: none"> <li>○ hormonal and antibiotic residues in frozen imported meat</li> <li>○ Nutritional composition, particularly of infant food and food for lactating mothers.</li> </ul> </li> <li>• Development of a food safety management system to ensure uniform application by the competent authorities, including provisions for their effective collaboration.</li> <li>• Promoting safe practices in food production (crop, livestock and fisheries).</li> <li>• Update, review and harmonize the regulatory and institutional framework to improve guidelines, standards, coordination, testing and enforcement, and food labelling.</li> <li>• Promote proper storage and handling to control incidents of food-related or animal feed-related disease outbreaks</li> <li>• Enhance private sector and civil society engagement in food safety and quality assurance.</li> <li>• Develop capacity of the general public to demand their rights in food safety and quality through awareness creation on basic aspects of food safety, such as certified standards and inspection certificates for food products.</li> </ul>
<p><b>National Food and Nutrition Security Policy Objective: NFNSP Objective: Strengthen and aligning institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base.</b></p>	

In Alignment With

**National Food and Nutrition Security Policy Objective Programme 4: Alignment and Harmonization with Regional and International Food and Nutritional Security Policies, Standards and Framework**

The Issue/s	Strategic Interventions
<p>The rise of global and national challenges related to the ever-increasing food prices and other food security issues, there is a need for the Government of Seychelles view its agricultural policies through a lens of consensus based on partnership with stakeholders at regional and international levels including the relevant funding partners</p>	<ul style="list-style-type: none"> <li>• In concurrence with the WTO, Seychelles will realign itself to various Acts relating to Food Safety and Quality to achieve a greater degree of harmonization with regional and international protocols. These are the Public Health Act, Food Act, Pesticide Act, SBS Act, Fish and Fishery Product Act</li> <li>• Under the National Biosafety Framework, the SBS Act of 1987 will be modified to ensure alignment with the SADC Food Safety Guidelines.             <ul style="list-style-type: none"> <li>○ The revised acts will clearly define the role and responsibilities of key role players. This is necessary to avoid conflict of interests, multiple inspections, investigations and duplication of testing and to avoid gaps in the production to consumption continuum.</li> </ul> </li> <li>• The review of the NSNFP with a five year time frame recognizing that the country may have rendered some altered suit of challenges posed by amongst others, climate change, globalization, regional market integration, demographic change and increasing pressure, on and demand for, natural resources.</li> <li>• The RECs (SADC, IOC and COMESA) offer an opportunity for Seychelles to access new markets through regional integration. It may be necessary for</li> </ul>

	<p>Seychelles to choose economic sectors that would give it a competitive edge and allow others to go through a natural process of decline, if they cannot stand up to competition with the integrated economic zones.</p> <ul style="list-style-type: none"> <li>• The agriculture and fisheries production sectors have many links to international conventions and treaties to which Seychelles is a signatory, e.g. CBD, Convention on Climate Change, IOC, IOTC, Convention on the sustainable use and conservation of genetic resources, FAO Code of Conduct for Responsible Fisheries etc. These are important instruments to ensure the sustainable utilization of natural resources (land, water and marine resources), including food security. For example, crop production and fisheries production have to be in conformity with the exigencies of existing international protocols to which Seychelles is a signatory, if development plans are to remain within the precinct of sustainable development protocols.</li> </ul>
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**National Food and Nutrition Security Policy Objective: Strengthen and aligning institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base.**

In Alignment With

**National Food and Nutrition Security Policy Objective Programme 5: PREPAREDNESS AND MANAGING RISK AND UNCERTAINTY**

**SNAIP : SNAIP Impact Indicators for Subprograms 4.1**

**Priority Areas:**

- a. Food and Nutrition Security Information
- b. National Data and Information Systems
- c. Research and analytical capacity on food systems and nutrition
- d. Strategic food reserves, early warning, safety nets and emergency management
- e. Insurance and risk management
- f. Food security and climate change
- g. The role of gender in food and nutrition security

**The Issue/s**

**Strategic Interventions**

Priority Area: Food and Nutrition Security Information

- Most analyses in food and nutrition are usually conducted for specific purposes by different stakeholders. The analyses are fragmented and segmented in most cases. Further, analyses at district and community level is limited and capacity for cross-sectoral analysis of food security and nutrition is not adequate. Therefore, there is need to enhance capacity for cross-sectoral data analysis.

- Establishing a food and nutrition information system based on the pre-existing administrative reporting systems in the relevant ministries already engaged in nutrition related interventions. This includes routine data from health and education institutions as well community level food and nutrition information including data from child growth monitoring and promotion programmes. Sample surveys will also be considered as well as Rapid Appraisal techniques as a possible means of obtaining information quickly. Information generated will be used to assess the food and nutrition situation as well inform programmatic changes and amendments by programme managers to bring about improvement. This particular component of the priority area will also encourage a cross ministerial bureaucratic

	<p>collaborations.</p> <ul style="list-style-type: none"> <li>• Effective quality management depends on knowledge and information exchange between the various links of a production chain. It improves productivity; leads to better production and consumer care and reduce risks. The sectoral ministries, public and private sector agencies will be supported in their efforts to gather and manage crucial data and information, which will also be used to monitor and evaluate the implementation of the policy. Therefore, there is need to enhance capacity for cross-sectoral and institutional data analysis.</li> </ul>
The Issue	Strategic Intervention
Priority Area : National Data and Information Systems	
<ul style="list-style-type: none"> <li>• Information about markets, products and services is needed in order for farmers to plan their investment and input sources. This includes access to information on what to grow for which market, and what the expected financial returns are, this in turn empowers the planning and production process. Such information improves income through better targeting, negotiation and more efficient and market-oriented production</li> <li>• A need to systematically develop methods for measuring healthy food systems and diets in the Seychelles</li> </ul>	<ul style="list-style-type: none"> <li>• Working with the Statistics Department, to guarantee that the following information is continuously collected, analysed, updated and disseminated; <ul style="list-style-type: none"> <li>a) statistics on production, trade and consumption;</li> <li>b) knowledge of operators at various stages of the food chain;</li> <li>c) typical and atypical use of products, raw materials and by-products;</li> <li>d) structure of production and supply chains; and</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>○ There is currently no collection of agricultural and food system data necessary to measure nutrition and health outcomes effectively</li> <li>○ Few if any statistical systems currently collect or analyse data which link information across the various domains of food systems from production through to consumption.</li> <li>○ There is currently no use of empirical data to measure the nutritional impact of national agricultural and food policies and other interventions, with sufficient accuracy.</li> <li>● There is a gap in food policy statistics relating to food consumption patterns, trends, and dynamics. This represents a serious limitation to policymakers' understanding of what should be changed, how to bring about change, and whether or not changes linked to policy initiatives have been implemented as intended.</li> <li>● Few attempts have been made to measure how diets are affected by policy interventions which influence the dynamics of processes along the food chain, from production through marketing, retail and consumption, or how food choices affect those dynamics</li> </ul>	<ul style="list-style-type: none"> <li>e) Production technologies, processes and practices.</li> <li>f) Population nutrition surveys <ul style="list-style-type: none"> <li>● Improving data on actual food intake</li> <li>● Developing metrics that measure the healthiness of food systems</li> </ul> </li> </ul>
The Issue	Strategic Interventions
Priority Area: Food Research and analytical capacity on food systems and nutrition	



<ul style="list-style-type: none"> <li>• Research and analytical capacity in all Seychelles institutions implicated in food systems and nutrition is limited by human capacity, research equipment and funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Scientific capacity and infrastructure at SAA, SFA and the SBS will be strengthened to ensure future research and analytical capacity.</li> <li>• The SAA, SFA, national health authority and the SBS will be strengthened to ensure future research and analytical capacity for sustainable development, sustainable use and exploitation of resources.</li> </ul>
The Issue	Strategic Interventions
Priority Area: Strategic food reserves, early warning, safety nets and emergency management + Food Security and Climate Change	
<ul style="list-style-type: none"> <li>• The vulnerability of the Seychellois farmers to drought and climate change</li> <li>• The Seychelles agricultural sector will be greatly affected by changing climate and weather patterns. There is thus a need to develop climate change adaptation and mitigation strategies and instruments are</li> <li>• Challenges with human resources and infrastructure for climate mitigation research</li> <li>• The Seychelles does not have a dedicated strategic food reserve.</li> </ul>	<ul style="list-style-type: none"> <li>• Developing national coping mechanisms to reduce the vulnerability of farmers to drought and climate</li> <li>• Conducting a Vulnerability Assessment and Mapping on an annual bases</li> <li>• Enhanced use of the early warning information in agricultural systems through dissemination of weather/drought information</li> <li>• Increased role of science and technology in helping livestock agriculture adapt to climate change, and in better understanding of the causes and impacts of climate change</li> <li>• The placement of an Early Warning System within the most appropriate institution that allows for a reciprocal flow of</li> </ul>

	<p>information among the primary decision-making bodies involved in emergency actions and longer term food security analysis and programming, the other following considerations must be included:</p> <ul style="list-style-type: none"> <li>○ administrative ease for accessing primary and secondary data from the relevant ministries</li> <li>○ managerial independence and analytical autonomy</li> <li>○ the ability to recruit and train a diverse group of food security analysts who can address the multi-sector dimensions of food security.</li> </ul> <ul style="list-style-type: none"> <li>● Understanding the challenges by increasing the role of science and technology in helping livestock agriculture adapt to climate change, and in better understanding of the causes and impacts of climate change</li> <li>● Ensuring that climate change adaptation and mitigation strategies and instruments are mainstreamed into agricultural production and utilising SEYFA as a point of entry</li> </ul>
The Issue	Strategic Interventions
Priority Area: Insurance and risk management	
<ul style="list-style-type: none"> <li>● The lack of collateral, has been a big barrier to access financial services particularly by small producers in addition to the fact</li> </ul>	<ul style="list-style-type: none"> <li>● The lack of collateral, has been a big barrier to access financial services particularly by small producers in addition to the fact</li> </ul>

<p>that banks consider agriculture related investments as high risk</p>	<p>that banks consider agriculture related investments as high risk</p> <ul style="list-style-type: none"> <li>• The establishment of agriculture guarantee fund in which the government partners with insurance companies that have developed a joint scheme referred to as the crop and livestock insurance program. The government will negotiate a premium for selected crops and animals based on government vision of agriculture and animal development. The insurance companies will then compensate crop and animal losses.</li> <li>• Initial point of entry <ul style="list-style-type: none"> <li>○ Assess performance of the existing Agriculture Development Fund and agriculture insurance scheme</li> <li>○ Increase the amount of the ADF and agriculture insurance scheme, if found successful</li> </ul> </li> </ul>
<p>The Issue</p>	<p>Strategic Interventions</p>
<p>Priority Area: The role of gender in food and nutrition security</p>	
<ul style="list-style-type: none"> <li>• In Seychelles, agriculture is a male dominated sector and most of the state land allocated for agricultural production is leased to male entrepreneurs.</li> <li>• Current Food and Nutrition Security as well Agriculture related policies and strategic documents ( NSNFP and SNAIP) do not</li> </ul>	<ul style="list-style-type: none"> <li>• Data collection activities, such as agricultural censuses and surveys, will promote the mainstreaming of gender issues, as indicated in the Global Strategy to Improve Agricultural and Rural Statistics endorsed by the United Nations Statistical Commission in 2010.</li> </ul>

<p>include a comprehensive analysis which addressed gendered impacts and influences of food production, procurement and preparation</p> <ul style="list-style-type: none"> <li>• The 2011/2012 Labour Force Survey revealed that only 0.7% of the female labour force is employed in the agriculture, forestry and finishing industry, compared to 6.5% of the male labour force. Since then, the employment of expatriate labour on commercial farms has drastically increased and all the foreign labour recruited is male</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize and establish the relationship between gender and food and nutrition security in Seychelles.</li> <li>• Promote gender responsive programmes and practices that will enhance national food and nutrition security.</li> <li>• Ensure gender is mainstreamed in all documents relating to food and nutrition security and increase women’s participation at all levels of planning.</li> <li>• Sensitize and build capacity for all to allow them to contribute to building a nation that is food and nutrition secure</li> <li>• Recognize that women play a crucial role in ensuring food security at the household level and provide specific funded interventions to support women for better performance in this role.</li> </ul>
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<p><b>National Food and Nutrition Security Policy Objective: Improving and optimizing the nutritional status, health and wellbeing of all Seychellois</b></p>
<p>In Alignment With</p>
<p><b>National Food and Nutrition Security Policy Objective Program 6: Institutional and Legal Framework for Policy Implementation, Monitoring and Evaluation Financing</b></p>
<p><b>Priority Areas:</b></p> <ul style="list-style-type: none"> <li>a. Institutional and legal framework for implementation</li> </ul>

b. The National Food Security Steering Committee c. Monitoring and Evaluation, Accountability and tracking policy implementation and review	
The Issue/s	Strategic Interventions
a. Priority Area/s: Institutional and legal framework for implementation, The National Food Security Steering Committee	
<ul style="list-style-type: none"> <li>• The need to develop an integrated and multi sector approach for tackling the urgent issues of nutrition</li> <li>• There is a challenge with ministries working within their own silos and not across sectors as it is relevant</li> </ul>	<p>*****Preliminary steps to initiate cross sectoral cooperation at high level was set in motion at the Ministerial Food Security retreat in November 2012 that was attended by the Ministers of Finance, Education, Natural Resources Management and Industry, Social Affairs, Land, Foreign Affairs, Health.</p> <ul style="list-style-type: none"> <li>• To implement the NFNSP policy, the Government of Seychelles will utilize participation and cooperation of multiple sectors, from within government, civil society and the private sector, that are active in one way or another in Agriculture, Fisheries, Livestock, Food, Food Safety, Food importation, Food Processing, Health, Land and Water Supply, Planning, Finance and Trade, Industry, Education, Information and Social Welfare.</li> <li>• To ensure the effective implementation of the policy it is necessary to put in place institutional structures and arrangements and to create an enabling environment to facilitate the full participation of the private sector, civil society and communities. These include:             <ul style="list-style-type: none"> <li>○ Establishing a National Food and Nutrition Security Steering Committee</li> <li>○ Establishing a functional institutional arrangement for joint</li> </ul> </li> </ul>

	<p>operations by lead ministries and collaborative stakeholders.</p> <ul style="list-style-type: none"> <li>• Establishing and activating effective district committees on food and nutrition on Mahe, Praslin and La Digue</li> </ul>
The Issue	Strategic Intervention
Priority Area: Monitoring and Evaluation, Accountability and tracking policy implementation and review	
<ul style="list-style-type: none"> <li>• There are inadequate linkages between policy and implementation in food and nutrition interventions in addition, there is a lack of monitoring and evaluation to check on the implementation of sectoral plans and activities</li> </ul>	<ul style="list-style-type: none"> <li>• An effective and independent M&amp;E system for food security and nutrition will be established by the Steering Committee. This will allow for active participation of all stakeholders to ensure transparency.</li> <li>• There is a need for the members of the National Food and Nutrition Security Steering Committee to participate in the development of the relevant priorities and measurable targets for food security and nutrition. <ul style="list-style-type: none"> <li>▪ The priorities and measurable targets will be developed by the Steering Committee.</li> </ul> </li> </ul>



## Chapter 3: Social Behavioral Change Campaign Strategy

The Social Behaviour Change Campaign (SBCC) strategy for FNS multisector implementation plan will focus on the actions that need to be taken in order to support improved nutrition in Seychelles. The strategy will be informed by formative research that establishes the key behaviour issues based on lifestyle choices causing health problems for the Seychellois. The focus is not only on the primary target groups, such as women, but also on those who influence the primary target groups at all levels, including family members, employers and health service providers. A broad range of channels will be used, including individual and group counselling, informal gatherings at community level, formal sessions through health services, school curricula and mass media. As individual and group counselling is one of the most effective channels, the capacity of health service providers to counsel women, caregivers and family members on the changes in behaviour need to prevent nutrition related health conditions will be enhanced. The full range of nutrition issues will be covered, including breastfeeding, complementary feeding, dietary improvement, home care of illnesses and utilization of health services. Special attention will be paid to ensuring that programmes and projects from the strategy use consistent community messages, tools and materials, and to inserting behaviour change counselling and support for nutrition into all points of contacts between women, caregivers and service providers.

### Proposed SBCC Approaches

- In initiating the process of developing the SBCC strategy, there is a need to conduct an audience analysis and background research to understand what the main determinants for health and behaviour are in the target populations. The audience analysis will also determine the best types of communication platforms and channels that will be used to reach each target specifically.
  - The analysis will also provide an understanding of where the target audience gets its information from , narrowing down who they trust and listen to for their information and what is also currently available in terms of information and communication, and in the case of the FSN multisector implementation plan, where they get their food from - markets, supermarkets etc. This



will also help determine the best places to disseminate the information- schools, churches, community groups, traditional leaders, television, etc.

- Radio is often a popular medium as it reaches a very wide audience, unfortunately with this medium there is not much depth to address controversial topics as with one-on-one or community groups, and it can be an expensive medium for communication given the production and broadcasting cost. But can also be economical in that its message can be sent out to a wider range of people.
- Another type of medium which can be quite affective is through a multi-channelled approach using various mediums through mass media, community and individual levels.

The SBCC strategy will also reference SBCC projects and initiatives which have proven successful- ex. TV shows/ short cartoons for children with nutritional superheroes- the entertainment education approach targeting children who can be a useful source to provide entry and information into a household.

The first steps in developing the SBCC Strategy for the FSN multisector implementation plan is the hiring of an SBCC technical expert to provide technical assistance and lead the process in conducting the development of the strategy. The SBCC technical expert will conduct the in-depth needs assessment / analysis to understand the different key stakeholders, target audiences, key issues and data and also identify the research gaps. And then based on this develop an SBCC strategy which will work over a proposed time frame, addressing the different key issues raised in the FSN multisector implementation plan depending on what was discovered with the needs assessment. It is proposed that the SBCC Technical Expert be placed within the Health Promotion or Health Education Division of the MOH, however this will need to be reviewed with the National Food Security and Nutrition Steering Committee (NFSNSC)

[Proposed TOR for the SBCC Technical Expert is as follows](#)

**Purpose:**

To conduct a needs assessment to document the current Social and Behavior Change Communication (SBCC) landscape in country that identifies existing agencies, partners, media outlets for potential collaboration; outlines key information gaps and research needs; suggest

strategies for implementing a package of SBCC interventions to be based on the proposed interventions in the FSN multi sector implementation plan and in line with the key objectives of the NFNSP:

- Ensuring the food security for all Seychellois through efficient and effective agricultural production, sustainable fisheries and balanced by importation of healthy and nutritious food.
- Improving and optimizing the nutritional status, health and wellbeing of all Seychellois. Improved nutrition in public institutions and among consumers, improved food and nutrition in schools.
- Strengthen and aligning institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base.

**Roles and Responsibilities:**

Key activities to be conducted by the SBCC Technical Expert:

- Provide recommendations and technical oversight to the design of a strategic SBCC activities and interventions to support the FSN multi sector implementation plan.
- Serve as expert advisor on the assessment and design of strategic SBCC activities to support the comprehensive nutrition interventions in the FSN multi sector implementation plan.
- Liaise in-country with key stakeholders and other partners working in nutrition programs to identify appropriate opportunities for collaboration and coordination for SBCC interventions.
- Conduct a comprehensive landscape of current SBCC projects, partners, existing data and resources.
- Identify existing agencies, partners, and media outlets for potential collaboration on SBCC activities.
- Conduct an in country review of existing data, research, and publications, print and media for SBCC nutrition related interventions.
- Develop a detailed needs assessment and report outlining strategies for implementing a package of SBCC interventions to be included as part of the activities linked with the FSN multi sector implementation plan.

- Draft Timeline and Outline/Action Plan of next steps for the development of SBCC activities to the FSN multi sector implementation plan.

**Deliverables:**

- SBCC Landscape and Needs Assessment including an action plan and proposal of next steps for the development of SBCC activities to be included in the FSN multi sector implementation plan.
- Detailed Trip Report.

**Competencies:**

- Solid and proven track record in developing, implementing and evaluating strategic SBCC programs.
- Sound knowledge of relevant BCC and Social Change theories.
- Demonstrated ability to build capacity and mentor government, program and civil society staff.
- Capable of working independently and with minimal supervision.
- Ability to work in fast-paced dynamic environment with multiple partners.
- Strong interpersonal and written communication skills.

**Education and Experience**

- Master's Degree (MA) in Public Health, Development Studies or Social Sciences.
- Ten years' experience in developing, implementing and evaluating strategic SBCC programs.
- Experience in nutrition programs preferred.
- Experience with international best practices in behavior and social change communication preferred.

**Language:**

- Strong working knowledge of English Language with the ability to read, analyze, and interpret complex documents.
- Ability to present information in front of group audiences, government officials and policy makers.

**Other skills and Abilities:**

- Ability to foster a cooperative work environment and develop positive and effective working relationships.
- Demonstrated skills in working effectively with a team of employees to be highly motivated, setting appropriate goals and attaining positive results.
- Strong critical thinking and problem solving skills.
- Excellent communication and interpersonal skills.

## Chapter 4: Monitoring and Evaluation Plan/Strategy

### Rationale and Objectives

The rationale for putting in place food security and nutrition monitoring system for the FSN multi sector implementation plan is to provide information about developments in food security and nutrition which would form the basis for program design and intervention. Monitoring also helps to improve program design and delivery and to provide a basis for timely corrective interventions in case of program failures. The objectives will be to institutionalize an effective and participatory M&E system for food security and nutrition. Active participation of the stakeholders will ensure that all the information needed is collected and analyzed for improved planning and implementation. Before new data is collected, the already available data should be fully utilized. There should be an effort to make data collected simple and easily interpretable and understandable.

### Scope and Approach

An appropriate M&E system will be developed at the national and district levels. Early warning systems may be used at the national level to monitor food security, but would be used to a less extent for nutrition monitoring. To enhance monitoring and evaluation of the FSN multi sector implementation plan and its impact, the government will need to put in place an M&E system that includes regular surveys at national and district levels, and that continuously seeks input on the progress of implementation from the private sector and other stakeholders to ensure their participation in the process. This will be done under a rotational leadership with the relevant Permanent Secretaries of the represented ministries in the National Food Security and Nutrition Steering Committee (NFSNSC). The National M&E system envisages a situation where the National Food Security and Nutrition Steering Committee (NFSNSC) will agree on the indicators to be used by the system on a sector-wide basis. Reports which will be key benchmarks on the progress of the implementation of the NFNSP. The reports will enable the key operators to make sure that implementation is taking place and the programs are fully funded.

## M&E Indicators

The selection of indicators should take place with the relevant members of the National Food Security and Nutrition Steering Committee (NFSNSC) and or relevant ministry technical officers at the design stage of each of the food security and nutrition program and priority areas. The indicators should consider the objectives, outputs, activities and inputs. Outcome or impact indicators measure the effect of activities in respect to the extent to which they meet the set objectives. On the other hand, process and output indicators measure how activities are planned and implemented. Careful selection of indicators at all levels is thus important in monitoring and evaluation. Some indicators are global or national/country while others may reflect the district level.

To monitor and evaluate policy change on food security and nutrition would require long-term measurement of indicators of change at the international (global) level and or national/sectoral level goals and objectives. It is important to monitor the impact of policy to receive feedback for policy makers and other stakeholders on the outcomes of the interventions.

## Risk Assessment

The overall process of risk analysis and evaluation is referred to as risk assessment. Risk analysis is a systematic use of available information to determine how often specified events may occur and the magnitude of their consequences. The process used to determine risk management priorities by comparing the level of risk against predetermined standards or target risk levels is risk evaluation.

Traditionally, government ministries carry out their functions with minimal sector-wide approach to development. The implementation of FSN multi sector implementation plan, however, requires a multi-sectoral approach to its implementation. This is a very complex process that requires high level policy guidance and commitment. There is also a risk of ministry seconding officers to the National Food Security and Nutrition Steering Committee (NFSNSC) without much thought about their competence.

A priority listing of risks is given in **Table 3**. **Table 4** applies the risk priority listing and provides a risk analysis and evaluation matrix.

**Table 1: Priority listing of risks**

Likelihood	Impact	Risk priority
High	High	5
High	Medium	4
Medium	High	4
High	Low	3
Medium	Medium	3
Low	High	3
Low	Medium	2
Medium	Low	2
Low	Low	1

**Table 2: Risk analysis and evaluation matrix**

Risk event	Risk consequence	Likelihood	Impact	Risk priority	Strategy	Responsibility
Inadequate political support	Inadequate funding affecting implementation	Low	High	1	<ul style="list-style-type: none"> <li>Stakeholder advocacy to maintain momentum for implementation.</li> <li>Empowerment of communities in the implementation process using key elements from the SBCC</li> </ul>	National Food Security and Nutrition Steering Committee (NFSNSC) Relevant ministries at Permanent Secretary level
Inadequate funding	<ul style="list-style-type: none"> <li>Activities slowed or halted.</li> <li>Implementation linkages and relationships disrupted.</li> </ul>	Low	High	1	<ul style="list-style-type: none"> <li>Identify possible alternative funding streams.</li> <li>Identify and adopt contingency plans based on priority program activities at reduced level.</li> </ul>	National Food Security and Nutrition Steering Committee (NFSNSC) Relevant ministries at Permanent Secretary level
Disasters (Tsunami, rainstorms, floods, landslides, etc. etc.)	<ul style="list-style-type: none"> <li>Unable to timely achieve certain objectives or interrupted implementation, and therefore unable to reach goals.</li> <li>Safety risk.</li> </ul>	Medium	High	3	<ul style="list-style-type: none"> <li>Monitor situation and develop contingency plans.</li> <li>Institute mitigation plans.</li> <li>Mainstream climate change considerations in all plans.</li> </ul>	National Food Security and Nutrition Steering Committee (NFSNSC) Relevant ministries at Permanent Secretary level
Resistance to collaboration initiatives by key stakeholders	<ul style="list-style-type: none"> <li>Fragmentation and duplication of activities with community groups.</li> </ul>	low	High	1	<ul style="list-style-type: none"> <li>Initiate regular dialogue with stakeholders at all levels.</li> <li>Raise awareness of operational strategic planning and stakeholder consultation procedures</li> <li>Ensure reporting and briefings on the programs are widely disseminated.</li> </ul>	NFSNSC members

## Chapter 6: References

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## Annex A: Stakeholder Mapping

Partner Type	Sector	Institution	Agency/ Section Unit	Function/s	Nutrition Intervention &Ongoing	Relevant Current	Opportunities for Synergy
Government	Agriculture	The Ministry of Fisheries and Agriculture (MFA)		MFA covers both the fisheries and agriculture sectors and is responsible for policy formulation and decision making including international relations affecting the sectors, and oversight over the two implementing agencies; Seychelles Fisheries Agency and Seychelles Agriculture Agency	Seychelles Agriculture Investment Plan, Program #4 to help ensure that the population of Seychelles is food secure and will contribute to Government of Seychelles efforts to promote a more balanced diet, leading to improved nutrition levels.		
Parastatal/Semi-Autonomous		The Ministry of Fisheries and Agriculture (MFA)	Seychelles Agricultural Agency (SAA)	The implementation of policies, enforcement of rules and regulations, research and extension, capacity building, contributing to technical backstopping for a sustainable agricultural sector.	To develop enhanced crop varieties and food products with nutritional attributes		After nationwide micronutrient analysis, working with MOH across all age groups, conduct research toward developing local crop varieties with the relevant nutritional attributes
			Seychelles Fishing Authority (SFA):	A parastatal organization which implements fisheries related strategies and actions for the MFA.	Training artisanal fisherman on quality and handling, Development of fish products (which needs private investment) to be used in school meal program for market testing		

Government	Health	Ministry of Health (MOH) Family Health and Nutrition section	Family Health and Nutrition section	The MOH has been the primary government institution tasked nutrition through the Nutrition and Food Safety Units. The MOH also administers the Pesticide Act( 1996)which targets registered commercial farmers	In order to improve exclusive breastfeeding up to 6 months at community level, working through Antenatal nutrition classes and Outpatient clinics, providing information and counselling to mothers and mothers to be about the best infant feeding practices. building the capacity of all health staff who care for mothers and their babies to provide accurate information about the benefits and management of breastfeeding and complimentary feeding	Both MOH and MOE are working to improve the nutritional well-being of school children in Seychelles through the school health promotion programs. Integration of school meal program that is in line with the Seychelles Dietary Guidelines. Implementing nutrition education from crèche through to secondary schools as part of a sequential comprehensive school curriculum. Harmonizing school food provision and environment with nutrition education in the curriculum. Building the capacity of staff involved in nutrition education through the principles of healthy eating. Working with the Parent's Teachers Association and the community in supporting and reinforcing nutrition education and providing tools to ensure the school's compliance to promoting healthy eating. There may be opportunities for SAA to streamline school gardens and trainings in addition to cross training MOH health officers on the role of complementary feeding after the six months
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						of exclusive breastfeeding
	Education	Ministry of Education (MOE)		The MOE is responsible for the planning, development and implementation of government education policies. MOE currently also oversees the vocational institution that trains agricultural producers through the Seychelles Agricultural and Horticulture Training Centre (SAHTC)	To implement nutrition education from crèche through to secondary schools as part of a sequential comprehensive school curriculum To harmonize the school's food provision and environment with nutrition education in the curriculum To build the capacity of staff involved in nutrition education and provision in the principles of healthy eating To involve the Parent's Teachers Association and the community in supporting and reinforcing nutrition education	
Government	Finance	Ministry of Finance, Trade and Blue Economy(MFTBE)		The Finance department of the Ministry provides the annual budget and capital investment financing for the agricultural sector through the SAA, and its trade division manages its trade negotiations under WTO	The importance of financial systems, stating political will for nutrition must be reflected through financial support at national level. Fiscal support should go towards structural interventions such as infrastructure investment to build more walking paths and cycling lanes which will allow for more physical activities	

					along with all other preventative measures	
	Social Protection		Agency for Social Protection	Agency responsible for processing applications for welfare assistance/cash transfers. Formed in January 2012 following the merger of the Social Welfare Agency and the Social Security Fund to “ensure the provision of comprehensive social security services and social relief against vulnerability”. The agency provides safety nets whether members of household are fully employed or not. targeting mostly low income families , mostly single female headed homes	Qualified beneficiaries are given cash transfers to purchase food. The Agency for social protection is currently transitioning towards food coupons or food stamps to be used exclusively at STC.	Agriculture and Social Protection: Provide households, and communities with the opportunity to spend more and invest more, thereby stimulating local economies, boosting economic growth, and increasing food and nutrition security. Synergies can occur through targeting vulnerable non-working households with young children and pregnant women, focusing on first 1,000 days of life by utilizing bi-weekly home visits by a community workers to disseminate nutrition messages s (e.g. sensitization on exclusive breastfeeding)

Private Sector	Private Sector	ISPC		ISPC is a foreign controlled company operating in the Seychelles and importing a range of fresh, frozen, and dry food, beverages, and nonfood items, aimed primarily at the hotel and restaurant trade. It is one of the largest wholesalers in the Seychelles and also operates supermarkets. It buys most of its fresh fruit, herbs, and vegetables and some fresh seafood and game meat from Europe's largest fresh market, Rungis in France, from where produce is flown to the Seychelles with 5 weekly arrivals by air transport from Paris.	ISPC should be encouraged to look at supporting and developing local production in those food products which can compete with imports. Organizing small-holder farmers to develop certain food items based on market need. Engage in research and product development/innovation in order to development of high-yield, nutrient-rich, input-low crop varieties and locally processed raw inputs into nutrient-dense foods (as per market demand).	The private sector retailer such as ISPC could provide an incentive for SEYFA to improve production and supply
Government(Regulatory Body)	Government	The Seychelles Bureau of Standards		The National Standards Body of Seychelles and is executive arm of the Ministry of National Development for all standards related matters. The SBS is responsible for the coordination of scientific research carried out in Seychelles and also develops, declares and promotes Seychelles Standards for products, processes and practices that are needed for use in all sectors of the economy as well also for the protection of the	The SBS plays a major role testing fresh and processed agricultural products. Its biochemical testing service laboratories are designated as the official testing laboratory for testing of fish and fish products by their Fish Inspection and Quality Control Unit (FIQCU).	Working with the Food Safety Management Committee (MOH) and Food Safety Unit to develop testing for food composition. Working with SAA and SEYFA to provide quality control testing of potential local commodities and disseminating of information. Provide testing of products from cottage industry

				environment.		
	Parastatal	Public Utilities Corporation (PUC)		The Public Utilities Corporation is a parastatal formed from a merger of the Seychelles Water Authority and Seychelles Electricity Corporation Limited. PUC is one of the leading organizations in Seychelles, providing electricity, water and sewerage services to customers on Mahe, Praslin and La Digue.	The provision of water fountains in all schools	

Public/Private partnership		Seychelles Farmers Association		The Seychelles Farmer's Association (SEYFA) works to empower farmers in Seychelles through building their capacity to produce using sustainable agriculture and market their products to improve their livelihoods and to contribute to food security in Seychelles. SEYFA also negotiate with government on issues which affect their members. It has a membership of approximately 400 farmers, the majority of which are livestock farmers.	Improved agriculture produce for local market which adheres to food safety standards	Working with SAA Crops Research to develop improved local varieties
Donor	Agriculture	Competitively Local Innovations for Small Scale Agriculture (CLISSA)		The objective of CLISSA is to revitalize and promote modern and sustainable agriculture, livestock and fisheries practices to enhance productivity and diversify market access for small scale farmers and artisanal fishers. Additionally the project provides training to backyard gardeners in order to improve food security	Providing a variety of home gardening through peri-urban techniques allows for beneficiaries to diversify diets	
Donor	Agriculture	AfDB		Agriculture Sector Development Project(ASDP)-Pending	TBD	