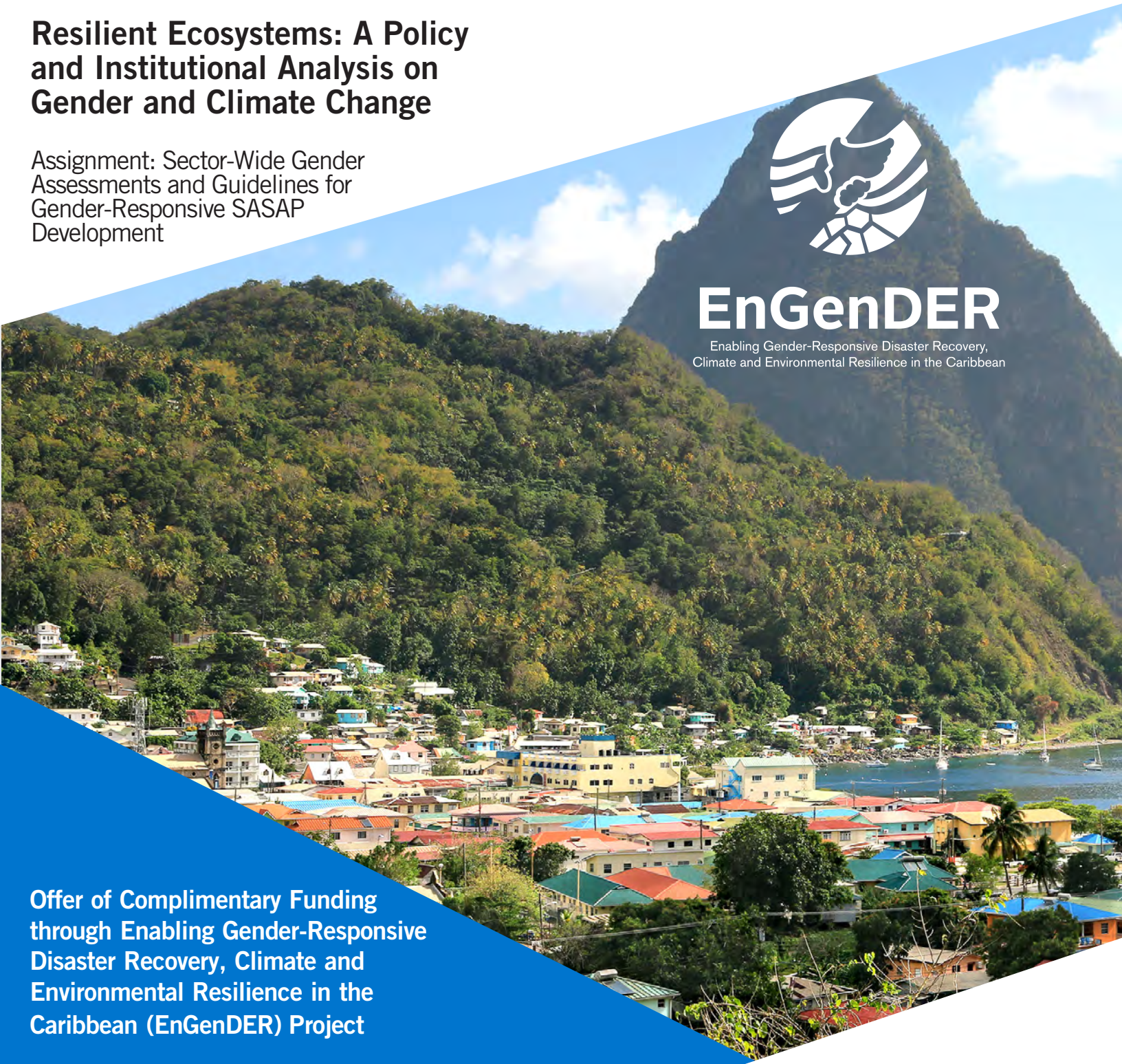
# FINAL REPORT

## Resilient Ecosystems: A Policy and Institutional Analysis on Gender and Climate Change

Assignment: Sector-Wide Gender Assessments and Guidelines for Gender-Responsive SASAP Development



**EnGenDER**

Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean

**Offer of Complimentary Funding through Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) Project**

**Prepared for:** Government of Saint Lucia
Department of Economic Development

**Prepared by:** Niagara College Canada

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## Executive Summary

Saint Lucia is one of nine Caribbean countries benefiting from the regional project, Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience (EnGenDER). This consulting assignment supports the efforts of the Government of St. Lucia to close existing financing gaps and to leverage sustainable and diverse sources of climate financing with specific attention to financing for gender-responsive and inclusive climate action. EnGenDER is implemented and coordinated through the United Nations Development Programme (UNDP) Barbados and the Eastern Caribbean office, through funding support from Global Affairs Canada (GAC) and the UK Government.

Under the consulting assignment Niagara College Canada undertook institutional and policy reviews of six sectors – Health, Education, Tourism, Resilient Ecosystems, Energy and Infrastructure and Spatial Planning. The reviews focused on: identifying the intersection of gender and climate change in each sector, assessing the institutional capacities and gaps in addressing gender responsive sector planning and developing relevant gender responsive guidelines and tools for use in the development of Sectoral Adaptation Strategies and Action Plans (SASAP).

This report outlines the findings of the policy and institutional capacity assessment of Gender and Climate Change adaptation planning in the Resilient Ecosystems sector of Saint Lucia. The process had limitations of time and constraints on movement, working arrangements, travel and in-person communications and consultations brought about by the COVID-19 pandemic. Notwithstanding these limitations, the report captures significant information obtained from desk reviews and online consultations with key informants.

The desk review encompassed:

- Saint Lucia's climate change impacts and existing climate change adaptation policies and plans, assessing these for the extent to which they include gender dimensions in identified risks, vulnerabilities and responses.
- Available global literature on gender, sector specific climate change issues, and the development of gender responsive adaptation policies and plans.
- A situational analysis, based on secondary research, on gender in relation to the sectors of interest in Saint Lucia, as well as the gender dimensions of climate change impacts.

Additionally, the process benefitted from direct, online consultations with key informants involved in climate change and/or gender responses in Saint Lucia.

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## LIST OF ACRONYMS

**CCAP:** Climate Change Adaptation Policy

**COVID-19:** Corona Virus Disease 2019

**EnGenDER:** Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience

**GAC:** Global Affairs Canada

**GoSL:** Government of Saint Lucia

**GSEC:** Caribbean Secondary Examination Certificate

**IMF:** International Monetary Fund

**INDC:** Intended Nationally Determined Contributions

**IPCC:** Inter-Governmental Panel on Climate Change

**IUCN:** International Union for Conservation of Nature

**M&E:** Monitoring and evaluation

**NAP:** National Adaptation Plan

**NCCC:** National Climate Change Committee

**NGOs:** Non-Governmental Organizations

**REASAP:** Resilient Ecosystems Adaptation Strategy and Action Plan

**SASAP:** Sectoral Adaptation Strategies and Action Plan

**SASAPs:** Sectoral Adaptation Strategies and Action Plans

**UNDP:** United Nations Development Programme

**UNFCCC:** United Nations Framework Convention on Climate Change

## DEFINITION OF TERMS

The assessment addresses and incorporates the following terms and definitions:

**Adaptation:** Coping processes and mechanisms implemented by individuals, communities, and countries given the consequences of climate change.

**Climate Change Risks:** Social and economic impacts resulting from direct or indirect climate variability.

**Gender:** Roles, responsibilities, and opportunities that are associated with different societal groups resulting from socialization and learning processes. These relationships are often governed by hidden power structures between them.

**Gender Equality:** A sustainable development precondition and indicator where responsibility, rights, and opportunities are not dependent on gender while recognizing the interests, needs, and priorities of all gender groups.

**Gender Mainstreaming:** Gender mainstreaming is defined as the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. (St Lucia Gender Policy)

**Gender Responsiveness:** Outcomes that encourage participation and fair distribution of benefits with the understanding of localized gender roles and inequalities.

**Intersectionality:** The recognition that gender overlaps with other socio-cultural characteristics such as race, ethnicity, disability, sexual orientation, age, geographic location (urban, rural) and socio-economic status. It considers societal norms and values related to these identity factors, and the consequent, cumulative effects and multiple forms of social barriers or privileges that groups of persons can experience based on these different identities.

**Mitigation:** The lessening or minimizing of the adverse impacts of a hazardous event. The adverse impacts of hazards, in particular natural hazards, often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures include engineering techniques and hazard-resistant construction as well as improved environmental and social policies and public awareness. It should be noted that, in climate change policy, "mitigation" is defined differently, and is the term used for the reduction of greenhouse gas emissions that are the source of climate change.

**Resilience:** The extent by which a system, community, or society can efficiently adapt, accommodate, and recover from the effects of a hazard.

**Vulnerability:** The susceptibility of an individual, community, or system to hazards resulting from physical, social, economic, and environmental conditions.

# 1.0 INTRODUCTION

Saint Lucia is one of nine Caribbean countries benefiting from the regional project, Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience (EnGenDER). The project is aimed at improving delivery of services to the most vulnerable, in an equitable, gender responsive manner and with increased capacity for accelerating climate change adaptation, risk mitigation and reduction, as well as post-disaster recovery. The EnGenDER project is implemented and coordinated through the United Nations Development Programme (UNDP) Barbados and the Eastern Caribbean office, through funding support from Global Affairs Canada (GAC) and the UK Government.

As part of the project, this consulting assignment was commissioned to support the efforts of the Government of St. Lucia to close existing financing gaps and to leverage sustainable and diverse sources of climate financing with specific attention to financing for gender-responsive and inclusive climate action.

Under the assignment, Niagara College Canada undertook institutional and policy reviews of six sectors – Health, Education, Tourism, Resilient Ecosystems, Energy and Infrastructure and Spatial planning. The reviews focused on identifying the intersection of gender and climate change in each sector, assessing the institutional capacities and gaps in addressing gender responsive sector planning and developing relevant gender responsive guidelines and tools for use in the development of Sectoral Adaptation Strategies and Action Plans (SASAP).

The findings of the assessments provide the Government of Saint Lucia (GoSL) with a comprehensive baseline understanding of gender needs, and priorities to be addressed with respect to gender and climate change adaptation within each sector. This supports the National process to extend the GoSL National Adaptation Plan 2018- 2028, to include gender responsive Sectoral Adaptation Strategies and Action Plans (SASAPs).

## 1.1 THE ASSESSMENT PROCESS

The assessment process involved desk reviews of the following:

- Saint Lucia's climate change impacts and existing climate change adaptation policies and plans, assessing these for the extent to which they include gender dimensions in identified risks, vulnerabilities and responses.
- Available global literature on gender, sector specific climate change issues, and the development of gender responsive adaptation policies and plans.
- A situational analysis, based on secondary research, on gender in relation to the sectors of interest in Saint Lucia, as well as the gender dimensions of climate change impacts.

Additionally, the process was informed by direct consultations with key informants in the sectors' institutional mechanism for development of SASAPs, and selected civil society stakeholders involved in climate change and gender responses in Saint Lucia. A summary of the initial project consultation is available through the document titled *"Inception Mission Report: Sector-Wide*

*Assessments and Guidelines for Gender-Responsive SASAP Development"*. This document can be accessed through the GoSL Department of Economic Development.

The structure of each sector analysis includes an overall literature review of the existing intersections of global climate change and gender, situating the GoSL approach within global best practices. In addition, there was analysis of key sector policy documents serving as the foundation for a technical gendered analysis of the sectors of interest.

### 1.1.1 LIMITATIONS

The assessment is based on a comprehensive review of available documents and input of stakeholders. It is not an exhaustive assessment due to limitations of time and constraints on movement, working arrangements, travel and in-person communications and consultations brought about by the Corona Virus Disease 2019 (COVID-19) pandemic. Notwithstanding the limitations, the report offers key findings and analyses, validated with feedback and input from key stakeholders from both government and civil society.

# 2.0 BACKGROUND

This section provides a detailed overview of the key concepts explored throughout the duration of this project.

## 2.1 DIMENSIONS OF SAINT LUCIA'S CLIMATE CHANGE VULNERABILITIES

For the purposes of this assessment the geographical/physical, economic, and human dimensions of vulnerabilities associated with climate change are explored. It should be noted that within these dimensions the impacts of climate change are not hierarchal or singular, but are varied and often present simultaneously.

### 2.1.1 GEOGRAPHICAL/PHYSICAL VULNERABILITIES

There is ample evidence of significant, increased risks and vulnerabilities faced by small island developing states due to climate change impacts. Saint Lucia has long recognized this and has taken steps to ensure policy and program plans address both mitigation and adaptation.

Saint Lucia's most recent National Adaptation Plan (NAP) 2018-2028 makes note of the fact that:

> *Small Island Developing States are particularly threatened by climate change. They face the prospect of partial or total inundation by sea-level rise, more intense tropical storms, increased coastal erosion and saline intrusion, higher air and sea temperatures and more erratic rainfall conditions (NAP, page 18).*

The NAP further describes the conditions that increase Saint Lucia's vulnerability to these risks, namely, its small size which results in country-wide impact of disasters, its geographic location in an area at high risk for cyclones, earthquakes, volcanoes and so on; and its economic dependence on a few sectors – agriculture and tourism- both susceptible to climate-related disasters (NAP, page 18).

The Saint Lucia National Climate Change Policy and Adaptation Plan identifies potential climate change impacts more specifically as, among other things, loss of coral reefs and other marine and terrestrial biodiversity; depletion of water supplies, reduced agricultural productivity, increases in contagious, vector borne and other diseases as well as increased coastal erosion and infrastructure damage due to sea level rise, more frequent and intense cyclones, storm surges and changes in temperatures for Saint Lucia (NAP, pages 21-31).

The International Monetary Fund Country Report of June 2018 on its Saint Lucia Climate Change Policy Assessment[1], carried out jointly with the World Bank, provides the following table

[1] IMF Country Report # 18/181; St. Lucia Climate Change Policy Assessment; June 2018; International Monetary Fund, Washington; https://www.imf.org/~/media/Files/Publications/CR/2018/cr18181.ashx

summarizing the main, projected, climatic developments stemming from climate change and the related consequences for Saint Lucia:

**Table 1. St. Lucia: Expected Climatic Developments and Consequences**

| | |
|---|---|
| Temperatures | • St. Lucia is projected to be warmer by up to 1.1°C–1.5°C between 2020 and 2039, with more pronounced increase in warm/wet seasons (June–November).[1]<br>• Sea surface temperatures in the Caribbean are projected to go up by as much as 2 degrees Celsius by the end of the century.<br>• Rising temperatures could exacerbate both the activity of and the damage caused by tropical cyclones. Average annual damages in the Caribbean could increase between 22 and 77 percent by 2100.[2]<br>• Disruption to marine ecosystems (including coral bleaching, seaweed invasion, and fish populations), with cost to the tourism and fisheries sectors. |
| Precipitation | • General Circulation Models (GCMs)[3] predict a median decrease of up to 22 percent for annual rainfall between 2020 and 2039.[4]<br>• Changes in rainfall patterns are projected to increase the likelihood of water shortages and heighten the risk of drought. |
| Sea level rise[5] | • A 1 m rise in sea level would put one of the two airports, all ports, and 7 percent of the major tourism properties at risk. Low-lying agricultural areas would also be affected.<br>• 100 m of beach erosion would affect 30 percent of all major tourism resorts and 53 percent of sea turtle nesting sites. |
| Extreme weather events | • Projections show increased inter-annual variability, with more intense effects of each severe weather event.[6]<br>• Greater intensity could accelerate soil erosion, leading to the contamination of groundwater, the salinization of water sources, and the sedimentation of dams and reservoirs, adversely impacting the quality of the country's water resources. |

[1] World Bank Climate Change Knowledge Portal (http://sdwebx.worldbank.org/climateportal/).

[2] Acevedo, S., "Gone with the Wind: Estimating Hurricane and Climate Change Costs in the Caribbean," IMF WP/16/199.

[3] General Circulation Models are climate models used to simulate the response of the global climate system to increasing greenhouse gas concentrations.

[4] World Bank Climate Change Knowledge Portal.

[5] CARIBSave Climate Change Risk Profile for St. Lucia, March 2012.

[6] World Bank Climate Change Knowledge Portal, St. Lucia.

### 2.1.2 ECONOMIC VULNERABILITIES

Saint Lucia's economy is highly vulnerable to adverse weather events. According to the International Monetary Fund (IMF):

> *Saint Lucia's annual average loss from wind-related events and floods averages just under US$49 million, or 3.4 percent of GDP. Once every 100 years, on average, these costs are expected to exceed US$882 million, or more than 61 percent of GDP—i.e., even before climate change, there is a 1 percent probability in any year that a natural disaster will impose national costs of more than 61 percent of GDP (IMF 2018, page 13).*

Added to climate change related costs, Saint Lucia now faces the unprecedented economic impact of the COVID-19 pandemic. Prime Minister Allen Chastanet, in remarks, indicates that:

> *Saint Lucia was poised to record robust economic growth in the region of 3.5 percent in 2020 according to the International Monetary Fund. As a result of COVID-19, this favorable projection has been significantly reversed, with the economy estimated to contract in the range of 8 to 18 percent.*[2]

Against this background, the Prime Minister of Saint Lucia in his 2018/2019 Budget address "Building Resilience Today to Secure Our Future" listed climate change as one of six areas of focus of the government over the next four years and spoke to the importance of building resilience in the economy to recover from natural disasters and bolster the effects of climate change among other desired outcomes.[3]

### 2.1.3 HUMAN VULNERABILITIES

Physical, geographic and economic vulnerabilities create and/or worsen human vulnerabilities and increase **human insecurity** as people face a multiplicity of impacts including:

- Income insecurity/loss of income and livelihoods;
- Physical displacement due to vulnerability of settlements;
- Food, water and health insecurity and crises;
- Loss of autonomy and self-determination as dependence increases;
- Violence including gender-based violence and violence against children;
- Adverse mental health/psychological effects;
- Reduced opportunities for education and training; and

[2] St Lucia Economic Recover and Resilience Plan: Moving from Pandemic to Recovery with Collective Action; Public Sector Modernisation, Ministry of Public Service, Information and Broadcasting, July 2020; Prime Minister's Remarks, Page 6; saint-lucia-economic-recovery-and-resilience-plan.pdf (govt.lc)

[3] Hon. Allen Michael Chastanet; Budget Address for Financial Year 2018/2019; Pages 11 and 25; Web Portal of the Government of Saint Lucia (govt.lc)

- Increased poverty among households headed by women where incomes are lower and the number of dependents higher than in male headed households[4] and among males who dominate in the economic sectors hardest hit and most disrupted by climate change impacts including fisheries, agriculture and forestry.

Not everyone will be affected to the same degree or in the same ways. Human vulnerability and resilience differ based on the socio-economic status of different demographic groups – their relative access to resources, benefits and services; their participation in decision-making, the roles and responsibilities they have and how directly these are affected by climate change impacts and/or affect capacity to adapt and have resilience. In this context, gender-related realities experienced by females and males become one of the important factors in analyzing the differential impacts of climate change and in determining the responses that will be appropriate, necessary and effective.

The Saint Lucia Human Capital Resilience Project Social Assessment report (2019, page 5) citing the 2017 UNDP Human Development Report, notes that Saint Lucia had positive indicators of human development. These included average life expectancy of 75.7, with that of females being 78.4 years compared to males' 73.0 years on average. The 2019 report also indicates there was significant decline in child mortality from 17.1 deaths per 1000 live births in 1990 to 11.1 in 2017 (Page 8).

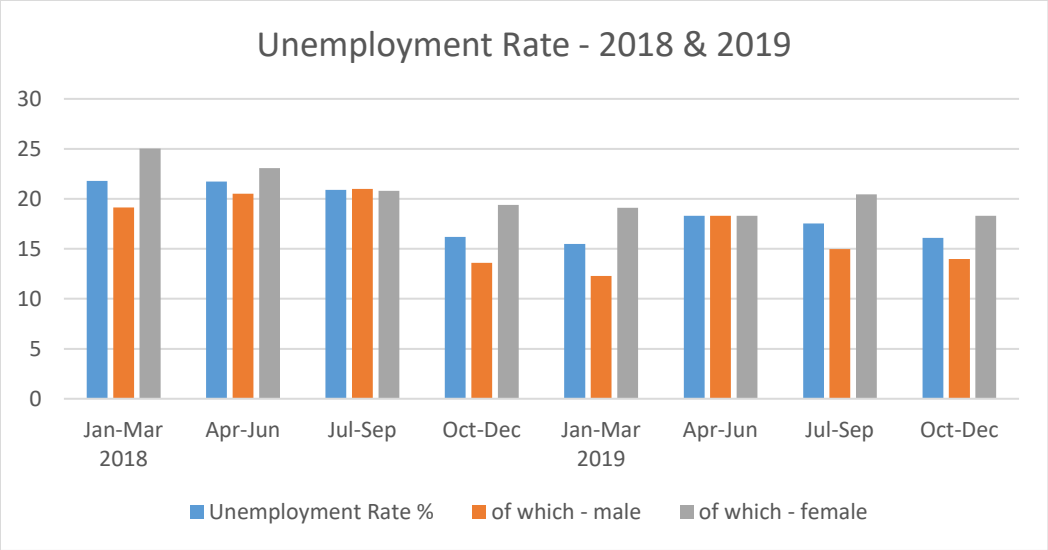
In addition to such positive indicators, however, the report (page 8) also cites St. Lucia's 2016 Survey of Living Conditions and Household Budgets which indicates that 25% of the population lived below the poverty line, child poverty stood at 34.5 percent, the poverty rate in female-headed households was 42.3 percent, and the unemployment rate was 20.2 percent with an even higher rate for youth unemployment at 36.3 percent.

While male unemployment may be more visible as males dominate the public spaces outside of the home and the incidence of anti-social behaviours, the data show that female unemployment rates are higher than male unemployment. This has implications for the over 40% of households headed by women especially as such households tend to have dependent children and, often, seniors. Gender disaggregated, quarterly data published by the Central Statistical Office of Saint Lucia for the period 2011- 2019 show consistently higher levels of unemployment among females than males but higher job seeking rates for females. Below is an extract of the unemployment data for 2018 and 2019, disaggregated by gender and based on an average population of persons 15 years and over of 170,440 in 2018 and 170,229 in 2019[5].

[4] Country Gender Assessment – St. Lucia, 2016; Caribbean Development Bank Country Gender Assessment - Saint Lucia 2016 | Caribbean Development Bank (caribank.org)

[5]Main Labour Force Indicators 2011- 2019; Labour Force - The Central Statistical Office of Saint Lucia (stats.gov.lc)

**Figure 1: Saint Lucia Unemployment Rate - 2018 & 2019**




Source: Main Labour Force Indicators 2011- 2019; Labour Force - The Central Statistical Office of Saint Lucia (stats.gov.lc)

The Human Capital Resilience Project Social Assessment report (2019, Annex 1, page 23) identifies factors impacting those who are vulnerable and in need of social protection as being, among other things:

- Limited access to resources (financial, material, educational, health, food, etc.)
- Limited access to relevant information on available/needed services.
- Existing programs which do not adequately cater to the needs of poor and vulnerable households and therefore do not adequately contribute to improving their competencies and building their capacities to reach their true potential.
- Chronic poverty and Inter-generational transmission of poverty as characteristics of the Saint Lucia poverty situation.
- High exposure to risks and vulnerable conditions/situations coupled with limited or no surplus capacity to absorb losses from the impact of hazards/shocks and to recover quickly, thus perpetuating their inability to manage their risks and enhance their resilience.

The heterogeneity of the population means that there are inequalities between and within each demographic group that impact the extent to which and the ways in which they participate in and benefit from the society's development efforts. Traditional gender socialization norms prevail in the region, defining the expected behaviors, roles and choices of girls and boys, women and men, and giving rise to several gender inequalities and differences in each group's life opportunities and experiences. These inequalities and differences in life experiences contribute to different types of vulnerabilities. These vulnerabilities may be further compounded by factors associated with age, ethnicity, disability, sexual and gender identity among others.

### 2.1.4 COVID-19 & CLIMATE CHANGE VULNERABILITIES AND IMPACTS

Saint Lucia has fared comparatively well with respect to the incidence of confirmed cases and recorded COVID-19 mortality. Nonetheless, like the rest of the world, the country is reeling from dire impacts of the SARS COVID-19 pandemic. These are stark, far-reaching impacts that have set back global gains in human development such as in health, education, inequality and poverty; have disrupted trade and severely impacted economies. These consequences will continue to reverberate for an extended time exacerbating on-going climate change and other vulnerabilities and impacts and worsening social inequalities.

COVID-19 has given global researchers a tangible, current crisis under which to understand women and girls' distinct vulnerabilities as it relates to global health crises. A recent paper by researchers from Data2X, Open Watch Data and the Centre for Global Development discusses these vulnerabilities, stating: “From the imprecise data that are available, vulnerable countries seem ill-prepared to address women’s vulnerabilities to the pandemic.” [6] An analysis of information from a UNDP-UN Women (2020) COVID-19 global response tracker raises particular concerns regarding policies that seek to increase women’s labor market participation and calls for the need to have reliable monitoring data to assess if gender-sensitive programs will benefit vulnerable women and girls in practice.

[6] Understanding Women’s and Girls’ Vulnerabilities to the COVID-19 Pandemic: A Gender Analysis and Data Dashboard of Low- and Lower-Middle Income Countries. By: Mayra Buvinic, Lorenz Noe, Eric Swanson (Page 3)

# 3.0 OVERVIEW OF GENDER AND CLIMATE CHANGE

The urgency with which countries like Saint Lucia must respond to address their capacity for adaptation and mitigation cannot be overstated. It requires a collaborative approach across Ministries, Departments and Agencies of government in partnership with civil society and the private sector. Such an approach is consistent with the emphasis of the Inter-Governmental Panel on Climate Change (IPCC). As cited in Saint Lucia's National Adaptation Plan 2018- 2023, the Fifth Assessment Report, of the Intergovernmental Panel on Climate Change emphasizes that:

> *"adaptation and mitigation can be understood as complementary components of islands' response to climate change and that adaptation generates larger benefit to small islands when delivered in conjunction with other development activities" (NAP, Page 8).*

An effective response with measurable results will need to be evidence-based to ensure plans respond to the actual situation and needs of different demographic groups and are informed by consultation with prospective beneficiaries and stakeholders, ensuring equitable representation of the voices of women, men, persons with disabilities, youth, seniors and other demographic groups.

## 3.1 MULTI-DIMENSIONAL GENDER CONSIDERATIONS IN PLANNING

The *Toolkit for a gender-responsive Process to Formulate and Implement National Adaptation Plans (NAP Global Network, 2019)* outlines that gender responsiveness in the planning process should take account of factors in three key areas.[7]

**Figure 2: Elements of a Gender-Responsive NAP Process**


[7] Toolkit for a Gender Responsive Process to Formulate and Implement National Adaptation Plans; NAP Global Network 2019; page 11- Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs) | NAP Global Network

The toolkit (pages 12-15) elaborates on key issues to consider in each of the three areas:

- **Gender and other demographic factors such as age, race, ethnicity, disability and class influence people's vulnerability to climate change** and influence people's access to resources, information, opportunities and their adaptation needs and capacities. Awareness of the differences in social roles and responsibilities of different groups, how these shape how people experience the impacts of climate change, the types of adaptation measures that are appropriate to their needs and their ability/availability to participate in adaptation measures is necessary for responsive adaptation planning and implementation.
- **Including gender focal points and external, non-government, gender actors and demographically representative community members in consultations** in the planning process demonstrates recognition of gender and other demographic differences in adaptation needs and capacities and fosters gender equitable participation in adaptation planning and decision-making processes.
- **Gender differences in income/pay, access to credit, access to and use of technology; education and training; access to information and services; occupational options, domestic roles and responsibilities etc.** can impact the extent to which males and females are positioned to benefit equitably from financial resources and other benefits resulting from adaptation measures. Adequate data on such differences and ensuring strategies to foster equitable access are a key element of gender-responsive adaptation planning.

Robust planning and policy development processes take account of issues of differences in:

- Degrees of access and participation;
- Levels of inclusion or exclusion of different demographic groups;
- The vulnerabilities and risks experienced by demographic groups in society; and
- The potential for differences in the type, nature and degree of impact of the plan or policy on the different groups.

Good practice ensures equitable representation and participation of different demographic groups, in particular the most vulnerable, in the processes of analysis and decision-making, and ensures that plans and policies respond to and mitigate inequalities, exclusion and/or harm.

In addressing the cross-cutting nature of gender in planning, Saint Lucia's NAP cites examples of women's progress in politics and the civil service, for example their leadership of four of ten Ministries, positions as Permanent Secretaries and leadership of the key Ministries and agencies tasked with leading climate change related policy. It cites ways in which females have advanced relative to males such as in rates of gain and decline in employment and concludes that:

> *In this context, and to foster equality in adaptation benefits, Saint Lucia's NAP and associated SASAPs focus their attention on vulnerable groups, and although gender-disaggregated information will be collected and assessed, the NAP and SASAPs include activities focusing on women and men based on other vulnerabilities (NAP, Page 47).*

### 3.1.1 APPROACH TO GENDER ANALYSIS

Gender analysis involves a **multidimensional approach** to take account of how gender norms, roles and responsibilities intersect with other identity factors such as age, ability/disability; race/ethnicity etc. and socio-economic factors such as poverty, to impact lives, impact the relative status of different groups and their needs and capacities for participation and benefit from adaptation measures.

In its publication, *Mainstreaming Gender in Health Adaptation to Climate Change Programmes*, the World Health Organisation 2012[8] provides guidance that "outcomes often vary greatly for different groups of women and men as in addition to gender, mediating factors include issues related to age, class and other differences".

The publication sets out that in treating with gender issues in the development of policies and plans it is important to take account of gender considerations in **five dimensions** which relate to males' and females' access to and control over household and societal resources, namely:

- **Economic resources**, both formal and informal, such as credit, money, microcredit, land, health insurance and housing;
- **Political resources**, such as positions of leaderships and opportunities for communication and negotiations, as well as civil, economic, social, political and cultural rights;
- **Social resources**, including community resources, social support networks, transport systems and other social services. It also includes information, education and skills resources in the form of both formal and informal education, availability of information to be able to make decisions, and opportunities to exchange information and opinions;
- **Time resources**, the amount of flexible work hours, and the amount of hours in a day that a person can use as wanted; and
- **Internal resources**, which include the ability to express one's own interests, as well as self-esteem and self-confidence.

Factoring gender needs and the implications of policy and plans across these dimensions also requires awareness that gender is an important, but not singular factor that impacts people's life chances and outcomes.

[8] Mainstreaming Gender in Health Adaptation to Climate Change Programmes; WHO 2012; Page 8
https://www.who.int/globalchange/publications/Mainstreaming_Gender_Climate.pdf

### 3.1.2 INTERSECTIONALITY OF GENDER CONSIDERATIONS

The concept of **intersectionality** recognizes that gender overlaps with other socio-cultural characteristics such as race, ethnicity, disability, sexual orientation, age, geographic location (urban, rural) and socio-economic status. It takes into account societal norms and values related to these identity factors, and the consequent, cumulative effects and multiple forms of social barriers or privileges that groups of persons can experience based on these different identities.

### 3.1.3 GENDER MAINSTREAMING

The goal of gender mainstreaming in policy and program planning and implementation means taking account of the concerns, experiences and needs of men and women as an integral dimension of all phases of program and policy development. It requires assessment of the implications of any planned policy and action for males and females. The end purpose for gender mainstreaming is that both men and women benefit equitably, and that programs and policies do not result in or perpetuate existing inequalities.[9]

## 3.2 GENDER AND CLIMATE CHANGE APPLICATIONS

The UNDP *Gender, Climate Change and Community Based Adaptation Guidebook* 2010[10] outlines gender differences that are relevant to understanding the vulnerabilities to climate change impacts and the extent to which different groups of males and females (depending not only on gender factors but also age, socio-economic status, etc.) have the capacity to bounce back from climate change impacts. These include differences in:

- **Access to resources.** Including land, security of tenure, livestock, tools, and credit.
- **Dependence on natural resources.** Women and men have different types of use/dependence on natural resources with women typically being more primary users for example of water and wood for a range of household purposes (consistent with their expected roles and responsibilities as care-givers) and males more likely to relate to and rely on natural resources (marine /water resources, forests, fisheries, etc. for income and value added purposes.
- **Sexual division of labor.** Males and females have variable and gendered occupational choices and opportunities. This impacts their time, income, burden of unpaid work (both in households and communities); their mobility and availability to access employment, the types of employment which are made available to them and their exposure to situations of exploitation, harassment and violence in the occupational setting. These and other

[9] WHO, 2012, page 11

[10] Gender, Climate Change and Community Based Adaptation Guidebook; UNDP, New York; 2010; Gender, Climate Change and Community Based Adaptation Guidebook | UNDP

gendered, labour related issues contribute to greater or lesser levels of vulnerability, adaptability and resilience to adverse climate change impacts.

- **Education and access to information.** Education increases resilience through higher employability and labour value, increased mobility (social and geographic) and access to information. While in the Caribbean there is equality in primary and secondary enrollment and amongst those with favourable achievement, females tend to outperform males in literacy, numeracy, various secondary subjects and in tertiary enrollment, the overall situation is one of under achievement with reports[11] indicating that about 30 percent of the eligible age cohort sits the Caribbean Secondary Examination Certificate (CSEC) annually, about 25 percent achieve five passes or more, less than 50% of the those aged 25 years or older have secondary education certification and less than 15% of the population have tertiary education. The situation of underachievement becomes even more pronounced for persons with disabilities and students attending schools in less affluent communities. The reports indicate fewer gender disparities in achievement at higher socio-economic levels.
- **Mobility.** Women are often more restricted in their movement/mobility, whereas movement/migration is often a coping mechanism more easily available to males. This is due to the fact that traditional gender roles result in women having major responsibility for care-giving of children, elderly relatives and others. With less freedom of movement and fewer options for employment/income earning women must often remain where climate change impacts have hit hard. This increases the relative vulnerability of women and their dependents.
- **Participation in Decision-Making.** Women and men have different levels of power, participation and representation in decision-making at the household, community and national levels. Each demographic group has important perspectives to bring to decision-making processes. A participatory process that involves different groups, women, men and others in equitable, representative numbers is likely to yield more relevant and responsive decisions.

[11] Reports that were reviewed include:

Implementation of the Montevideo Consensus on Population and Development in the Caribbean: A review of the period 2013–2018; Francis Jones et al; ECLAC 2019, Page 20
https://repositorio.cepal.org/bitstream/handle/11362/44473/S1801148_en.pdf?sequence=1&isAllowed=y

*Status of Women and Men Report: Productive Employment and Decent Work for All, Alecia Mondesire, UN Women, 2019; Page 2 ; https://www2.unwomen.org/-/media/field%20office%20caribbean/attachments/publications/2019/status%20of%20women%20and%20men-web.pdf?la=en&vs=5426*

*Caribbean Synthesis Review and Appraisal Report on the Implementation of the Beijing Declaration and Platform for Action*; Alicia Mondesire, UN ECLAC 2015; Page 17; https://repositorio.cepal.org/bitstream/handle/11362/39054/S1500700_en.pdf?sequence=1&isAllowed=y

Caribbean Human Development Report 2016; Multidimensional Progress: Human Resilience Beyond Income; UNDP, New York, 2016; Page 82
file:///C:/Users/jethro/Documents/2019/SAGE/Resource%20documents/undp_Caribbean%20HDR_2016.pdf

**Table 2: The UNDP 2010 Guidebook summary of vulnerabilities in relation to gender:**

| WOMEN | MEN |
|---|---|
| **Gender disparities that increase risks in disasters:** | |
| • Higher levels of poverty;<br>• Extensive responsibilities of caring for others;<br>• Domestic violence;<br>• Traditional women's occupations. | • Occupational segregation;<br>• Internalized norms of masculinity;<br>• Roles in the family and in the home. |
| **Gender experiences that can increase capacities for managing disaster situations:** | |
| • Social networking;<br>• Caring abilities;<br>• Extensive knowledge of communities;<br>• Management of natural and environmental resources;<br>• High levels of risk awareness. | • Professional and work contacts;<br>• Technical abilities;<br>• Limited childcare responsibilities. |

# 4.0 REVIEW OF SAINT LUCIA'S SECTOR PLANNING PROCESS

Prior to sector specific assessment and analysis, a comprehensive review of the key stakeholders and planning entry points for the development of Saint Lucia's SASAPs was undertaken. A summary of the key stakeholders and the defined entry points that are relevant to this work is outlined in the following.

## 4.1 KEY STAKEHOLDERS OF THE SASAP PROCESS AND OTHER GENDER AND VULNERABILITY RESPONSIVE PLANNING

Stakeholder involvement is an essential element of the planning process for the development of a SASAP. Stakeholders' knowledge, expertise and lived experience assist in deepening understanding of the issues to be addressed, priorities to be set and the strategies and actions that might be most effective in achieving desired outcomes.

Equitable representation of demographic groups that are most vulnerable (based on gender, age, disability, socio-economic status, community vulnerability or other factors) to climate change risks and to adverse health consequences is important. Women have specific vulnerabilities associated with their roles and responsibilities, their higher level of unemployment, comparatively lower levels of income, under-representation in decision-making at national and community levels, their increased vulnerability to violence during times of disaster and their greater dependence on health services for themselves and dependents.

As put by the Green Climate Fund's Gender Policy:

> *"The impacts of climate change can exacerbate existing gender inequalities…climate change initiatives are more sustainable, equitable and more likely to achieve their objectives when gender equality and women's empowerment considerations are integrated into the design and implementation…. Further, women and vulnerable communities are also part of the solution to climate change and should, therefore, be effectively engaged in discussions and decisions that affect them."*[12]

See the NAP Global Network Framework for Gender-Responsive National Adaptation Plan Processes, Table 1 – Key Issues for NAP Teams to Consider, for a comprehensive outline of steps for gender mainstreaming in the planning process for NAPs/SASAPs. Involving stakeholders may be achieved through, among other means:

- Membership on SASAP committees/sub-committees/working groups
- Consultative meetings/events/forums/focus groups
- Rapid assessments, surveys and other research methods

[12] Green Climate Fund, Gender Policy; Updated Gender Policy and Action Plan 2020-2023; "Rationale" Page 1; Gender policy | Green Climate Fund

The SLU NAP Stocktaking, Climate Risk and Vulnerability Assessment Report (2018) identifies key stakeholder, State and private sector agencies as follows:

- Ministry of Tourism, Information and Broadcasting
- Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives:
  - Agricultural Division
  - Fisheries Department
  - Forestry Department
- Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation
  - Physical Planning Section
- Ministry of Finance, Economic Growth, Job Creation, External Affairs and Public Service
- Ministry of Health and Wellness
- Ministry of Commerce, Industry, Enterprise Development and Consumer Affairs
- Water Resources Management Agency
- Ministry of Education, Innovation, Gender Relations and Sustainable Development
- Ministry of Equity, Social Justice, Empowerment, Youth Development, Sports and Local Government
- National Conservation Authority
- Ministry of Home Affairs, Justice and National Security
- Ministry of Infrastructure, Ports, Energy and Labour
- Saint Lucia Hotel and Tourism Association
- Saint Lucia National Trust
- National Emergency Management Organisation (NEMO)
- Saint Lucia Solid Waste Management Authority
- Water Sewage Company
- Land Conservation Boar

The gender bureau/unit and focal points of the Ministry of Health and Wellness as well as other relevant Ministries where they exist are important actors to be included. Non-Governmental Organizations (NGOs) and community-based organizations as well include:

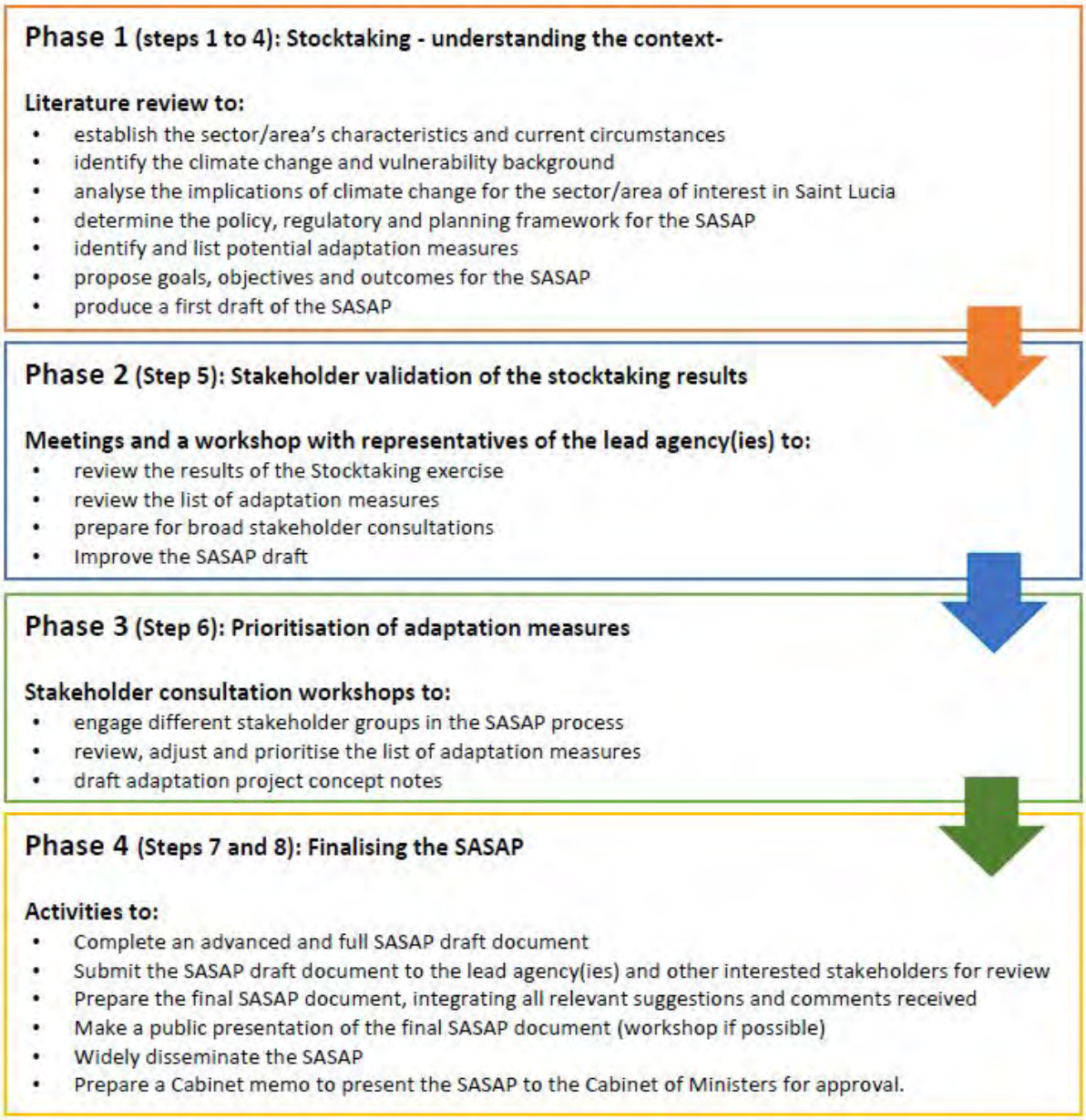
- Women's organizations
- Organizations of youth
- Organizations of persons with disabilities
- Environment and sustainable development actors
- Community-based disaster committees
- Organizations of health professionals

## 4.2 ENTRY POINTS FOR GENDER MAINSTREAMING IN THE SASAP PLANNING PROCESS

The Guideline for the Development of Sectoral Adaptation Strategies and Action Plans: Saint Lucia's Experience under The National Adaptation Planning Process is an important resource. It sets out in detail the steps to be followed in the planning process for SASAPs, both in diagram and in a narrative which includes information on entry points for including gender considerations.

Gender analysis (relevant literature, disaggregated data, impact analyses, stakeholder consultation, etc.) should be an integral part of each of the steps described in the table below (Guideline, page 9).

**Figure 3: SASAP Phases**




A preliminary analysis of ENTRY POINTS has identified possible synergies for consideration:

- Coordinating Mechanisms
- Policy/Legislation
- Institutional Approach
- Project Identification, Design and Implementation
- Capacity Development Initiatives
- Gender Budgeting and Financing
- Disaggregated Data

- Planning and Indicator Development
- Implementation
- Monitoring and Evaluation
- Link to criteria for successful Climate Financing

## 4.3 THE NAP COORDINATING MECHANISM

Saint Lucia has a national inter-agency coordinating mechanism for national and regional climate change activities, which is a key foundation for the NAP process. This mechanism is the National Climate Change Committee (NCCC), which is recognized under the Climate Change Adaptation Policy (CCAP) as the body in charge of coordinating and facilitating the implementation of climate change adaptation measures across sectors and agencies and at all levels of society. The NCCC sits at the Ministry of Education, Innovation, Gender Relations and Sustainable Development, and comprises representatives of public, statutory, academic and private sector bodies. In addition, the NCCC may appoint other members on an ad hoc basis.

## 4.4 MOVING FORWARD/RELEVANCE TO SECTOR ASSESSMENT

It is important to note that although comprehensive and sequential, the SASAP Development guidelines lack specificity for both a strategic gender responsive approach and practical methodologies for planners to meaningfully implement gender mainstreaming strategies into sector plans. For example, within the SASAP Guidelines (Annex 7, page 32); “Criteria for the prioritization of adaptation measures”, social and gender barriers are mentioned in the description aligned with criteria 5.0 - “Ease of implementation/feasibility” but it is still unclear to the document user what this criteria means or includes in order to plan for gender barriers in a meaningful and actionable way. To enhance the gender responsiveness of the SASAP development guidelines, the assessments undertaken will generate specific gender mainstreaming guidelines that will highlight specific entry points for the GoSL to ensure gender and climate change considerations in all stages of the SASAP inclusive of planning, implementation and monitoring, and evaluation.

# ECOSYSTEMS SECTOR ANALYSIS: GENDER AND CLIMATE CHANGE DIMENSIONS IN EXISTING NATIONAL CLIMATE CHANGE ADAPTATION & ECOSYSTEM SECTOR POLICIES AND PLANS


## SUMMARY

The following section includes a review of policy documents relevant to relevant sectors within the ecosystems thematic area in Saint Lucia. An initial assessment of the extent of the inclusion of gender dimension of climate change and adaptation is included.

A review of existing national climate change adaptation and sector-specific policies and plans indicates that the impacts of climate change on ecosystems and the importance of supporting resilient ecosystems for livelihoods is not lost on the planning entities in Saint Lucia. Reports and policies relevant to sectors that directly relate to ecosystems can be considered climate-responsive; however, these same policies and reports lack specific language surrounding action towards gender-responsive climate adaptation planning. Although there appears to be some understanding of gender inequalities within ecosystems, there does lack clear tangible action items for future planning within this area.

The literature reviewed for this report indicates that there are themes within the ecosystems thematic area that emerge in relation to gender responsiveness and climate change adaptation. These themes are suggested entry points for future Sector Adaption Strategy and Action Plan (SASAP) planning activities within the sector.

1. Sector Participation/Employment
2. Business and Ownership
3. The Gendered Nature of Political Participation

This supports planning that: 1) Recognizes gender differences in adaptation needs and capacities; 2) Ensures gender-equitable participation and influence in adaptation decision-making processes, and; 3) Ensures gender-equitable access to financial resources and other benefits resulting from investments in adaptation. Further analysis for gender responsiveness within the sector is to be undertaken in subsequent project deliverables.

## ECOSYSTEMS SECTOR ASSESSMENT PROCESS

To support the initial assessment of Saint Lucia's gender and climate responsiveness within published policy and planning documents, a multi-level approach to reviewing the available resilient ecosystem plans and policies was employed.

### STEP 1: CLIMATE CHANGE & ADAPTATION POLICY & PLAN REVIEW

An initial review of Saint Lucia's climate change and adaptation policies and plans was undertaken in order to assess the inclusion of ecosystem-related themes. Additional considerations were made for the extent to which gender dimensions of climate change and adaptation are addressed in relation to ecosystems as a theme. The initial assessment of the inclusion of gender dimensions in these documents is anecdotal, and additional analysis is required in subsequent project deliverables.

The policy and plan document assessment team applied a simple keyword search approach in order to determine to what extent Saint Lucia's adaptation policies and planning documents included ecosystems and gender considerations. It should be noted that the keyword "Climate Change" was not utilized in this search due to the often synonymous nature of ecosystems and climate change impacts. The keywords searched within the documents were as follows:

- Ecosystems – as it relates to water, agriculture, fisheries, and natural resources;
- Biodiversity – as it relates to ecosystems;
- Gender – excluding names of departments, positions, and publications; and
- Vulnerable – as it relates to humans / populations / groups.

Refer to Appendix 1 for a detailed overview of this initial assessment.

### STEP 2: ECOSYSTEMS SECTOR POLICY & PLAN REVIEW

An additional policy and plan assessment was undertaken in order to gain a better understanding of the status of ecosystem specific documents. This document review focused on current policy and planning documents and did not assess bodies of legislation in detail. Strengths and weaknesses within these policies have been identified as it relates to the ability for the work to address the gender dimensions of climate change adaptation.

There are currently four SASAPs that have been published under the NAP process that directly relate to the theme *Resilient Ecosystems*

- Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Water Sector (Water SASAP) 2018-2028
- Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (Fisheries SASAP) 2018-2028
- Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

- Saint Lucia Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020-2028

Other policies reviewed include:

- Saint Lucia Forests and Lands Resources Department Strategy 2015-2025
- GEO Saint Lucia: State of the Environment Report

Refer to Appendix 2 for a more detailed review of each document.

Table 2 in the REASAP describes a multitude of relevant policies and planning documents that can be considered within the ecosystems thematic area. The assessment team will seek additional insight from the relevant Saint Lucia focal points as to whether any additional document review is required.

### STEP 3: ECOSYSTEMS SECTOR STAKEHOLDER ENGAGEMENT

The intended stakeholder engagement meeting was unable to be scheduled. In lieu of a formal stakeholder engagement event, a representative for the Ecosystems Sector reviewed a draft of this document and provided relevant feedback.

## INTRODUCTION TO GENDER, CLIMATE CHANGE AND ECOSYSTEMS

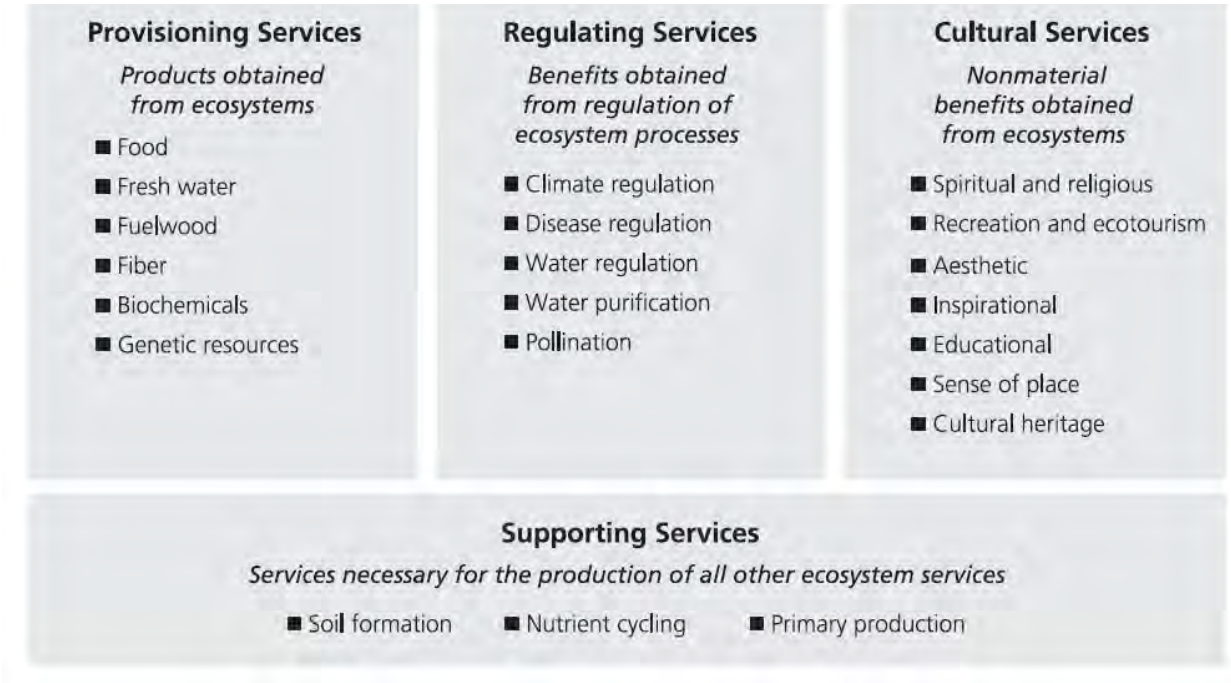
Ecosystems are complex systems that are closely tied to the impacts of climate change. The United Nations defines ecosystems as: "all living things (plants, animals, and organisms) in a given area, as well as their interactions with each other, and with their non-living environments (weather, earth, sun, soil, climate, atmosphere)"[13].

It is widely accepted that the ecosystems support life on Earth, and the health of an ecosystem is directly correlated to the health of the people within the system. People generally rely on ecosystems to survive through the services they provide, commonly referred to as ecosystem services. Ecosystem services is defined by the Millennium Ecosystem Assessment as "the benefits people obtain from ecosystems"[14]. The figure below outlines ecosystems services in detail and categorizes the services into Provisioning Services, Regulating Services, Cultural Services, and Supporting Services (see Figure 4 below).

[13] United Nations. (n.d.). *Water and ecosystems.* UN Water. Retrieved from: https://www.unwater.org/water-facts/ecosystems/.

[14] World Resources Institute. (2003). *Ecosystems and human well-being: A framework for assessment. Chapter 2 Ecosystems and their services.* Authors, Alcamo, J. et al.; Contributing authors, Bennett, E.M., et al.. 49. Retrieved from: https://www.millenniumassessment.org/documents/document.300.aspx.pdf

**Figure 4: Ecosystem provision, regulating, cultural, and supporting services.**




Saint Lucia is known to be a biologically diverse country, with the economy heavily based on ecosystem services. Saint Lucia's NAP 2018 states the following in relation to the country's reliance on these services.

"Saint Lucia possesses an impressive diversity of terrestrial and aquatic biological species and an equally remarkable diversity of ecosystems. The island's two key economic sectors, tourism and agriculture heavily rely on natural ecosystems and the services they provide. Terrestrial and freshwater ecosystems are vital for filtering pollutants and sediment, especially to the agricultural sector, which relies primarily on rain-fed rivers and healthy watersheds. Soil retention and the provision of clean water are critical services provided by forest ecosystems. Saint Lucia's coral reefs, mangroves, and seagrass meadows along the coastline, form a highly interdependent and valuable coastal and marine ecosystem network that protect the shores, while providing marine life habitat and tourism attractions."[15]

An element of ecosystems and ecosystem services that is often overlooked is the gendered nature of the management and use of these systems. The International Union for Conservation of Nature (IUCN) states that "Ecosystems are highly gendered – women and men derive different values and benefits from ecosystem services and resources, and they hold different roles in accessing, using

[15] Government of Saint Lucia. (2018). *Saint Lucia's National Adaptation Plan (NAP): 2018–2028*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 105.

and managing these resources"[16]. The IUCN suggests the following areas within ecosystem services where gender differences might exist:

- Aspects of livelihoods;
- Gender differentiated knowledge and experiences;
- Innovation opportunities; and
- Planning.

Saint Lucia has recognized some of the gendered aspects of ecosystems services within their Resilient Ecosystems Adaptation Strategy and Action Plan 2018-2028 document. The specific examples are in line with the potential gender differences proposed by the IUCN.

**Example 1**

"Many livelihood activities in the agriculture and fishing industries, such as fishing in the open sea, are dominated by men; however, it is well noted that there are critical roles played by women in the fisheries sector that do not receive due recognition."[17]

**Example 2**

"Women actively participate in decision making in policies pertaining to biodiversity and ecosystem services and they share access to and benefit from biodiversity. There is an increase in women's enterprises in biodiversity goods, such as sea moss cultivation and production and broom-making."[18]

The gender differences in these examples are directly in line with what the IUCN states are potential gender differences within ecosystem services. In Saint Lucia's case, ecosystem services are closely tied to many sectors and thematic areas, therefore these areas of gender difference are broadly applicable within the ecosystems thematic area and provide a basis for continued analysis of gender-responsive climate change planning.

[16] IUCN. (2019, December 17). *Benefits of gender equality in sustainable ecosystem management.* IUCN. Retrieved from: https://www.iucn.org/news/gender/201912/benefits-gender-equality-sustainable-ecosystem-management.

[17] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 18-19

[18] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 18-19

## CLIMATE CHANGE IMPACTS: SAINT LUCIA'S ECOSYSTEMS SECTOR

Saint Lucia's REASAP 2020–2028 indicates the following climate change impacts on the country's ecosystems and ecosystem services.

### Table 3: Climate Change Impacts on Ecosystems

| Impacts | Repercussions |
|---|---|
| **Impacts of more frequent extreme weather events (intense rainfall events, hurricanes, high winds, storm surges)** | • The resilience of Saint Lucia's natural ecosystems could be compromised with the direct and indirect impacts of climate change. Any decline in the health of the island's ecosystems will affect the goods and services that they offer, and have a profound effect on the well-being, livelihoods and economy of Saint Lucians. Fresh water, clean air, fertile and stable soils, healthy fisheries, native forest foods, medicines, fibres and wildlife, all depend on healthy ecosystems. Changes in these services could lead to:<br><br>• Increased health care costs.<br><br>• Increased exposure to hydrometeorological hazards and risk of disasters.<br><br>• Loss of land productivity and nutrient cycling (and agricultural yields/food security).<br><br>• Reduced climate change adaptation |
| • Destruction and damage of unique terrestrial animal and plant habitats due to the direct impacts of extreme weather.<br>• Increased susceptibility of forest trees to breakage.<br>• Damaged and destroyed coral reefs and mangroves due to:<br>  • The impact of high wind speeds and large waves during tropical storms/hurricanes<br>  • Increased sedimentation/siltation resulting from heavy rainfall (exacerbating soil erosion) inland<br>  • Contamination from industrial, domestic and farming activities reaching the sea (particularly during flooding and heavy rain events).<br>• Declining integrity and health of coral reefs and mangroves will also lead to:<br>  • Loss of fish nurseries and breeding grounds.<br>  • Reduced protection against extreme winds and storm surges as these ecosystems act as coastal defences for the protection of land-based resources, communities and infrastructure.<br>• Exacerbated soil erosion resulting in increased sediment loads reaching watercourses and the sea, carrying agrochemical residues and other pollutants.<br>• Higher risk of algal blooms with increasing amounts of nutrients reaching the sea due to both agrochemical residues leaching during intense rains and to the overflow of sewage and greywater during flood events-.<br>• Increased risk of land slippage, particularly in areas with highly altered ecosystem structure, including those denuded of vegetation. | |
| **Impacts of higher temperatures, prolonged and intense dry episodes and drought** | |
| • Changes in ecosystem composition and structure take place as temperatures rise and species migrate in search of the climate conditions to which they are adapted.<br>• Species distributions change, and some species will be lost.<br>• Increased risk of forest fires, damaging ecosystems during long dry periods and further weakening their ability to recover.<br>• Wetlands, watersheds, riparian and freshwater ecosystems and species will be affected by warmer temperatures and reduced stream flows. Increased abstraction of river waters to cover growing freshwater demands could exacerbate the negative effects, which include among others:<br>  • Reduced forest productivity and phenological changes (i.e. flowering, fruiting) are to be expected with water stress and higher temperatures.<br>  • Loss of habitat, foraging substrates, nesting and roosting sites for wildlife, increasing their vulnerability to predation.<br>  • Reduced water and food availability for wildlife.<br>  • Alteration in species breeding periods.<br>  • Increase in forest pest and disease outbreaks. | |

| Impacts | Repercussions |
|---|---|
| • Reduced vegetation cover will exacerbate soil erosion.<br>• Reduced stream flows will also facilitate the extension of saltwater intrusion (due to SLR) in low-lying watercourses, with salinity further affecting riparian ecosystems in these areas.<br>• Forest reserves may face increasing land-use conflicts as coastal populations and activities relocate.<br>• Reduced reproductive frequency of endangered turtles. Higher beach temperatures may also alter sex ratios in the developing eggs of these species. | and mitigation options (e.g. planting corals to establish protective reefs for coastlines may not be feasible under high ocean acidification and temperature levels). |
| Higher sea temperature impacts | |
| • Coral bleaching will be the most evident impact of increased sea temperature; with bleaching events occurring annually or bi-annually within the next 30 to 50 years, expected to become the key driver of reef decline.[26]<br>• Fish reproduction may be altered by:<br>  • Changes in breeding patterns<br>  • Skewed sex ratios, affecting the ability of fish species to sustain a balanced population<br>• Migration patterns could change<br>• Pelagic species may abandon the tropics in search of cooler temperatures.<br>• Disease transmission could increase with the proliferation of marine pathogens, endangering both sea life and human consumers<br>• Recent inundations of SaintLucia's east coast with unprecedented amounts of pelagic Sargassum *(Sargassum natans* and *Sargassum fluitans)* | • Loss of biodiversity and biodiversity-dependent activities (e.g. fishing, honey production, ecotourism).<br>• Increased opportunities/ conditions for invasive alien species to spread.<br>• Lower incomes. |
| Impacts of increased atmospheric carbon dioxide absorption by the ocean (ocean acidification) | |
| With ocean acidification:<br>• Sea carbonate levels drop, reducing the ability of organisms to form shells and skeletons and triggering other physiological alterations.<br>• Coral abundance may decrease<br>• Coral reefs may become too physically weak to sustain the impacts of more intense hurricanes<br>• The protective function that coral reefs offer to coastlines may be compromised, with serious implications for coastal infrastructure and tourism.<br>• Survival rates of clams, conch, squid, octopuses and other molluscs may decrease<br>• Growth rates of echinoderms (sea urchins, sea cucumbers and starfish) may decrease<br>• Crustaceans (e.g. lobster) may be affected<br>• The abundance of calcifying algae may be significantly reduced while that of fleshy algae may increase<br>• Food chains may be affected with the loss of plankton and other species. | |
| Sea level rise impacts | |
| • Inundation and resulting degradation of wetlands and other ecosystems in low-lying areas (e.g. low-lying dry forests). | |
| • Increasing seawater intrusion into coastal waterways will affect the composition of freshwater and riparian ecosystems. | |
| • Beach erosion and the reduction of habitats for animal species, including the loss of turtle nesting sites (a 1 to 2 m increase in sea level could damage 6-10% of the nesting sites).<br>• Migration or loss of wildlife species from altered habitats.<br>• Corals that are not able to adapt to deeper depths will be lost.<br>• Loss of coastal fish breeding and nursery habitats if mangroves are lost due to sea level rise | |

## CLIMATE CHANGE ADAPTATION PRIORITIES IN SAINT LUCIA'S ECOSYSTEMS SECTOR[19]

Saint Lucia's climate change adaptation priorities within the ecosystems thematic area have been outlined in detail in the REASAP 2018-2028 document. The following was taken directly from the REASAP.

**Outcome 1. Enhanced enabling environment for ecosystem-based adaptation and sustainable natural resource management under a changing climate**

Strategic objectives:

1. Strengthen the national policy, institutional, and legislative framework (including incentives) to improve natural resource management for securing ecological resilience and ecosystem-based adaptation to climate change.
2. Strengthen environmental research, information generation, knowledge management, and monitoring systems for adaptation to climate change.
3. Enhance public awareness and influence behavioural change on the importance of maintaining healthy ecosystems, their biodiversity, and services for climate change adaptation and mitigation while building capacity.

**Outcome 2. Enhanced ecosystem integrity for the sustainable supply of essential ecosystem goods and services to society under a changing climate**

Strategic objectives:

1. Enhance the sustainable management (including the conservation, sustainable use, and equitable sharing of benefits arising from the use of resources) of critical ecosystems for building resilience to climate change.
2. Address the known drivers of ecosystem degradation.

**Outcome 3: Strengthened Ecosystem-based Adaptation and Disaster Risk Reduction**

Strategic objective:

1. Accelerate the use of ecosystem-based solutions for climate change related hazards.

[19] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 35-36.

## HIGHLIGHTS OF EXISTING INITIATIVES RELATED TO ADAPTATION OR MITIGATION WITHIN THE ECOSYSTEMS SECTOR

The REASAP provides a list of initiatives related to adaptation and mitigation within the Ecosystems thematic area. Box 2 in the REASAP lists these eleven initiatives that were intended to be undertaken within the ecosystem thematic area between 2012 and 2020:

- Development of climate change legislation;
- Development of sectoral policies, strategies, and plans to help build climate resilience;
- Budget reform to better integrate climate considerations;
- Adoption of modern technologies;
- Availability of financing schemes and insurance to increase resilience;
- Provision of incentives that seek to modify behaviour;
- Improved research, data collection, and management;
- Development of tools for improved decision making;
- Capacity building in public agencies and specific target groups;
- Institutional strengthening and improved collaboration between agencies; and
- Increased public education and outreach.

A status update on these initiatives is requested in order to assess the inclusion of gender within the planning of these initiatives, as they can be considered direct action taken place as a result of the REASAP planning process.

## ASSESSMENT OF THE INSTITUTIONAL MECHANISM FOR THE ECOSYSTEMS SECTOR SASAP

Ecosystems as a "sector" or thematic area is unique due to its cross-sectoral impact. Resilient ecosystems both have the ability to positively and negatively impact livelihoods and actions throughout arguably all sectors. Saint Lucia's REASAP was developed under the NAP process and is valid until 2028. This action plan was developed under the guidance of the Department of Sustainable Development, which is responsible for climate change and climate adaptation activities. The REASAP is rooted in climate-responsive planning as it relates specifically to resilient ecosystems, but also suggests cross-sectoral actions; however, gender considerations are not currently evident as a priority within this thematic area.

Desk research indicates that in addition to the Department of Sustainable Development, the NCCC also serves as a coordinating mechanism for national climate change actions and can be considered a relevant stakeholder and important coordinating agency when undertaking working within a thematic area such as ecosystems.

## SUMMARY OF FINDINGS AND NEXT STEPS

The secondary document review highlighted the gender inequities that have been identified within the ecosystems thematic area. Clear themes emerged in relation to gender responsiveness within the Resilient Ecosystems thematic area; these themes are described below.

**Theme 1 – Sector Participation/Employment:** There exists both a lack and niche of employment for women within the ecosystems thematic area. When examining specific sectors like the agriculture and fishing industries, the jobs within these areas are occupied primarily by men. However, it is observed that throughout these sectors, and others based within the realm of ecosystem-based services, women are seen to still participate in the job market, but do not receive the same level of recognition.

"Many livelihood activities in the agriculture and fishing industries, such as fishing in the open sea, are dominated by men; however, it is well noted that there are critical roles played by women in the fisheries sector that do not receive due recognition. The development of a gender policy in the fisheries sector is ongoing and should increase women's participation and recognition in that sector. There is an increase in the presence and organisation of women in the agriculture sector, specifically in small-scale farming and agro-processing."[20]

**Theme 2 – Business and Ownership:** It should be noted that because women are impacted by biodiversity loss when it comes to business success, an assumption can be made that women are disproportionately impacted by climate change challenges, like biodiversity loss. Women, in this case, exist within two spaces, both having an impact on ecosystems through business ownership, but also being impacted by changes in the ecosystem due to climate change.

"There is an increase in women's enterprises in biodiversity goods, such as sea moss cultivation and production and broom-making. Notwithstanding this trend, land ownership continues to be passed on to men as opposed to women in families and when a couple owns land, it is more frequently in the name of the man as opposed to the woman. This challenges the growth potential of women-owned businesses in agriculture and biodiversity."[21]

**Theme 3 – The Gendered Nature of Political Participation:** The document review suggests that within the biodiversity thematic area, women disproportionately have the burden of care and stake in addressing climate change issues, but they are not employed in directly relevant positions or have land claims in order to make progress. However, it is seen that women occupy roles within

[20] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 18.
[21] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 18.

government for decision making, but often within sectors (often service focus) that further exacerbate the burden of care back onto women both at work and home.

"Gender-differentiation of responsibilities in combating biodiversity loss is not very stark in Saint Lucia. Women actively participate in decision making in policies pertaining to biodiversity and ecosystem services and they share access to and benefit from biodiversity."[22]

"There are 13 female Permanent Secretaries and eight males and seven Deputy Permanent Secretaries. It is important to note that among the Ministries headed by women Ministers, most are in service-related fields, in keeping with the burden of care following women from the home into the workplace."[23]

In addition to the gender gaps that have already been identified in the ecosystems thematic area, there are additional weak points that emerged during the document review:

- Data availability;
- The need for sector-specific gender policies is identified - there is no current evidence to support the development of these policies;
- Missing extended integration of gender considerations within priority measures and outcomes, and
- Some plans and policies lack the integration of gender considerations.

It is suggested that these weak points within the ecosystems thematic area act as the entry points for the future gender mainstreaming analysis, and the development of gender- and climate-responsive planning guidelines.

[22] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 18.

[23] Government of Saint Lucia. (2020). *Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028, under the National Adaptation Planning Process.* Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 19.

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Caribbean Synthesis Review and Appraisal Report on the Implementation of the Beijing Declaration and Platform for Action; Alicia Mondesire, UN ECLAC 2015; Page 17; https://repositorio.cepal.org/bitstream/handle/11362/39054/S1500700_en.pdf?sequence=1&isAllowed=y

Country Gender Assessment – St. Lucia, 2016; Caribbean Development Bank Country Gender Assessment - Saint Lucia 2016 | Caribbean Development Bank (caribank.org)

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## APPENDIX 1 – INITIAL ASSESSMENT OF THE GOSL CLIMATE CHANGE ADAPTATION POLICIES AND PLANS

The following table was utilized as a mechanism for initial assessment for the inclusion of the gender dimensions of climate change in Saint Lucia's available policy and planning documents.

Keyword search: 1. Ecosystem, Biodiversity, Ecology, Biosphere; 2. Gender, Men, Women, Man, Woman

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's National Adaptation Plan (NAP) 2018 -2028 | ✓ | Section 4.9, page 47; in addressing gender the NAP cites other factors in Saint Lucia - poverty, age, and level of education achieved as possibly being greater drivers of vulnerability. It cites the leadership of women in Ministries, as Permanent Secretaries etc. to support the conclusion.<br><br>The NAP concludes that to foster equality in adaptation benefits, Saint Lucia's NAP and associated SASAPs focus their attention on vulnerable groups, and although gender-disaggregated information will be collected and assessed, the NAP and SASAPs include activities focusing on women and men based on other vulnerabilities<br><br>Page 51; calls for the mainstreaming of gender equality across all activities. Stating that gender policies will be implemented in order to reduce future "burden" to vulnerable groups. Specifically focusing on gender.<br>• States age & education level are greater causes of vulnerability. Though further research is required. | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Saint Lucia's National Adaptation Plan Stocktaking, Climate Risk and Vulnerability Assessment Report (2018) | ✓ | Section 8.0, page 29; "gender equality" mentioned in a list of five development themes related to the Medium-Term Development Strategy (2012-2016) Sectoral Action Plan and medium-term development goals. a) Stabilization of the Economy; b) Poverty Reduction; c) Gender Equality; d) Environmental Sustainability; and e) Education, Training and Human Resource Development.<br>• Prioritizes gender equality out of 16 total development strategy themes<br>Page 31; "eliminating gender bias" is listed as a key area in which it prioritizes expenditures in The Estimates of Revenue and Expenditure 2016-2017, a national budget document.<br>• States children as a vulnerable group<br>It prioritizes expenditure for the period within the following key areas: infrastructural development; value-added agriculture and fisheries; improving security; enhancing the quality of and access to basic education and essential healthcare services; enhancing public sector efficiency; eliminating gender bias and promoting children's rights. | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Saint Lucia's National Adaptation Plan Roadmap and Capacity Development Plan 2018-2028 | ✓ | Table 2. NAP Capacity Development Plan, page 27; "gender integration" included in a list under the heading "weakest individual skills" and cross referenced against five institutional functions involved in the NAP in the "Results of the assessment exercise" table. *refer to table beginning on page 25.<br><br>Page 3; under "Background" briefly mentions the involvement of the Ministry of Education, Innovation, Gender Relations and Sustainable Development.<br>Page 5: under "NAP Roadmap" refers to LEG guidelines in place.<br>Page 23: under "Individual skills to be strengthened" mentions application of vulnerability assessments & support tools in efforts to locate and resolve.<br>Page 27; under "results of the assessment exercise" gender integration scores a total of 2 out of 20. Gaining points in Coordination & Information Management, lacking in Assessment, Prioritization, & Risk Management. (Table begins on page 25)<br>• Advocacy also scoring 2 out of 20. Gaining its points in Prioritization & Coordination.<br><br>Acronyms: V&A – (Vulnerability & Adaption, LEG – (Least developed countries expert group), | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's Climate Change Communications Strategy | ✓ | No specific reference to gender. Includes participation from the Ministry of Education, Innovation, Gender Relations and Sustainable Development<br>Section 3, page 9; Mentions implementation of assessment programs referred to in "Saint Lucia's National Adaptation Plan Roadmap and Capacity Development Plan 2018-2028". This goes on throughout the majority of the document, though is visible in Figure 1. | |
| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Water Sector (Water SASAP) 2018-2028 | ✓ | Section 5.0, page 15; under the heading "Gender Considerations" - same language as in the NAP<br>Section 5 begins with their goal of "mainstreaming" gender within all levels & activities. Specifically calling for the decrease of gender-based vulnerabilities within the workforce.<br>Acknowledges the gaps in employment based on various vulnerabilities & minorities, including, employment gap, lack of minorities in administrative & planning positions, & general attention to minorities & vulnerable individuals/communities. | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028 | ✓ | Section 5.0, page 13; under heading "Gender Considerations" - same language of NAP with the addition of the following which relates to the participation of women and youth in agriculture:<br><br>In Agriculture, women and youth participate in all activities of their choice; there are many female farmers providing leadership in the sector at the community and sector levels; women actively participate in Farmer Field School exercises and are highly recognized for their skills at making observations in the field that might require the attention of the agriculture extension staff (Graham, 2015).<br><br>It is also noted on page 14 (last paragraph of Section 5.0) that to foster equality in adaptation benefits, Saint Lucia's NAP and associated SASAPs focus their attention on vulnerable groups, for whom no clear policy strategy has been formulated in agriculture (Graham, 2015) | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (Fisheries SASAP) 2018-2028 | ✓ | Ecosystem<br>P.37 financial system to build capacity of fishers to adapt to climate change<br><br>Energy<br>P. 7 Increasing fuel costs<br>P. 48 Piloting climate resilient and fuel-efficient fishing fleets<br>P. 12 Key adaptation measures: fuel efficient technologies for aquaculture and fishing operations | Ecosystem<br>How will women benefit from the loan/credit system is missing. Referenced earlier that the goal is to not impose burden to women. Among variables identified for vulnerable groups is poverty. Additionally, identified is the need for fishery dependent folks to seek income from other sources in off season. How will the loan/credit program not push women further into poverty given the intensification of competition (i.e., decreasing yields)? Are there other culturally appropriate activities and fisher targets for women to participate in relation to the fishery sector? Consider loan/credit forgiveness programs and grant programs for high yielding economic activities.<br><br>Infrastructure<br>How will infrastructure support be geared towards women? Is there a role for women to be involved in the planning, improvement, and maintenance of targeted fishery infrastructure? What are the gendered dimensions of infrastructure?<br><br>Energy<br>How will the burden of increasing fuel costs not be carried by women? Will the upgrading of existing energy technologies be downgraded on women? How will these technologies be refurbished, recycled, or discarded? |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020-2028 | ✓ | p. 18 Land ownership is low among women. Noted as a challenge to women-owned businesses in biodiversity and agriculture.<br><br>P. 20 Climate Finance | Ecosystem<br>p. 18 critical roles for women in the fishery sector mentioned herein but analysis absent in Fishery SASAP<br><br>Infrastructure<br>p.18 Women under represented in construction and manufacturing sectors. Largest portion of National budget. How will EcoDRR and EbA measures respond to this gap?<br><br>Energy<br>Ministry of Sustainable Development, Energy, Science, and Technology has project responsibility for the integrated ecosystem management and restoration of Forests on the South East Coast of St. Lucia. Otherwise, no mention. |
| Saint Lucia's Portfolio of Project Concept Notes for the Water Sector 2018-2028 | **X** | Lacking gendered proximity to wastewater infrastructure and the varied consequences.<br><br>Missing water distribution strategy (equal/equitable gendered access).<br><br>P. 31 Missing gendered flood hotspot analysis. | Gender considerations not made in this document. Focus is instead on 'vulnerable groups'.<br><br>Infrastructure<br>P. 31 Mentions that the beneficiaries are community members and households exposed to flooding. Are there cultural and/or technological barriers to access Early Warning System? |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Saint Lucia's Portfolio of Project Concept Notes for the Agriculture Sector 2018-2028 | ✓ | P. 12 Gender responsive knowledge materials and communication products, services and products on CRA* best practices | |
| Saint Lucia's Portfolio of Project Concept Notes for the Fisheries Sector 2018-2028 | ✓ | Missing gender considerations section.<br><br>NB: CBF Carribean Biodiversity Fund<br><br>Concept Project 1: Financial system for fishers to adapt to climate change by creating competitive value chain financial products. See earlier notes on the intersection of poverty and gender | Infrastructure<br>Plans to raise revenue to maintain and operate fishery facilities. How could women be an asset and beneficiary of this process?<br><br>Updating building codes. Will there be special considerations for women?<br><br>Energy<br>Mention of climate risks, EWS, and reducing fuel consumption. Plans to purchase climate resilient and fuel-efficient fishing fleets. When retiring old fleets will these be downgraded to vulnerable groups/women? |
| Saint Lucia's Portfolio of Project Concept Notes for Resilient Ecosystems 2020-2028 | ✓ | Missing Gender Considerations section. | Ecosystem<br>Gendered analysis of a sustainable blue economy and livelihood opportunities |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process (2018) | ✓ | Adobe p.3 NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development.<br><br>p.10 NAP Monitoring & Evaluation process will identify gaps and solutions to address shortcomings including the needs of vulnerable groups and the collection of gender-differentiated information | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Guidelines for the Development of Sectoral Adaptation Strategies and Action Plans (SASAPs): Saint Lucia's Experience under its National Adaptation Planning Process | ✓ | Adobe p.3 NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development.<br><br>p.3 Includes a list titled "What do you need to know before engaging in the elaboration of a SASAP?" #6 on the list states: *Media presence and involvement is recommended throughout the process to disseminate information on efforts, engender widespread ownership and support and raise awareness.* (p.4)<br><br>p.10 Within the first phase of developing a SASAP, Step 1. includes a list of information to gather in order to establish the sector/area's characteristics and current circumstances. On the list (f.) states *Are there gender issues documented for this sector in the country?*<br><br>p.25 The National Climate Change Committee Membership includes representation from the Ministry of Education with Gender Relations identified as akey department/division/section/unit engaged.<br><br>p.26 In the suggested outline for SASAP development, Section 5 is identified as Gender Considertaions, which states this section *informs on gender issues in the country as they relate to climate change*. It also will *incorporate relevant gender-disaggregated data for the sector/area of the SASAP into the text presented in the corresponding section of the existing SASAPs. Update the information provided if necessary.* | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's National Climate Change Research Policy 2020-2030 | ✓ | Adobe p.2 NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development. | Not relevant to gender specifically, only sector specific inclusion:<br><br>Within the Foreward (Adobe p.3) the priority sectors/thematic areas for climate change adaptation action includes Water; Agriculture; Fisheries; Infrastructure and Spatial Planning; Natural Resource Management/Resilient Ecosystems (terrestrial, coastal, and marine); Education; Health and Tourism. Other key sectors/thematic areas will be identified through a cyclical, iterative NAP process. The explicit mention of energy is not included within the document except for a footnote on p.3 that refers to the Ministry of Sustainable Development, Energy, Science and Technology.<br><br>p.15 Annex 1. is titled #10 *Template for the Submission by Potential Research Partners of Climate Change-Relevant Project Concept Notes to the Government of Saint Lucia*, and question #10 states, *List the development sectors the research will focus on (e.g., water, agriculture, fisheries, infrastructure, health, education, ecosystem management [marine, terrestrial], tourism, etc.)* (p.16) |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
|---|---|---|---|
| Saint Lucia's Climate Change Research Strategy 2020 - 2030 | ✓ | Adobe p.2 NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development.<br><br>p.8 Section 5.1 is table outlining the *Cross-Cutting Research and Information for Improved Decision Making*, and within the theme *Understanding the drivers and distribution of vulnerability to climate chang*e, it lists gender as a question to determine how vulnerability is distributed across SL and what are the root causes of vulnerability across geographic areas. | |
| Saint Lucia's Private Sector Engagement Strategy -Under its National Adaptation Planning Process (2020) | ✓ | p.ii NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development. | p. ix Outlining the engagement by sector, this section states, *Cross-cutting sectors (land, water, energy, and waste management) and business multipliers, such as legal, financial, management, engineering, and construction services, will also be targeted in the engagement strategy, given the need to engender more resilient infrastructure, utilities, physical structures, and spaces.*<br><br>In Section 2.3.2 *Identification of Key Financiers in Saint Lucia*, it describes Climate Adaptation Financing Facility (CAFF), which is a funding mechanism within the Saint Lucia Development Bank designed to offer climate change adaptation loans which are: (a) affordable, (b) equitable across socio-economic and gendered lines and (c) which will provide incentives for preemptive vulnerability reduction, which finances |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| | | | investments and activities that seek to build the resilience of assets - while not explicitly expressed this funding could support infrastructure and energy specific infrastructure |
| Saint Lucia's Climate Financing Strategy - Under the National Adaptation Planning Process (2020) | ✓ | p.iv NAP process is spearheaded by the Sustainable Development and Environment Division (SDED) of the Department of Sustainable Development, currently housed within the Ministry of Education, Innovation, Gender Relations and Sustainable Development.<br><br>p.17 *The United Kingdom and Canada are jointly funding a UNDP-led regional project for the Caribbean known as EnGenDer. This project focuses on disaster risk financing and gender analysis in adaptation.* | No specifc mention of specific sectors and gender dimensions; however, the financial impacts and considerations have broad reaching impacts that could affect all sectors. |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Saint Lucia Climate Change Adaptation Policy (2015) | ✓ | ECOSYSTEM<br>This footnote of page 10 of the document is the only mention of a gender, but what is interesting is how it is mentioned. The footnote is referencing climate focused consultations that were undertaken, and when the consultation is mentioned is specifies that women and youth were included in the process<br>"23The SNC V&A assessments have identified implementation adaptation measures for the tourism, and agricultural sectors both of which underpin the Saint Lucian economy and both of which suffered the effects of the 2009/2010 drought. **During the PPCR consultations, community groups, including women and youth, also identified a number of implementation adaptation measures that focused on water and which were important for their quality of life – during the aforementioned drought and Hurricane Tomas of October 2010, many of these groups had to resort to obtaining water from springs and other water sources which were determined to be unsafe for health. Water quality is also important for maintaining healthy ecosystems.** The Soufrière Marine Management Association had undertaken a coastal water quality monitoring programme through the GEF Small Grants Programme and discovered that the reefs which were important snorkelling sites were inundated by heavy sedimentation brought down by the Soufrière River because of poor husbandry practices along the entire length of the river. This, in turn, has impacted on the quality of the reefs and their function as important fisheries sites." | ECOSYSTEM<br>Direct correlation drawn to the impacts of climate change on ecosystems (starting on page 2 and throughout document):<br>"Poor land use planning and associated squatter developments, deforestation and developments in disaster-prone areas have exacerbated vulnerabilities, while the absence of approved building codes and standards has resulted in a housing stock prone to the damage by floods, landslides and high winds. The island already suffers from a water deficit in some areas and the number of proposed golf courses and other large tourism and other developments will exacerbate this situation. Plans to develop large hotel plants close to the sea and marinas along the rough east (Atlantic) coast will, if realized, add to the economic vulnerability of the island, as a whole, and tourism industry, in particular.<br>These developments will also threaten important marine and terrestrial ecosystems and will erode the resilience of natural systems to the impacts of climate change."<br><br>Ecosystems also mentioned in the conversation of adaptation measures - focusing on research in ecology and climatology. |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Saint Lucia Economic Recovery and Resilience Plan – Moving from Pandemic to Recovery with Collective Action (2020) | | There is a lot of mention of "protecting the vulnerable population", which we know to include women and youth in instance of natural disaster and health crisis, but there is no mention of gender specific terms in the document. | EXAMPLE: "3) Protect the poor and most vulnerable segments of the Saint Lucian population and mitigate further deterioration in the quality of life;" |
| Saint Lucia's National Climate Change Policy and Adaptation Plan (2003) | ✓ | No mention of gender dimensions of climate change. | |
| Saint Lucia's Initial National Communication on Climate Change to the UNFCCC (2001) | ✓ | There is a lot of mention of "vulnerable population", but does not reference women or gender specific. | |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Second National Communication on Climate Change for Saint Lucia to the UNFCCC (2011) | ✓ | Page 16; Section on “Gender, Youth, Children and Poverty” | Specific reference to cliamte change under this section: "To date, climate change initiatives undertaken in Saint Lucia have been deemed to be both gender-inclusive and gender-equitable. Issues of gender, youth, children and poverty have also been well addressed within national development in various national policy and legislative instruments, albeit without a strong link to climate change."<br><br>Specific reference is made to biodiveristy, land use, and implies ecosystems. There is ample opportunity for entry of the gender dimensions of climate change into the "Land Use" discussion..."Current threats to biodiversity include poor land use practices which threaten land based biodiversity through habitat loss as well as marine biodiversity through siltation and land based pollution. These threats are likely to be exacerbated by the additional pressure they will face from the impacts of climate change. These include loss of habitats, increased risks of landslides, soil erosion,siltation of rivers and near shore habitats, changes in wild life populations, storm impacts on near shore marinebiodiversity, loss of coastal forests, and the impacts of floods and droughts on habitats and biodiversity" (page 46) |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| Third National Communication on Climate Change for Saint Lucia to the UNFCCC (2017) | ✓ | Gender is mentioned when describing vulnerable groups. | What is most Interesting about the National Communication on Climate Change to the UNFCCC documents (2001, 2011, 2017) is that they do go from no mention of gender to identifying gender bias within the discussion of vulnerable populations.<br><br>EXAMPLE: "Existing gender inequalities are increased or heightened by climate-related hazards: gendered<br>impacts result from customary and new roles in society, often entailing higher workloads, occupational hazards indoors and outdoors, psychological and emotional distress, and mortality in<br>climate-related disasters;" (pg. 213)<br><br>Where sector specific actions are concerned, however, gender is still missing from the conversation.<br><br>EXAMPLE: "Sustainable management of ecosystem services and biodiversity conservation has not been well presented<br>in terms of its contribution to climate resilience and to development, growth and equity to economists,<br>political leaders and policy makers. There is need to fully embrace the potential opportunities associated<br>with the value of biological resources and natural capital (the Green Economy) (GOSL, 2014). The INDC |

| Saint Lucia Climate Change Adaptation Policies & Plans | Inclusion of Ecosystems Thematic Area | Inclusion of gender dimensions of climate change | Comments on Ecosystems & gender dimensions if applicable |
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| | | | acknowledged the value of Saint Lucia's forests in carbon sequestration but did not quantify this contribution due to inadequacy of available data. As such, the INDC does not acknowledge that the forest contributes significantly to climate change mitigation. Only if the value of the forest to climate change is recognized will it be protected (pers. Comm., Department of Forestry, 2017)." (pg.239) |

# APPENDIX 2 – ECOSYSTEMS POLICY TABLE

| Name of Policy | Policy Overview | Gaps/Weaknesses/Strengths/Notes Regarding Gender, Vulnerability and Climate Change References |
|---|---|---|
| Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) Snapshot<br><br>Government of Saint Lucia. (2020). Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028. Retrieved from https://napglobalnetwork.org/wp-content/uploads/2020/12/napgn-en-2020-saint-lucias-reasap-2020-2028.pdf | Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan 2020-2028 (REASAP), is the fourth of the NAP's Sectoral Adaptation Strategies and Action Plans. It has been designed on a similar temporal framework for the initiation of action to safeguard Saint Lucia's natural capital from the impacts of climate change, while harnessing the country's biodiversity, ecosystems and ecosystem services to reduce vulnerability and build resilience. The REASAP consists of 58 adaptation measures deemed critical for strengthening the resilience of natural systems and accelerating the implementation of ecosystem-based adaptation approaches to build climate resilience across Saint Lucia's society. The measures, endorsed by relevant stakeholders, offer solutions to information, technical, institutional, financial, regulatory and policy limitations hampering ecosystem-based adaptation and sustainable ecosystem and biodiversity management. (p.7) | Overall both gender and climate change have been well addressed. Section 5 (p.18) is titled Gender Considerations, which comprehensively covers gender mainstreaming in the context of the climate change and the NAP, with specific references to different sectors (including agriculture and fishing, as well as construction and manufacturing), including reference to EnGenDER, and identifies existing gaps in sectors.<br><br>The REASAP indicates that Agriculture, Fisheries, and Water were the first key sectors that fall within the "Resilient Ecosystems" thematic area. The REASAP, along with Agriculture, Fisheries, and Water all have a section of the planning document dedicated to "Gender Considerations". The next priority sectors under "Resilient Ecosystems" are natural resource based, likely represented by the current planning document Saint Lucia Forests and Lands Resources Department Strategy - this document expires in 2025 and makes no gender consideration. It appears the mechanisms are in place and the timing is ideal in order to publish a gender responsive SASAP within the next 4 years for the Forests and Lands Resources sector. |
| Saint Lucia Resilient Ecosystems Adaptation Strategy and Action Plan 2020-2028<br><br>Government of Saint Lucia. (2020). *Saint Lucia Resilient* | This strategic planning document, REASAP, is the fourth of the NAP's Sectoral Adaptation and Action Plans. It provides 58 adaptation measures and accelerated implementation plans for the "ecosystems" sector. Additional consideration is given to three major expected outcomes for ecosystems-based climate responsiveness. Gender mainstreaming considerations are noted in Section 5., however, thorough integration within the management plans and sector | Climate responsiveness is addressed in detail. Each ecosystem subsector is detailed with responsive management and implementation planning through 'Project Concepts' (see p. 64-84).<br><br>Lacks thorough integration of gender considerations, p. 18, into adaptation measures and implementation planning. |

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| *Ecosystems Adaptation Strategy and Action Plan 2020-2028.* Retrieved from https://napglobalnetwork.org/wp-content/uploads/2020/12/napgn-en-2020-saint-lucias-reasap-2020-2028.pdf | projections are absent. This integration can inform the targeted funding models for both climate and gender responsiveness. The REASAP does acknowledge this need and participation in EnGenDER 2021 is noted. | |
| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (Fisheries SASAP) 2018-2028 | The Fisheries SASAP identifies challenges, solutions, and implementation measures that addresses the themes of sustainability and climate change within the fisheries sector. Additional considerations are made in regard to fishery-related businesses and livelihoods under similar context. This SASAP acknowledges the financial challenges that many women face in this sector and offers a strategic financial system to build the capacity of vulnerable actors (p. 37). The SASAP deliberates the need for assessing risk transfer through a partial loan guarantee. Loan systems can push vulnerable actors further into poverty. Guaranteed loans would transfer the principle to the acting government agency in the event of a default. This would position the agency to play a highly active role in the success of the borrower. In closing, while gender considerations are made (p. 13) there is a gap integrating gender-responsiveness throughout other priority measures and outcomes. | This SASAP extends gender responsiveness to the intersection of fisheries and finance.<br><br>Missing extended integration of gender considerations within priority measures and outcomes. |
| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028 | The Agriculture SASAP identifies agriculture specific challenges relating to climate change and proposes a myriad of solutions. For effective climate resilience, the SASAP proposes 5 key adaptation measures grouped under 14 strategic objectives and 4 major outcomes. While the SASAP acknowledges the need for gender responsiveness in regard to knowledge materials (see Project Concept 2., p. 44) there is a gap integrating gender with other strategic adaptation measures and outcomes. The Agriculture SASAP is poised to expand these considerations given the existing gender analysis herein (p. 13). | Gender analysis on p. 13 identifies the leadership roles women play within the sector.<br><br>The analysis for private property ownership and remuneration gaps are not identified. Further, gender is only considered in the adaptation measures once in regard to knowledge materials. |

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| Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Water Sector (Water SASAP) 2018-2028 | This document outlines the importance of water in everyday life, while assessing & depicting the strategies & adaption plans in place. With the purpose of striving towards safer water-based climates, activities, & facilities, with fewer risks as a result of climate change. | Document mentions readiness & prioritization to climate concerns & adaption measures. Project Concept 7 & P43 Identifies plans for changing watercourses & how that impacts other variables. Section 5, known as "Gender Considerations" extensively outlines the gender considerations throughout the policy. Effectively noting the importance of vulnerable groups, specifically woman & their gaps in the workforce.<br><br>Gender-based vulnerabilities are still present, though monitored. |
| Saint Lucia Forests and Lands Resources Department Strategy<br><br>Government of St. Lucia. (2015). Saint Lucia Forests and Lands Resources Department Strategy 2015-2025. Retrieved from http://faolex.fao.org/docs/pdf/stl192162.pdf | This report outlines a strategy for the Saint Lucia Forests and Lands Resources Department to address the changing responsibilities of the Department and the demands on its resources over the next 10 years. The mission, vision, and strategic goals are outlined in Table 1 (p.1). The strategy is intended to serve as the framework for more detailed plans to implement its main programmes. | Climate responsiveness is addressed in the report, including both adaptation and mitigation to the impacts of climate change. Strategy 3 specifically states, "Protecting water supplies, soils and coastal zones and ensuring resilience to climate change", with four goals outlined (p.2)<br><br>Gender responsiveness missing.<br><br>While climate change is addressed, it should be noted that it is not specifically integrated into the Guiding Principles - Core Values and Beliefs (p.8 & 9).<br><br>Gender considerations section not included in this report. |
| GEO Saint Lucia: State of the Environment Report<br><br>Government of Saint Lucia. (2006). GEO Saint Lucia: State of the Environment Report. Retrieved. (2006). Retrieved from https://wedocs.unep.org/bitstream/handle/20.500.11822/8446/-State_of_the_Environment_Re | This report describes three key systems including Marine and Coastal Systems, Forest Systems, and Freshwater Systems and addresses five key issues; Land Use Management, Waste Management, Chemical Use, Climate Change, and Air and Noise Pollution. Additional considerations for implementation issues are also considered within the goal of a Nationa plan for Sustainable Development. There is a need for a gender considerations to be outlined in tangency with climate responsiveness. The report recognizes that an analysis of Business as Usual is to crucial to putting Sustainability First in planning and management of the featured key "ecosystems". | Climate responsiveness is addressed throughout the report. Both within key systems and as separate considerations. P. 37 details approved policy responses within the context of climate change.<br><br>Gender responsiveness missing.<br><br>Acknowledges that implementation, management, and enforcement gaps exist. The nature of the report is descriptive NOT prescriptive. Is there another policy document that implements the goals suggested herein? |

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| port_-_GEO_Saint_Lucia-2006GEO_SaintLucia_2006.pdf.pdf?sequence=3&isAllowed=y | | Gender considerations section not included in this report.<br><br>Life expectancy in 2004 was differentiated by female (75.9 years) and male (70.9 years). |