FINAL REPORT

Infrastructure and Spatial Planning Sector: A Gender Assessment

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



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

OCTOBER 14, 2021



Canada











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 this consulting assignment Niagara College Canada undertook institutional and policy reviews of six sectors/thematic areas – 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).

Following the Institutional and Policy Analysis, the Niagara College team conducted gender assessments for each of the six sectors/thematic areas further exploring the links between gender and climate change. This report represents the Gender Assessment for the Infrastructure and Spatial Planning sector. It sets out the findings of a technical analysis - identifying practical considerations for prioritizing, implementing, monitoring and evaluating gender responsive actions for climate change adaptation in the infrastructure and spatial planning sector, based on linkages identified between gender, climate change and infrastructure and spatial planning.

The assessment process had 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. Nonetheless a desk review of relevant national, regional and international documents and a survey of key informants involved in climate change adaptation and disaster risk reduction planning and response in Saint Lucia yielded significant information captured in this report.

TABLE OF CONTENTS

| EXECUTIVE SUMMARY1 |
|--|
| TABLE OF CONTENTS |
| LIST OF ACRONYMS |
| DEFINITION OF TERMS |
| 1.0 INTRODUCTION |
| 2.0 NATIONAL CONTEXT: CLIMATE CHANGE, GENDER AND INFRASTRUCTURE AND SPATIAL PLANNING |
| 3.0 PRACTICAL CONSIDERATIONS FOR PRIORITIZING, IMPLEMENTING, MONITORING AND EVALUATING GENDER RESPONSIVE CLIMATE ACTIONS IN THE INFRASTRUCTURE AND SPATIAL PLANNING SECTOR |
| 3.1 AVAILABILITY OF KEY DATA INCLUDING GENDER EQUALITY / GENDER DISAGGREGATED DATA |
| 3.1.1 GENDER AND SEX DISAGGREGATED DATA |
| 3.1.2 STATUS OF GENDER DATA |
| 3.2 EXTENT OF GENDER EQUITABLE PARTICIPATION AND INFLUENCE IN DECISION- MAKING PROCESSES FOR THE DEVELOPMENT AND IMPLEMENTATION OF ADAPTATION PLANS AND STRATEGIES |
| 3.3 EXTENT OF ACCESS TO FINANCIAL RESOURCES AND OTHER BENEFITS RESULTING FROM INVESTMENTS IN ADAPTATION BETWEEN WOMEN AND MEN |
| 3.3.1 GENDER-RESPONSIVE BUDGETING |
| 4.0 INDICATORS AND MECHANISMS FOR MONITORING AND EVALUATION OF GENDER- RESPONIVE CLIMATE CHANGE ADAPTATION PLANS |
| REFERENCES |
| APPENDIX 1 – GENDER AND CLIMATE CHANGE SURVEY |

LIST OF ACRONYMS

CCAP: Climate Change Adaptation Policy **CDB:** Caribbean Development Bank CLGF: Commonwealth Local Government Forum **COVID-19:** Corona Virus Disease 2019 ECLAC: Economic Commission for Latin America and the Caribbean EnGenDER: Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience **ESMF:** Environmental and Social Management Framework FCDO: Foreign, Commonwealth & Development Office GAC: Global Affairs Canada **GDP:** Gross Domestic Product **GoSL:** Government of Saint Lucia GPMU: Gender Policy and Mainstreaming Unit **GRU:** Gender Relations Unit **IMF:** International Monetary Fund **M&E:** Monitoring and evaluation **MICS:** Multiple Indicator Cluster Survey NAMA: Nationally Appropriate Mitigation Action **NAP:** National Adaptation Plan **NCCC:** National Climate Change Committee

NCCHR: National Coordinating Committee for Human Rights

NDC: Nationally Determined Contribution

NGO: Non-Governmental Organization

OECS: Organisation of Eastern Caribbean States

PAHO: Pan America Health Organization
SASAP: Sectoral Adaptation Strategies and Action Plans
SIDS: Small Island Developing States
UNDP: United Nations Development Programme
UNICEF: United Nations Children's Fund

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.

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.

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

This technical analysis was carried out as part of the Caribbean regional project, Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience (EnGenDER), a project being implemented by United Nations Development Programme (UNDP) Barbados and the Eastern Caribbean, through funding support from Global Affairs Canada (GAC) and Foreign, Commonwealth and Development Office (FCDO). Through this project, Niagara College Canada is working with the Government of Saint Lucia to conduct sector-wide gender assessments in six sectors (health, energy, resilient ecosystems, tourism, education, and infrastructure and spatial planning). The assessments will inform guidelines for ensuring gender-responsive Sectoral Adaptation Strategy and Action Plan (SASAP) development. This work is aligned with Saint Lucia's National Adaptation Plan (NAP), Nationally Determined Contribution (NDC), and Nationally Appropriate Mitigation Action (NAMA). The activities undertaken by the consultants 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.

This report sets out the findings of a technical analysis. It does so by identifying practical considerations for prioritizing, implementing, and monitoring and evaluating gender-responsive actions for climate change adaptation in the infrastructure and spatial planning sector, based on linkages identified between gender, climate change, and infrastructure and spatial planning.

The assessment process had 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. Nonetheless, a desk review of relevant national, regional and international documents and a survey of key informants involved in climate change adaptation and disaster risk reduction planning and response in Saint Lucia yielded significant information captured in this report.

2.0 NATIONAL CONTEXT: CLIMATE CHANGE, GENDER AND INFRASTRUCTURE AND SPATIAL PLANNING

Saint Lucia faces significant risks and vulnerabilities. The country's vulnerabilities are made acute by factors such as its small size, which results in the country-wide impact of disasters, where its geographic location in an area at high risk for cyclones, earthquakes, volcanoes, and so on. There is also its economic dependence on a few sectors – agriculture and tourism – both susceptible to climate-related disasters¹.

| | Level of Vulnerability | | | | | | | | | |
|---------------------------|------------------------------------|--|----------------------------------|---|---------------------------------|--|------------------------------------|------------|--|--|
| Districts | Storm/ Hurricanes ⁶⁴ | Drought ^{es} | Flooding ^{66,67} | Landslides | Sea Level Rise ⁶⁹ | Coastal Erosion ⁷⁰ | Volcanic Activity ⁷¹ | Earthquake | | |
| Castries City | High | Medium low inland. Medium in coastal areas. | Low to moderate | Predominantly low to few moderate | High | Vulnerable in specific locations | Low | High | | |
| Anse la Raye/ Canaries | High | Medium low inland. Medium to low in coastal areas. | High around the Roseau River | Predominantly moderate to high | High | Vulnerable in specific locations | Low to moderate | High | | |
| | | | | Level of Vulneral | bility | | | | | |
| Districts | Storm/ Hurricanes | Droughtes | Flooding ^{66,67} | Landslides | Sea Level Rise ⁶⁹ | Coastal Erosion ⁷⁰ | Volcanic Activity ⁷¹ | Earthquake | | |
| Soufriere | High | Low inland, Medium to low in coastal areas. | Mainly low | Predominantly moderate to High | High | Non- vulnerable | Very high | High | | |
| Choiseul | High | Medium to high inland. High in coastal areas | Mainly low | Predominantly moderate to High | High | Non- vulnerable | High | High | | |
| Laborie | High | Medium low – Low inland. Medium to high in coastal areas. | Mainly low | Predominantly low to moderate | High | Non- vulnerable | Moderate to high | High | | |
| Vieux-Fort | High | Medium low inland. High in coastal areas. | Mainly low | Predominantly low | High | Coastline predominantly vulnerable | Low to high | High | | |
| Micoud | High | Low to medium inland. High in coastal areas. | Mainly low | Predominantly low | High | Coastline predominantly vulnerable | Low to moderate | High | | |
| Dennery | High | Low to medium low inland. High in coastal areas. | Low High - Town of Dennery | High | High | Coastline predominantly vulnerable | Low | High | | |
| Gros Islet | High | Medium low inland. High in coastal areas. | Medium - high | Predominantly low | High | Vulnerable in specific locations | Low | High | | |

Figure 1: Levels of Vulnerability to Natural Hazards by Districts²

¹ 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.

² Kairi Consultants Ltd. (2018, December). St. Lucia National Report of Living Conditions 2016: Summary Report. 196-197. https://www.stats.gov.lc/wp-content/uploads/2019/01/Saint-Lucia-National-Report-of-Living-Conditions-2016-Final December-2018.pdf.

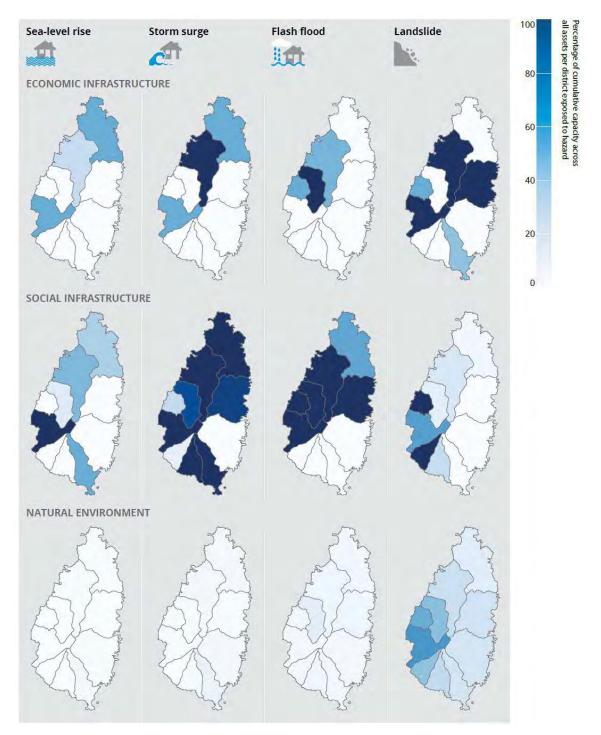
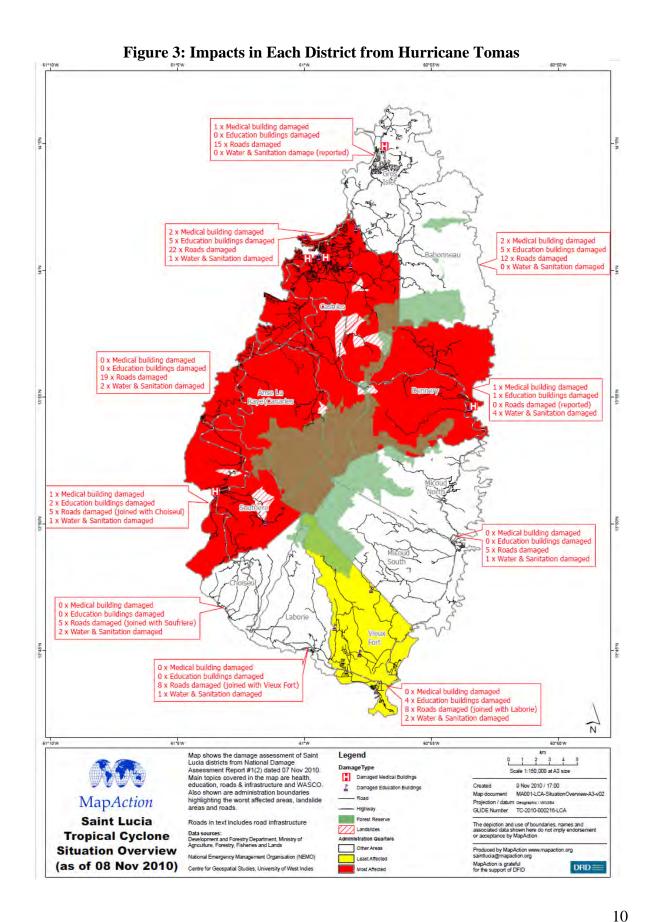


Figure 2: Cumulative Infrastructure Sector Exposure to Different Hazards³

³ Adshead, D., Fuldauer, L.I., Thacker, S., Román García, O., Vital, S., Felix, F., Roberts, C., Wells, H., Edwin, G., Providence, A. and Hall, J.W. (2020). *Saint Lucia: National Infrastructure Assessment*. United Nations. 68.

As Figures 1 and 2 illustrate, each District in St. Lucia faces a variety of natural hazards that directly impact infrastructure and spatial planning. The impacts from these hazards are considerable, especially those from cyclones and flood rains which have become more frequent and intense due to climate change. Figure 3 shows impacts in each district from Hurricane Tomas, a category one hurricane in 2010. Though category one, Tomas brought extensive rain that wreaked havoc.⁴

⁴ Baptiste, A.J. (2011, July 25 & 26). After Action Review of St. Lucia's response to Hurricane Tomas, 2010. Auguste, P. (Ed.). <u>AAR.Hurrianne.Tomas.pdf (stlucia.gov.lc)</u>



The map shows the direct damages Hurricane Tomas had on health, education, road, and water infrastructures. These damages led to an inability to safely rely on education infrastructure to provide emergency housing and shelter and an inability of key health personnel to travel to assist in the recovery process, among other disruptions.

The broad-based impacts affect all aspects of economic, social, and physical life. The economic costs are high. The International Monetary Fund (IMF) records that: "Saint Lucia's annual average loss from wind-related events and floods averages just under US\$49 million, or 3.4 percent of GDP..."⁵.

The physical, geographic, and economic vulnerabilities create and/or worsen human vulnerabilities and increase human insecurity of residents of St. Lucia who 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
- Increased poverty among households headed by women where incomes are lower, and the number of dependents higher than in male-headed households⁶ and among males who dominate in the economic sectors hardest hit and most disrupted by climate change impacts, including fisheries, agriculture, and forestry.

Human settlement patterns are a factor in the vulnerabilities and impacts experienced by different groups. Historical and socio-economic factors such as employment/unemployment and income inequality, and poverty have contributed to the human settlement patterns of St. Lucia and related vulnerabilities of the population to natural and climate-related hazards.

As described in an Organisation of Eastern Caribbean States (OECS), World Bank-funded, Regional Health Project's Environmental and Social Management Framework (ESMF) for St. Lucia, settlement patterns have historically followed along flat coastal areas near major rivers⁷.

⁵ IMF. (2018, June). *St. Lucia Climate Change Policy Assessment*. Country Report # 18/181. p 13. International Monetary Fund, Washington. https://www.imf.org/~/media/Files/Publications/CR/2018/cr18181.ashx

⁶ Caribbean Development Bank. (2016). *Country Gender Assessment – St. Lucia 2016*. Caribbean Development Bank. <u>Country Gender Assessment – St. Lucia 2016</u> | Caribbean Development Bank (caribank.org)

⁷ Government of Saint Lucia. (2019). Environmental & social management framework (ESMF) for the OECS regional health project (P168539) Saint Lucia. <u>http://www.govt.lc/media.govt.lc/www/resources/publications/final-oecs-esmf-st-lucia-june-3rd--1-.pdf</u>.

The ESMF indicates that as population and rural-urban migration have increased, the settlement pattern has been slowly moving up from low-lying urban areas into the surrounding hillsides.

The ESMF indicates that many of the settlements are unplanned, with populations from lowerincome households and are susceptible to landslides and exposure to hurricanes. They have inadequate drainage, unplanned sewage systems, and services and lack basic sanitation services such as running water and proper sewage disposal facilities. The Framework also notes that a lack of stable tenure and marginal incomes and other resources often results in residents lacking the capacity to make investments that may reduce their risk exposure⁸.

Demographic factors in Levels of Vulnerability and Resilience

The foregoing illustrates the fact that not everyone is affected in the same way or to the same degree. Human vulnerability and resilience differ based on the socioeconomic status of different demographic groups – their relative access to resources, benefits, and services.

The Summary Report of the St Lucia National Report of Living Conditions 2016 lists some of the socioeconomic disparities as follows⁹:

- Poor households were ten percentage points less likely than their rich peers to hold titles.
- The proportion of households living in housing with concrete outer walls and sheet metal roofing increased with wealth status.
- The poor reported a higher percentage with heart disease, 30.3 percent relative to 25 percent among the non-poor.
- The poorest 20 percent of households were the most disadvantaged in terms of water provision, in terms of a seven-day supply of water.
- At 38.9 percent, pit latrines were the sanitation facility among poor households, while one in every 20 households reported no toilet facilities.
- Survey data suggest that non-poor households may have greater potential to adapt to anticipated impacts of climate change and natural disasters.

Demographic factors also impact people's participation in decision-making, the roles and responsibilities they have, and how directly these are affected by climate change impacts. They contribute to differences in people's capacity to adapt and have resilience. Age, socioeconomic status, gender, disability, and geographic location are among the significant factors which planners must take into account as they seek to assess and respond to different levels and types of vulnerability and resilience.

⁸ Government of Saint Lucia. (2019). Environmental & social management framework (ESMF) for the OECS regional health project (P168539) Saint Lucia. <u>http://www.govt.lc/media.govt.lc/www/resources/publications/final-oecs-esmf-st-lucia-june-3rd--1-.pdf</u>.

⁹ Kairi Consultants Ltd. (2018, December). *St. Lucia National Report of Living Conditions 2016: Summary Report*. <u>https://www.stats.gov.lc/wp-content/uploads/2019/01/Saint-Lucia-National-Report-of-Living-Conditions-2016-Final_December-2018.pdf</u>.

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.

Gender Dimensions of Vulnerability

The *Saint Lucia Human Capital Resilience Project Social Assessment* report¹⁰, cites St. Lucia's 2016 Survey of Living Conditions and Household Budgets, indicating that 25% of the population lived below the poverty line and child poverty stood at 34.5 percent. The poverty rate in female-headed households was 42.3 percent, and their unemployment rate was 20.2 percent. There was an even higher rate of youth unemployment at 36.3 percent.

Additionally, the *Saint Lucia National Report of Living Conditions 2016: Summary Report*¹¹, shows that over 40% of poor children live in male-headed households and a higher rate of 42.3% in female-headed households. Female-headed households tended to be larger – in rural households, it was 3.1 persons and males, 2.8 persons, and among poor households, male-headed households were 3.4 persons on average compared to female-headed households with 4.8 persons.

Based on their larger household size and greater responsibility for caregiving, females are likely to have more demands on their time and therefore less available and flexible time resources to 'use as wanted' than males do. This can translate to less freedom or capacity to participate in adaptation programmes and opportunities where no provisions are made to increase their involvement, for example, through the provision of child care services.

The UNDP *Gender, Climate Change and Community Based Adaptation Guidebook* 2010¹² summarises the main aspects of gender differences that are relevant to understanding the vulnerabilities to climate change impacts. It also summarises the extent to which different groups of males and females will, without appropriate policy and programme responses, have the capacity to bounce back from climate change impacts. These include differences in:

• **Dependence on natural resources.** Women and men have different types of uses of and dependence on natural resources, with women typically being more primary users. For example, the use of water and wood for a range of household purposes (consistent with their expected roles and responsibilities as caregivers) and males more likely to relate to and rely on natural resources (marine /water resources, forests, fisheries, etc. for income and value-added purposes.

¹⁰ Government of Saint Lucia. (2019, December). Saint Lucia human capital resilience project – P170445 Social Assessment. http://www.govt.lc/publications/saint-lucia-human-capital-resilience-project-p170445-social-assessment.

¹¹ Kairi Consultants Ltd. (2016). St. Lucia National Report of Living Conditions 2016: Summary Report. 3-4.

¹² UNDP. (2010). Gender, Climate Change and Community Based Adaptation Guidebook. UNDP, New York. Gender, Climate Change and Community Based Adaptation Guidebook | UNDP.

- Sexual division of labor. Males and females have variable and gendered occupational choices and opportunities. This impacts their time, income, the 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.
- **Mobility.** Women are often more restricted in their movement/mobility due to caregiving responsibilities, whereas movement/migration is often a coping mechanism more easily available to males. 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.

Applying the above to the map of impacts of Hurricane Tomas in 2010, it can be determined that impacts on health, education, road, and water and sanitation infrastructure would have disproportionate impacts on women and girls. For example, disproportionate levels of hardship for women and girls who have responsibility for household tasks and caregiving and therefore have greater and different types and degrees of dependence on public services and utilities. When children's education is disrupted or shift to the home, as is the current experience arising from the COVID-19 pandemic, women's time use for childcare and supervision increases. This greatly impacts their ability to work and constrains their mobility. Women's higher levels of unemployment and lower levels of income before disasters mean they and their dependents are more severely affected with greater risk of household income and food poverty and less capacity to be resilient. Males face economic setbacks, but they are more likely to be employed in recovery and adaptation efforts than women are unless there is deliberate planning to ensure women benefit equitably. Males are also prone to more risk-taking behaviours that may result in higher levels of injury.

Gender is an important but not singular factor that impacts people's life chances and outcomes. It is essential to bear in mind that gender overlaps with other socio-cultural characteristics such as race, ethnicity, disability, sexual orientation, age, geographic location (urban, rural), and socioeconomic status. The societal norms and values related to these intersecting identity factors have cumulative effects and contribute to multiple forms of social barriers or privileges that groups of people experience.

We can look further into the Hurricane Tomas example to consider the intersection of gender, climate change, and infrastructure and spatial planning. The breadth of impacts captured above and in Box 1 below^{13,14}, indicates how pivotal the infrastructure and spatial planning sector is in

¹³ Baptiste, A.J. (2011, July 25 & 26). After Action Review of St. Lucia's response to Hurricane Tomas, 2010. Auguste, P. (Ed.). <u>AAR.Hurrianne.Tomas.pdf (stlucia.gov.lc)</u>.

¹⁴ UN ECLAC. (2011). Saint Lucia macro socio-economic and environmental assessment of the damage and losses caused by Hurricane Tomas: A geo-environmental disaster towards resilience. UN ECLAC. <u>https://www.finance.gov.lc/resources/view/290</u>

contributing to St. Lucia's climate change adaptation strategies and the resilience of the nation's physical, economic and human development.

Box 1: After Action Review of St. Lucia's Response to Hurricane Tomas 2010

Saint Lucia's Infrastructure and Spatial Planning sector was seriously affected by Hurricane Tomas. This analysis examines a sample of impacts the Hurricane had on the following economic infrastructures (roads and bridges, airports, ports, electricity, water, telecommunications), social infrastructures (healthcare, education, tourism), and natural environment assets (rivers, slopes). The following challenges and lessons were highlighted:

Challenges:

- 1. The issue of communication was a major challenge, considering the complete shutdown of a major telecommunications system (LIME).
- 2. Roads were inaccessible and slippery as a result of mud slides. Almost all of the damages experienced were as a result of landslide action (mass slope movement), river bed erosion or river sedimentation. Several bridges were also damaged.
- 3. Lack of water, disruption to electricity and the communication network had a significant impact on the hotels.
- 4. Destruction to the Dennery hospital and other health facilities.
- 5. Extensive flooding caused serious damage to access road to the Soufriere hospital.
- 6. Access to safe water in health facilities was a major problem.
- 7. Lack of electricity resulted in loss of supplies such as vaccines and other medication which must be stored at a certain temperature.
- 8. The heavy siltation from flooding rendered the Soufriere Infant, Soufriere Primary schools and the Special Education Centre inaccessible.
- 9. Limited water storage capacity at a number of schools.
- 10. Erosion of river banks led to damage to poles and other electricity-related infrastructure and landslides led to damage to electricity generating equipment.
- 11. No measurable damage at any of the sea or airports of the island. The runway at Hewanorra airport did, however, have to be cleared of mud after the event.

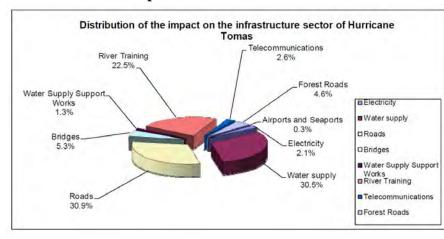


Figure 4: Distribution of the Impact on the Infrastructure Sector of Hurricane Tomas¹⁵

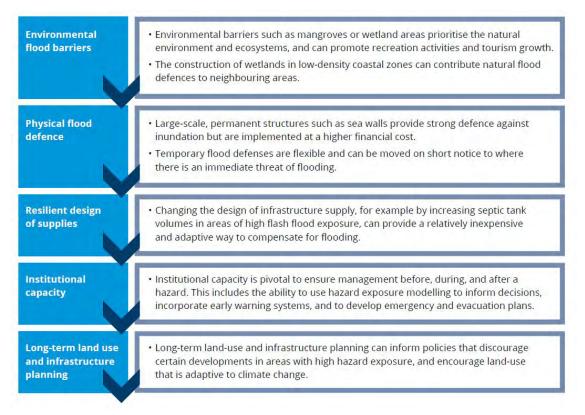
Lessons Learnt:

- 1. The need for The Ministry of Communications, Works, Transport & Public Utilities to review its Disaster Plan to improve on internal response mechanisms and to be in a preparedness mode in the event any natural disaster affects the island.
- 2. The existing bridges should be replaced with open span structures, so that their waterway areas are greatly maximized.
- 3. To date many hotels and guests houses have invested in water harvesting and water storage facilities to augment their water storage capacity.
- 4. Rain water harvesting with assistance from PAHO is being explored at health facilities.
- 5. Generators are necessary in each region to allow for storage of vaccines and medication.
- 6. Regular practice of flood mitigation measures required e.g. maintenance of drains around schools.
- 7. The need for improved water storage capacity at a number of schools. The Ministry of Education is planning to increase capacity at secondary schools to 8,000 gallons and at primary schools to 5000 gallons. They are also considering implementing rain water harvesting in schools on the island.
- 8. Relocation of the Union Substation to slightly higher land in order to elevate critical electricityrelated infrastructure by approximately 1 metre above floor level.
- 9. The need for a review of the airport/runway drainage to be carried out, with the objective of reducing runoff of water and mud to the runway during a high rainfall event.

¹⁵ UN ECLAC. (2011). Saint Lucia macro socio-economic and environmental assessment of the damage and losses caused by Hurricane Tomas: A geo-environmental disaster towards resilience. UN ECLAC. <u>https://www.finance.gov.lc/resources/view/290</u>

Examining the foregoing case of the infrastructure related impacts of Hurricane Tomas and, where they exist, other more recent events can indicate some of the areas to be considered and addressed in infrastructure sector adaptation planning. In line with the Sendai Framework for Disaster Risk Reduction and Saint Lucia's National Adaptation Plan, the Saint Lucia National Infrastructure Assessment ¹⁶ indicates the following types of adaptation options to be implemented in the infrastructure sector of Saint Lucia.

Figure 5: Types of Adaptation Options to be Implemented in the Infrastructure Sector of Saint Lucia



It is important to recognize gender differences while assessing adaptation needs, opportunities, and capacities to inform national strategic policies and promote equitable inclusion of women, men, and youth within the infrastructure sector. Because women, men, and youth experience climate change impacts differently, adaptation options/measures will also affect women, men, and

¹⁶ Adshead, D., Fuldauer, L.I., Thacker, S., Román García, O., Vital, S., Felix, F., Roberts, C., Wells, H., Edwin, G., Providence, A. and Hall, J.W. (2020). *Saint Lucia: National Infrastructure Assessment*. United Nations Office for Project Services, Copenhagen, Denmark; https://www.preventionweb.net/files/74108_saintlucianationalinfrastructureass.pdf

youth differently. For example, a report by the Department of Infrastructure and Energy of the IDB titled *How to Integrate a Gender Approach in the Infrastructure Sector*?¹⁷ states:

- School enrollment among girls can increase as much as 15% when communities have potable water and bathrooms and up to 7% (for primary school) when local roads are maintained, which reduces travel times.¹⁸
- When communities have electricity in the home, women's incomes increase by 42% on average, and employment and school enrollment increase by 15% and 12%, respectively.²⁰
- Public lighting reduces the incidence of several types of violence and sexual assaults against women.²¹
- Investments in public mass transit systems make it 7.6% more likely that women living near transit routes will find a job.²²

A critical first step to recognizing these gender differences in Saint Lucia's infrastructure sector is collecting gender-disaggregated data. While analyzing this data, it is critical to have equitable representation of women and demographically diverse groups in decision-making processes as it strengthens the range and quality of information that is taken into consideration. In order to complete the cycle, having equitable access to financial resources and other benefits of investments in climate change adaptation ensures that everyone's needs are met. These considerations are examined in the next section of this report.

¹⁷ IDB. (2020). How to integrate a gender approach in the infrastructure sector?: Infrastructure for development. Special no. 2. IDB. https://publications.iadb.org/publications/english/document/How-to-Integrate-a-Gender-Approach-in-the-Infrastructure-Sector-Infrastructure-for-Development-Special-Number-No.-2.pdf.

¹⁸ IDB. (2017). The secret of super women: feminine hygiene. IDB.

¹⁹ McSweeney, and Remy. (2008). Building roads to democracy: The contribution of the Peru rural roads program to participation and civic engagement in rural Peru. World Bank.

²⁰ Snyder et al. (2018). Gender and Energy: The Balance of Power. IDB.

²¹ Gishler et al. (2016). How to Turn on the Lights in Haiti. Infrastructure for Development. IDB.

²² Martinez et al. (2018). Connecting to Economic Opportunity? The Role of Public Transport in Promoting Women's Employment in Lima. Institute of Labor Economics.

3.0 PRACTICAL CONSIDERATIONS FOR PRIORITIZING, IMPLEMENTING, MONITORING AND EVALUATING GENDER RESPONSIVE CLIMATE ACTIONS IN THE INFRASTRUCTURE AND SPATIAL PLANNING SECTOR

In developing a gender-responsive SASAP, the infrastructure and spatial planning sector are expected to take account of the following²³.

- Gender differences in adaptation needs and capacities;
- The extent of gender-equitable participation and influence in decision-making processes for the development and implementation of adaptation plans and strategies; and
- Gender equitable access (of males and females) to financial resources and other benefits of investments in climate change adaptation.

This technical analysis examines the status of resources and capacity within and/or available to the Ministry of Infrastructure, Ports, Energy and Labour to ascertain the above and to factor the findings into priorities for climate change adaptation in infrastructure, in planning the strategic actions and their implementation and in developing appropriate indicators and mechanisms for monitoring and evaluation.

3.1 AVAILABILITY OF KEY DATA INCLUDING GENDER EQUALITY / GENDER DISAGGREGATED DATA

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 adaptation needs and capacities. Awareness of the differences in the situation with respect to the socio-economic position, roles, and responsibilities of different groups and 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.

Gender-disaggregated or gender-specific data are a key tool in determining and assessing gender differences in adaptation needs and capacities. Data is, therefore, a necessary input for evidence-based, gender-responsive planning.

²³ NAP Global Network. (2019). *Toolkit for a Gender Responsive Process to Formulate and Implement National Adaptation Plans*. NAP Global Network. 11. Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs) | NAP Global Network.

3.1.1 GENDER AND SEX DISAGGREGATED DATA

Sex-Disaggregated Data has been understood as the statistics and data gathered and broken down by sex in order to aid male-female comparison. This has generally been taken as a quantitative analysis. Gender statistics, however, are more than data disaggregated by sex. Having data by sex does not guarantee, for example, that concepts, definitions, and methods used in data production factor in such issues as gender roles, relations, and inequalities in society.

Gender Disaggregation promotes a broader understanding of the types of data that can allow for a deeper understanding of what is occurring with different groups in order to better inform what appropriate responses and supports might be required. Gender disaggregation implies going beyond who and how many to investigate 'why' - to assess the existence and the extent of differences in experiences, for example, in women's and men's time use, income differences, role differences, etc. Such data allow for an examination of the qualitative and experiential issues that give rise to the numerical representation of males and females in any given scenario.

Looking at the number of people impacted by a disaster event based on sex tells one level of the story. Looking at the different ways they are impacted, why adds another level, and so on. In gathering such data, a variety of tools and methods are important, including the use of interviews, focus groups, etc.

3.1.2 STATUS OF GENDER DATA

In a 2019 report on its assessment of the production and management of gender-disaggregated data in St. Lucia, the Economic Commission for Latin America and the Caribbean (ECLAC) noted that there is a lack of data disaggregated by gender, age, disability, race, and other criteria in the Caribbean, including in Saint Lucia²⁴. The report states that the unavailability and underutilisation of gender data undermines the ability to adequately address gender inequalities and hinders the assessment of the impact and effectiveness of public policies and programmes. It points out that gaps in the collection and management of gender and other demographically disaggregated data are due to factors such as structural challenges: like the low reflection of gender considerations in evidence-based decision-making, poor inter-agency coordinating mechanisms, and insufficient and inefficient use of human, physical, and financial resources.

In preparing this technical analysis, the consultants found that while there does exist key genderdisaggregated data such as from the Central Statistical Office, such data collection and

²⁴ ECLAC. (2019). Gender Data Assessment in St. Lucia: Challenges and Recommendations. Samantha John-Aloye et al. United Nations ECLAC.

management was not evident from a search across several Government of Saint Lucia (GoSL) platforms. None could be found at the website of the Ministry of Infrastructure, Ports, Energy and Labour, for example, and none was found for disaster impact and response, etc. A Gender and Climate Change Survey (see Appendix 1) was distributed as part of this project that contained specific questions about sex/gender-disaggregated data. However, no responses were received from key informants in the infrastructure and spatial planning sector.

Despite the systemic limitations and gaps, the desk review undertaken was able to unearth a range of relevant data sets of a general nature related to the infrastructure and spatial planning sector, labour market, poverty, environmental vulnerabilities, etc. and for the situation with males, females, and children based on multiple indicators. The table below sets out some of the sources and types of data available for reference to inform the infrastructure sector's SASAP planning process.

| Source | Type of data | Key information |
|--|--|---|
| GoSL Open Data web portal <u>Saint Lucia Open</u> <u>Data (govt.lc)</u> | 13 data sets – Mapping, urban planning, economy, public safety, environment, finance and budgeting, transportation, government, health care, agriculture, tourism, demography, education | Mapping – <u>Search Saint Lucia</u> <u>Open Data (govt.lc)</u> Meteorology stations island wide St. Lucia communities – shape files St. Lucia Districts – census data |
| | Data sets from 16 GoSL Ministries, Departments and Agencies including: Central Statistical Office, Dept. of Education, Innovation and Gender Relations; Dept. of Finance; Dept. of Health & Wellness; Dept. of Physical Planning; Meteorological Services; National Emergency Management Organisation; Sustainable Development & Environment Division | Locations of Highways St Lucia Hotel Locations Location data on St Lucia Schools Geodata on St Lucia Health Districts and Facilities Urban Planning – Emergency shelters (2018) Emergency Shelters Saint Lucia Open Data (govt.lc) |
| | | Economy – <u>Search Saint Lucia</u> <u>Open Data (govt.lc)</u> Sex and age disaggregated labour Force data |

Table 1: Available Data Sets by Source, Type, and Key Information

| Source | Type of data | Key information |
|--------------------------------------|---|--|
| | | Environment – historical weather observations <u>Search</u> <u>Saint Lucia Open Data (govt.lc)</u> Finance & Budgeting <u>Search Saint Lucia Open Data</u> (govt.lc) Economic & Social Review 2009-2014 including consumer price indices and mid-year population estimates by sex, age and districts; debt; government expenditure etc Demography – Population |
| | | census 2010 – by district, sex and 5 year age group <u>Census population Saint Lucia</u> <u>Open Data (govt.lc)</u> |
| GoSL – Central Statistical Office | Various by subjects including Water and Electricity, Labour force, population, Vital statistics, Environment Subjects - The Central Statistical Office of Saint Lucia (stats.gov.lc) | Water and ElectricityWater production and consumption, and electricity generation and distribution.Labour ForceUnemployment rate, composition of labour force etc.PopulationPopulation estimate, poverty rate, etc.Vital StatisticsBirths, deaths, etcEnvironmentHuman settlements, land use, energy, solid waste etc. |

| Source | Type of data | Key information |
|---|---|--|
| | St. Lucia National Report of Living Conditions 2016 Saint-Lucia-National-Report-of- Living-Conditions-2016- Final_December-2018.pdf (stats.gov.lc) Summary report - https://www.stats.gov.lc/wp- content/uploads/2019/01/Summary- Report-Saint-Lucia-2016-National- Report-of-Living- Conditions_December- | Comprehensive, sex, age and other demographically disaggregated data Summary data and recommendations for action |
| GoSL Department of Finance | Estimates of expenditure, description/reports of national programmes; procurement Acts/guidelines etc Department of Finance: Search Annual Economic and Social Review Project procurement documents e.g. for infrastucture Department of Finance: Search Economic Recovery and Resilience Plan components and their status. a) Disaster risk and climate change <u>SLUERRP Pillar 6 </u> <u>Strategy 32</u> | Current infrastructure programmes; tenders Saint Lucia: National Infrastructure Assessment |
| Ministry of Infrastructure, Ports, Energy and Labour | Publications <u>Ministry of Infrastructure</u> (govt.lc) | Saint Lucia National Energy Transition Strategy and Integrated Resource Plan |
| UNICEF/GoSL- Ministry of Social Transformation, Local Government and Community Empowerment | 'Saint Lucia Multiple Indicator Cluster Survey 2012: Final Report 2014. <u>Saint Lucia 2012 MICS_English.pdf</u> (mics-surveys- prod.s3.amazonaws.com) | Situation of women and children including gender parity index primary and secondary education; literacy rates women 15-24; domestic violence – attitudes of women, men; access to mass media and information and communication technology |

| Source | Type of data | Key information |
|--|---|---|
| and Central Statistics Office | (Next scheduled MICS for St. Lucia is 2022, current status is survey design. Source: <u>Surveys - UNICEF MICS</u> | - women 15-24 and 15-45; persons collecting drinking water by sex, age and urban/rural |
| GoSL Dep. Of Education, Innovation & Gender Relations | Beijing +25 National report 2019 Beijing +25 Report, Saint Lucia (cepal.org) | Status of implementation and achievement of the Beijing Programme of Action |
| UNDP LAC | Caribbean Human Development Report 2016 Caribbean Human Development Report (undp.org) | The 2016 report entitled <i>Multidimensional Progress</i> : <i>Human Resilience Beyond</i> <i>Income</i> provides information and gender and other demographically disaggregated data in such chapters as a. A new paradigm for assessing vulnerability: embracing human development b. Human vulnerability in the Caribbean: who are the most vulnerable and why |
| | | An important chapter is on multidimensional policy solutions for multidimensional problems |
| UN Women - Caribbean | Caribbean Gender Profile web page on St. Lucia. <u>Saint Lucia UN Women – Multi-</u> <u>Country Office – Caribbean</u> | Regional and international human rights Conventions signed and St. Lucia National reports; gender disaggregated data |
| UN ECLAC | Various publications Search Economic Commission for Latin America and the Caribbean (cepal.org) | Gender data, climate change, sectoral reports, etc. |
| Map Access (an NGO) | Geo-spatial data on disaster impacts | 31 data sets mapping various types of impacts from hurricane |

| Source | Type of data | Key information |
|--------|--|--|
| | <u>Hurricane Tomas, St Lucia, November</u> 2010 - MapAction | Tomas 2010 by district in St. Lucia |
| CDB | Country Gender Assessment-St. Lucia; 2016 - <u>Country Gender Assessment -</u> <u>Saint Lucia 2016 Caribbean</u> <u>Development Bank (caribank.org)</u> | Gender data for employment, poverty, climate change and disasters, education, health, agriculture, tourism, decision- making, etc. |

3.2 EXTENT OF GENDER EQUITABLE PARTICIPATION AND INFLUENCE IN DECISION-MAKING PROCESSES FOR THE DEVELOPMENT AND IMPLEMENTATION OF ADAPTATION PLANS AND STRATEGIES

Women's representation in Parliamentary decision-making in St. Lucia was at 12% in 1997, rising to 16% from 2010 through to 2018 (World Bank data²⁵). For comparison, the proportion in Barbados was approximately 11% in 1997 and improved to 20% in 2018; for Dominica, the data shows women occupying approximately 18% of Parliamentary seats in 2001 and 34% in 2020.

Data reported by the Commonwealth Local Government Forum (CLGF), UK²⁶, indicates that there has been a small increase in the number of appointed women councillors from 60 of 136 (44.1%) in 2015/16 to 62 of 137 (45.3%) in 2016/17. The number of women mayors was reported to be two of four (50%), and a decrease indicated in the number of female chairpersons from 5 of 11 (45.5%) in 2015/16 to 4 of 11 (36.4%) in 2016/17.

| Election | 20 | 14/15 | 2015/16 | | 2016/17 | |
|---------------------|-----|-------|---------|-------|---------|-------|
| Councillors | # | 96 | # | 96 | # | 96 |
| Female councillors | 61 | 44.5 | 60 | 44.1 | 62 | 45.3 |
| Male councillors | 76 | 55.5 | 76 | 55.9 | 75 | 54.7 |
| Total councillors | 137 | 100.0 | 136 | 100.0 | 137 | 100.0 |
| Mayors | # | % | # | 96 | # | 96 |
| Female mayors | na | na | 2 | 50.0 | 2 | 50.0 |
| Male mayors | na | na | 2 | 50.0 | 2 | 50.0 |
| Total mayors | na | 100.0 | 4 | 100.0 | 4 | 100.0 |
| Chairpersons | # | 96 | # | 96 | # | 96 |
| Female chairpersons | na | na | 5 | 45.5 | 4 | 36.4 |
| Male chairpersons | na | na | 6 | 54.5 | 7 | 63.3 |
| Total chairpersons | na | 100.0 | n | 100.0 | n | 100.0 |

Figure 6: CLGF Table: Women Councillors and Mayors/Chairpersons 2014-2017

Source: Department for Local Government correspondence with CLGF

²⁵ World Bank. (n.d.). Proportion of Seats Held by Women in National Parliaments (%) – St. Lucia. Proportion of seats held by women in national parliaments (%) - St. Lucia | Data (worldbank.org).

²⁶ Commonwealth Local Government Forum. (n.d.). *The Local Government System in St. Lucia: Country Profile 2017/18*. Commonwealth Local Government Forum, UK. <u>Saint Lucia.pdf (clgf.org.uk)</u>.

As previously stated, equitable representation of women and demographically diverse groups in decision-making strengthens the range and quality of information that is taken into consideration. Inclusion of gender focal points from ministries and agencies/departments of the GoSL, non-government, gender actors, and demographically representative community members in consultations is an important component of a robust planning process. Such inclusion in the SASAP process demonstrates recognition of the need to understand and factor in gender and other demographic differences in climate change adaptation needs and capacities. Planning and decision-making processes can benefit significantly from gender-equitable participation.

The GoSL has demonstrated commitment to inclusive decision-making. The NAP speaks to promoting gender equality in decision-making, and there is a firm foundation to build on with St. Lucia's track record with participatory and inclusive climate change and disaster planning processes and mechanisms²⁷. These mechanisms include 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 comprises representatives of public, statutory, academic, and private sector bodies and may appoint other members on an ad hoc basis.

Inclusive and equitable decision-making is also supported by a National Mechanism for Gender Equality named the Department of Gender, housed within the Ministry of Education, Innovation, and Gender Relations. The Department of Gender has the responsibility for other cross-cutting processes, including SDG coordination and Climate Change. The structure of the mechanism includes the Permanent Secretary as the administrative head of the Department, with the Director of Gender as the Chief Executive Officer. The Department comprises two units: a Gender Relations Unit (GRU) with responsibility for Communication and Gender-based Violence Prevention and Intervention; and a Gender Policy and Mainstreaming Unit (GPMU) with responsibility for intersectional gender analyses, gender mainstreaming, monitoring gender-responsive measures (including legal reform) and reporting²⁸.

The Division of Gender Relations within the Ministry of Education, Innovation, Gender Relations is the lead agency with responsibility for the process of the development of a national gender policy and corresponding implementation. In alignment with the timing of the UNDP EnGenDER initiative, the Department of Gender developed a draft National Gender Equality Policy Statement and Strategy. This occurred "at a time of immense environmental, social, health and economic challenges, from global threats such as Climate Change and the Global Pandemic caused by the Novel COVID-19 virus", which "are particularly devastating to Small Island Developing States

²⁷ 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.

²⁸ Saint Lucia National Gender Equality Policy Statement Draft January 2021.

(SIDS) like Saint Lucia, given their fragile economies, high debt to GDP ratio and almost exclusive reliance on tourism"²⁹.

Currently, before Parliament, the Gender Policy Statement included national consultation with a wide range of stakeholders as well as the creation of task force groups for data gathering to inform the planning process. The National Gender Equality Policy Statement will be implemented through a 5-year Strategic Plan aligned to the key results areas of the Medium-Term Development Strategy (2020 - 2023) and the priority sectors for adaptation identified in Saint Lucia's National Adaptation Plan (2018 - 2028).

In addition to defining four key priority areas of 1) Eliminating gender-based violence; 2) Governance (coordination of the national gender machinery and gender mainstreaming); 3) Health, and; 4) Economic empowerment of women and environmental sustainability. The Gender Equality Policy (2021) prioritizes equitable civic participation and states at Paragraph 2.4 a GoSL objective to:

"Create institutional mechanisms and systems that mandate and facilitate effective dialectic and inclusive participation, collaboration and consultation with various stakeholders (including civil society organizations, youth, private sector, academia, vulnerable groups and the media)."³⁰

In addition to the National Gender Mechanism, a National Coordinating Committee for Human Rights (NCCHR) was established via Cabinet Conclusion No. 120 of April 2, 2019, to foster dialogue among national stakeholders on human rights matters³¹. The Committee is coordinated by the Department of Foreign Affairs and includes senior-level representation from several ministries, departments, and agencies. These include the Division of Gender Relations represented by the Director. Importantly too, the Committee has membership from the Coalition of Civil Society Organisations³², represented by its Chairman, the National Youth Council, represented by a First Vice-President and the National Council of and for Persons with Disabilities, represented by its President.

These mechanisms represent institutional resources that the Infrastructure and Spatial Planning sector may draw upon to assist in establishing an inclusive and consultative process as part of its internal planning mechanism for the development of its SASAP. In doing so, the intent to increase the participation of women and men from communities and civil society organizations should be

A Gender Assessment - Links Between Gender and Climate Change in the Infrastructure and Spatial Planning Sector

²⁹ Saint Lucia National Gender Equality Policy Statement Draft January 2021.

³⁰ Saint Lucia National Gender Equality Policy Statement Draft January 2021.

³¹ Saint Lucia Department of External Affairs. (n.d.). National Coordinating Committee for Human Rights. <u>https://externalaffairs.gov.lc/human-rights</u>.

³² This coalition is a network of Civil Society Organisations (CSO) involved in diverse areas of interest throughout Saint Lucia. The coalition was established as a platform for engaging civil society as equal partners with the public and private sectors in the sustainable development of Saint Lucia. See: <u>The Coalition of Civil Society Organisations (saintluciacsocoalition.org)</u>. The Coalition maintains a comprehensive list of CSOs in St. Lucia. See: <u>CSO Directory – The Coalition of Civil Society Organisations (saintluciacsocoalition.org)</u>

both strengthened and equitable through appropriate evidence and data to validate genderresponsive policy development, planning, and decision-making.

3.3 EXTENT OF ACCESS TO FINANCIAL RESOURCES AND OTHER BENEFITS RESULTING FROM INVESTMENTS IN ADAPTATION BETWEEN WOMEN AND MEN

No data was found by which to assess the extent of gender equity in access to financial resources and other benefits of investments in climate change adaptation. This is a function of the absence of gender mainstreaming in adaptation planning.

ECLAC (2019, page 16) states that:

"A failure to acknowledge gender-specific risks and vulnerabilities in policy design and implementation implies that the economic, social, political, and health realities of males and females in Saint Lucia are the same and that males and females would be affected in the same manner by decisions in those areas. This results in ineffective policies, and poor programming and service delivery."³³

A key aspect of policy design and implementation is the budget/resource allocation - the macro, national budget/allocation, sectoral budgets, and those for specific projects and programmes. Differentiated planning based on information about and consideration of the economic, social, political, health, and other realities of the different demographic groups is crucial. It is a path that most readily ensures that there is equitable access to financial resources and other benefits resulting from development financing in general and investments in adaptation strategies in the context of SASAPs.

³³ ECLAC. (2019). Gender Data Assessment in St. Lucia: Challenges and Recommendations. Samantha John-Aloye et al. United Nations ECLAC.

3.3.1 GENDER-RESPONSIVE BUDGETING

Gender-responsive budgeting is designed to mainstream gender analysis into all stages of the budget planning cycle. It is not about whether an equal amount is spent on women and men. Rather whether the spending is targeted to and will be adequate to meet women's and men's needs, taking into account other factors such as age, location (urban, rural), disability, social roles and responsibilities, socio-economic status, etc. It involves analysis of the impact of any form of public expenditure or resource allocation on women and girls as compared to men and boys. (Manual for Training on Gender Responsive Budgeting, 2006, Page 36)³⁴

The ECLAC report (2019, page 8) indicates that the strengthening of capacity for such analysis and planning is being pursued under a GoSL partnership with the Caribbean Development Bank (CDB). The initiative, ECLAC notes, provides technical assistance in gender planning and gender-responsive budgeting and will support government bodies to integrate a gender perspective into policies, programmes, and projects through the training of civil servants and training of trainers.

³⁴ Schneider, K. (2006). *Manual for Training in Gender Responsive Budgeting*. GTZ, German Federal Ministry for Economic Cooperation and Development. <u>Microsoft Word - Deckblatt.doc (ndi.org)</u>.

4.0 INDICATORS AND MECHANISMS FOR MONITORING AND EVALUATION OF GENDER-RESPONIVE CLIMATE CHANGE ADAPTATION PLANS

The *Saint Lucia National Climate Change Policy and Adaptation Plan*³⁵, indicates that its monitoring is carried out by the NCCC or its successor body, which reports on a semi-annual basis to the Cabinet through the Minister of Planning, Development, Environment and Housing. After five years of the Policy and Action Plan being adopted, the Committee is mandated to carry out a public review of the policy to determine its effectiveness in achieving its goals and objectives.

A Monitoring and Evaluation Plan exists for the NAP 2018-2023. It sets out a comprehensive list of indicators, including for SASAPs. There is reference to gender-/vulnerable group-specific indicators. These include: *Vulnerable groups specifically targeted in the sectoral and cross-sectoral plans*; *Total number of gender-specific sectoral and cross-sectoral measures completed during the requisite calendar year*, and; *Of the measures that were completed during the requisite calendar year*, which, if any, specifically targeted men or specifically targeted women? List initiative(s) and gender targeted³⁶.

It is outlined in the Monitoring and Evaluation (M&E) Plan that, resources allowing, it is expected that aside from the annual monitoring and evaluation of NAP progress, the NAP and SASAPs will be reviewed overall at least once during the 2018-2028 period. Ideally, two reviews should occur: in 2021 (end of the period prescribed for initiating the implementation of short-term activities); and in 2024 (end for medium-term activities)³⁷.

Below, a representative infrastructure and spatial planning outcome from the NAP that relates to coastal infrastructure has been isolated to provide an illustrative example of the need to provide evidence and measurable data that a gendered analysis has occurred that looks to 1) the recognition of gender differences in adaptation needs, opportunities and capacities 2) gender-equitable participation & influence in decision-making processes and 3) gender-equitable access to financial resources and other benefits resulting from investments in adaptation.

In developing gender-responsive SASAP priorities, infrastructure planners must methodically validate that gender-responsive planning (inclusive of data, budgeting, and M&E) is taken into consideration to both improve infrastructure sector adaptive planning and meet external green climate funding criteria. Subsequent gender-related indicators that could be considered within the

³⁵ Government of Saint Lucia. (2015). Saint Lucia national climate change policy adaptation plan. 19.

³⁶ Government of Saint Lucia. (2018). *Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development., <u>Saint Lucia Monitoring and Evaluation for NAP.pdf (unfccc.int)</u>

³⁷ Government of Saint Lucia. (2018). *Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development., <u>Saint Lucia Monitoring and Evaluation for NAP.pdf (unfccc.int)</u>

SASAP process as it relates to equitable decision-making process indicators in Disaster Preparedness and Response are also included as an illustrative example of global best practice.

| the NAP – section or OUTCOME 3. ENHAN | TECHNICAL ANALYSIS EXPLORING LINKS BETWEEN GENDER AND CLIMATE CHANGE Based on the NAP – section on Infrastructure and Spatial Planning Sector p.98-104 OUTCOME 3. ENHANCED INFRASTRUCTURE-BASED CLIMATE ADAPTATION | | | | | |
|--|---|--|--|--|---------|--|
| Strategic Objective 2 Adaptation measures | Indicative outputs | OPERATIONS AND SAFETY UNDER A CHANGING CLIMATE Gender-responsive NAP process considerations Gender- gender Gender- equitable Gender-equitable access to financial resources and other benefits resulting adaptation Gender- ndicator adaptation influence in needs, from investments in adaptation Gender- equitable opportunities making and capacities processes | | | Gender- | |
| 199 Assess and strengthen the resilience and operational thresholds in the coastal infrastructure | More flexible seaport operations analysed and planned, to take advantage of suitable operating conditions (and in anticipation of increased downtime). Quay and wharf levels including infrastructure revised. | | | | | |

 Table 2: Technical Analysis Exploring Links Between Gender and Climate Change

Figure 7: Sample Results and Indicators for the Gender Equality Dimension of Voice and Rights³⁸

| Sample Results | Sample Indicators |
|--|--|
| Gender Equality Dimension: Void | ce and Rights |
| Increased capacity of women to prepare for humanitarian emergencies and recover from them | Number and percentage of women and men in local disaster preparedness and management committees, and risk assessment and planning teams Percentage of women in office-bearing and decision-making positions in committees, compared with the percentage undertaking voluntary disaster preparedness work Number and percentage receiving training or assistance for disaster risk reduction, preparedness, and response, by sex and age (including women from households headed by women) Number and percentage of women and men involved in maintaining early-warning systems (including indigenous, local, and contemporary warning systems) Number of local women's organizations and networks supported to undertake disaster risk assessment, preparedness, planning, training, and mitigation activities Number of local women's organizations and community-based organizations engaged in raising women's awareness of their human and legal rights (pre-disaster) |
| Women participate as decision makers in all aspects of the humanitarian response | Number and percentage of people consulted on their relief and rehabilitation needs, safety, and security, by sex and age Number and percentage of women and men who are consulted on the design of water and sanitation facilities, camp layout, and temporary shelters Number of local women's organizations and networks supported to deliver relief, rehabilitation, reconstruction, and resettlement services and programs Examples of changes to the distribution or type of relief items due to consultation with women (e.g., type or quality of food items or utensils; design of water, sanitation, or shelter facilities) Percentage of women and men in decision-making positions (e.g., camp management, distribution of food and other relief items, planning and implementing reconstruction) Evidence that regular dialogue is occurring with affected women and men, with separate forums for consultation with women Evidence that child and family care provisions are in place to enable women and girls to participate in decision making |
| The rights, safety, and security of women, men, girls, and boys are protected during relief, recovery, and reconstruction - Registration procedures - Gender-based violence - Psychosocial support | Percentage of affected population interviewed and registered individually, by sex, including unaccompanied children and other vulnerable groups; and percentage provided with registration documents, by sex Evidence that monitoring procedures are in place to prevent exploitation and abuse during registration processes Number of reported cases of gender-based violence, by type and age, and the percentage where the survivor chooses to pursue legal action Number of survivors who receive counseling and other support (e.g., legal, medical, safe refuge) for physical and sexual gender-based violence, by sex and age Evidence that reports on gender-based violence are compiled monthly, analyzed, and taken into account when implementing security and safety measures (including domestic violence and violence perpetrated by state and non-state actors) Number who receive trauma counseling and support, by sex and age Evidence that information, education, and communication materials are available on sexual and physical violence |
| Increased capacity of women to protect themselves from rights violations and advocate for and monitor service delivery during relief, recovery, and reconstruction | Number and percentage of women and men who receive training or awareness-raising on their rights and entitlements Number of local women's organizations and networks supported to monitor service delivery and protection issues Evidence of protection issues and rights violations that arise, and the action taken by women's organizations, nongovernment organizations, and individual women and men to address them |

3. Gender Equality Dimension: Voice and Rights

³⁸ Asian Development Bank, & Australia Aid. (2013). *Tool kit on gender equality results and indicators*. Asian Development Bank. 49.

Development of indicators of responsiveness to vulnerable groups, including gender responsiveness, in SASAPs is an important step in the planning process, as is defining a timetable, method/s, and institutional mechanism for monitoring and evaluation. The NAP M&E Plan outlines the rationale in the following terms that:

"Adapting to climate change is a continuous process, and requires the periodical review of plans, as vulnerabilities change, new or additional information on climate change emerges, national environmental, social and economic conditions vary, and policies are implemented. The NAP and SASAPs must therefore be reviewed and updated periodically"³⁹.

³⁹ Government of Saint Lucia. (2018). *Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development. 8. <u>Saint Lucia Monitoring and Evaluation for NAP.pdf (unfccc.int)</u>.

REFERENCES

- Adshead, D., Fuldauer, L.I., Thacker, S., Román García, O., Vital, S., Felix, F., Roberts, C., Wells, H., Edwin, G., Providence, A. and Hall, J.W. (2020). Saint Lucia: National Infrastructure Assessment. United Nations Office for Project Services, Copenhagen, Denmark; https://www.preventionweb.net/files/74108_saintlucianationalinfrastructureass.pdf
- Asian Development Bank, & Australia Aid. (2013). *Tool kit on gender equality results and indicators*. Asian Development Bank. 49.
- Baptiste, A.J. (2011, July 25 & 26). *After Action Review of St. Lucia's response to Hurricane Tomas, 2010.* Auguste, P. (Ed.). <u>AAR.Hurrianne.Tomas.pdf (stlucia.gov.lc)</u>
- Caribbean Development Bank. (2016). Country Gender Assessment St. Lucia 2016. Caribbean Development Bank. Country Gender Assessment - Saint Lucia 2016 | Caribbean Development Bank (caribank.org)
- Commonwealth Local Government Forum. (n.d.). *The Local Government System in St. Lucia: Country Profile 2017/18*. Commonwealth Local Government Forum, UK. <u>Saint_Lucia.pdf (clgf.org.uk)</u>.
- ECLAC. (2019). *Gender Data Assessment in St. Lucia: Challenges and Recommendations*. Samantha John-Aloye et al. United Nations ECLAC.

Gishler et al. (2016). How to Turn on the Lights in Haiti. Infrastructure for Development. IDB.

- Government of Saint Lucia. (2015). *Saint Lucia national climate change policy adaptation plan.* 19.
- Government of Saint Lucia. (2018). *Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development., <u>Saint Lucia</u> <u>Monitoring and Evaluation for NAP.pdf (unfccc.int)</u>
- 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.

Government of Saint Lucia. (2018). Monitoring and Evaluation Plan of Saint Lucia's National

- Government of Saint Lucia. (2019, June). Environmental & social management framework (ESMF) for the OECS regional health project (P168539) Saint Lucia. <u>http://www.govt.lc/media.govt.lc/www/resources/publications/final-oecs-esmf-st-lucia-june-3rd--1-.pdf</u>.
- Government of Saint Lucia. (2019, December). Saint Lucia human capital resilience project P170445 Social Assessment. <u>http://www.govt.lc/publications/saint-lucia-human-capital-resilience-project-p170445-social-assessment</u>.
- IDB. (2017). The secret of super women: feminine hygiene. IDB.
- IDB. (2020). How to integrate a gender approach in the infrastructure sector?: Infrastructure for *development. Special no. 2. IDB.* <u>https://publications.iadb.org/publications/english/document/How-to-Integrate-a-Gender-Approach-in-the-Infrastructure-Sector-Infrastructure-for-Development-Special-Number-No.-2.pdf</u>.
- IMF. (2018, June). St. Lucia Climate Change Policy Assessment. Country Report # 18/181. p 13. International Monetary Fund, Washington. <u>https://www.imf.org/~/media/Files/Publications/CR/2018/cr18181.ashx</u>
- Kairi Consultants Ltd. (2018, December). St. Lucia National Report of Living Conditions 2016: *Summary Report*. <u>https://www.stats.gov.lc/wp-content/uploads/2019/01/Saint-Lucia-National-Report-of-Living-Conditions-2016-Final_December-2018.pdf</u>.
- Kairi Consultants Ltd. (2018, December). St. Lucia National Report of Living Conditions 2016: *Summary Report*. 3-4. <u>https://www.stats.gov.lc/wp-content/uploads/2019/01/Saint-Lucia-National-Report-of-Living-Conditions-2016-Final_December-2018.pdf</u>.
- Kairi Consultants Ltd. (2018, December). St. Lucia National Report of Living Conditions 2016: *Summary Report*. 196-197. <u>https://www.stats.gov.lc/wp-content/uploads/2019/01/Saint-</u> Lucia-National-Report-of-Living-Conditions-2016-Final_December-2018.pdf.
- Martinez et al. (2018). Connecting to Economic Opportunity? The Role of Public Transport in Promoting Women's Employment in Lima. Institute of Labor Economics.
- McSweeney, and Remy. (2008). Building roads to democracy: The contribution of the Peru rural roads program to participation and civic engagement in rural Peru. World Bank.

- NAP Global Network. (2019). Toolkit for a Gender Responsive Process to Formulate and Implement National Adaptation Plans. NAP Global Network. 11. Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs) | NAP Global Network.
- Saint Lucia Department of External Affairs. (n.d.). *National Coordinating Committee for Human Rights.* <u>https://externalaffairs.gov.lc/human-rights</u>.

Saint Lucia National Gender Equality Policy Statement Draft January 2021.

Schneider, K. (2006). *Manual for Training in Gender Responsive Budgeting*. GTZ, German Federal Ministry for Economic Cooperation and Development. <u>Microsoft Word -</u> <u>Deckblatt.doc (ndi.org)</u>.

Snyder et al. (2018). Gender and Energy: The Balance of Power. IDB.

- UNDP. (2010). *Gender, Climate Change and Community Based Adaptation Guidebook.* UNDP, New York. <u>Gender, Climate Change and Community Based Adaptation Guidebook</u> <u>UNDP</u>.
- UN ECLAC. (2011). Saint Lucia macro socio-economic and environmental assessment of the damage and losses caused by Hurricane Tomas: A geo-environmental disaster towards resilience. UN ECLAC. <u>https://www.finance.gov.lc/resources/view/290</u>
- World Bank. (n.d.). Proportion of Seats Held by Women in National Parliaments (%) St. Lucia.
 <u>Proportion of seats held by women in national parliaments (%) St. Lucia | Data (worldbank.org)</u>.

APPENDIX 1 – GENDER AND CLIMATE CHANGE SURVEY

About the Survey

Thank you for taking part in this important survey measuring your perceptions regarding gender and climate change within your sector. This information will help us perform a technical analysis exploring the links between gender and climate change within your sector to identify practical considerations for prioritizing, implementing, and monitoring and evaluating gender responsive climate actions.

This work is part of the Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) project being implemented by UNDP Barbados and the Eastern Caribbean, through funding support from Global Affairs Canada (GAC) and Foreign, Commonwealth and Development Office (FCDO). Through this project, Niagara College Canada is working with the Government of Saint Lucia to conduct sector-wide gender assessments in six sectors (health, energy, resilient ecosystems, tourism, education and infrastructure and spatial planning) which will then inform guidelines for ensuring gender-responsive Sectoral Adaptation Strategy and Action Plan (SASAP) development. This work is aligned with Saint Lucia's National Adaptation Plan (NAP), Nationally Determined Contribution (NDC), Nationally Appropriate Mitigation Action (NAMA) and other projects undertaken by consultants such as the Caribbean Natural Resources Institute (CANARI), etc.

The survey contains 30 questions and should take 15-20 minutes to complete. Be assured that your responses to this survey are completely anonymous. Additionally, your responses will be combined with those of many others and summarized in a report to further protect your anonymity. If you wish to be involved in a focus group and/or interview related to gender responsive climate adaptation planning in your sector, please provide your name and contact info at the end of the survey.

Thank you again for your participation, The Niagara College Team

Glossary

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

Gender budgeting: Has an objective to produce a budget in which gender has been mainstreamed, rather than focusing on a separate budget for women. This means that the process of the formulation of the budget includes an analysis of both public spending and "methods of raising public revenue", from a gender perspective, highlighting the process of resource allocation for women and girls as compared to men and boys. (Diane Elson, 2003)

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.

Sex-disaggregated data: Data that is collected, presented and analyzed separately for women, men, girls and boys. It allows the identification of existing and potential inequalities based on gender. It is the basis for effective gender analysis. (UNICEF, 2017; UN Women Training Centre, 2017)

Social equality: Equivalent treatment of and opportunity for members of different groups within society regardless of individual distinctions of race, ethnicity, gender, age, social class, sexual orientation, or other characteristics or circumstances

Introduction

What is your sex?
 Male
 Female

2. Which sector do you work in? Health Education Ecosystem Tourism Energy Infrastructure

3. What type of organisation do you work for? Academic or research institution Civil society organisation (NGO or community group) National or local government Private enterprise Other, please identify

4. What is your role at this organisation? _____

 What is your position's responsibility as it relates to gender and climate change planning? (I.e. Project identification, assessment, planning, implementation, monitoring and evaluation)

Assessing gender differences in adaptation needs, opportunities and capacities per sector

6. Do gender inequalities and differences exist in your sector?

Yes

No

Unsure

- 7. If you answered yes, please provide examples of these gender inequalities and differences
- 8. Are men and women impacted differently by climate change and related hazards (I.e. dry spell and drought, heatwave, hurricane, etc.) within your sector?

Yes No

Unsure

9. If you answered yes, please provide examples of how men and women are impacted differently. What evidence do you have? (I.e. qualitative, quantitative) _____

10. What do you see as the main opportunities and/or barriers for promoting gender and social equality in your work or sector? What strategies would you recommend to address these opportunities and/or barriers?

Examining how equitable are participation and influence by women and men in decision making processes

11. Does your sector have a process for consultation of stakeholders to support joint decisionmaking or action on policies and/or programmes (I.e. stakeholder meetings, consultation meetings, focus groups, client/beneficiary surveys, etc.)

Yes No Unsure

- 12. If you answered yes, can you give examples of type (I.e. steering committees, community level, government level)? _____
- 13. How well do you think women or women-focused groups have been engaged in decision making processes? (sliding scale 1-5 with 1 being not well, 5 being extremely well)
- 14. What evidence do you have that supports your answer to the question above? (I.e. qualitative, quantitative) _____
- 15. List any roles/organizations that need to be included in these decision-making processes to ensure that gender is integrated? _____

Examining how equitable are access to financial resources and other benefits resulting from investments in adaptation between women and men

16. Are you receiving funding for initiatives in climate change adaptation?

Yes

No

Unsure

- 17. If you answered yes, where are you receiving this funding from? _____
- 18. Are gender differences taken into account in budget planning in your sector (gender budgeting)?

Yes No

Unsure

19. If you answered yes, can you provide an example of how gender differences are taken into account in budget planning in your sector? _____

- 20. What methods (analytical tools, indicators/criteria or other measures) are in place to ensure climate finance addresses gender concerns and promotes gender equality?
- 21. How are you monitoring and evaluating gender responsive climate actions? (I.e. gender-related targets, gender-related indicators, etc.)

Identifying gaps in sex- disaggregated data and information related to gender dynamics and differences in vulnerability to climate change and capacities for adaptation

22. Does your sector collect sex-disaggregated data? Yes No Unsure

23. If you answered yes, what information is collected? _____

24. Is any information around gender differences in vulnerability to climate change and capacities for adaptation collected? (for example, number of women vs. men that are out of work as a result of a hurricane)

Yes No unsure

- 25. Who is responsible for collecting this data?
- 26. Who is responsible for storing this data? _____
- 27. If you answered no, why do you think this information is not being collected?
- 28. What types of data do you need to help you make better decisions about the needs of men and women in climate change planning? ______
- 29. Would you like to be contacted to participate in a focus group and/or interview related to gender responsive climate adaptation planning in your sector?

Yes

No

30. If you answered yes, please provide your name and contact information below.