



EnGenDER

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



Gender-Responsive Climate Budgeting in the Caribbean:

Closing the Gender and Climate Budget Gap



United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)

UN Women is the United Nations organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide. UN Women supports UN Member States as they set global standards for achieving gender equality and works with governments and civil society to design laws, policies, programmes and services needed to implement these standards. It stands behind women's equal participation in all aspects of life, focusing on five priority areas: increasing women's leadership and participation; ending violence against women; engaging women in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality central to national development planning and budgeting. UN Women also coordinates and promotes the UN system's work in advancing gender equality.

About the EnGenDER Project

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ACRONYMS AND ABBREVIATIONS

BGA	Bureau of Gender Affairs
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
Cat DDO	Catastrophe Deferred Drawdown Option
CBF	Caribbean Biodiversity Fund
CC4FISH	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector
CRB	Climate-responsive budgeting
COVID-19	Coronavirus disease 2019
CRF	Canada-Caribbean Resilience Facility
DMI	Dominica (Commonwealth of)
EbA	Ecosystem-based adaptation
E-LWPG	Enhanced Lima Work Programme on Gender
EnGenDER	Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FHH	Female-headed household
GBV	Gender-based Violence
GCAM	Gender and climate marker
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GRB	Gender-responsive Budgeting
GRCB	Gender-responsive Climate Budgeting
GRN	Grenada

HEAT	Human Economic Impact Assessment
ILO	International Labour Organization
IMF	International Monetary Fund
IUCN	International Union for Conservation of Nature
M&E	Monitoring and Evaluation
MRV	Monitoring, Reporting and Verification
NAP	National Adaptation Plan
NCD	Non-communicable Disease
NDC	Nationally Determined Contribution
OECS	Organisation of Eastern Caribbean States
PDNA	Post-Disaster Needs Assessment
PFM	Public Financial Management
PWDs	Persons with Disabilities
SASAP	Sectoral Adaptation Strategy and Action Plan
SDG	Sustainable Development Goal
SIRFF	Sustainable Island Resource Financing Framework
SVG	Saint Vincent and the Grenadines
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children’s Fund
UNOPS	United Nations Office for Project Services
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
USD	United States dollars
WEDO	Women’s Environment Development Organization
WFP	World Food Programme

HOW TO USE THIS GUIDANCE DOCUMENT

This **guidance document** is intended to be an easy-to-read and easy-to-use companion for teams and individuals working on Gender-responsive Climate Budgeting (GRCB) in the Caribbean, particularly in Antigua and Barbuda, Dominica, Grenada and Saint Lucia. This is especially relevant to sectoral adaptation planning.

The guidance document serves as a guidance strategy document, not a toolkit. It refers to specific steps and strategies, and shares relevant documentation from the region or other parts of the world in an effort to help teams navigate this space selectively where they are most relevant. Where tools exist, reference is made to them.

Part I provides the background, context and limitations of the guidance document.

Part II describes the context for GRCB at the macro level as part of the necessary ecosystem shift that will support sectoral adaptation planning efforts if and when undertaken. A five-step process is outlined from step 1, Define, to step 5, Mainstream and Integrate.

Part III takes a detailed review of seven sectors and provides guidance, examples of tools and suggestions, as well as tips for taking clear action. In each sub-section, elements of the five-step process are elaborated. At the end of each section is a *Recommended Reading* section (with links); links are also provided in the Annexes.

The **Conclusion** summarizes key issues and lessons from GRCB in general as well as how it responds to some of the expressed gender-responsive and climate budgeting needs of these Caribbean nations.

The **Annexes** provide access to background documents as well as other tools and guidelines that may be relevant in supporting the development and implementation of Sectoral Adaptation Strategies and Actions Plans (SASAPs).

KEY TERMS

Adaptation is an adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Climate change is attributed directly or indirectly to human activity that alters the composition of the global atmosphere as well as to natural climate variability observed over comparable time periods.

Gender describes socially constructed roles for women and men. Gender is an acquired identity that is learned, changes over time, and varies widely within and across cultures. In contrast, sex identifies the biological differences between males and females.

Gender equality refers to equal rights, responsibilities and opportunities of women and men, and girls and boys, which do not depend on whether they are born male or female. Gender equality emphasizes that the interests, needs and priorities, as well as the diversity of different groups of women and men, and girls and boys are recognized. Gender equality is not exclusively a woman's issue; it should also concern and fully engage men. Equality between women and men is seen as a human rights issue and as a precondition for, and indicator of, sustainable, people-centred development.

Gender balance refers to the equal and active participation of women and men in all areas of decision-making, and in access to and control over resources and services.

Gender-responsive and climate budgeting refers to reforming methods and practices across the whole budget cycle to ensure that both gender and climate change are taken into account. In many cases, it involves integrating gender concerns into existing climate-responsive budgeting (CRB) practices. In this Gender-Responsive Climate Budgeting guidance document (hereafter referred to as the 'guidance document'), this term refers to jointly mainstreaming gender and climate, and integrating appropriate methods in a coordinated manner.

Gender mainstreaming is the process by which the gaps in development opportunities between women and men are reduced. It also involves working towards equality between men and women as an integral part of the organization's strategy, policies and operations.

Gender norms refer to the social principles that govern the behaviour of girls, boys, women and men in society. These norms are internalized and learned early in life, and are the standards and expectations to which gender identity generally conforms, within a range that defines a particular society, culture and community at a certain point in time.

Gender parity is the ratio of male to female or female to male in any given indicator.

Impact assessment refers to ex-ante appraisal and ex-post evaluation that assesses the expected or actual results generated by a programme.

Note: The content here was taken mainly from UNICEF and CABRI reports with some adaptations of language, hence the lack of the use of quotations. Effort was made to simplify the language while keeping to the spirit of the content.

Sources: CABRI. n.d. Inclusive Budgeting and Financing for Climate Change in Africa. www.cabri-sbo.org/uploads/files/Documents/Opportunities-for-coordinating-the-integration-of-gender-and-climate-change-into-budgeting-and-finance.pdf

UNICEF (2017). Gender Equality: Glossary of Terms and Concepts. www.unicef.org/rosa/media/1761/file/Gender%20glossary%20of%20terms%20and%20concepts%20.pdf

INTRODUCTION

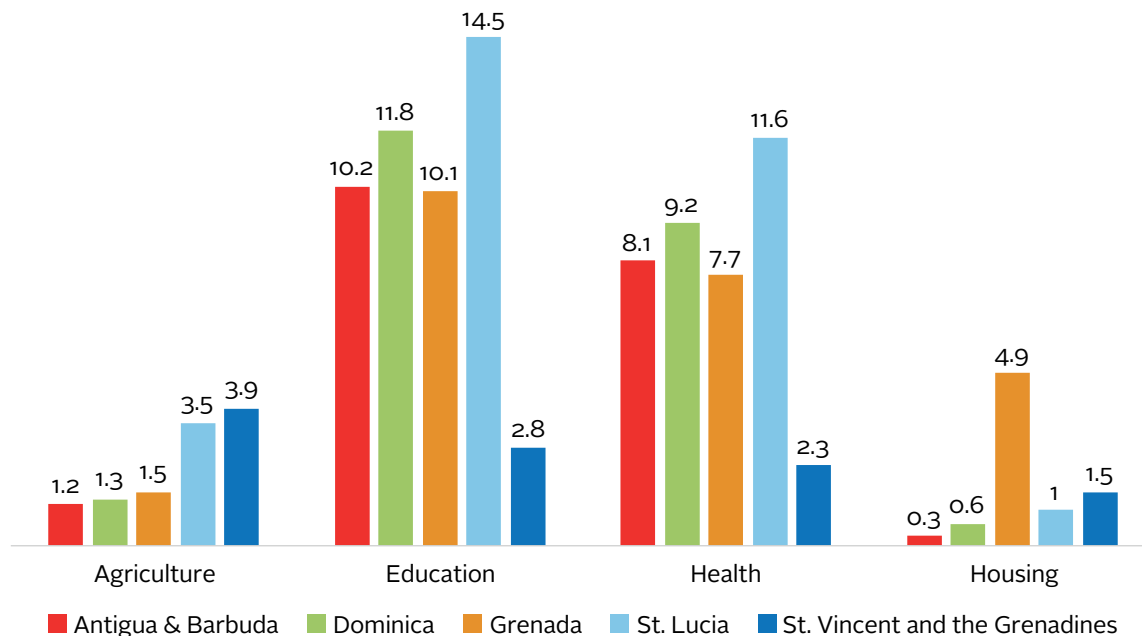


Gender-Responsive Climate Budgeting in the Caribbean for Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) countries (the ‘guidance document’) aims to help stakeholders close a significant gender and climate budget gap at the national and sectoral level by:

- enhancing their awareness of the benefits of gender-responsive climate budgeting (GRCB) and the value it can bring to efforts at the sectoral level, particularly in delivering for the most vulnerable and in addressing a clear gender inequality of risk;
- strengthening the capacity of public finance actors and stakeholders, for example, the Ministry of Finance, to conceptualize GRCB steps, actions and instruments as part of their normal budgeting processes, as well as the financial allocation of resources for projects and programmes that address gender equality and climate change.

This guidance document will be complemented by a one-day training and a training report, which will include recommendations for follow-up. Lessons learned from the training will also be integrated back into the guidance document, making it a living, participatory document for which there should be interest and buy-in.

Figure 1: Public capital expenditure per key sector in EnGenDER countries, 2021* (% of budget)



Note: *Data used in Figure 1 were sourced from the five countries' 2021 budget statements.

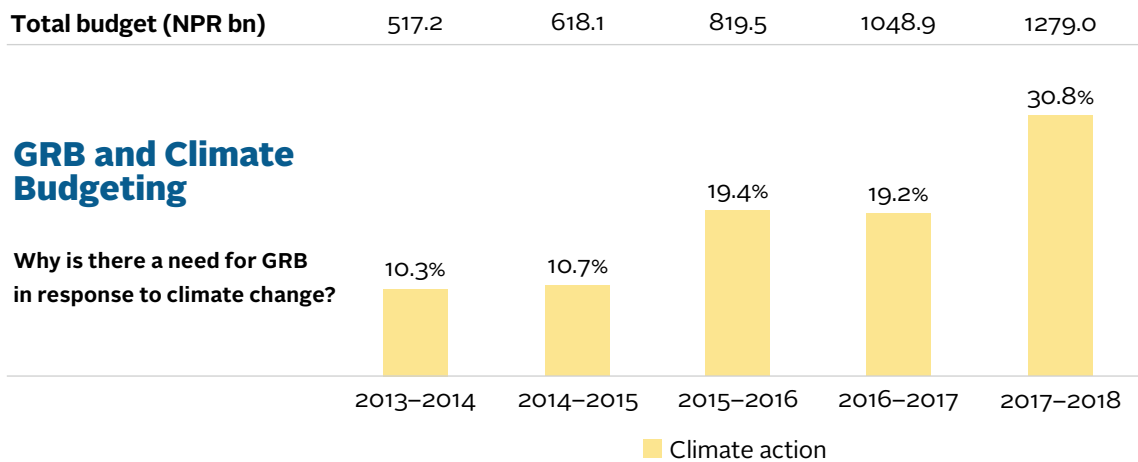
Sources: 2021 Budgeting documents including budget speeches (Governments of Antigua and Barbuda, 2020, Grenada, 2021, Saint Lucia, 2021, Dominica, 2021, and Saint Vincent and the Grenadines, 2021).

The development process of this guidance document leverages:

- preceding analyses and/or assessments of finance and costing needs;
- the results of previous studies and other guidance documents;
- existing Nationally Determined Contributions (NDC) roadmaps and other Sectoral Adaptation Strategies and Action Plan (SASAP) documents for Antigua and Barbuda, Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines (SVG);
- a review of the budgeting situation;
- discussions with key stakeholders including consultants/consulting teams who have been working on the SASAP documents.

Some of the questions that the guidance document considers were also explored in the Gender Budgeting Virtual Workshop hosted by the Gender Team of the United Nations Framework Convention to Combat Climate Change (UNFCCC) in September 2021 and delivered by SAEDI Consulting (Barbados) Inc.; the following questions are relevant to Caribbean Small Island Developing States (SIDS):

- *How can/do budgets – or how likely are they to – affect people who critically rely on or need adaptation support? Is the focus on improving their situation without addressing some of the fundamentals that drive susceptibility and vulnerability to climate change and its effects or addressing these issues more directly?*
- *In the past, where have investments been made, and are there any expanded or new areas needed to sustain them?*
- *If GRCB is implemented, what are the key areas for tracking and monitoring, and what are the specific ways and tools needed? How can this be achieved in a way that is practical, useful and helpful for others?*
- *How can SASAPs be effectively monitored? What objectives and outcomes must be achieved? What indicators should be identified? What specific techniques are useful and relevant? Budget codes? Expenditure reviews?* Figure 2 provides an example of the result of an expenditure review.

Figure 2: A climate budget review, 2013–2018

Note: GRB = Gender-responsive Budgeting

Source: Presentation made at the UNFCCC “Act on the Gap” Workshop focused on Gender-Responsive Budgeting, held in September 2021.

For some stakeholders, this is a journey that they may already be on, and for others, one to which they should be invited. Lessons are drawn from the Pacific Region, Mexico and Africa, where gender-responsive budgeting (GRB)/gender-responsive climate budgeting (GRCB) is being implemented and/or considered. The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) Gender Marker may also be relevant, but the priority has been placed on materials developed in and for the Global South.

There is an opportunity, through GRCB, to enhance government accountability while leveraging some of the possible approaches from work in the United Nations Spotlight Initiative, a joint United Nations system and European Union (EU) initiative whose main donor is the EU. In the latter, accountability scorecards relating to services for responding and/or ending violence against women and girls are being piloted, which are also useful in reporting and accountability in a GRCB context. Accountability for commitments and delivering on results will be a key aspect of making GRCB real and tangible. Specific tools are recommended accordingly to support such efforts relevant to sectors and also presented in the Annex.

Structure of the guidance document

The guidance document has three main sections:

Part I consists of the introduction, including the structure of the document, the approach taken, and limitations as well as gender and climate guiding principles.

Part II outlines how GRCB is intended to work.

Part III addresses GRCB at the macro and sectoral levels. Seven sectors are examined specifically in this context.

The Annexes, which include reference documents, have a limited focus on key tools and other materials that are adaptation- and sector-specific.

The guidance is sharply focused on GRCB, a combination of GRB and climate budgeting (CB). It is a relatively new area in general and, as a defined practice, new to the Caribbean. Accordingly, some of the proposed guidance will be experimental because GRCB is still nascent and growing. Since there are limited examples and practices in the Caribbean, there are limited specific references from the region compared to others. Existing guidance on developing SASAPs in Saint Lucia is maximized as is guidance developed for national adaptation plans (NAPs) and national strategic actions plans for addressing gender-based violence (GBV), which, although focusing on other issues, provides many lessons learned, including from the wider Caribbean region.

The document includes various figures, examples, scenarios and elements, as well as data points that can continue to make the business case for GRCB in each priority sector. To date, analysis by NDCs (first- and second-generation) suggests that GRB/GRCB is neither consistently considered nor applied in the context of climate change planning.

Where possible, some of the innovations identified in the preliminary expenditure review conducted as a precursor to this document will be considered and innovative approaches used to prioritize adaptation measures in the country SASAPs.

Target audience

The intended audience is the main five member states of the Organisation of Eastern Caribbean States (OECS), i.e. Antigua and Barbuda, the Commonwealth of Dominica, the tri-island state of Grenada, Carriacou and Petite Martinique, Saint Lucia and SVG. This group includes government representatives such as public servants working on climate action programming and budgeting directly and indirectly, sectoral ministries with the mandates to advance climate adaptation action and measures, the private sector, social movements/activists including women's groups and gender and climate groups, as well as communities and private individuals. Attitude is a key element of institutionalizing and putting GRCB into practice.



SECTION I

Setting the Stage for Gender-Responsive Climate Budgeting



In advancing the concept of GRCB, this guidance document leverages the 2030 Agenda for Sustainable Development with a dual focus – on Sustainable Development Goal (SDG) 5 (Gender Equality) and SDG 13 (Climate Action). This effort in highlighting how budgets are equally climate- and gender-responsive, as well as mutually reinforcing also considers other SDGs, such as SDG 12 (Reduced Inequality), SDG 16 (Peace Justice and Strong Institutions), SDG 17 (Partnership for the Goals) as well as SDG 8 (Decent Work and Economic Growth).

This guidance document also bears in mind that GRB is included in the monitoring framework of the SDGs as Indicator 5.c.1, measuring *the proportion of countries with systems to track and make public allocations for gender equality and women's empowerment*. This indicator emphasizes the need for strong policy frameworks for gender equality, tools/instruments to integrate gender into public finance management systems, and transparency of gender budget information for government accountability.

UN Women Talking Points make clear the need and value of stakeholder dialogue and partnership on GRB (a precursor of GRCB):

Developing an integrated national financing framework requires broad-based, multi-stakeholder dialogue to accurately map the policy and financing landscape, which must include national women's machinery and women's organizations. Additionally, costing the national gender action plan can provide critical data on financing needs to achieve gender equality goals to underpin the design of the financing framework.¹

Source: UN Women (n.d.).

Similarly, developing a national financing framework for climate change must engage a broad-based coalition including sectoral actors as well as gender machineries² and/or organizations, and related action plans should provide critical information and data on financing needs in the short, medium and long term.

The need for a robust budgeting and financing approach emerges from the costing and expenditure review that preceded the work on this guidance document and that informs the guidance and the content. Some of the considerations included are as follows:

- Over the years, various assessments of costs have been conducted, which have not always been consistent and which have used different methodologies. Some International

¹ UN Women (n.d.).

² 'Women's machineries' is a term used to refer to designated state/public authorities with mandates for gender equality and women's empowerment. These authorities, which can be a distinct Bureau of Gender Affairs, a ministerial portfolio within a larger ministry and or a department/division with a ministry, usually take the lead in this area. These state actors are usually key partners for UN Women, particularly in its normative work.

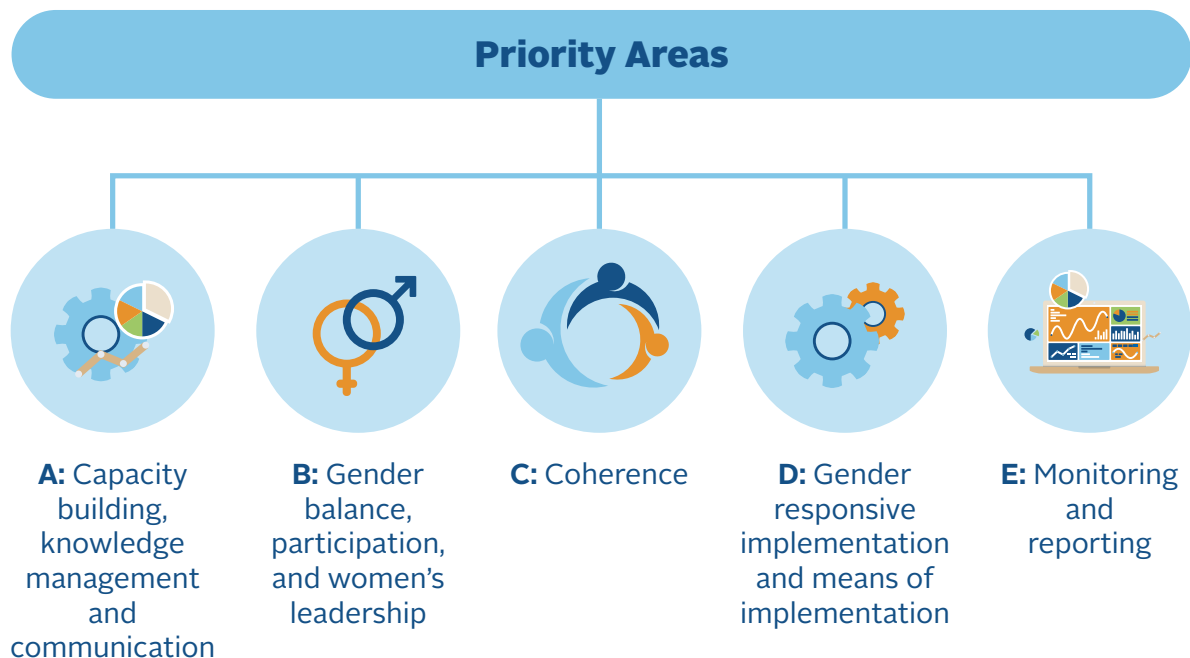
Monetary Fund (IMF) assessments have been the most robust (in terms of the breadth and depth of the analysis of finance, what is in place and what is lacking) and comparable between Caribbean countries (due to the use of a common methodology and assessment of fiscal, financial and economic structural factors that weaken the macroeconomic framework for Caribbean SIDS).

- Adaptation costs often seem to have been the more complicated of the costs to calculate and are not always consistently included in NDCs. For countries without NAPs, other sources including budget statements, project budgets and other statements had to be used to understand the amounts being allocated as a proxy for adaptation needs and spending. Hence, caution was necessary in adding to or subtracting amounts and estimating, for example, an adjusted cost of inaction with adaptation measures and budgets consolidated.
- All countries face a small but potentially impactful chance of a major disaster annually, and the impact of events on their GDP is serious, reaching as high as 80 percent.
- Although innovations are expanding, the process has been slow, and countries are still innovating nationally rather than at a multi-country or regional level to share climate, environmental and or disaster risk, except for the Caribbean Catastrophe Risk Insurance Facility (CCRIF).
- Insurance and underinsurance are key and pervasive issues for which significantly more research, instruments and experimentation are needed.
- National budgets now consistently consider and reflect disaster risk as well as climate risk in line with long-term resilient planning, including adaptation; mitigation of climate change and mixed adaptation and mitigation approaches are less common. However, these issues are not driving how funding is allocated. Although there is some innovative (Bahamas Development Bank with support from UN Women Caribbean) and experimental work on green bonds that may be relevant, there is no consistent approach that defines the role and more appropriate use of various instruments such as grants, equity, loans and/or bonds.
- More detailed research and analysis on the cost of inaction including an update of the 2008 analysis are warranted, including greater consideration of the actions taken and being proposed so that the remaining gap could also be calculated and leveraged for advocacy and policy reform efforts. A partnership between the World Bank, the IMF, United Nations Development Programme (UNDP) and UN Women seems necessary to also ensure that gender is mainstreamed in this analysis and that a gender and social cost of inaction gap can also be assessed.

- Some of the SASAP concept notes are very general, while others are necessarily cross-cutting. More micro-targeting, particularly for impact, seems relevant.
- COVID-19 has put a damper on – and has been the reason for catalytic change in – some of the budgeting language, content and focus. Countries are still coming to terms with the depths of the impact and the changes it has brought to the way planning is approached.

This EnGenDER investment supports the implementation of the Enhanced Lima Work Programme on Gender (E-LWPG) and builds on the capacity-building efforts of the United Nations Framework (UNFCCC) and other actors. It also leverages analyses carried out by the Women's Environment Development Organization (WEDO) and by the Commonwealth Secretariat, which highlights persistent disconnects between gender and climate, the ways in which gender is inconsistently addressed, and the lack of use of tools such as GRB to deliver on bold promises in policy and strategy documents. Recent reviews by the Commonwealth Secretariat, for example, of the 2020/2021 cohort of new or updated NDCs show improvement as well as persisting gaps in how gender is applied. Areas for improvement include a more consistent application of a gender lens using best practices in how the nexus between gender and climate is treated. The five priority areas of the E-LWPG, which reflect some of this globally agreed best practice, are highlighted in Figure 3.

Figure 3: Areas of the Enhanced Lima Work Programme on Gender (E-LWPG) considered



Source: UNFCCC and adapted by SAEDI Consulting (Barbados) Inc.

This document focuses significantly on Priority Areas C, D and E, i.e. Coherence, Gender-responsive implementation and means of implementation, and monitoring and reporting, respectively. The emphasis on GRCB is expected to be especially critical for Priority Area E.

This focus on budgeting is also consistent with the 2015 Addis Ababa Action Agenda on Financing for Development.³ The Agenda reaffirms that:

achieving gender equality, empowering all women and girls, and the full realization of their human rights are essential to achieving sustained, inclusive and equitable economic growth and sustainable development. We reiterate the need for gender mainstreaming, including targeted actions and investments in the formulation and implementation of all financial, economic, environmental and social policies. We recommit to adopting and strengthening sound policies and enforceable legislation and transformative actions for the promotion of gender equality and women's and girls' empowerment at all levels, to ensure women's equal rights, access and opportunities for participation and leadership in the economy and to eliminate gender-based violence and discrimination in all its forms.⁴

The Agenda also makes a critical commitment to the mobilization of domestic resources, which will be a central focus of this guidance document. It will not be the only focus, however, since, for SIDS, the mobilization of international climate finance and concessional financing for climate adaptation, mitigation and resilience, as well as loss and damage, are pivotal to their economic stability and survival. It notes:

Sound social, environmental and economic policies, including countercyclical fiscal policies, adequate fiscal space, good governance at all levels and democratic and transparent institutions responsive to the needs of the people, are necessary to achieve our goals. We will strengthen our domestic enabling environments, including the rule of law, and combat corruption at all levels and in all its forms. Civil society, independent media and other non-State actors also play important roles.⁵

SASAPs must also be gender-sensitive to the pre-existing risk of GBV and consider that there is a likelihood that it will increase due to the stress, tension and conflict arising from devastating impacts, losses and damages. This correlation between GBV and environmental interventions is not new in the EnGenDER project; the project has supported COVID-19

³ UN (2015).

⁴ Sustainable Development Knowledge Platform (2022).

⁵ Ibid.

response actions including response to GBV in Saint Lucia, Antigua and Barbuda, Dominica and SVG.⁶ In order to confirm this correlation it is essential to highlight the lessons learned from Hurricane Maria in Dominica, such as the rise of looting. Moreover, the gender inequality of a risk study carried out in 2021 highlighted significant risks for two categories of workers in Dominica, including agricultural workers. This study noted: “With little legal protection and limited access to the law, women agricultural workers are particularly susceptible to harassment at work. Similarly, women domestic workers often report low wages and sexual harassment.”⁷

Defining gender-responsive climate budgeting

Gender inequality and climate change are two cross-sectoral issues that are important to address in the scope of sustainable development and well-being. With decades of work being carried out on GRB, and more recently, CRB, both show potential positive effects that can be mutually reinforcing. In this ‘double-mainstreaming’ approach, bridging these two areas creates a new operational space for budgeting that integrates both concepts into a single programme and policy objective, i.e. GRCB.⁸ While this work is relatively new to the Caribbean region, there is much that can be learned from experimental work in Africa and robust efforts in Asia (Bangladesh) and Latin America (Mexico).

The amount of funding from international sources, which is allocated separately for climate and gender, is and continues to be greater for the former.⁹ Funding climate change and gender together ensures adequate funding and strategies that can benefit more people and vulnerable groups. It also provides an opportunity to address these two important issues in the development sector, in addition to advancing towards achieving multiple SDGs at the same time.

Critical to this effort is the credibility of claims regarding the gender and climate benefits arising from planned and approved budgets and expenditure. Currently, in the Caribbean experience of the five focus countries, claims are inconsistently made, tracked and reported (see Table 1), and benefits inconsistently defined and accessed regarding gender specifically. Across various documents, claims are inconsistent and do not analyse cost/impact of gender inequality, or the benefits of a gender lens applied to areas such as monitoring and evaluation, or to tracking systems.

A tracking system to consolidate claims by governments on adaptation costs, needs and finance, as well as the targets and benefits of this finance should be stored in one location for analysis, reporting and tracking. Based on the findings of Table 1, it

6 UN Women Caribbean (2022).

7 Perch (2021).

8 CABRI (2022).

9 Ibid.

is possible to observe how inconsistencies at the level of public instruments drive how finance is allocated and for which objectives.¹⁰ While gender is increasingly being reflected in climate policies and considerations, the same cannot yet be said for climate in gender equality and women's empowerment plans and policies. In budget statements, both areas are weak. There are also a few cases in the context of costed plans where the current commitments are still at the draft stage. Even though PDNAs may highlight issues and losses/damages with gender linkages, this does not always translate into identifying key integrations areas.

Table 1: Current practices of gender and climate mainstreaming in various public finance instruments and/or documents across five focus countries

Area of focus	Countries				
	Antigua and Barbuda	Dominica	Grenada	Saint Lucia	Saint Vincent and the Grenadines
Costed Plans					
Gender		Draft	Approved/Pending		
Climate	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending
Gender in Climate	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending
Climate in Gender		Draft	Approved/Pending		
Budget Statement					
Gender		Approved/Pending	Approved/Pending		
Climate	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending
Gender in Climate				Approved/Pending	
Climate in Gender			Approved/Pending		
Planning Guidelines					
Gender		Approved/Pending	Approved/Pending		
Climate	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending	Approved/Pending
Gender in Climate			Piloted/Planned	Approved/Pending	
Climate in Gender					

■ Approved/Pending
 ■ Draft
 ■ Piloted/Planned

Note: These documents were identified and reviewed as part of the cost and expenditure review and analysis that preceded the development of this GRCB guidance document.

¹⁰ This refers to the areas to which finance, financial stimulus and even investment might be allocated, for example, adaptation, mitigation, loss and damage, enhanced direct access or contingency, risk management and/or social protection. This concerns the strategic directions of finance, including whether gender is considered, and if so, how, sometimes with clear purpose and sometimes just outlining broad objectives.

To date, in planning guidelines, both gender in climate, and climate in gender are poorly represented, which is a critical gap in terms of institutionalizing integration systematically within public sector planning processes and priority definition.

General guiding principles for gender-responsive climate budgeting

The approach to GRCB goes beyond considerations of men and women. It is intended to be an intersectional gender and social inclusion lens to sectoral adaptation planning for SIDS. *This requires considering not just gender but also class, ethnicity, education/literacy, ability and age, etc.* This entails addressing the inequality of risk that are driven by gender norms, roles and responsibilities, and not only those shaped by whether a person is male or female.

Gender-responsive budgeting is not about creating separate budgets for women, or solely increasing spending on women's programmes; rather, it seeks to ensure that the collection and allocation of public resources is carried out in ways that are effective and that contribute to advancing gender equality and women's empowerment.

Accordingly, GRCB expands this to take into consideration climate and climate vulnerabilities, and also the intersections between gender and climate, ensuring that programming and budgeting allocations are made specifically for the most affected, the most vulnerable, and those most likely to be challenged in coping and/or adapting. In the Caribbean context, this expansion is difficult to achieve due to the lack of long-standing research and data that chronicle the evolving impact of climate vulnerability and change on women and men, girls and boys, and persons with non-confirming gender identities, depending on their roles in the household, in livelihood activities, in the labour force, in the recovery and rehabilitation process, and in the lives of others. This is slowly changing: indeed, in 2021, there were published studies as well as comparable information and data sets, particularly on the gender inequality of risks.

For GRCB to be effective in transforming the status quo, it will need to foster and promote the application of ten principles, as shown in Box 1.

Box 1: GRCB Principles for Caribbean SIDS

- There should be no gender mainstreaming (policy, actions and interventions) without climate mainstreaming and no climate mainstreaming (policy, actions and interventions) without gender mainstreaming.
- Accountability for actions and commitments made through the budgeting process.
- Broad, meaningful participation by government, the private sector, non-governmental organizations and citizens is key, specifically by those who rely on a particular sector for their livelihood.
- Gender- and climate-related claims and benefits should be specific, measurable, attainable, relevant and time-bound (SMART).
- Budgeted areas and planned expenditure should be linked to a defined planning element, commitment and priority area that specifically delivers on a national or sectoral strategic focus.
- Budgeting should combine domestic and international resources.
- Implementing partnership strategies and leveraging public and non-public investment and resources are encouraged.
- Accounting and monitoring should be participatory and independent where possible, supported by an audit to verify results, impacts and outcomes.
- A risk management approach, anchored in risk-sharing, risk-pooling and benefit-sharing, should drive how costs and expenditures are allocated and shared across ministries, sectors, taxpayers and recipients of public benefits.
- Both process and conduct are important in this space, thus ensuring that both formal and informal actors are considered, reflected and enabled by the investments in the public, private and blended financing sectors.
- Equity should be ensured between groups of people within the sectors, and when determining mitigation for loss and damage, adaptation and resilience.

Source: Author.

SECTION II

Getting Started –
Closing the inclusivity gap
in macro-level budgeting



A powerful reason for focusing on budgets, and how resources are budgeted and allocated is that budgets tend to reflect the value placed on an issue. For example, household budgets may often reflect household priorities since there is often a trade-off between types of services, machinery and/or technology in favour of other interests. Similarly, this can also be observed in government budgets, although debt-to-GDP ratios also drive prioritization where debt service payments usually trump any other kind of payment or expenditure.

Basically, a budget can represent the most comprehensive statement of a government's plans and priorities for social and economic development. They can be used to track how public funds are raised and used, and who the beneficiaries will be. GRCB is part of a toolkit to make finance in general more gender- and climate-smart, to make gender finance more climate-smart, and to make climate finance more gender-smart. This should be a standard way of operating, planning and programming.

Bosnic (2015)¹¹ outlines the following steps as essential in creating GRB initiatives:

- analysing the extent to which budget programmes are gender-responsive. This entails assessing the extent to which policy affects different groups and budgets reflect their needs while looking at the factors such as age, socio-economic background, location and degree of education, among others;
- based on the results of a GRB analysis, making changes to budgets and programmes to improve their levels of gender-responsiveness;
- incorporating GRB throughout the budgeting process, by: (i) including gender-responsive indicators on budget requests; (ii) including gender strategic objectives into policy and budgets; and (iii) providing impact statements of producing GRB on gender equality.

GRCB efforts in the Caribbean can and should adopt this model with a few adjustments (see Box 2).

¹¹ Bosnic (2015).

BOX 2: Key steps for addressing the gender-responsive budgeting elements of gender-responsive climate budgeting

- Review the overall budgeting approach of the government and assess the extent to which it is gender- and climate-responsive.
- Analyse the impact of the current policy on different groups and the extent to which the budget reflects their gender, age-related and climate needs and priorities. A broad set of factors should be included in the impact assessment such as sex, age, livelihood source, location (urban/rural), educational attainment and use of natural resources.
- Based on the findings of the analysis, recommend and make changes to planning, design, implementation, and monitoring and evaluation (M&E) of budgeting approaches and programmes for gender and climate, and where they intersect, including at the sectoral level, e.g. agriculture, water and energy.
- Resulting from the analysis, identify priority actions (using criteria) for changing the budgeting and programming process and guidelines to assess gender and climate responsiveness, i.e. a gender and climate marker.
- In an effort to fully mainstream and integrate gender and climate throughout the budgeting process, leverage lessons learned from GRB. This includes recommending or mandating; (i) the ways of measuring gender and climate responsiveness in budget requests i.e. through the use of a gender and climate marker; (ii) clearly defined specific, measurable, achievable and attributable, relevant, time-bound (SMART) gender and climate objectives defined in the budgeting process as well as in the presentation of how the allocated resources were spent, which should match policy where possible;¹² and (iii) the provision of impact statements on gender and climate responsiveness as well as achieving adaptation and resilience.

¹² While ideally, guidance on these objectives should come from policy, not all countries have gender or climate policies or ones that are coherent with each other (and/or leave space for complementarities between these two types of policies, nor do they all have National Adaptation Plans (NAPs). Usually, countries have more expansive climate policies and documents than gender ones. The source of guidance for this element of the mainstreaming effort may need to be derived from NAPs for GBV (in the case of Antigua and Barbuda) and the gender inequality study (Saint Vincent and the Grenadines) and from the NDCs (Antigua and Barbuda, and Dominica) where NAPs do not exist.

Given the focus on adaptation in the context of this guidance document, the following documents/types of documents and content will be important in guiding and shaping the quantity and quality of a country's macro-level GRCB ambition, including:

- NDC (initial and updated versions)¹³
- National Adaptation Plans (NAPs);
- draft or completed SASAPs;¹⁴
- NDC roadmaps;¹⁵
- 2021 budget statements (and if time permits, for the last 5–10 years and analyses of the extent of attention paid to gender and/or climate);
- the cost of inaction studies (including from gender inequality of risk studies);
- Post-disaster Needs Assessments (PDNAs), such as Hurricane Maria and Irma in 2017, which describe gaps between losses and damages and the amount of resources available/received;
- resilience assessments (national and regional);
- Voluntary National Review Reports on the 2030 Agenda for Sustainable Development (currently available for Antigua and Barbuda, Dominica, Saint Lucia; Saint Vincent and the Grenadines', which was completed in 2020, is not available online except for a summary, and Grenada is due in 2022);¹⁶
- household risk management budgeting by sex of household (only available in Antigua and Barbuda);¹⁷
- Assessments of the gender-responsiveness of public financial management (Caribbean Risk Facility);
- Assessment and Overview of Climate Finance Flows (2014–2017) at the national level and/or reviews of climate policy and financing as carried out by the IMF.

The review of 5–10 years of budget statements and allocations is useful in determining the quality of financial allocation and prioritization given to gender and climate, and the responsiveness of the budget to events and hazards. For example, the 2020 and 2021 budgets of the five focus countries have been a main source of insights into the real-time impact of the COVID-19 pandemic and how and to what extent governments have responded; and these responses are reflected in this guidance document in several instances.

13 At the time of preparation of this document, Saint Lucia and Grenada have completed new full versions of their NDCs, while Antigua and Barbuda has submitted an update to its first NDC. The latter update includes a number of enhanced gender targets.

14 SASAPs have been completed or advanced for all five countries under the EnGenDER project in 2021.

15 These roadmaps were carried out for Saint Vincent and the Grenadines, and Dominica, and were briefly reviewed as part of this consultancy (given the limited time allocated and that these were still in draft rather than final form).

16 Sustainable Development Knowledge Platform. (2020). *Voluntary National Reviews*. [Voluntary National Reviews: Sustainable Development Knowledge Platform](#).

17 Department of Environment of Antigua and Barbuda (2020).

Table 2: Summary of socio-demographic information for the five focus countries

Country	Female pop. ('000s)	Male pop. ('000s)	Percentage of female-headed households (%)	Poverty rate (%)	Child poverty rate (%)	Labour force, female (% of total labour force)	Labour force, female participation (aged 15) rate* (%)	Persons with disabilities (%)	Indigenous pop. (% of total pop.)
Antigua and Barbuda	51.9	46.9	48.4	18.3	24.3	52.8	68.5	7.9	n/a
Dominica	36.7	35.4	39.2	28.8	38	41.6	49.6	9.7	2.9
Grenada	55.8	56.6	47	37.7	50.9	53.5		n/a	n/a
Saint Lucia	95.5	90.5	43.6	28.8	36.7	43.6	48.5	13.2	n/a
Saint Vincent and the Grenadines	54.7	56.2	48	30.2	37.6	41.6	57	5.4	3

Note: *Female (% of female population aged 15+). ** Recent estimates suggest a total of 3,000–3,500 Kalinago in Dominica, based on Government of Dominica reporting.

Sources: World Bank (n.d), United Nations (n.d), Countrymeters (n.d), ILO (n.d), Kairi Consultants (2000, 2007, 2010), OECS Commission and UNICEF (2017), CIA (n.d).

The quality of response is also critical. Indeed, the focus on gender responsiveness is a critical qualitative aspect, which, through the budget, also seeks to eliminate inequalities and discrimination.

It is also important to include analysis where available on household budgeting realities in order to ensure coherence between macro-level efforts, sectoral investments and household self-reliance, particularly regarding social protection. Ensuring that these limited resources create the maximum impact and leverage other efforts is paramount in a fiscally restrained policy space, especially during the COVID-19 pandemic. COVID-19 pandemic analyses, such as the Human Economic Impact Assessment (HEAT) reports, are useful to understand how household dynamics are influencing, even to a small extent, sectoral economic drivers and the macro-economy.

Consideration should be given to pre-existing structural factors, inequalities and deprivations. For example, when analysing some of the basic socio-demographic information of the five countries through a gender lens, it is possible to observe a number of intersecting factors in the form of drivers of vulnerability; exposure to discrimination, vulnerability and the effect of climate change: i.e. that there are small, distinct populations and groups (minorities), high rates of poverty, high percentages of female-headed households (FHHs) and child poverty, and a relatively high percentage of persons with disabilities (PWDs) all at the same time. This basic socio-demographic information may indicate that there are a number of people whose experiences reflect a

number of characteristics, i.e. they may belong to one or more of the following groups: an ethnic minority group, of a poor FHH, the poor, persons under 18 years of age, PWDs and women. It is also striking that in three of the four countries (Antigua and Barbuda, Dominica and Saint Lucia), the female population outstrips the male population, making gender inequality even more egregious (see Table 2). These are the groups that are often the most and the most disproportionately impacted in a disaster or from intensifying climate variability and change. They often take longer to recover, and their experience of loss and damage, particularly in the form of housing, infrastructure, agricultural income losses, etc., is often more acute than that of other groups in society. The nature and scope of losses and damages from events experienced by men and women in all countries differ significantly, particularly if they are engaged in agriculture and fisheries; the nature of the assets and way that loss is experienced differs. In both sectors, the asset poverty of many women is more severe than for men, and they are less likely to be able to afford insurance, and/or their assets are less likely to be insurable. When men's assets such as large equipment and boats are compared to women's assets such as processing equipment, protective gear and knives, there is a major difference in terms of the value and the insurability of these asset types.

With respect to climate, the ability to track impacts on people is more difficult and complicated, while the ability to track impacts cumulatively at the macro and the sectoral levels is much easier. A now aged projection analysis of the cost of inaction suggests that, in the five focus countries, during the 2025–2100 period, there will be generally acute costs for the lack of appropriate scaled action to confront climate change, ranging from the highest cumulative cost (Grenada) to the lowest of the five countries (Antigua and Barbuda). Across Caribbean Community (CARICOM) countries, Grenada will incur one of the highest costs (Table 3).

Table 3: Cost of inaction on climate change for the 2025–2100 period (as a % of GDP)

Country	2025	2050	2075	2100	Cumulative	Rank
Antigua and Barbuda	10.4	20.7	31.1	41.4	103.6	5
Dominica	16.3	34.3	54.4	77.3	182.3	2
Grenada	21.3	46.2	75.8	111.5	254.8	1
Saint Lucia	12.1	24.3	36.6	49.1	122.1	3
Saint Vincent and the Grenadines	11.8	23.6	35.4	47.2	118	4

Sources: Bueno et al. (2008); and Perch (2021).

More critically for the planning and budgeting process are the shifts and increases in impact in the 25-year cycles presented in Table 3. In all countries, the cost will double between 2025 and 2050, highlighting the timeliness of action required as well as the need to stave off catastrophic impacts to GDP in countries with an already relatively high debt-to-GDP service ratio. Budget statements provide limited insights into how climate-related expenditure is linked to providing support to the most vulnerable people. More general statements on vulnerability are often made without tying specific expenditure to specific groups; however, the tourism, construction and agricultural sectors, and social protection services¹⁸ are usually exceptions to this.

An analysis from the Preliminary Cost of Inaction and Expenditure Review¹⁹ that preceded this document already shows that, for some countries, one event has already cost them significantly and that the cost of adaptation is already relatively high as a percentage of GDP (Table 4). Moreover, a review of 2021 budget statements show the extent to which countries continue to pay for recovery years after an event; for example, SVG continued to pay for recovery from floods that occurred in 2013 and 2016. In the context of SVG, recent events also devastated infrastructure and key sectors, i.e. La Soufrière volcanic eruption in 2021, and prior, the severe outbreak of dengue fever in 2020, which resulted in a number of deaths and severely challenged the country's health sector.

Table 4: Cost of inaction (projected) and current costs of adaptation

Country	Cost of Inaction on GDP (%)					Cost of climate events to sectors			Cost of adaptation	
	2025	2050	2075	2100	Cumulative	Sector	Cost (USD million)	GDP (%)	Cost (USD million)	Percentage of GDP (%)
Antigua and Barbuda	12.2	25.8	41	58.4	137.4	Housing	200	12	120	7.2
Dominica	16.3	34.3	54.4	77.3	182.3	Housing	353.96	75	158	33.6
Grenada	21.3	46.2	75.8	111.5	254.8	Housing	507.6	46.6	262	24
Saint Lucia	12.1	24.3	36.6	49.1	122.1	Transport	71.13	4.1	350	20.5
Saint Vincent and the Grenadines	11.8	23.6	35.4	47.2	118	Housing	23.5	2.9	25	3.1

Sources: Based on Bueno, R., Herzfeld, C., Stanton, E., & Ackerman. (2008). *The Caribbean and Climate Change: The Costs of Inaction*. www.researchgate.net/publication/237150420_Climate_Change_in_the_Caribbean_The_Water_Management_Implications; Government of Saint Vincent and the Grenadines (2016), Government of Antigua and Barbuda (2017), OECS (2005), Government of the Commonwealth of Dominica (2017) and Government of Saint Lucia (2010).

The GRCB expenditure and budget review, therefore, must also consider these recurring and highly specialized costs (per sector) as losses, damages and recovery costs, the number

¹⁸ Here, readers are reminded that social protection is treated like a sector; it was identified as such and as a priority by the Government of the Commonwealth of Dominica.

¹⁹ Perch (2021).

of years in which this has occurred, and the cumulative amount allocated to this kind of expenditure in general and by sector. One of the most significant documents for this kind of analysis, even at a superficial level, is the annual budget statement. Although not all budget statements are the same or provide analysis at the micro, meso (sectoral) and macro levels, they often present budget information by sector and at times by subsector, and comparisons will be made between the current budget cycle and the last one. When conducting this review, it is imperative to read the budget statement and annex footnotes carefully, which is where helpful information is presented in great detail. Annexes of budget statements usually also present some historical data.

Key questions to guide a cost and expenditure review are as follows:

- What investments, if any, which may be visible through tax rebates and forgone income, are governments, sectors and people making in order to build resilience?
- What are the recovery costs for governments, sectors and people, and how long does it take?
- Whose recovery takes the longest?
- What measures are being used to cope with uncertainty, including unexpected difficulties by individuals/householders and governments? Is there equal access to contingency planning measures by men and women? Do criteria respond to gender-based roles and responsibilities?
- What is the level of insurance protection for public and private assets, including buildings?
- Are specific protection measures (social, economic and environmental) in place? What do they cost and how gender-responsive are they?
- To what extent are social sector budgets and expenditures climate-sensitive and -responsive, particularly poverty reduction interventions?
- What extent of physical infrastructure and construction is driven by social and gender considerations such as employment, business opportunities for marginalized communities including PWDs, and investments in improving settlements in/away from high-risk areas?
- How effective are existing strategies in allocating resources to women and other vulnerable groups suffering from gender-based discrimination and vulnerabilities?

Another source of information for macro-level GCRB reviews is a series of analyses carried out by the IMF. A macroeconomic and fiscal policy perspective on climate exposure and vulnerability as well as the scale of economic impact provides critical insights and reveals key gaps in the current climate finance and budgeting ecosystem. These gaps consist of the lack of insurance including for public buildings and the costs that are transferred and automatically absorbed by the state, which then jeopardizes the state's fiscal flexibility. The IMF review findings imply but do not explicitly mention that in all countries, the state has become the default insurer for much of the physical loss and damage experienced, creating a significant climate debt-related burden, which is not currently part of fiscal analysis. Part of the challenge is that these costs related to covering these losses and damages are recorded as expenditures and consequently

shifts of these resources away from long-term development often do not appear as a cost. The fact that the gender, social and environment budgets are often the first to be cut in a fiscal crisis is not deeply explored, despite the impact that these cuts may have on climate change adaptation and resilience investments for people, livelihoods and communities.

Resilience reviews, which are similar to reviews on adaptation, gender or climate, are also relevant and are increasingly being conducted. Despite their limited use to date, they do help cover this planning, knowledge and risk perception gap, and have helped to better calculate and understand the direct and indirect effects of finance funnelled into the region to address climate and/or disaster recovery. One 2020 assessment commissioned by the United States Agency for International Development (USAID) estimates hundreds of millions allocated to resilient efforts in the Caribbean.²⁰




A similar level of analysis is often available for gender and/or gender and climate at the regional level. Good alternatives that can be employed to address this analytical need include the following already established reporting and information collection exercises: the annual budget statements; Beijing +25 Reports (produced only around every five years); detailed GRB reviews of the overall budget and the expenditure of the Bureau for Gender Affairs (BGA) or relevant department or ministry; finance flow reviews carried out under the United Nations Framework Convention to Combat Climate Change; and reports such as National Communications of the five-year updates to the NDCs. Delving into the extent of climate-related expenditure is critical as is delving into the gender budget. If well-timed, each of these analyses could inform an annualized update, which is currently not the case.

In the Caribbean, there is a lack of gender, climate and finance national or regional trackers and tracking, despite being highly warranted. Global trackers usually lack information for the Caribbean and rely on national reporting for monitoring, reporting and verification (MRV). The lack of these systems and related data limits the possibility of carrying out reviews and impact assessments.



²⁰ USAID. (2020).

Given the above-mentioned factors and issues, key impact indicators for tracking would need to include the following:

 Climate
<ul style="list-style-type: none"> ■ Annual percentage of GDP expended on loss and damage ■ Annual percentage of GDP invested in adaptation ■ Annual resources mobilized from external sources for climate adaptation ■ Percentage of available finance allocated and spent per sector ■ Annual financial flows for climate change ■ Percentage of annual expenditure on climate change allocated to gender and social sectors ■ Percentage of annual budget allocated to risk management instruments and funds.
 Gender
<ul style="list-style-type: none"> ■ Number of female-headed households (FHHs) impacted/affected historically ■ Number of FHHs impacted/affected by the most recent event ■ Estimated impact in terms of costs on gender and/or social sectors by an extreme event (including loss and damage and how much needed for recovery) as a percentage of all costs. This can be expressed in local currency and the USD equivalent.
 Gender in climate
<ul style="list-style-type: none"> ■ Loss and damage by sector, by sex and occupation ■ Percentage of poor FHHs with at least two weeks of back-up supply of energy and water ■ Impact on gender (USD) or as a percentage of GDP ■ Gender impacts of climate risk by sector in US dollars or relevant currency ■ Number of people affected by climate change, by sex and gender ■ Percentage of poor single MHH with at least two weeks back up supply of energy and water.

Taking all of the above into consideration, a five-step process for GRCB Review is proposed in Table 5 that also considers the limited capacities and data in the Caribbean region. The five steps build on the review and assessment processes and practices highlighted earlier in this section and intersect with the SASAP process at Step 4 and 5. **This allows the GRCB to serve a wider process of policy and programming alignment between gender and climate that goes beyond SASAPs.**

Table 5: Step-by-step GRCB macro-level review actions

Step-by-step process	Action	Source documents
Step 1: Define	<ul style="list-style-type: none"> Review the current budgeting approach and system, and identify the framing for the gender-responsive climate budgeting (GRCB) analysis (i.e. scope, timeframe and intended focus). 	<ul style="list-style-type: none"> Budget circular Budget guidelines
Step 2: Analyse and assess Impact	<ul style="list-style-type: none"> Analyse the impact of the current policy on different groups and the extent to which the budget reflects their gender, age-related and climate needs and priorities. A broad set of factors should be included in the impact assessment including sex, age, livelihood source, location (urban/rural), educational attainment and use of natural resources. This assessment and analysis should be both quantitative and qualitative. 	<ul style="list-style-type: none"> Budget and Expenditure Report Annual Performance Report Budget Review in the Budget Statement Donor reports Beneficiary feedback Surveys
Step 3: Flag gaps and incoherence	<ul style="list-style-type: none"> Summarize key gaps and disconnects between statements of intent and reporting. These can include possible areas in planning, design, implementation and monitoring and evaluation of budgeting approaches and programmes for gender and climate, and where they intersect, including at the sectoral level, e.g. agriculture, water, energy. 	<ul style="list-style-type: none"> Gender Policy and Action Plan National Adaption Plans (NAPs) Nationally Determined Contributions (NDCs) Sectoral Adaptation Strategies and Action Plans (SASAPs) Post-disaster needs assessments Gender Inequality of Risk Studies
Step 4: Prioritize and make recommendations	<ul style="list-style-type: none"> Identify priority actions for changing the budgeting Define programming process and guidelines Develop performance criteria and performance indicators. 	<ul style="list-style-type: none"> Budget Statement GRB/GRCB Commitments and Statements Programming reports
Step 5: Mainstream and integrate:	<ul style="list-style-type: none"> Tracking codes Gender and climate tracker Gender marker GRCB reporting tools Means of verification Gender mainstreaming in procurement. 	<ul style="list-style-type: none"> Revised Budget Guidelines New Accountability Guidelines Online and physical reporting GRCB Strategy and Operational Guidelines.

These steps are detailed further Section III, which follows, including at the sectoral level. Examples of a gender and climate tracker tool, a gender and climate marker, GRCB reporting, and gender mainstreaming in procurement are provided in Annex 2.



SECTION III

Closing the Gap in Sectoral
Adaptation Planning –
A focus on seven priority
sectors



In this section, recommended approaches for GRCB at the sectoral level are presented including examples of model approaches and tools relevant to the context of the five focus countries (Antigua and Barbuda, Dominica, Grenada, Saint Lucia and SVG).



Over the last 21 years (2000–2001), Caribbean SIDS have experienced intense and, in some cases, more frequent extreme events, more and varied natural hazards, and devastation of economies and livelihoods. The five countries have experienced at least 30 combined events in the last 21 years, and the number of significant events per country range from 4 (Antigua and Barbuda) to 8 (SVG), for a total of USD 183 million in losses and damages for just one sector. Losses in all countries were the most significant for infrastructure and housing. Estimated costs to the housing sector (based on the costing review) exceed USD 1 billion collectively, and were as high as USD 500 million in Grenada (Hurricane Ivan) and over USD 300 million in Dominica (Hurricane Maria). Hurricane Irma in Antigua and Barbuda, mostly Barbuda, was devastating to the housing sector (see Table 4).²¹ Over this period, Caribbean SIDS have also been recorded in annual and decadal indices of the Climate Risk Index (CRI).

Impacts at the sectoral level can be fully or partly devastating, masking significant economic, social and environmental displacements that affect the physical wellbeing, livelihoods, income-generating opportunities and mobility of those working in the sector, producers, and consumers of outputs from the sector. In many cases, due to the lack of protection and insurance, the government or the state has acted as the insurer of last resort or has provided a macro-level safety net.

²¹ GoAB (2018), GoCD (2017) and OECS (2005).

The five countries have identified the following priority sectors for adaptation plans and strategies:

Figure 4: Summary of Priority Sectors

	Antigua and Barbuda Finance, Infrastructure and protected area
	Dominica Health, social protection, employment, agriculture and fisheries
	Grenada Health and agriculture
	Saint Lucia Agriculture, water and fisheries
	Saint Vincent and the Grenadines Agriculture (including fisheries and forests) and water

Source: SAEDI Consulting (Barbados) Inc.

In SIDS and non-SIDS, these seven sectors intersect and at times are interdependent, e.g. agriculture and water. This section provides specific guidance on GRCB that can enhance planning, intervention design, monitoring and evaluation (M&E), and the achievement of results that accelerate adaptation and resilience. It also recognizes resource-based realities that affect the susceptibility of the sectors to gender and climate vulnerabilities. Regardless of the need for an expansive finance and financing ecosystem that is more responsive to gender and climate imperatives, public finance through budget and expenditures sends important signals that can stimulate, accelerate and complement private sector investment.

The agriculture sector is often at the heart of twin crises of climate and biodiversity, compounded by gender inequality and poor empowerment of women.²² Women as consumers and as the most influential household spenders due to their caregiving role as well as women business owners and potential movers of agricultural produce are often ignored or undervalued. They also face critical obstacles in accessing finance, and due to their reliance on biodiversity and critical ecosystem services,²³ they are doubly exposed with little recourse for taking anticipatory or preventative action. Women are particularly reliant

²² Anthem and Johnson (2021).

²³ Ecosystems provide services that are essential for human well-being including air, food and water. There are four types of services: provisioning (water, food, raw materials); regulating (air quality, carbon sequestration, wastewater treatment, pollination, tide control); supporting (shelter and habitat for species, e.g. mangroves); and cultural (recreation including sport and tourism, aesthetic, cognitive/inspirational and spiritual activities, e.g. cultural heritage).

on provisioning and regulating services (see section 3.3 on protected areas and ecosystem services) due to social and cultural norms and the loss of access to these services or how the decline in quantity and quality of these services impacts on women's livelihood activities and their ability to provide for their families. Global commitments under SDGs 5, 13, 14 and 15 therefore must be considered in combination.

There is duality in this situation as it concerns findings and applying solutions. Budgeting alone would be insufficient to address and finance adaptation in overcoming these key challenges in agricultural sustainability. To this end, investment is also key. Hence, GRCB must take an approach that examines and leverages the budgeting process. An investing approach, not just a budgeting one, through a gender and climate lens, must also be adopted in a way that complements the budgeting process rather than acting in a silo. This is clear from the analysis by the IMF, particularly in terms of meeting adaptation needs.

Focusing on gender and climate needs, both practical and strategic, a hybrid approach is proposed by the author, which is based on the International Union for Conservation of Nature (IUCN) Environment and Gender Index (EGI)²⁴ and the socio-ecological resilience framework by Cinner and Barnes (2019).²⁵ In practical terms, key gender needs include livelihoods, ecosystems, participation, governance, assets and education, social organization, flexibility and learning; and in strategic terms, gender needs that arise are decision-making and leadership, access and control over resources, agency and socio-cognitive capacity. Table 6 presents a gender and climate marker that embodies these ideas.

Table 6: Proposed gender and climate marker to be used in support of GRCB mainstreaming in the Caribbean

Gender Marker Designations	Criteria/justification	Assumptions
GCAM 0	The budgeted activity will have limited or no impact on gender equality and climate change adaptation efforts.	The proposed activity and finance have no significant influence on gender relations and/or climate change adaptation
GCAM 1	The budgeted activity includes a rationale that acknowledges that gender differences and inequalities exist, and there is a minimal potential to contribute indirectly to gender equality, women's economic empowerment and to climate change adaptation efforts.	The proposed budgeted activity and related finance have a minimal gender and/or climate commitment requirement. The nature of the activity is such that it will impact minimally on the status of men and women, and reduce inequalities of risk from climate.

²⁴ IUCN (2013).

²⁵ Cinner and Barnes (2019).

Gender Marker Designations	Criteria/justification	Assumptions
GCAM 2	Proposed budget activity(ies) include clear and gender objectives, indicators and expected results.	The proposed activity consists of basic gender analysis and has a clear gender mainstreaming goal.
GCAM 3	The budget and linked activities are linked to a clear gender budget statement with more general climate results also identified.	This project has medium potential to make an impact on gender and climate and deliver change at the output level.
GCAM 4	The budget and linked activities are linked to a clear climate and gender budget statement, with detailed indicators, means of verification, and an Action Plan and outcomes.	Proposed activities could make a significant contribution to gender equality and climate change adaptation, delivering on targets in the National Action Plan, the NDC and a Gender Policy and Action Plan.

Source: Author.

This marker can support review processes, allowing for a score to be given at the end of a review and/or inform on some of the high-level gaps particularly for Stage 3 of the GRCB process. Mandating the Preparation of the Climate Gender Budget Statement together with the usual Budget Statement and a Gender Budget Statement, as has been modelled in Indonesia, is also recommended for consideration. The marker could also be used to score Budget Statements and highlight areas for improvement.

In the following sections, these ideas and recommendations will be applied to sectoral priorities and contexts, keeping in mind the need for SMART efforts in the context of GRCB. The climate and gender crises facing the region will not wait.

3.1 Agriculture including fisheries

The agriculture sector is no longer a major contributor to GDP for Caribbean countries nor a major source of employment. However, it remains key as a livelihood and source of income for pockets of society, particularly rural communities. Its sustainability and its food production capacity are pivotal to the food and nutritional security of the focus countries whose food import bills are significant. The COVID-19 pandemic has been devastating to the economies of all five focus countries, and supply chain challenges have led to ramped-up investment and support for local farming initiatives including backyard gardening.

Despite the sector's economic performance and its contribution to employment for men and women, it is still one of the most prioritized sectors in terms of climate change adaptation. The costs to the sector from the most common and frequently experienced natural and

climate hazards have been high (Table 7). Often, agriculture (including fisheries) is one of the first sectors for which adaptation plans, strategies or plans have been developed, e.g. SVG, Grenada, Saint Lucia and Dominica.

Table 7: The cost of major disasters and impact on agriculture sector over the 2000–2021 period

Country	Number of events (2000–2021)	Major natural disaster event [Impact in USD (% of GDP)]	Impact on the agricultural sector from most significant event in terms of losses and damages) (US dollars)
Antigua and Barbuda	4	Hurricane Irma, 2017: 10.5% of GDP	518,500
Dominica	5	Hurricane Maria, 2017: 263% of GDP	88,000,000
Grenada	7	Hurricane Ivan, 2004: 200% of GDP	37,100,000
Saint Lucia	6	Hurricane Tomas, 2010: 43.4% of GDP	56,200,000
Saint Vincent and the Grenadines	8	Flood, 2013: 15% of GDP	1,372,666
Total	30	583%	183,191,166
Average	6	106. 3% of GDP	36,638,233.20

Climate and natural hazards

The total estimated climate and natural hazard impacts on the sector over the selected 21-year period amount to over USD 183 million (Table 7). Figures for the fisheries sector are lower, and analysis tends to be varied – either included in agriculture, or presented separately. Although climate change projects on fisheries have been implemented in the region and across the five countries, e.g. Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CCAFISH),²⁶ gender analysis and gender mainstreaming overall in climate and fisheries are weak. A traditional focus on fisheries at the harvest node to the exclusion of other actions and nodes within the fisheries value chain often renders the role of women and gender roles invisible. Detailed analysis in some countries such as Dominica highlight different impacts on both agriculture and fisheries, particularly regarding asset building and the ability to protect assets such as time and labour. In post-Maria Dominica, although infrastructure loomed large, agriculture was the fifth most significantly impacted sector in terms of damage but the first in terms of losses (exceeding USD 100,000,000).

²⁶ FAO (n.d.).

Women in the agricultural sector are invisible particularly in budget allocation due to their informal roles and lack of power. Access to finance also remains unequal (examples of this are available in past research in Dominica), even with limited analyses available including of loans, insurance and credit (e.g. the Gender Inequality of Risk Study for Dominica). Stimulus packages to support the sector in the wake of the COVID-19 pandemic have tended to focus on full-time farmers and fishers, excluding more casual farming and food producing actors, as well as many others who are active across the value chain such as agro- or agri-processors, vendors, marketers and distributors. Men usually outnumber women as farmers and agriculture workers from 3:1 to 5:1, and as fishers, sometimes as much as 20:1. Land ownership and plot size also tend to be skewed in favour of men, in some cases, as much as 10:1 (one of five agricultural districts in Antigua and Barbuda).

The scope of activity in the agricultural sector is expanding to include aquaculture such as sea moss farming, and in some cases, combining elements of fisheries and crop production, as well as beekeeping, which can be more resilient to the water-related and hydro-meteorological challenges that face the sector. While aquaculture appears to be male-dominated to some extent, beekeeping tends to be female-dominated, and can serve and has served as a pathway for engaging more women in the livestock sub-sector. While risks to aquaculture are clear in terms of equipment losses, the impacts are not always tabulated separately within a broader sectoral analysis.

In general, in the livestock sub-sector, women farmers tend to raise small ruminants rather than large livestock such as cattle. At times, they may work with their husbands as partners, for example, in Antigua and Barbuda.

The SASAPs for Grenada, Saint Lucia, Dominica and SVG all include agriculture, and the SASAPs for Dominica and SVG include fisheries. Critically, in the current budgeting process, agriculture is often separated from water resource management, health and food security, transport and labour issues, which tend to be where gender and climate aspects are most visible.

In making sectoral adaptation more gender- and climate-sensitive, the five-step process elaborated on in Section II is adapted below to the agriculture and fisheries context of the five countries.

Step 1: Define

In defining the agriculture and fisheries sectors, a value chain approach lends more visibility to the role of all actors and extends any analysis beyond a production focus. This scoping requires carrying out a review of the sector similar to the one carried out in the gender inequality risk studies for SVG and Dominica. In the example presented in Figure 4, the fisheries sector in SVG is mapped according to gender roles across the value chain using the following legend: blue (male), yellow (female) and green (both). Brown boxes denote the

nodes/dimensions of the value chain. A similar map for the agriculture sector in Dominica shows similar trends.

Figure 5: Fisheries' value chain gender map (Saint Vincent and the Grenadines)

Support (Value Chain Node)	Harvest	Processing	Marketing	Consumers
Boat Builder	Boat Captain	Fish Vendor (70%M, 30%F)	Hawkers (mainly young women)	Restaurants
Mechanic and Other Services	Boat Crew	Fish Cleaner	Retailers	Households
Fuel and Ice Supply	Boat Owner	Fish Processor	Trader/Importer	Hotels
Grocery Supply for Boats	Boat Agent		Trader/Exporter (Growth area)	Tourists
Gear and Equipment (Importers)				Fish Fry
Fisheries Officers				Supermarkets
				Institutional Users – Schools

■ male-dominated
■ female-dominated
■ both men and women are actively participating in the node

Source: Author.

Based on the above as well as an analysis on the experience of disaster and climate impacts on the sector, a review of current policies and commitments needs to be carried out, examining gender and climate policies, strategies and action plans, and the budgets that may be included in them.

There are budgeted costs or estimated costs for some action plans and not for others among the five countries. The current budgeting process should be reviewed from two levels: (i) the gender and climate perspective separately; and (ii) in the context of co-budgeting and/or specific allocations to gender in climate, and climate in gender in the agriculture and fisheries sectors. This more in-depth review may also require involving the Ministry of the Environment with the Ministry of Agriculture in order to include budgeting, resources mobilization and other financing initiatives. For example, in Antigua and Barbuda, this would be critical for accurately capturing climate finance flows and the sectoral allocations as well as expenditure, potential adaptation financing innovations and the extent to which budgeting or financing is, or is becoming, more gender-responsive.

It is also important to engage civil society actors (not all funding comes through the public finance system) as well as private sector actors for an accurate picture of the ecosystem. The latter point is particularly important for the fisheries sector in capturing budgeting and financing efforts by fishers to boost their own resilience and reduce risks.

Figure 6: The diversity of roles of women in fisheries



Source: SAEDI Consulting (Barbados) Inc.

Step 2: Assess and analyse impact

Using the gender and climate needs approach (identified in Section II), compare and match the results of the budget review in Step 1 to the commitments, mandates and targets (when they exist in NDCs and NAPs) as well as issues identified in reports to the Commission on the Status of Women, the Beijing Platform for Action and/or Voluntary National Review Reports on the 2030 Agenda for Sustainable Development. This impact assessment process will also provide clarity on the extent and nature of data and information available, and where critical gaps may inhibit a comprehensive understanding of the process and opportunities for change. In conducting the assessment, a multiple role for the Bureau for Gender Affairs (or the Directorate of Gender Affairs as it is called in Antigua and Barbuda), the Climate Change Division or Ministry, the Ministry of Agriculture and Fisheries (usually one Ministry), and the Ministry of Finance is paramount in ensuring equal attention to gender and climate, and to quality and quantity of impact.

Table 9: Beneficiary impact assessment results

Who/How	Leadership and decision-making/agency	Access and control over resources/flexibility	Ecosystems	Rights and participation	Governance	Social organization	Assets and education/learning/socio-cognitive
Women active in the agriculture value chain							
Female-headed households							
Elderly men							
Youth							
Persons with disabilities							
Indigenous people							
Agriculture workers							

Once Table 9 is completed, it should highlight the impacts or expected impacts across a number of groups. The frequency of positive responses will demonstrate who is benefiting and possibly in what ways, for example, age, livelihood source, sex, gender, and resilience strategies.

The summary results should define the extent to which agriculture and fisheries' budgets consider: gender, climate and water; gender, climate and transportation; gender, climate and health; and gender, climate and labour/working conditions. Tables 8 and 9 show assessment results, which are important for capturing impacts at the following levels: (i) food and fibre production; (ii) biodiversity enhancement; (iii) quality of life enhancement; and (iv) environmental enhancement.

Steps 3: Flag gaps and incoherence

Arising from the analysis, specify key gaps and areas of incoherence that may need to be addressed with specific budgeting actions and/or require action by more than one ministry. A working group approach will be key to prioritize how best to address gaps in the budgeting cycle, including through guidelines. It should assign responsibilities and accountabilities, i.e. which actor will take responsibility for the work in the gap areas identified. It is imperative to engage the Ministry of Finance particularly if specific budgeting and tracking codes are required that should also be systematized across the public sector financing system. It will be critical at this and the next stage to also engage the ministerial budgeting/finance staff, and to ensure that project staff also consider these issues in their finance planning and expenditures, as well as in results reporting.

Step 4: Prioritize and make recommendations

At this stage, concrete recommendations to the budgeting and financing process will be made, and engagement with public finance officers will be key. Sharing the findings of the analysis (Step 2) and the gap assessment (Step 3) is important to help financing staff understand both the ‘what’ and the ‘why’. This process should ideally be led by persons/teams with gender and climate expertise as well as sectoral knowledge. A combination of personnel from various ministries may be ideal.

In formulating SASAPs, SASAP engagement and prioritization mapping will need to be linked more closely at this stage. In addition, their planning and costing as well as the development of concept notes or ideas should take into consideration the results of the first three steps. This should then lead to clearer and better-defined gender mainstreaming efforts as well as more specific and tangible interventions with a gender focus, specifically targeting vulnerable and at-risk women. This would also build on the gender guidelines developed for SASAPs in Saint Lucia, with a specific focus on budgeting, financing and costing. Critical on the costing side is making available adequate budget resources for ongoing tracking and impact assessment.

The prioritization approach should not only consider cost but also the size of the benefits to be generated in terms of: (i) scale; (ii) extent of reach; and (iii) the likelihood that the proposed intervention will directly engage vulnerable groups. Simple measurements of *low*, *medium* and *high* can be used to complement other prioritization criteria. Strong evidence and stakeholder preference (the opinions of proposed beneficiaries)²⁷ are important. These can both be valued and measured, along the same lines: *low*, *medium*, *high* and *very high*.

Step 5: Mainstream and integrate

It is at this stage that discrete actions can be taken; lead as well as support responsibilities should also be defined. This could take the form of a pilot and would also be key to ensure that other stages blend into the SASAP process to inform the defining of specific adaptation measures and also how the SASAPs will be monitored, reported on and verified. A key element of this is to leverage GRCB and SASAP processes as part of adaptation planning. This would include the development of:

- a gender, climate and agriculture marker (that can build on, for example, FAO’s gender marker), which would be ideal for setting specific standards and criteria for measurement. This could be tracked by the Bureau of Gender Affairs, institutionalizing its role as a technical partner in the process.
- gender-, climate- and agriculture-specific tracking codes or expenditure tags, which would allow the tracking of budgets from allocation to reporting and means of verification

²⁷ Adapted from FAO (2017).

of impact. These codes could also be used to tag concept notes and project documents so that once approved they can be tracked within the sectoral SASAP framework as well as by the donor. This would also help with improved attribution and contributions from projects and activities to observed and measurable change or results.

- a simplified tracking system managed by the Ministry of Agriculture linked to specific means of verification, which would be both quantitative and qualitative;
- gender and climate mainstreaming in procurement when realizing budgeting and financing commitments. This would allow for local content provisions in the TORs and scope of work in the form of enhanced business access for some groups or types of businesses, preferential participation of some types of beneficiaries, and ‘green solutions’ including for reducing waste and putting an emphasis on recycling and emissions reduction. It would also allow for the potential use of quotas to provide opportunities for micro and small-scale suppliers and businesses to compete.

Recommended reading:

Gender-Responsive Budgeting: A focus on agriculture sector (Asia-Pacific Region). www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2017/12/gender-responsive%20budgeting-agriculture%20sector.pdf?la=en&vs=616

The Role of Governments in Developing Agriculture Value Chains. www.cabri-sbo.org/en/publications/background-paper-the-role-of-governments-in-developing-agriculture-value-chains



3.2 Water

The water sector is pivotal to gender equality and climate change adaptation and resilience. Water management at the household level is often deemed a woman's responsibility, and many reproductive roles are related to water use and access to clean and safe sources of water for drinking and other uses. The region is often faced with a dichotomy of too little or too much water, particularly from a natural and climate hazard perspective. Both sudden and slow-onset hazards and effects plague the water sector to varying degrees across the five countries. In terms of GDP, the water sector is not a significant generator of revenue, and employment in the sector is not always well documented. However, key economic drivers of the economy rely on water such as tourism, industry, transport, retail and services, as well as agriculture. In most of the countries, agricultural water use is a major factor in terms of the quantity and at times the quality of water available.

One of the five countries is in a state of absolute water scarcity, one is water-scarce and two are water-stressed. Only one of five is not water-stressed, i.e. Dominica (see Table 10). Due to the acute nature of the tension between supply and demand, some countries rely significantly on alternative water sources, such as Antigua and Barbuda, and some have expanded options for rainwater harvesting and storage (e.g. Grenada, particularly Carriacou and Petite Martinique, i.e. the other two islands of the tri-island state). Other social sectors such as housing and health rely on water, as do ecosystems, in order to continue providing critical services.

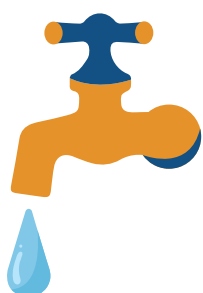
Table 10: Water use statistics for SASAP focus countries

Country	Available water	Annual water use (% of available water)	Renewable freshwater (m ³ /capita/year)	Natural and desalinated water availability (m ³ /capita/year)
Antigua and Barbuda	Absolute water scarcity	22	542	616
Dominica	Not stressed	10	2701	2701
Grenada	Water stress	7	1782	1782
Saint Lucia	Water stress	14	1813	1813
Saint Vincent and the Grenadines	Water scarcity	8	982	982

Source: FAO AQUASTAT Country Fact Sheets (n.d.). www.fao.org/aquastat/en/countries-and-basins/country-profiles

Climate hazards facing the five countries include drought and torrential and excessive rainfall, which in turn cause or result in floods and landslides (SVG, Dominica, Saint Lucia), and to a lesser extent, Grenada. In Antigua and Barbuda, there is more flooding than landslides. Often the biggest impact on the water sector is on water infrastructure and supply capacity. Experiences across the five countries confirm the vulnerability of the water sector with regard to supply stoppages lasting a few days to a few months depending on the scale of the impact. In the aftermath of Hurricanes Maria and Irma, it was estimated that it may take months to restore the full capacity supply, and in Barbuda, there are some houses still awaiting repair. In SVG, water takes on another important role as a generating source of power via hydroelectricity, which makes up approximately 10–20 percent of the current energy mix. In recent events, key stations have been out of operation at times for weeks and months, resulting in increased costs for affected households when the power grid reverted to fossil fuels. In other countries, energy is also critical to water supply and distribution, particularly those living and farming at high elevations. Issues of wastewater management are also relevant given the potential pollution of the land, soil, water and forest ecosystems.

The Grenada NAP, the Saint Lucia NAP, the Saint Vincent SASAP²⁸ and the Dominica SASAP all directly or indirectly consider water a priority sector. The Grenada NAP, for example, estimates costs for various sectors including water security at USD 46 million (accounting for 17.5 percent of the total estimated NAP budget), and infrastructure (broadly) accounted for 43 percent of the overall budget (Table 2). The Saint Lucia Water SASAP estimates the cost of adaptation over ten years at USD 21.7 million.



Traditionally, planning in the water sector has been devoid of significant gender analysis. Women’s burden of care and care responsibilities including in addressing water supply gaps were unaccounted for. Health-related concerns raised in the SVG Gender Inequality of Risk Study²⁹ highlighted water wastage, low water catchment and storage capacity, and incorrect water storage practices as contributors to vector-borne diseases such as dengue fever.

In addition, women with disabilities can be severely limited in their access to clean running water; they may have challenges in maintaining menstrual hygiene such as being able to wash sanitary clothes. In the Caribbean, there has been recent acknowledgement that menstrual poverty is also affecting women and girls in the Caribbean. In the same analysis, risks arise from damaged water infrastructure and having to rely on external sources of water, which increases time use and physical stress, and creates physical security issues, particularly for women. Ensuring proper hygiene and menstrual health is also an acute concern, particularly in times of water scarcity. Women with disabilities may also face

²⁸ There is a NAP on the Water Sector pending for SVG.

²⁹ Perch (2020).

specific physical and other challenges in their access to clean potable water, including collecting it from standpipes and/or rivers.

More broadly, a critical gap persists in practice: although women remain the managers and stewards of water at the household level, they are often not consulted on the nature of their needs and the multiple and cascading risks created when they are not met due to structural issues or due to events such as disasters. The loss of access or declining quality can have cascading consequences at the household and community levels, particularly when the women in the household are also involved in farming and/or fisheries, and face the impacts of both flooding and landslides (ibid).

With the three water-focused SASAPs in mind, SVG, Saint Lucia and Grenada, some clear steps are outlined below.

Step 1: Define

When putting the water sector into perspective, several key actors are important, including utility companies, public state actors, non-governmental organizations (NGOs), customer representative groups and resource users. A sector review is required to examine water use, irrigation levels and capacity, water dependency, access and control over water resources, and gender-based water use. For example, total consumption increased in most Caribbean countries during the COVID-19 pandemic. Residential consumption increased for all five countries, but in most cases, these increases were offset by large decreases in non-residential consumption. Overall, these changes in consumption patterns led to an increase in the residential share of demand.³⁰ In Antigua and Barbuda, the two islands face different challenges, which require a nuanced approach that considers both issues – water scarcity and quality in Antigua, and saline intrusion in Barbuda. Additionally, limited water availability influences protected areas and biodiversity. In Grenada, similar differentials in surface and groundwater capacity between Grenada, Carriacou and Petite Martinique require consideration. In Saint Vincent and the rest of the Grenadines including Bequia, investment in desalination has been required. In Saint Lucia, according to the *Gender and Age Inequality of Disaster and Climate Risk* study,³¹ despite being the main water users and collectors, women are:

- unequally represented in supply, sewerage, waste management and remediation jobs, with men generally earning high wages. In management, women are also barely represented;
- poorly represented and poorly included in decision-making on water use, allocation and governance;

³⁰ K&M Advisors (2020).

³¹ Hope (2021).

- not well represented in technical roles that influence production quality, transmission and distribution while overly represented in positions with less power and influence, e.g. administration roles;
- not engaged in local-level decision-making.

Sectoral use of water can be nuanced. Across the five main nodes in fisheries, for example, water use and its intensity are significantly different and driven by differing needs. The use of water in the harvest node is starkly different from that of the processing node. In the latter, according to a fish processor in Barbados, up to a thousand gallons could be consumed daily to process as many as 500 fish. Therefore, solutions to this sector and its nodes will need to be specifically tailored while keeping in mind phytosanitary requirements and the need to avoid the loss of fish catch due to temperature-related degradation. Understanding who dominates these nodes and the differences between the uses of water across nodes has helped to reveal that while men generally dominate the fisheries sector, women are among the most significant users of water due to their dominant role in processing. Although access to water is often subsidized, there is often excess water usage that is not properly controlled; hence, efforts in better managing water as a resource, particularly in a climate variability and change context, will require some delicate handling, complex negotiations and multipart solutions.

A review of current policies and commitments needs to be carried out, examining gender and climate policies, strategies and action plans, and the budgets that may be included in them, as well as the match between budgets and commitments made locally and/or internationally. Then, budgeting is reviewed from both the gender and climate perspective separately, and where there may be co-budgeting and/or specific allocations to gender in climate. Allocations to projects and programming to address the nexus between gender, climate and water may be granted but at a very small scale and remain largely invisible. The NDC is a particularly good resource in this context.

Given the nature of water and the phenomenon of squatting in the region, it will also be important to consider informal settlements. The role of private sector actors and the tourism sector will also be important considerations in a holistic approach.

Step 2: Analyse and assess impact

Given the highly gender-sensitive nature of water, a traditional gender needs framework is valuable (Table 11).

Table 11: Gender needs framework model for the water sector

Gender needs	Strategic		Practical				
	Leadership and decision-making	Access and control over resources	Livelihoods	Ecosystems	Rights and participation	Governance	Education and assets

Note: Given the criticality of water to economic sectors such as agriculture and fisheries, this analysis may be carried out at various levels.

Like the agriculture sector and given the dependence on water of a variety of food production, the assessment results are similar but will be expanded to include a much wider range of directly impacted stakeholders (Tables 11 and 12). As mentioned by PWDs in the SVG, there is less concern about having access to water and more about them being able to discern climate effects on the quality and quantity of water.

Table 12: Budget allocation assessment results

Areas of GRCB analysis	Agriculture (in USD and % of budget)	Fisheries (in USD and % of budget)	Gender (in USD and % of budget)	Climate (in USD and % of budget)	Secondary focus areas (in USD and % of budget)			
					Tourism	Transportation	Health	Wastewater management
Gender								
Climate								
Gender in Climate								
Climate in Gender								

Table 13: Beneficiary impact table

Who/How	Leadership and decision-making/agency	Access and control over resources/flexibility	Ecosystems	Rights and participation	Governance	Social organization	Assets and education/learning/socio-cognitive
Women							
Female-headed households							
Elderly men							
Youth							
People with disabilities							
Indigenous people							
Agriculture workers							

Who/How	Leadership and decision-making/agency	Access and control over resources/flexibility	Ecosystems	Rights and participation	Governance	Social organization	Assets and education/learning/socio-cognitive
Women farmers							
Health workers							
Domestic workers							
The elderly (including the sick and infirm)							
Hotel and accommodation sector							

This expanded analysis assists in capturing impacts at the following levels: (i) food and fibre production; (ii) biodiversity enhancement; (iii) quality of life enhancement; and (iv) environmental enhancement.

Key indicators to be assessed include:

- share of budget allocated annually (recurrent and capital) to gender, climate, gender in climate, and climate in gender within water sector SASAPs and/or the national budget if there are no SASAPs;
- share of budget benefiting women and girls in getting access to water resources;
- share of annual budget and available finance targeting vulnerable groups;
- % reduction in sectoral loss and damage cost being funded by government;
- % increase in insured assets;
- % increase in rural access and control of water resources;
- water equity gap between groups.

Step 3: Flag gaps and incoherence

At this stage, the team should review the findings, which may be many given the complexity of the water sector, and prioritize key gaps in, and areas of incoherence with, existing policies and strategies. This entails analysing the NAPs in place for the water sector. Keeping the respective Ministry of Finance fully engaged is key, particularly if specific budgeting and tracking codes are required. It will be critical at this stage and the next to engage the ministerial budgeting/finance staff, and to ensure that project staff also consider these issues in their finance planning and expenditures, as well as results reporting.

Step 4: Prioritize and make recommendation

Sharing the findings of the analysis and the gap assessment is an important element that will help financing staff understand both the ‘what’ and the ‘why’. This process should

ideally be led by gender and climate expertise with sectoral knowledge, and a combination of personnel from various ministries.

In the context of the formulation of SASAPs, costing activities and the development of concept notes/ideas should bear in mind the results of the first three steps. This would also build on the gender guidelines developed for SASAPs in Saint Lucia³² with a specific focus on budgeting, financing and costing. Since the Antigua and Barbuda SASAP focuses exclusively on finance, this is a good opportunity to leverage it and its recommendations to inspire other countries. In this context, it is also important to emphasize the lessons learned and model practice being developed as the Sustainable Island Resource Financing Framework (SIRFF) expands its scope of work and its delivery of enhanced access to finance. Some of the interesting developments include financing strategies that tackle water issues as well as issues of equality and/or social inclusion. With GCRB in mind, it will also be important to adequately budget resources for tracking and impact assessment as well as activity implementation.

Using a problem-ranking approach,³³ prioritization should consider both the cost to solve the problem, as well as the benefits in terms of scale, and the extent to which the problem affects multiple vulnerable groups. Simple measures of *low*, *medium* and *high* can be used to complement other prioritization criteria. Whether the activity is based on strong evidence is also important as is stakeholder preference,³⁴ ensuring that the voices of proposed beneficiaries are integrated. Table 14 shows a sample problem ranking for water.

Table 14: Sample problem ranking

Problem	Criteria						Rank
	Cost	Size of benefits	Will positively affect multiple vulnerable groups	Time horizon	Principal beneficiaries	Risk if problem not solved	
Rural water equity gap	High	Medium	High	Medium-term	Women, All people	Medium	
Limited water access for women's economic empowerment activities	Medium	High	High	Short-term	Women, female-headed households, women farmers	High	

Source: Adapted from FAO (2020).

³² Government of Saint Lucia (2018b).

³³ Based on a rural appraisal technique, it asks assessors to identify problems (usually six or more) and to rank them by order of importance.

³⁴ Adapted from FAO (2017).

Step 5: Mainstream and integrate

Once the problems are identified and solutions agreed on, the budgeting process should ensure that:

- funds are specifically identified for gender mainstreaming activities such as M&E, and also for specific activities carried out by gender consultants and/or gender experts, for example, awareness and capacity building, as well as specific gender analysis and data collection;
- funds are allocated for distinct gender equality and women's empowerment activities, including on legal literacy, rights and redress mechanisms, and on business opportunities for expanding water access to underserved groups.

This would also require the development of:

- a gender, climate and water marker, ideal for setting specific standards and criteria for measurement in all three areas, especially where they intersect. This could be tracked by the Bureau of Gender Affairs and the Ministry of Finance or a civil society organization, institutionalizing a multisectoral approach to adaptation in the water sector;
- gender-, climate- and water-specific tracking codes or expenditure tags that allow the tracking of budgets from allocation to reporting and means of verification of impact. These codes could also be used to tag concept notes and project documents so that when approved they can be properly tracked within the sectoral SASAP framework as well as by the donor;
- a simplified tracking system managed by the ministry responsible for water linked to specific means of verification that would be both quantitative and qualitative.

Recommended reading:

Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Water Sector (Water SASAP)

Budgeting for water, sanitation and hygiene (WASH) in Gambia. www.cabri-sbo.org/en/publications/policy-brief-2021-the-integration-of-climate-change-into-budgeting-and-finance

3.3 Protected areas; taking ecosystem services into consideration

Ecosystem services are critical to climate change adaptation in Caribbean SIDS, and all five countries have significant designated protected areas, and in particular, Grenada, Saint Lucia and Dominica as well as SVG have significant designed forested protected areas. Several national parks and forest reserves have been created. Similarly, in Antigua and Barbuda, there are a few protected areas and reserves to protect birds and other fauna. Some protected areas are coastal and marine, and their number has expanded in recent years, including with the recent support of the Caribbean Biodiversity Fund (CBF).³⁵

Given the high cost and the impracticality of a hard engineering solutions-only focus, the five countries of interest have all recently deepened their focus on various approaches linked to ecosystems and protected areas management, including but not exclusive to: nature-based solutions and ecosystem-based adaptation (EbA). This section will focus mostly on these two elements under protected areas. Only one country out of the five, Antigua and Barbuda, has designated protected areas specifically prioritized under the EnGenDER project, while Saint Lucia has already prepared a SASAP on protected areas since 2018.

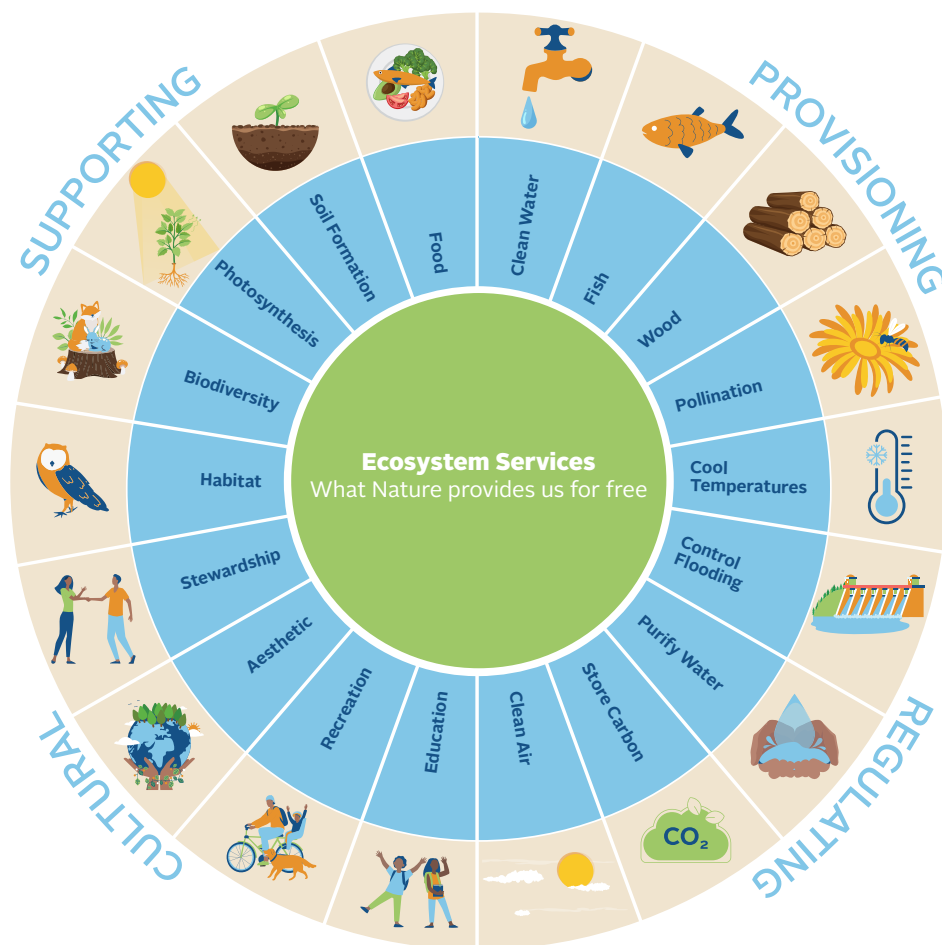


Ecosystem services are key to many other sectors, including agriculture, food security, water and health. There is significant potential according to the Adapt'Action/OECS Commission project on Mainstreaming EbA and Gender into Climate Change Adaptation, and EbA investments are expected to present more opportunities for inclusive adaptation measures and more affordable ones.

Much of the approach to this area is similar to the *Agriculture* section above. One of the areas where EbA is expected to be particularly useful is climate change adaptation in the agriculture sector, as well as in the forestry sector. However, the approach differs with regard to some of the key issues that will need to be considered, as described in *Defining* and in *Mainstreaming*, which is the focus of this section.

³⁵ More information on the Caribbean Biodiversity Fund (CBF) can be found on their website: www.caribbeanbiodiversityfund.org. The CBF focuses on conservation finance and climate change, and has recently established the Ecosystem-based Adaptation Facility. With support from the CBF, Antigua and Barbuda established a Marine Ecosystems Protected Area (MEPA) Trust in 2015.

Figure 7: Types of ecosystem services



Source: US Department of Energy. Fermilab. <https://ecology.fnal.gov/ecosystem-service>

An OECS Toolkit on EbA and Gender notes:

People, their livelihoods and economic activities often depend on the structure and function of ecosystems. They can also significantly alter and undermine them. Ecosystems often provide for goods and services that contribute to human subsistence and well-being. As the climate continues its warming trajectory, and populations grow, adaptation strategies will need to be transformative: implemented in a way that not only to address the immediate risks to the coral reef ecosystems and those which depend on their services, but also seek to restore the degraded reefs to safeguard the services they provide on a long term. This is at the heart of Ecosystem-based Adaptation actions.³⁶

³⁶ OECS (2020a).

There can be a very extensive range of services that can have direct and indirect implications for lives and livelihoods, sectoral development and even national economic resilience (Figure 6).

Climate and natural hazard impacts on ecosystems are harder to identify due to the variable number of services implied and because they are not part of an economic sector per se. Still, some data do exist, and ecosystems can be valued with monetary terms to a certain degree. Tropical Storm Erika devastated Dominica, particularly its agricultural and forestry sectors, and in some cases, protected areas were affected. For example, damage to forest roads was identified as well as to other roads and for park-related infrastructure.³⁷ Losses to infrastructure is the highest category of losses to the forestry sector according to information provided by the Division of Agriculture in 2015. More generally, the tourism sector may face a loss of income or an implied loss of future income if ecosystems are destroyed, but these risks and considerations are not currently accounted for directly.

One of the sectors where impacts are documented is in the forestry sector. Generally, it is much less documented in gender and protected area management, although Grenada's NAP does outline a cost for ecosystem resilience, estimated at merely 10.15 percent of the overall NAP budget. An estimate by the IMF of financing costs suggests an annual cost of USD 2.7 million, or 0.2 percent of GDP, based on Grenada's 2015 NDC (Table 15). Table 15 clearly indicates that these costs are also tied to coastal zone management, infrastructure and land, public education and adaptation financing management.

Table 15: Government of Grenada: Financing needs by area for climate change adaptation and mitigation as outlined in the 2015 NDC

Needs	Indicative Cost (US\$ m)	o/w Private Sector	Average Annual Cost (US\$ m)	Annual Cost/ Percent of 2018 GDP
Mitigation (NDC)	161.4	100.0	6.1	0.5
Adaptation (NAP and latest updates)	339.1		33.9	2.9
Institutional improvement	0.3		0.0	0.0
Policy development	0.7		0.1	0.0
Water availability	50.2		5.0	0.4
Food security	46.0		4.6	0.4
Ecosystem resilience	26.6		2.7	0.2
Coastal zone management	15.0		1.5	0.1
Infrastructure and land	112.9		11.3	1.0
Disaster and disease management	0.2		0.0	0.0
Climate data	7.0		0.7	0.1
Public education	1.7		0.2	0.0
Adaptation financing management	1.4		0.1	0.0
Monitoring and evaluation	0.2		0.0	0.0
Not in NAP	77.0		7.7	0.6
Total	500.5	100.0	40.0	3.4

Sources: Grenada Intended Nationally Determined Contribution (2015); Grenada National Climate Change Adaptation Plan (2017); Ministry of Climate Resilience; IMF staff estimates and projections.

Note: 1/ Assumes the plans will be implemented in 10 years. IMF, 2019.

³⁷ Government of the Commonwealth of Dominica (2015).

This focus on adaptation financing management, which is a small part of the budget, reinforces the need for GRCB.

The OECS Toolkit highlights several gender barriers to the consistent application of EbA and to mainstreaming gender into EbA, including knowledge and data gaps, and the invisibility of gendered roles and responsibilities. Traditionally, the needs of men and women, and gender-based roles were lumped together or undervalued, and the physical labour related to efforts in protected areas received the most consideration, including as an economic driver. Women's invisibility and informal roles in sectors that were highly dependent on ecosystems are also barriers to equal participation, representation, leadership and decision-making.

The numerous climate hazards in protected areas include drought, excessive rainfall, extreme heat, saline intrusion and rising sea surface temperatures. The impacts on biodiversity are often slow-moving events with devastating impacts on food and fibre production, and quality of life for direct and indirect users of resources. All of the five countries also benefit economically from tourism due to their wealth of land and water biodiversity, as well as activities such as whale-watching. Biodiversity and environmental conditions can change over time due to the climate affecting some species more than others.

In ensuring that sectoral adaptation is more gender- and climate-sensitive in budgeting and financing, the hybridized step-by-step process, i.e. where some steps are combined, is recommended.

Steps 1–3 should follow the Guidance in the OECS EbA and Gender Toolkit (Figure 7).

Figure 8: Relevant steps for GRCB on protected areas and ecosystems in the oecs EbA and Gender Toolkit



Note: GESI = gender equality and social inclusion; EbA = Ecosystem-based adaptation; M&E = Monitoring and Evaluation.

Source: OECS (2020a).

Other complementary actions, particularly in assessing the budget, would follow Tables 8, 9, 11, 12 and 13 used in the preceding *Agriculture* and *Water* sections.

As a complement to these analytical actions, users can also consider the questions in Table 16 to ensure that gender-based livelihoods are included. Complementary impact and forward-looking questions would include:

- What/how are the investments in the protected areas contributing to gender equality and climate change adaptation?
- Does the budget allocation match the annual adaptation cost and the percentage of the budget that should be allocated?
- How can GRCB fill the gender and climate gaps in the budget and financing? What are the priority areas of action?
- How can the budget and financing process better support livelihoods?

Table 16: Sample gender and EbA questions to inform budget analysis and impact assessment

Gender-responsive sensitive & ecosystem-based adaptation guiding questions
<ol style="list-style-type: none"> 1. Who are the main stakeholders and ecosystems services, and what are the relationships between them? 2. What are the structure and functions of the ecosystems and their target social demographic, and what are the social and economic means in place to manage and monitor them? 3. What are the important socio-economic issues that have affected, that affect, and will affect the ecosystem and its inhabitants, including gender-differentiated impacts from losses of ecosystem services? 4. Do proposed EbA interventions consider the differential needs amongst women and between women as well, such as age, (dis)ability and geography? Do they address practical and strategic gender needs? 5. What are the likely impacts of the ecosystem on adjacent ecosystems, and target community interest groups including gender-differentiated impacts? 6. Are there gendered patterns in the use of resources and reliance on ecosystem services which need to be considered in the context of socio-ecological resilience? 7. Are intended impacts simultaneously benefiting to livelihoods and ecosystems; do they provide an opportunity to move out of traditional roles in the labour force?

Source: OECS (2020b).

Step 4: Prioritize and make recommendations

For Step 4, using the NDC and NAPs as well as SASAP as a guidance, preference ranking is recommended. The prioritization should consider the cost of solving the problem and the size of the benefits in terms of scale and extent to which the problem affects multiple vulnerable groups. A simple measuring scale of *low*, *medium* and *high* can be used to complement other prioritization criteria. It is important to determine whether the activity is based on strong evidence as well as stakeholder preference,³⁸ i.e. the voices of the proposed beneficiaries. These should both be valued and measured using a scale such as *low*, *medium*, *high* and *very high*. Table 17 is a template of a Preference Ranking Table. To prepare this table, the process needs to extend beyond a technical focus and will require targeted stakeholder engagement. It is possible that this engagement has already been carried out and therefore the preference ranking can be inferred from other analytical work. Additionally, this is an area for engagement with NGOs and community-based organizations, particularly for filling in the template for the ranking of preferences.

Table 17: Preference ranking table template for protected areas

Problem	Criteria						Preference male/female beneficiaries	Rank
	Estimated cost	Size of expected benefits	Will positively affect multiple vulnerable groups	Time horizon	Principal beneficiaries	Risk if problem not solved		
Declining provisioning services worsened by climate change								
Food and fibre production decline/stagnation								

Source: Adapted from FAO, 2020.

There is a growing body of evidence of the need to consider GBV in environmental and climate projects/programmes and interventions including those of IUCN, 2020.³⁹ There is work ongoing in the Caribbean on this issue by the Breadfruit Collective based in Guyana, but less visible work in the OECS sub-region.

³⁸ Adapted from FAO guidance (2017). *Guide to mainstreaming gender in FAO's project cycle*. Rome. www.fao.org/3/i6854e/i6854e.pdf

³⁹ IUCN, 2020. Gender violence and environment linkages. The violence of inequality. Itzá Castañeda Camey, Laura Sabater, Cate Owren and A. Emmett Boyer Jamie Wen, eds. <https://portals.iucn.org/library/sites/library/files/documents/2020-002-En.pdf>

Step 5: Mainstream and Integrate

Carry out discrete actions and define lead and support responsibilities. These should include the development of:

- a gender, climate and protected areas marker. This could be tracked by a civil society organization or by the CBF, institutionalizing the need for both country and regional collaboration in this area where marine protected areas may intersect and where actions in one country could affect another;
- gender, climate and protected tracking codes or expenditure tags that allow the tracking of budgets from allocation to reporting and means of verification of impact. These codes could also be used to tag concept notes and project documents so that when approved they can be properly tracked within the sectoral SASAP framework as well as by the donor. These codes would help with improved attribution and contributions from projects and activities to observed and measurable changes or results;
- a simplified tracking system managed by the ministry responsible for protected areas and ecosystems linked to specific means of verification that would be both quantitative and qualitative. Since the mandate for this area is likely spread across several ministries, the work would be divided into terrestrial ecosystems, including both freshwater ecosystems and agroecosystems, and then coastal and marine ecosystems.

Recommended reading:

OECS, OFD and Adapt 'Action. 2020. [Building Resilience with Nature and Gender in the Eastern Caribbean: A Toolkit to Mainstream Ecosystem-Based Adaptation, Gender Equality & Social Inclusion](#)

[OECS and Adapt'Action to launch Environment and Resilience Webinar Series](#)

3.4 Health

Gender and age responsiveness are especially relevant in the context of human and environmental health. Climate-related impacts are affecting human health in various ways. Individuals who suffer from non-communicable diseases (NCDs) and comorbidities are identified as particularly vulnerable to excessive heat and vector- and water-borne diseases. Physical effects such as heat stroke on individuals suffering from diabetes, high blood pressure and heart problems are expected. Excessive heat is also likely to make working conditions challenging for people working outdoors, including vendors of produce. Heat could also result in more post-harvest losses in fisheries as more cooling is required and energy costs increase accordingly along the value chain, with derivative impacts on food quality and the

quantity of food that might be available. Additionally, climate and natural hazards have serious impacts on health infrastructure, often limiting if not crippling service delivery, including for expectant mothers. Impacts on air quality as well as water quality and quantity also have health implications, and increased competition can lead to challenges for those left behind.

Health impacts from climate change are a serious concern for Caribbean SIDS already challenged in addressing the increasing toll of NCD in addition to the high level of household and child poverty (Table 18). Data for Antigua and Barbuda on these issues are more limited than for the other countries.

Table 18: Health-related statistics for the focus countries

Country	Gender and poverty		Key health parameters*			
	Global Gender Gap Index **	Child poverty***	Undernourishment (% total population)	Prevalence of anaemia in pregnant women	Child obesity (aged 10–19)	Obesity in adult population (%)
Antigua and Barbuda	n/a	24.3	n/a	22.1	n/a	19.9
Dominica	0.699	38	5.8	24.4	31.7	27.9
Grenada	n/a	50.9	n/a	n/a	24.9	21.3
Saint Lucia	n/a	36.7	n/a	21.9	22.3	19.7
Saint Vincent and the Grenadines	n/a	37.6	5.7	24.8	27.5	23.7

*FAO, IFAD, UNICEF, WFP and WHO(2020).

**World Economic Forum (2021).

***OECS (2017).

Two focus countries, Dominica and Grenada, have prioritized the health sector under the EnGenDER project. Annually, they allocate between USD 16 million and USD 38 million to the sector, respectively. It is projected that over a ten-year period in Grenada (2015–2025), NDC adaptation costing for the sector will be USD 161 million. The Dominica SASAP outlines a cost of 2.2 million (based on concept notes developed to date) for the 2021–2031 period. The loss and damage experienced by the sector is variable depending on the type of event. SVG's Post-Disaster Needs Assessment (PDNA) estimated a loss of USD 2.05 million due to the 2016 floods (Table 19); estimated losses and damages to the sector from Hurricane Maria in Dominica were USD 17 million, and needs were estimated at USD 22.14 million.⁴⁰ In some cases, as in some natural hazards, the recovery costs are more significant than the costs of losses and damages due to many unexpected or less visible impacts on the sector, particularly on personnel versus physical damage.

⁴⁰ Government of the Commonwealth of Dominica (2017).

Table 19: Summary of health and climate information across countries

Sectors (all countries)	Budget allocation (annual average)	Loss and damage from recent events (average)	SASAP, NAP, NDC costing/project budgets	NDC costings (latest INDC)	Allocations for specialized funds
Health (DMI, GRN)	USD 262,000 (GRN) USD 38.48 million (SVG) USD \$16.02 million (DMI)	USD 2,052,917 (Saint Vincent and the Grenadines)	USD 1,200,000 to USD 2,200,000 (DMI SASAP)	USD 161 million (GRN)	Disaster risk reduction and disease prevention (USD 180,000 GRN NAP)

Note: NDC=Nationally Determined Contributions, DMI=Dominica, GRN=Grenada, NAP=National Adaption Plan, SASAP=Sectoral Adaptation Strategy and Action Plan.

Step 1: Define

In framing the scope of the health sectors, several factors will be important, including issues of public and environmental health, the COVID-19 pandemic, as well as the differentiated impact of health on men and women including on women's burden of care.⁴¹ Both the Dominica and Grenada **Gender Inequality of Risk** studies identified diseases and patterns affecting women more than men, particularly anaemia. Analysis arising from COVID-19 showed a number of heads of households coping with less food so that their children could eat.

A review of existing policies and commitments needs to be carried out, examining gender and climate policies, strategies and action plans, and the respective budgets that may be included in them. A review of the degree to which there is a match between budgets and commitments made locally and/or internationally should also be carried out. Then, the current budgeting process should be reviewed from the gender and climate perspective separately. And then, they should be reviewed in combination – where they may be co-budgeting and/or when specific allocations to gender in climate and climate in gender in the water sector – do and could incur. If they are not occurring, then during the review, analysts/users should seek opportunities for doing so. The NDC is a particularly good resource in this context. So, too, are regional and global health and climate impact studies, particularly those carried out through a gender lens. Teams involved in this phase are encouraged to assess budgets by gender, age, urban/rural, livelihood/income streams in order to effectively capture the range of possible health risks, particularly those that may be community health-related, for example, inappropriate pesticide use, which can have primary effects on users and secondary effects on others including in their own household. Thus, analyses must be conducted not only of health budgets, but also of water and agricultural budgets, taking into consideration the multiple layers of gender, age, education, ability and employment. The

⁴¹ Women are already burdened by care duties that limit their time and capacity for accessing opportunities and knowledge. If health effects from climate change increase, it is expected that women will need even more time to dedicate to caring for others, including children, the elderly and others affected.

extent to which these interlinkages can currently be tracked in the current system should trigger engagements with the Ministry of Finance on budgeting in general and reform in order to significantly improve tracking.

Access to health services by victims of GBV is also critical. GBV was estimated to have intensified in the aftermath of Hurricane Maria and as well as during the COVID-19 pandemic due to several circumstances, including survivors trapped with perpetrators due to lockdowns and stay-at-home orders.⁴² Only Grenada has obtained an actual estimate of the prevalence of GBV through a survey as well as a qualitative report, which show that this is a health pandemic of its own; five Caribbean Community (CARICOM) countries in total have studies.

Due to the COVID-19 pandemic, health workers and medical professionals are overworked and under pressure, which makes them more susceptible to several ailments, both physical and psychosocial. This also needs to be considered in budgeting for managing risks, which will may require staff rotation and other measures to boost emergency management and the supply of additional personnel to manage the pandemic as well as regular health surveillance.

Step 2: Analyse and assess impact

At this stage, focus must be placed on the kind of impact achieved and experienced by target beneficiaries, and a comparison made between the needs identified and the outcomes expected at the time that the intervention was designed or the budget compiled. This will require consideration of a number of quality-of-life aspects of health and health impacts from public finance investments. Risk management measures against pesticide use and health-related impacts, given the likelihood of increased use of pesticides to increase productivity due to climate-related production declines or reversals, are also included. This assessment can take multiple forms, as shown in Tables 20 and 21.

⁴² This distinction and clarification are made because not all budget items are based on an explicit intervention basis or with performance in mind. This is particularly the case for long-standing, recurrent expenditures that have become habitual and that are 'baked into' the planning cycle.

Table 20: Budget allocation template

Areas of Gender-responsible climate budgeting (GRCB) analysis	Food security (in USD and % of budget)	Health (in USD and % of budget)	Gender (in USD and % of budget)	Climate (in USD and % of budget)	Secondary focus areas (in USD and % of budget)			
					Transportation	Water	Agriculture and fisheries	Wastewater management
Gender								
Climate								
Gender in climate								
Climate in gender								

Table 21: Beneficiary impact template

Who/How	Leadership and decision-making/agency	Access and control over resources/flexibility	Ecosystems	Rights and participation	Governance	Social organization	Assets and education/learning/socio-cognitive
Women							
Female-headed households							
Elderly men							
Youth							
People with disabilities							
Indigenous people							
Agriculture workers (pesticide use*)							
Women farmers							
Health workers							
Domestic workers							
The elderly (including the sick and infirm)							
Hotel and accommodation sector							
Victims of domestic violence/sexual and gender-based violence							

*Pesticide use can increase due to climate effects, which reduce the productivity of land. There are significant risks from pesticide use to both men and women that affect several aspects of physical health, which are well documented globally. These risks increase with inappropriate use, handling and disposal of pesticides. The Food and Agricultural Organization of the United Nations (FAO) currently manages a regional project that seeks to increase knowledge, capacity and standard/guidance to reduce the use of toxic and harmful pesticides as well as promote the use of more sustainable alternatives.

With an increase in temperatures, the hotel and accommodation sector will have to use more cooling technologies, which, if inefficient or not based on renewable sources, will also generate more greenhouse gases. Additionally, tourists may be unaccustomed to and unable to cope with heat waves, which could lead to health emergencies. Hotel and accommodation sector staff who work outside in the gardens, on beaches and on tours will need to take occupational health and safety precautions for themselves and to protect other staff, guests and visitors. Health-related impacts such as vector-borne diseases could also depress the tourism market. In addition, an increase in the number of health warnings could reduce the attractiveness of specific hotels due to their location. The demand on water due to health-related impacts is also expected to be very high (based on lessons from COVID-19), and the hotel and accommodation sector is already a significant user of water resources and a competitor with other sectors for this resource.

This expanded analysis assists in capturing impacts on quality-of-life enhancement and environmental enhancement. Key indicators to be assessed could include the following:

- share of budget allocated annually (recurrent and capital) to gender, climate, gender in climate, and climate in gender;
- share of budget benefiting women and girls in obtaining access to healthcare;
- share of annual budget and available finance targeting vulnerable groups;
- percentage reduction in sectoral loss and damage cost being funded by the government;
- health equity gap between groups;
- percentage of cost of health impacts from climate change (annual);
- number of pesticide related health impacts per annum;
- number of persons experiencing severe food insecurity after an extreme event.

Step 3: Flag gaps and incoherence

At this stage, the team should review the findings, which, given the complexity of the health sector in terms of physical, social, environmental as well as mental health, will be numerous. Psychosocial impacts from the trauma of loss are also to be expected. Key gaps should be identified and/or organized in a hierarchy of needs and/or importance, which is informed by costs as well as by an existing policy and strategy. This includes looking at relevant health sector NAPS or health-related measures integrated into agriculture and food security NAPS, water NAPS and infrastructure NAPS.

Full engagement of the Ministry of Finance is key, particularly if specific budgeting and tracking codes will be required. It will be critical at that stage to engage the budgeting/finance staff at the ministerial level and to ensure that project staff also consider these issues in their finance planning and expenditure as well as results reporting.

Step 4: Prioritize and make recommendations

This process should ideally be led by gender and climate experts with sectoral knowledge and a combination of personnel from various ministries may be ideal to ensure a holistic approach.

In the context of SASAP formulation, this will imply that the SASAP engagement and prioritization mapping will need to be linked more closely at this stage and that planning, costing of SASAPs and the development of concept notes/ideas should bear in mind the results of the first three steps. This should then lead to clearer and better-defined gender mainstreaming efforts, as well as to more specific and tangible interventions with a gender focus targeting vulnerable and at-risk women. Adequate budget resources of tracking and impact assessment are critical to costing. Careful attention should be given to recurrent and capital expenditures, and how to distinguish separate health and development investments from gender and climate interventions.

Using a problem ranking,⁴³ the prioritization should consider the cost to resolve the problem and the benefits in terms of scale and the extent to which the problem affects multiple vulnerable groups by gender and age. Simple measures of low, medium and high can be used, and the voices of key beneficiaries will need to be heard and integrated into the ranking results. This may be complemented by mapping the value chain used in the *Agriculture* section of this document, adapted to the health sector, with a focus on where and how men and women's labour is allocated and concentrated.

Once the problems are identified and solutions agreed on, the budgeting process should ensure that:

- funds are specifically identified for gender mainstreaming activities, including M&E, by engaging gender consultants and/or gender experts for specific activities including climate change adaptation in the health sector, awareness, capacity building, as well as specific gender analysis and data collection;
- risk management measures are integrated that consider public health imperatives, particularly in the context of COVID-19 and climate, gender and health;
- GBV linked to environmental stress, such as natural hazards and climate change, can also be detected and has a specific budget line;
- funds are allocated for distinct gender equality and women's empowerment activities, such as legal literacy, rights and redress mechanisms, and on business opportunities for expanding health access to underserved groups. In Dominica, the specific health

⁴³ Based on a rural appraisal technique, it asks assessors to identify problems (usually six or more) and to rank them by order of importance.

challenges of the Kalinago community would need to be treated distinctly from those that are non-Kalinago.⁴⁴

Step 5: Mainstream and integrate

Here, discrete actions can be taken, and lead and support responsibilities defined. This could take the form of a pilot, but it would also be key to ensure that other stages blend into the SASAP process to inform the defining of specific adaptation measures and how the SASAPs will be monitored, reported on and verified. The focus in this guidance is mostly on the latter in ways that leverage both the GRCB elements and the SASAP process.

This would include the development of:

- a gender, climate and health marker (Table 6), which can be adapted to sectors in Section II, and would be ideal for setting specific standard and criteria for measurement. This could be tracked by the Bureau of Gender Affairs, institutionalizing its role as a technical partner in the process.
- gender, climate and health tracking codes or expenditure tags that allow the tracking of budgets from allocation to reporting and means of verification of impact. This would also help with improved attribution and contributions from projects and activities to observed and measurable change or results.
- a specific tracking code needed to track GBV in the context of natural hazards and climate change. Like NCDs and climate change, GBV is also a slow-burning issue that can be easily masked and go undetected;
- a simplified tracking system managed by the Ministry of Health linked to specific means of verification that are both quantitative and qualitative.

⁴⁴ Direct Relief. (2021). *In Dominica, Indigenous Kalinago Had Few Options for Care. Now, a Transformed Clinic is a Health Care Hub*. www.directrelief.org/2021/09/in-dominica-indigenous-kalinago-had-few-options-for-care-now-a-transformed-clinic-is-a-health-care-hub/#:%7E:text=Health%20disparities%2C%20like%20higher%20rates,addition%20to%20cancers%2C%20she%20said

Recommended reading:

GRB-related outputs from the EU-United Nations Spotlight Initiative in Grenada, among other countries (contact the UN Women Spotlight Team for further information on these outputs), including the draft manual for tracking and assessing budget allocations for addressing Violence Against Women and Girls.

The Cost of Ending Violence Against Women and Girls in Grenada (to be published in 2023 by UN Women)

The Caribbean Public Health Agency (CARPHA) 65th Annual CARPHA Health Research Conference on Pandemic, NCDs and Climate Change: The Caribbean's triple threat, held on 16–19 June 2021

CARPHA. State of Public Health Report 2019. Healthy Ageing in the Caribbean

3.5 Finance

Only Antigua and Barbuda has identified the finance sector as a priority, and it is largely through the lens of their experience that the GCRB is explored. Analyses have been carried out by the IMF and the World Bank Canada-Caribbean Resilience Facility (CRF) for all five countries for this sector, albeit to a limited extent. The finance sector can be approached from various angles, including the role of public and private finance institutions as well as insurance companies. The actions and inactions of all of these actors have implications for some of the scope of loss and damage, particularly public and private property. These angles are relevant given the scope of climate impact, which include the scale of the cost of inaction, i.e. intensifying debt and restrictive fiscal space for long-term investments such as in climate change action. It has been projected that the cost of inaction to mitigate climate change is significant for all countries, i.e. an average of over 100 percent of GDP between 2025 and 2100.⁴⁵ Public finance alone will be insufficient to meet the twin challenges of climate change and gender equality. Indeed, among the biggest gaps are the lack of insurance of both public and private assets, and the general poor level of insured assets across the region.

Caribbean SIDS alongside other members of the Alliance of Small Island States (AOSIS) have made the case that available bilateral and multilateral assistance is not enough to address climate change, despite the main underlying drivers being the economic and livelihood actions of countries in the Global North.

⁴⁵ Perch (2021).

The cumulative cost of inaction for Antigua and Barbuda is middle of the range for the region. By 2025, it is projected to be **12.2 percent** of GDP; by 2050, it doubles to **25.8 percent**, and by 2100, it doubles again to **58.4 percent**. Analysis for this report suggests that this cumulative cost is the 3rd highest of all five countries and the 7th highest of the 24 countries reviewed by Bueno et al., in 2008.⁴⁶



A summary of storms affecting Antigua and Barbuda (before Irma and Maria) highlight the country's exposure to natural hazards and climate risk (Table 22). Shifts in the frequency and intensity of Category 4 hurricanes are visible in Antigua and Barbuda, from one in 50 years to one in 10 years.⁴⁷

Table 22: Recent storms affecting Antigua and Barbuda (1995–2010)

Year	Storm	Loss and Damage (EC\$ 1995)	Category
1995	Hurricane Luis	346.55M	cat 4
1998	Hurricane Georges	200M	cat 3
1999	Hurricanes Jose and Lenny	247.43M	cat 2, cat 3
2008	Hurricane Omar	48.6 M	TS rain event
2010	Hurricane Earl	52.10M	cal 2

Source: Government of Antigua and Barbuda (2018).

Based on the limited studies available (i.e. there is no ongoing assessment in any of the countries), ongoing costs of climate on gender equality and women's empowerment are already quite high. There is no analysis on the impact on gender equality and women's

⁴⁶ Perch (2021).

⁴⁷ Government of Antigua and Barbuda. (2021). *Updated Nationally Determined Contribution (INDC)*. www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Antigua%20and%20Barbuda%20First/ATG%20-%20UNFCCC%20NDC%20-%202021-09-02%20-%20Final.pdf

empowerment on climate. The IMF (2019⁴⁸) calculates that the annual loss from wind- and flood-related events to Saint Lucia is just under USD 49 million or less than 5 percent of GDP. In a 100-year cycle, these costs are expected to balloon to almost 900 million, or 61 percent of GDP. Estimates by the IMF⁴⁹ suggest that 25 percent of Saint Lucia's investment envelope has been allocated to adaptation in recent budgets and in the investment pipeline, with an estimated USD 30–35 million, or 2 percent of GDP, for adaptation out of the capital budget of USD 92–111 million. Annually, around 50 percent of the allocation is spent, i.e. every year Saint Lucia invests roughly 1 percent of GDP on adaptation. In its 2020 Budget Speech, the Government of SVG acknowledged that, in 2001, “less than 10 percent of our nation's public debt was incurred for adaptation and mitigation to climate change; today that number has risen to in excess of 50 percent”.⁵⁰ There is usually a glaring gap in financing between losses experienced and funds received either as emergency resources or as part of humanitarian, rehabilitation or recovery support. This often leaves SIDS with a large, growing and unpayable climate debt.

In Grenada, a mapping by the World Bank highlights a huge gap of USD 433 million that went largely unaddressed up to four years after the event.⁵¹ The IMF estimates an annual average adaptation cost in Grenada of USD 33.9 million, just less than 3 percent of GDP.⁵²

Step 1: Define

A review in 2021 by the World Bank⁵³ suggests that Antigua and Barbuda is making progress on adaptation finance management but still a little behind the curve compared to the regional average on areas such as gender-sensitive resource allocation (one of the lowest areas of progress), together with auditing practices and procurement planning, which are also connected (Figure 8). Resource planning and public asset management are areas that need improvement (Figure 8).

48 Bonato et al. (2018).

49 Ibid.

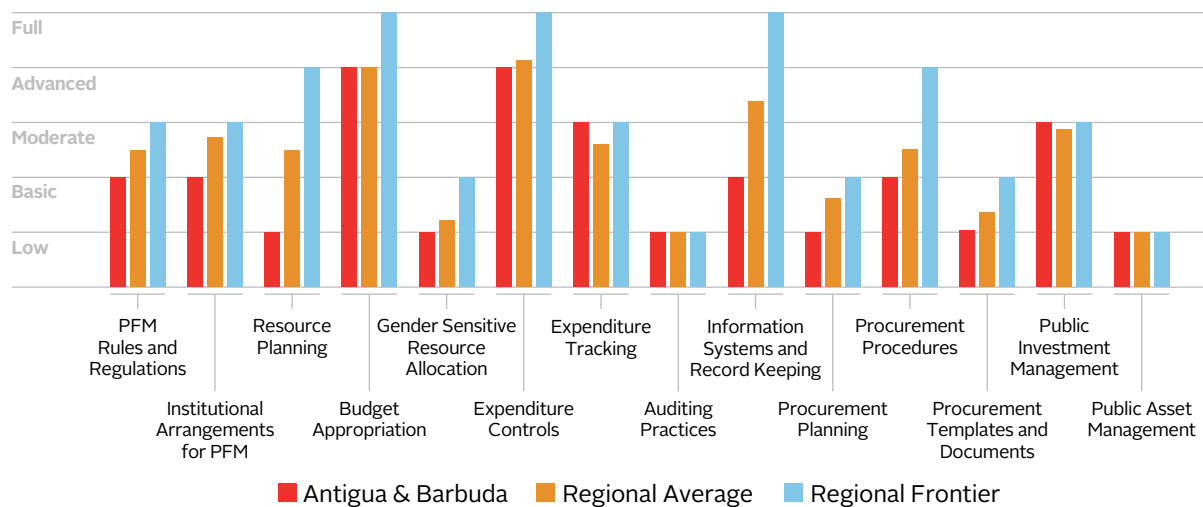
50 Government of Saint Vincent and the Grenadines (2020).

51 World Bank (2018a).

52 Bonato et al. (2018).

53 Canada Caribbean Resilience Facility (2021).

Figure 9: Extent to which disaster resilience and recovery considerations are integrated into public financial management (PFM)



Note: Regional frontier in this context refers to the country that has advanced integrating disaster resilience and recovery considerations in public financial management the furthest within the region (i.e. is leading the way in this work).

Although the 2017 report on climate flows is detailed, it acknowledges that the climate relevance of 97 percent of budget expenditure is unknown in Antigua and Barbuda.⁵⁴ Historically, there is better tracking or capacity to track international finance, and accordingly, it emerged from an analysis that the lion's share in Antigua and Barbuda is allocated to adaptation (more than 60 percent), followed by mitigation (11 percent) and cross-cutting areas, usually grant-based activities (25 percent).⁵⁵ Analyses of the other five countries, particularly Grenada, show similar and even more significant lack of data and information, and poor climate and gender expenditure control mechanisms and resource allocation. This combined with the scope of current costs of climate and gender inequality make for a daunting task.

This step, under the leadership of the Ministry of Finance, is key to compiling all the available public finance analyses on climate and gender together in one location and to understanding the annual capital and recurrent costs of climate change, gender inequality, and of the two combined. Involvement of the banking sector, credit unions as well as insurance companies will be pivotal. Some of this discussion has already been initiated during stakeholder consultations for the Gender Inequality of Risk Studies in Dominica.

⁵⁴ Watson, Robertson, Ramdin and Bailey (2017).

⁵⁵ Ibid.

Key questions in this step include:

- What is the scope of capital and current expenditure related to financing costs for climate change and its impact on the country's fiscal position and debt-to-GDP ratio? What are the hidden costs of the above/mentioned climate and financing crises?
- What is the annualized budget for adaptation, risk management and gender equality response? How does it compare to the estimated adaptation costs and the cost of inaction calculated in 2008 for climate and any cost of inaction analysis for gender inequality?

Step 2: Analyse and assess impact

Building on Step 1, this step focuses on analysis and impact assessment to understand both the implications of the issues and the cost of the failure to properly account for their economic impact. Key questions for the analysis and impact include but are not limited to the following:

- What does climate change and gender inequality, separately and especially in combination, cost the economy?
- Who pays the highest price for the costs of climate and gender inequality, and where do these costs intersect? What is the value of this cost over time, i.e. the cost of inaction?
- What is the cost of the budget failure to account for these costs? What sectors would need to be involved?
- What has been the total and cumulative loss and damage impact of events over the last 41 years?

Presenting the findings in this analysis will be critical to engaging decision- and policymakers as well as broader national stakeholder groups on the issues of impact-based financing. One key issue in this context will be the economic impact that the current state of underinsurance will have on the fiscal capacity at the national, sectoral and household levels on vulnerable groups including women and FHHs. Using similar tables to those in the other sections, the assessment results should comprise both impact analysis and risk assessment analysis arising from not addressing these issues.

Step 3: Flag gap and incoherence

Building on the IMF and World Bank analyses to date, this step should focus on key gaps (with potential to be catalytic beyond the finance sector) that are barriers to more gender- and climate-sensitive resource allocation. Beyond issues of allocation, the intended and actual use of the resources should also be considered. This will require more than financial analysis and will call on other skillsets, including behaviour analysis. Here, the available data and information on knowledge, attitudes, practice and behaviours regarding financing

related to gender and climate are critical, including the findings from the consultations that informed this guidance document.

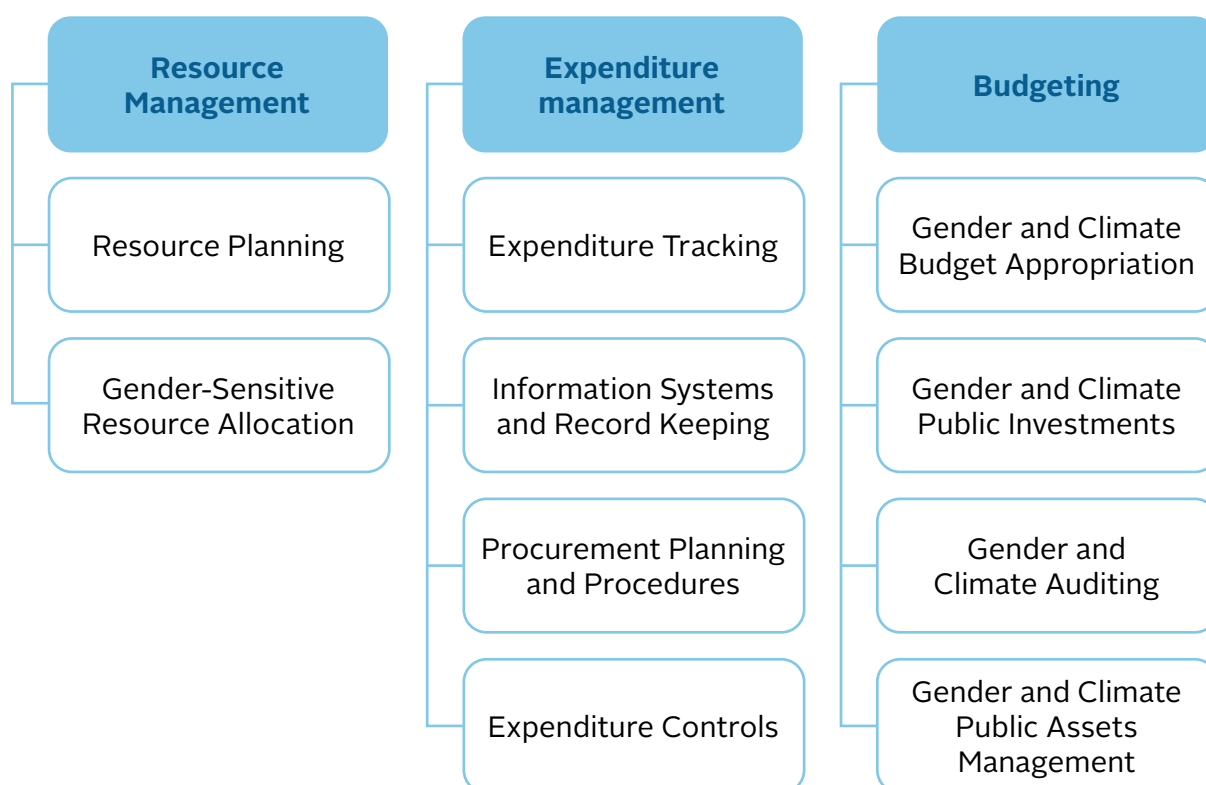
Given the complexity of the issues, which usually includes a lack of knowledge, resistance to issues of gender, and the feeling that this would require additional work, as well as the lack of GRCB tools and/or specific knowledge, a problem tree approach is proposed. A problem tree analysis works well in a multidisciplinary context and would help to narrow down the available information into a consensus position on root causes, drivers, enabling conditions and consequences. On this basis, there should be a collective decision regarding where the problem will be tackled, ideally at the level of drivers, enabling conditions or root causes. Too much of the current level of financing is focused on the consequences without addressing key structural issues or adaptation in a way that would also serve to protect and build resilience to other development challenges. The Guide for Group Interviews and Focus Group Discussions on Gender and Climate, which was developed as part of stakeholder consultations in Dominica on the gender inequality of risk, is well suited to this task and did consider the financing sector (i.e. banks and insurance).

A table or a matrix of findings that reflects the result of this brainstorming also contributes to mutual understanding and the communication of the results that inform the next steps.

Step 4: Prioritize and make recommendations

In this stage, since this is a sector unlike other sectors, the approach will be slightly different. Consideration will also have to be given to the elements considered by the CRF in its public finance review since they are all relevant in the GCRB context. The prioritization based on pair-wise ranking that spotlights problems based on the number of times they are repeated will consider the following areas in Figure 9.

Figure 10: Areas to be considered in the pair-wise prioritization process



Source: Adapted from CRF, 2020.

In all of these areas, there is expected to be an exclusive focus on gender and climate, which can then be ideally connected to other SASAP analysis and steps, and thus combined. This should enable SASAP-recommended measures and budgets to be more nuanced, realistic and better embedded into existing financing structures and mechanisms. Where there are clear structural and ecosystem gaps, the SASAP should include recommendations on budgeting and solutions to address them.

Step 5: Mainstream and integrate

Building on the linkages and connections with the SASAP process while ensuring that a more long-term and whole-of-society approach is taken on the issue of financing, several key elements are necessary, including a division of labour in terms of lead roles and responsibilities. This will ensure not only that the SASAPs are monitored and verified, but also that a culture of M&E and MRV is integrated into the financing ecosystem that tracks from intended purpose to results reporting, which will require the following:

- **a gender, climate and finance marker** (see *Gender Marker*, which can be adapted to sectors in Section II) would be ideal for setting specific standard and criteria for

measurement). This could be tracked by the Bureau of Gender Affairs, institutionalizing its role as a technical partner in the process.

- **gender, climate and finance tracking codes or expenditure tags**, which would allow the tracking of budgets from allocation to reporting and means of verification of impact. These codes could also be used to tag concept notes and project documents, so that when approved, they can be properly tracked within the sectoral SASAP framework as well as by the donor. This would also help with improved attribution and contributions from projects and activities to observed and measurable change or results. Codes will be needed for: (i) gender and climate adaptation; (ii) gender, climate and finance; (iii) loss and damage; and (iv) climate risk management including tracking the various sinking contingency funds and the Catastrophe Deferred Drawdown Option (Cat DDO),⁵⁶ which contribute to managing the cost of debt and disaster response-associated debt, when drawn down.
- **a simplified tracking system** managed by the Ministry of Finance and Environment linked to specific means of verification that are both quantitative and qualitative, and that are determined on a country-by-country basis.

Recommended reading:

Canada Caribbean Resilience Facility. Antigua and Barbuda. (2021). *How Disaster Resilient is Antigua and Barbuda's Public Financial Management*.










Watson C., Robertson M., Ramdin, A., and Bailey, C. (2017). *Assessment and Overview of Climate Finance Flows: Antigua and Barbuda*.

3.6 Housing and shelter

The housing sector of Caribbean SIDS has proven to be vulnerable to climate change, and its impacts on people are usually differentiated depending on gender, age and location. In some cases, like Hurricane Ivan's impact in Grenada and flood events in SVG, the extent of the loss exceeds 50 percent of all damages; in other cases, it is at least 20 percent of all damages in the worst disasters (Saint Lucia, Dominica and Antigua and Barbuda). Often, physical displacement, with knock-on effects on the ability to access transportation, employment and other services, also becomes a challenge.

⁵⁶ See, for example, World Bank (2018b).

Figure 11: Shelter Management Guidelines developed by the Caribbean Public Health Agency, the Pan-American Health Organization and the Caribbean Disaster Emergency Management Agency

	<p>Location</p> <ul style="list-style-type: none"> Select a shelter facility that is safe – away from coastal plains, not prone to high winds, landslides, nor threat from falling trees, powerlines and away from hazardous materials
	<p>Pets</p> <ul style="list-style-type: none"> Provide temporary housing for displaced pets away from persons housed in mass shelter zones
	<p>Safety and Security</p> <ul style="list-style-type: none"> Work closely with Disaster Management agencies and protective services to ensure compliance with and enforcement of shelter rules and the rule of law Ensure that there are systems in place to identify legitimate shelter occupants and staff
	<p>Length of Stay</p> <ul style="list-style-type: none"> Plan adequately for short-, intermediate-, and long-term shelter stays
	<p>Demographics</p> <ul style="list-style-type: none"> Consider demographics at the shelter, i.e. gender, age, persons with special needs, when planning
	<p>Persons with Special Needs</p> <ul style="list-style-type: none"> Ensure persons with special needs can safely access the facility Make special provisions to protect persons with cognitive challenges and mental health impairments to prevent discrimination and stigmatisation
	<p>Children</p> <ul style="list-style-type: none"> Provide safe spaces for children to play, sleep and bathe that are separate from strangers
	<p>Personal Effects</p> <ul style="list-style-type: none"> Carefully manage personal effects brought to the shelter by shelter occupants Encourage community education on how to prepare for sheltering during emergencies
	<p>Gender</p> <ul style="list-style-type: none"> Ensure safe and secure facilities for residents, staff, visitors and especially vulnerable groups – women, girls and transgender persons Ensure sanitary facilities and access to adequate safe sanitary supplies for pregnant, nursing, and menstruating persons

Source: Caribbean Public Health Agency (2020).

Shelters and shelter management become important elements of housing, particularly since they are temporary housing for the displaced in the short and medium term. Consequently, there has been a significant escalation of analysis, work and emphasis on shelter management and shelter management guidelines (see Figure 10). In particular, hazards such as hurricanes, storms, landslides and flooding, which require the movement of people into temporary shelters and incur the risk of displacement, are being assessed more regularly as are financing and other support costs required.

Displacement relating to housing impacts is a regular occurrence that can last from a few days to months. It is usually temporary and is funded as such, but in reality, it can stretch for a long time for some vulnerable persons and households. For example, there were extensive shelter stays for Hurricane Ivan in 2004 (Grenada), Hurricane Maria in 2017 (Dominica) and Hurricane Irma 2017 (Antigua and Barbuda), as well as more recently, due to the volcanic eruption in SVG, which devastated the north of the country. Anecdotal information has pointed to the lack of proper facilities, gender-sensitive approaches and risk analysis, which led to incidents of sexual assault, and physical and sexual abuse and harassment. As a result, all countries now have access to guidelines such as those shown in Figure 10 to address knowledge and practice needs via training, education and standards. This should assist in reducing gender-based risks for shelter managers and staff as well as users of the facilities.

Estimates for housing impacts from the largest events to affect the five countries, including the most recent category five hurricanes – Irma and Maria – were significant in both Dominica and Barbuda. Loss of life, infrastructural damage, loss of housing stock and output losses are just some of the risks posed by climate and natural hazards, particularly to the critical tourism sector. Although there is strong commitment to adaptation and building resilience by states as well as entities within them, including through determinative policies and strategies, funding is inadequate in all countries for the scale of the task. In Saint Lucia, it is estimated that there is a 1 percent chance that a disaster will exceed 61 percent of the country's GDP.

In post-Maria Dominica, although damage to infrastructure loomed large, damage to housing was twofold. Housing topped the list of needs, followed by transport and agriculture (including forestry and fisheries) and then electricity, commerce and micro business. Similarly, in 2004, due to Hurricane Ivan in Grenada, more than 90 percent of the housing stock was damaged, and a massive housing recovery effort was necessary. In the 2013 floods, housing represented 8 percent of the losses and damages documented. In post-Irma Barbuda, housing was and is the main recovery focus, with multi-million-dollar investments being made by development partners such as the European Union and the Government of China. Housing investments are small-, meso- and large-scale, and ongoing government efforts through the Housing Revolution programme seek to expand housing, improve access to climate-resilient and more affordable housing, and finalize the housing recovery effort in Antigua and Barbuda. These efforts are complemented by home-grown initiatives focused

on affordable housing and climate-sensitive construction techniques. Housing challenges are particularly challenging for FHHs, PWDs and the elderly.

Although information on informal settlements is poor in the region, there is some information in Antigua and Barbuda, including on some of the challenges experienced to date. Available information on housing from the 2011 National Census and the most recent poverty assessments show that poor quality housing and inadequate construction materials pose challenges for some groups in the face of hurricane- and storm-related risk. The information on the quality of housing of agricultural workers in Antigua and Barbuda also raises questions about their exposure to recurring damage. While the quality of housing affects both male and female workers, due to the lower pay of female agricultural workers, they are less likely to be able to afford some types of housing upgrades. Hence, women are also slower than male earners in restoring their housing to acceptable levels post-disaster. Given traditional social norms, they are also less likely to have the skills to do so themselves.

Step 1: Define

The housing (and shelter) sector is one where impact can be directly felt in reducing vulnerability for specific groups, including women and FHHs. It is also where there are many more impact analyses available, and perhaps a greater understanding of the needs than for other sectors. It is also through this sector that issues such as energy and water access can be addressed, that location, physical risks and quality of the physical structure can be examined simultaneously, and that the fragility of the employment of the homeowner as well as all the other conditions come into play. Having this broad view before starting the budget and financing analysis is essential to ensuring that key issues and people are not left behind.

Once the team has collated all the relevant data and analysis, it is important to consider and answer any key questions that may arise. The issue of underinsurance of residential housing, raised in the focus group discussions for the Gender Inequality of Risk Study, should also be taken into consideration. From these discussions, the following guiding questions were determined:

- What is the cost being covered by the state, insurance and homeowners due to the impact of extreme events?
- Are there gender barriers to accessing finance that need to be considered? And is gender a lens used for analysis or are gender-related criterion considered, for example, in designing loans and financing instruments? Is gender considered in the selection of who is being trained and on what they are being trained? Are harmful gender norms or gender bias being challenged?
- What is the cumulative cost of housing impacts over the last 20 years from big and small events?
- Who has been most affected and has experienced multiple impacts over more than one event?

Step 2: Analyse impact

Based on the guiding considerations and others that the team may identify, it should be possible to conduct a robust analysis and impact assessment of budgeting and financing to date at two levels. The first is the extent to which these issues were considered, and where and how; and the second is the impact of the investments – i.e. who benefits and how? It would be ideal to disaggregate benefits by sex and/or age, or (dis)ability, but this may not be possible in all countries. This is one sector where the quality of impact matters more directly in some ways given the impact that can be made at a macro-economic as well as sectoral level. This potential can be seen in some of the targets identified by Antigua and Barbuda in their update to their recently updated NDC (September 2021), particularly from a resilience perspective. Useful indicators that are derived from these targets for use in analysing impact include, for example:

- the number of days that a household can survive a loss of supply of water and energy;
- the extent of avoided losses due to resilient construction techniques.

These targets are currently not easy to capture due to the lack of appropriate systems, but with tracking and reporting systems in place, it may be possible to present this information in the future.

The impact assessment framework needs to be gender- and age-responsive, and should identify groups and vulnerabilities based on the PDNAs and the gender inequality of risk assessments carried out in 2020 and 2021.

Step 3: Flag gaps and incoherence

Like the previous section, this step requires an analysis that is deeper yet still summary, which should lead to the identification of key gaps, barriers and constraints. A pattern analysis from the impact assessment helps in this regard and is simply a review of the repeated nature of some challenges and issues, and the extent to which they have been identified in various reports. In addition, it is important to match the arising need to existing policy priorities. These gaps and incoherencies will be the focus of the work at the next stage of the process.

Traditional models of gap and barrier analysis can be used here, or problem trees to produce a solid framework of root causes and drivers, enabling conditions, and consequences. The focus here from the budgeting and financing cycle is to understand, at a minimum, the enabling conditions and the role that budgets and finance may play in this regard, and the role that public finance plays in sending signals to key markets such as banking and insurance. These signals are important in enabling banks and insurance companies to take steps in new areas and develop new products.

Step 4: Prioritize and make recommendations

Based on the findings in Step 3, a simple prioritization exercise is needed to identify urgent areas of action in the sector linked to the SASAP process and then the enabling actions required by budgets and finance to support them. Preference ranking is preferred over problem-ranking here to give household members and household owners a greater voice, and to ensure that users/practitioners have the capacity to differentiate preferences by sex and gender. To be able to understand the gender differences in preference, sex-based information is not enough; therefore, stakeholders should be encouraged, in their interface with the team, to discuss the reasons underlying their preference and how it may be linked to gender roles and responsibilities. This process relies on more participatory approaches and engagement between the government, NGOs, homeowners and householders, construction actors, loan recipients, PWDs, agricultural workers and public sector workers, as well as persons previously rejected for a loan or mortgage.

The value of informal loans and savings schemes such as ‘box hand’ in Antigua and Barbuda and ‘sou-sous’⁵⁷ in Dominica, Saint Lucia and Grenada also need to be considered. Integrating them or linking them with more formal financing mechanisms should be given greater consideration due to the role they can play in serving as non-traditional forms of collateral.

This step is particularly helpful in the SASAP process, which can also contribute to informing this stage of the debate in narrowing in on what can be carried out and what is affordable.

Step 5: Mainstream and integrate

At this final step, there are several tools, processes and guidelines that will need to be created or adjusted. Since a significant level of housing initiatives are government-shaped or -driven (e.g. Dominica, which also has a Housing Revolution initiative and efforts to expand affordable housing), this will require some budgeting guidelines. In particular, the following are recommended:

- a gender, climate and housing marker specific to the housing sector that can be used by both public and private sector actors;
- an expenditure tracker for gender, climate and housing that is also adaptable to public and private sector housing, and that captures information that can assist in measuring the impact of investments in both areas for a more resilient housing stock;
- Gender, Climate and Housing Guidelines for the Finance and Housing Ministry to enable it to allocate more gender- and age-sensitive resources. These Guidelines should also consider issues of pay and the needs of victims of GBV in terms of housing priorities.

⁵⁷ ‘Box hand’ and ‘sousesou’ are a form of informal community lending where members of the group pay a sum at designated periods (e.g. once a month, every fortnight, etc.) and take turns receiving the full amount that was paid for that designated period.

(Trinidad and Tobago has recently initiated some thinking in this regard, as reflected in its budget analysis, which could be a model that other countries can develop further.) These Guidelines could then be used by banks to initiate a medium-term revision of their loan and risk criteria, as well as to expand the scope for guarantee-supported loans, etc., which would allow greater access to finance by those who need it most. The other four countries could also adopt some of the Guidelines of the Antigua and Barbuda Sustainable Island Resource Framework (SIRF) Fund in this regard.

Put simply, allocations that cannot confirm commitments to gender-sensitive allocations, nor meet marker requirements, nor commit to using the guidelines should not be funded by the public purse.

Recommended reading:

Guidelines for Implementing Gender Equality and Socially Inclusive Infrastructural Projects: <https://antiguaobserver.com/new-guidelines-for-the-construction-sector>

Antigua and Barbuda. Final Report on Institutional Capacity Building in Gender Sensitization for Road Infrastructure Rehabilitation Works. www.dropbox.com/s/ga5f39u8mpcmssw/Final%20-%20Guidelines%20for%20Implementing%20Gender%20Equality%20and%20Socially%20Inclusive%20Infrastructure%20Projects%5B137503%5D.pdf?dl=0

Relevant guidance for public and private sector loan and grant recipients, available from the Antigua and Barbuda SIRF Fund website: <https://environment.gov.ag/sirf#funding>

Shelter Guidelines: www.carpha.org/Portals/o/Images/COVID-19%20Infographics/Guidance/ShelterGuidelines-COVID19-CARPHA.pdf

3.7 Social protection and employment

This section combines two areas of critical importance for Caribbean SIDS due to their vulnerability to economic, social and environmental shocks. Lessons from the COVID-19 pandemic have shown the need for social protection and employment/income-generating activities to be more closely aligned and to ensure that social protection and employment are fit-for-purpose in meeting the needs of the most vulnerable groups. While employment is usually considered in PDNA, consideration of social protection can be more inconsistent. Although neither is an economic sector per se, they are key contributors to the quality of economic and social development, and also have an impact on and can be influenced by environmental factors. In Dominica, Hurricane Maria had an estimated impact of over

USD 1 billion on employment; its NDC estimates an investment of at least USD 25 million over ten years is needed in this area. In Grenada, the devastation to employment from the 2004/2005 Hurricane Ivan was so significant that the Government accessed the Natural Insurance Scheme to fund unemployment benefits. Analysing both of these impacts would be valuable for climate change adaptation efforts such as the numerous ways in which governments spontaneously adapted to unusual circumstances.

Social protection and employment are two of the priority sectors for Dominica that are largely considered. In addition, information on impacts and other challenges faced by the other four countries will also be considered. Even when they are considered as in Dominica's SASAP in 2021, the amount allocated to them is low, i.e. less than 1 million. If extrapolated to a per capita analysis, Dominica would be provided with approximately USD 100 over a 1–2-year period. Employment is estimated at an even lower amount and captures employment in micro, small and medium-sized enterprises (MSMEs). Yet, the normal budget allocation by the author's calculation from the most recent budget for social protection annually is over USD 40 million and approximately USD 4 million for employment.

Employment losses arising from COVID-19 have been particularly stark in the tourism sector, with some estimates as high as 10,000 jobs in some countries. The opportunity that GRCB presents is important for better tracking the impact and the beneficiary incidence of social protection and employment. Improving the employment situation will require re-tooling and upskilling, particularly for many women whose jobs no longer exist. Although men and women have both suffered from the pandemic, evidence suggests that women suffered more from (i) job losses; (ii) insecure employment; (iii) challenges in working from home; and (iv) homeschooling responsibilities. In SVG, the volcanic eruption caused severe disruption in the north and milder disruptions elsewhere. Extensive damage to agriculture and to buildings will have affected employment and its government's fiscal capacity in the medium term.

Step 1: Define

In applying GRCB to these two sectors, it is important to build on the body of work carried out by the World Bank, the United Nations Children's Fund (UNICEF), the International Labour Organization (ILO) and the World Food Programme (WFP) in this area. This will require:

- defining which aspects of the public finance management system, budget, guidelines and budgeting tagging currently capture social protection in general, and shock-responsive social protection, specifically, as well as the extent of support that the government has provided to employment including incentives and unemployment benefit;
- identifying where and if these elements are being tracked in any way, given high levels of informality in the labour market and clear gender division of labour;

- analysing value chains to identify women in sectors where they have traditionally been less visible, if not invisible;
- in agriculture, distinguishing between agricultural workers and farmers, and between farmers, vendors and agro-processors;
- disaggregating the available information on beneficiaries of potentially relevant programmes by sex, age and gender in order to truly understand the scale and scope of vulnerability and multiple forms of deprivation being experienced;
- determining relevance through a shock-responsive lens. This lens is important for understanding the nature and scale of shock to people's lives, including income, assets and opportunities, and then developing a social protection monetary solution that can reasonably mitigate against the shock. There is ample work on shock-responsive social protection being carried out by the Institute for Development Studies (IDS) and the World Food Programme (WFP). For the latter, some of this work is already being piloted in the Caribbean region.

Step 2: Assess and analyse impact

Based on the findings in Step 1, analyse select or all programmes to determine the extent of: (i) quality of life impact; (ii) gender considerations; (iii) climate considerations or post-disaster/recovery; and (iv) gender and climate considerations.

The analysis should be presented as simply as possible, starting with the key ministries and then working towards a wide-ranging, albeit limited, perspective. The analysis should be able to highlight the areas that are universal, means-tested and/or targeted. Findings should be presented by sex, age and gender where possible, and should distinguish between vulnerable groups such as the elderly, FHH, children in poor households, single male-headed households, PWDs and indigenous peoples.

Step 3: Flag gaps and incoherence

Like the analysis in Section 3.4 (*Health*), the focus here is on: (i) the identification of critical and highly sensitive gaps that would influence the uptake of social protection, and of gaps between the stated intent and targets of NAPs and NDCs; and (iii) the current state, level and extent of budgeting that is carried out with direct and indirect links to gender of climate. In consolidating the findings in this step, it is important to also consider ongoing discussions on the post-COVID recovery and on the possibilities of an expanded decent work agenda, as well as the need to invest in protection against workplace harassment. The results table (see previous sections) can be adapted to the needs of the specific sub-sector. Since this list is likely to be a long, every effort should be made to keep it to no more than 10–15 issues/areas.

Step 4: Prioritize and make recommendations

By using national development planning instruments, the NAPs, NDC and the SASAPS, a hierarchy of the major gaps and barriers to a more gender-responsive and climate budgeting experience is created. Based on the level of ambition, also consider the extent to which employment and social protection need to be gender-transformative and not gender-responsive.

To rank either the problems or solutions, use a preference ranking model that will involve inputs and opinions from potential beneficiaries and account for intersectionalities of gender, age and employment source. Also, carefully consider post-COVID-19 directives and directions to ensure that the proposed adjustments and adaptation are relevant in the medium term.

It is here that the SASAP conceptualization and budget considerations should be informed from the results to date, particularly the GRCB analysis, assessment and ranking.

Step 5: Mainstream and integrate

With a focus on direct actions, this step focuses particularly on tools and systems, and would include the development of:

- a gender, climate and social protection and employment marker. This is ideal for setting specific standard and criteria for measurement, and could be tracked by the Bureau of Gender Affairs, institutionalizing its role as a technical partner in the process;
- gender, climate, social protection and employment tracking codes or expenditure tags, which allow the tracking of budgets from allocation to reporting and means of verification of impact. These codes could also be used to tag concept notes and project documents, so that when approved they can be properly tracked within the sectoral SASAP framework as well as by the donor. This would also help with improved attribution and contributions from projects and activities to observed and measurable change or results in response and resilience to shocks and reduced loss of employment;
- a simplified tracking system managed by the ministry responsible for social protection and employment linked to specific means of verification that would be both quantitative and qualitative.

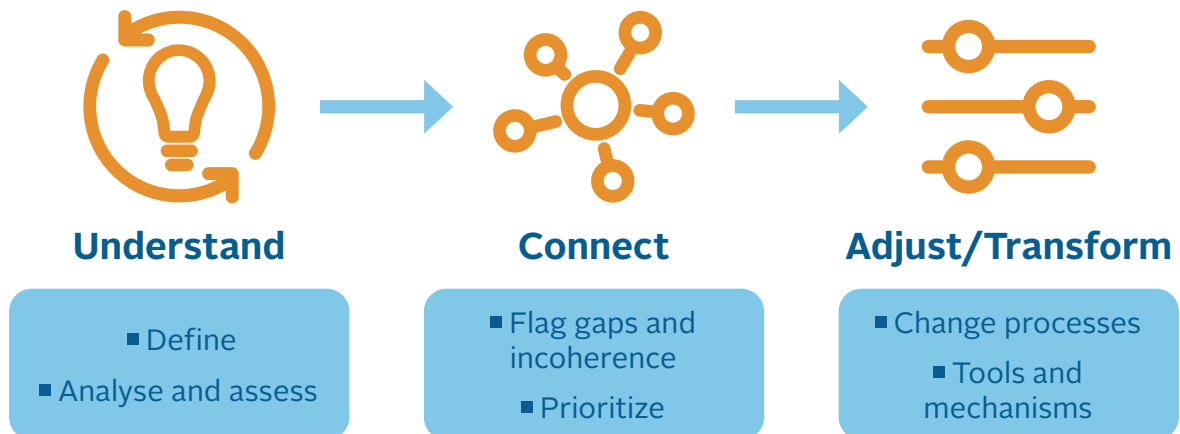
SECTION IV

Conclusions



This guidance document has elaborated on some key elements and considerations supported by examples of tools and/or guidance on how to undertake the main key steps outlined below in each sector. This is based on the latest knowledge on the sector's gender, climate and finance implications.

Figure 12: Summary of the step-by-step process



Every effort has been made to keep the steps and language simple while providing supporting evidence of and information on why these approaches are necessary and discussing some of the issues, experiences and impacts (many gendered) that must be considered in each sector; these are in no way comprehensive but illustrative as guidance to users and practitioners. It is expected that in employing the guidance, more issues and contexts can be added that could inform a second and/or third edition of this document. Table 23 summarizes financing innovation efforts.

Table 23: Financing innovations identified in the Draft Cost and Expenditure Review of Adaptation in five OECS countries

Country	World Bank/IMF Financing Tools *	Contingency Fund/Budget	Funds with the Eastern Caribbean Central Bank	National Programme/Fund**	Climate Resilience Plan/Fund
Antigua and Barbuda				✓	✓
Dominica			✓		✓
Grenada		✓	✓	✓	
Saint Lucia	✓	✓		✓	✓
Saint Vincent and the Grenadines	✓	✓			

Source: Author.

Notes: * Tools used are the Catastrophe Deferred Drawdown Option (CAT DDO) and the Rapid Credit Facility.

** National programmes/funds include the Revolving Fund Programme for Adaptation (SIRFF), the National Transformation Fund Contingency Fund, and the Citizenship Investment Fund.

The aim of this guidance document is to support this new generation of SASAPs and inspire future ones. Caribbean SIDS are not starting from zero; work that is directly relevant to closing the GRCB gap and to mainstreaming both gender and climate in the budgeting process has already been carried out, which has been showcased here. Efforts have been made to identify instruments that can support informal and formal policy changes while also implementing GRCB in ways that significantly close the gap and that can drive current efforts closer to an ideal of inclusive and climate-responsive public finance management; this guidance document is a contribution to these efforts.

Caribbean governments' GRCB efforts can have global relevance in filling the gaps on good and promising practices to integrate climate into gender budgets. There are more available guidance and practices on integrating gender into climate than on integrating climate into gender. This is an area that requires further investment, additional guidance and capacity building in the Caribbean context and across the world in general.

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ANNEX 1

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ANNEX 2

Models and examples of gender-responsive climate budgeting tools with the relevant adaptations

Gender and climate tracker tools

There is ongoing, robust discussion on tracking for gender and climate, particularly to facilitate MRV for the Enhanced Lima Work Programme on Gender (E-LWPG). One of the most visible trackers is available at Women's Environment Development Organization (WEDO) and focuses on three main areas: participation, coherence and mandates. The participation statistics focus on the involvement/participation of women in climate diplomacy. Other aspects of the tracker monitor and evaluate attention to women as beneficiaries and actors, and gender as an important qualifier of vulnerability and risk.

The WEDO Climate Tracker Tool focuses on the norms, while other trackers focus on climate finance and the extent to which this delivers on United Nations Framework Convention for Climate Change (UNFCCC) commitments.

More on the WEDO climate tracker: <https://genderclimatetracker.org/gender-mandates/introduction>

Analysis on Gender and Climate Finance: <https://genderclimatetracker.org/resource/gender-and-climate-finance>

Measuring Results in Getting Resources to Women: https://networkedintelligence.com/wp-content/uploads/2019/02/Gender-indicators-for-Climate-Finance-Dec-2013_Reworked.pdf

Gender and climate markers

With a focus on financial and social outcomes, the following examples and guidance are relevant in action learning as well as good and promising practice. There are no specific gender and climate markers available yet, but one is proposed here at the end of Section I. Other works elaborating on some of the challenges help to advance work in this area, including:

Measuring Results in Getting Resources to Women. https://networkedintelligence.com/wp-content/uploads/2019/02/Gender-indicators-for-Climate-Finance-Dec-2013_Reworked.pdf

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Gender-responsive Procurement – Women’s Empowerment Principles. www.weps.org/resource/gender-responsive-procurement



EnGender

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

