

# OECS CLIMATE CHANGE ADAPTATION STRATEGY AND ACTION PLAN 2021-2026

JUNE 2021



Disclaimer: This technical assistance programme is financed by the French Development Agency (AFD) within the framework of the Adapt'Action Facility. This Facility, which began in May 2017, supports African countries, LDCs and SIDS in implementing their commitments under the Paris Climate Agreement, through the financing of studies, capacity-building activities and technical assistance, especially in the adaptation sector. The authors assume full responsibility for the contents of this document. The opinions expressed do not necessarily reflect those of AFD or its partners.

The OECS CLIMATE CHANGE ADAPTATION STRATEGY & ACTION PLAN (CCASAP) (Deliverable 4-5) outlines a regional vision for adaptation support and details activities to be implemented under this vision.

The analysis was produced by Fernanda Zermoglio (Team Leader), Annie Bonnin Roncerel (Deputy Team Leader and M&E), Judi Clarke (Gender Equality), Cristina Solana (Water Resources), Aurelie Le Dissez (Land Use Planning and Coastal Infrastructure), Spencer Thomas (Economist), Jonathan McCue (Coastal Management), Cédric Van Meerbeeck (Climatologist, CIMH) and Dr. Leonard Nurse (Integrated Coastal Management & Climate Change Adaptation, UWI).

Supervision: Crispin d'Auvergne and Shanna Emmanuel (OECS Commission), Carole Cornille (Artelia), Morgan Rohel (Expertise France), Elodie Afonso (Adapt'Action Facility in the Caribbean, Expertise France, AFD).

Acknowledgement: We extend our appreciation for their feedback to the authorities from Anguilla, Antigua & Barbuda, the British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Saint Kitts & Nevis, Saint Lucia, Saint Martin, Saint Vincent & the Grenadines, the Climate Change and DRR Programme of the Caribbean Natural Resources Institute (CANARI) and the Adapt'Action EbA-GESI and RFbA project teams.

*Cover photo: Marigot Bay, Saint Lucia EbA-GESI Adapt'Action project (Copyright: E. Afonso)*

Edition: 2021

DELIVERABLE n°4- 5

REF. 8 41 2412

Implemented by



With the support of



## FOREWORD

While it was already widely recognised that the Caribbean is one of the regions of the world most vulnerable to natural hazards, the rapid and relentless onset of climate change has exacerbated some of these hazards and, overall, poses an existential threat, especially to the smallest islands in the emerald chain - Member States of Organisation of Eastern Caribbean States (OECS).

The observed and projected impacts of climate change have already begun, and will continue, to negatively affect our natural systems, social and economic sectors, built environment and infrastructure and, indeed, our general way of life and prospects for a sustainable future. This therefore calls for an urgent, yet coherent, multi-dimensional approach to adaptation and resilience-building at both the national and regional levels.

This Climate Change Adaptation Strategy and Action Plan (CCASAP) 2021-2026 promotes and supports evidence-based decision-making and adaptation action. It also supports related capacity enhancement, climate leadership and governance and the identification and funding of innovative adaptation interventions. Its three transformative pathways are well targeted towards promoting climate-resilient socioeconomic development in the region, emphasising among others, flexibility, gender equality and social inclusion.

The CCASAP is unique in that it is the first climate-change-related instrument of its type to be endorsed by all Member States of the OECS, transcending their various national circumstances. This therefore provides an unprecedented opportunity for region-wide coordination and collaboration on climate adaptation, supporting Nationally Determined Contributions to the Paris Agreement and aligned aspirations.

2026 will soon be upon us and I therefore look forward to the timely and effective implementation of the CCASAP. This can be achieved only through a broad alliance and engagement of governments, civil society, the private sector and international development partners, all working together. The OECS Commission is committed to playing its role and looks forward to working with all who share the vision and approach articulated in this strategy.



Dr. Didacus Jules

Director General of the Organisation of Eastern Caribbean States (OECS)

# CONTENT

EXECUTIVE SUMMARY .....	i
1. INTRODUCTION.....	1
1.1 Background and context .....	1
1.2 Methodology.....	2
2. CLIMATE IN THE EASTERN CARIBBEAN .....	5
2.1 Overview .....	5
2.2 Trends, Projections and Critical Risks .....	5
2.3 Critical impacts of climate change in the region .....	7
3.3 Policy Gaps identified.....	8
4 STRATEGY AND PLAN OF ACTION.....	11
4.1 Overview .....	11
4.2 Guiding Principles.....	11
4.3 Vision and Goals.....	13
4.4 Strategic Building Blocks - Transformative Pathways .....	16
The first transformative pathway aims to improve access to data and information to increase actionable climate knowledge .....	16
The second transformative pathway aims to increase capacity building and assistance to implement climate resilient socio-economic interventions .....	20
Finally, the third transformative pathway aims to enhance leadership and governance and access to climate finance for adaptation. ....	23
5 MANAGEMENT AND IMPLEMENTATION .....	29
5.1 Implementation Arrangements .....	29
5.2 Risk Management .....	29
5.2 Monitoring and Evaluation .....	29
ANNEX 1: LEGAL FRAMEWORK FOR CLIMATE CHANGE POLICIES IN THE EASTERN CARIBBEAN .....	32
ANNEX 2 : CURRENT OECS PROGRAMMES .....	40
ANNEX 3: MAIN REGIONAL PROGRAMMES IN THE EASTERN CARIBBEAN .....	41

## ACRONYMS AND ABBREVIATIONS

AF	Adaptation Fund
AFD	Agence Française de Développement
CARICOM	Caribbean Community
CCA	Climate Change Adaptation
CCASAP	Climate Change Adaptation Strategy and Action Plan
CCCCC	Caribbean Community Climate Change Centre
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDB	Caribbean Development Bank
CDKN	Climate Development and Knowledge Network
CIMH	Caribbean Institute for Meteorology & Hydrology (St. James, Barbados)
COMES	Council of Ministers of Environment and Sustainability
CROP	Caribbean Regional Oceanscape Project
DFID	Department for International Development (United Kingdom)
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EbA	Ecosystem-based Adaptation
ECROP	Eastern Caribbean Regional Ocean Policy
ENSO	El Niño–Southern Oscillation
FbA – RFbA	Forecast-based early Actions - Regional Forecast-based early Actions
GAP	Gender Action Plan
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GESI	Gender Equality and Social Inclusion
GST	Global Stocktake of the Paris Agreement
IPCC	Intergovernmental Panel on Climate Change
LDC	Least Developed Country
M&E	Monitoring and Evaluation
NAP-GN	National Adaptation Plan – Global Network
NDC	Nationally Determined Contributions
NOAA	(USA) National Oceanic and Atmospheric Administration
ODA	Overseas Development Assistance
OECSC	Organisation of Eastern Caribbean States Commission
PA	Paris Agreement
SDGs	(UN) Sustainable Development Goals
SIDS	Small Island Developing States
SGD	Saint Georges Declaration
SLR	Sea Level Rise
UNFCCC	United Nations Framework Convention on Climate Change

# EXECUTIVE SUMMARY

## BACKGROUND AND CONTEXT

This document defines the vision of the Organization of Eastern Caribbean States (OECS) for its work on climate change adaptation to build resilient societies, whilst reducing vulnerability. The strategy supports the goals and objectives of full members, associate members, and observers, outlining the OECS's unique role in convening and providing technical support. It also embraces the organisations remit to exert regional leadership and to promote proven, evidence-based approaches to advance effective climate adaptation programs and policies.

This Climate Change Strategy and Action Plan (CCASAP) supports the OECS' work on climate change adaptation within the region for the medium and long term. It is an adaptable high-level framework that guides the organization's resources (human, technical and financial) toward achievable regional outcomes that align with – and are responsive to – specific country and territory contexts. As such, it can be applied to all climate risk related policies and associated measures.

## PURPOSE

The main purpose of the CCASAP is to address the following:

- Support the need to **build an analytical base** that helps to systematize and share relevant information, practices, and techniques which may be used to support climate change adaptation transformation.
- Support the urgent need to enhance **technical expertise needed to increase adaptation** efforts through a targeted "cradle to grave" training and capacity improvement programme.
- Support the need to **identify and fund creative and sustained climate resilient efforts** that support economic development and all of society.

## GUIDING PRINCIPLES

The CCASAP is based on the principles of collaboration and capacity-building that recognize and emphasize the following:

- Becoming resilient to current climate by **expanding coping capacities will automatically enhance resilience** to future climate change. When climate variability and extremes alter (e.g. more heat and drought, stronger major hurricanes, increased marine heat-waves, etc.), the adaptive elements in place to achieve climate resilience can be built upon to accommodate these shifts as part of agreed limits of coping "ranges" that have arisen from such climate extreme variables.
- **Being flexible** is important in our response to near-, medium- and long-term climate change impacts. This principle will assist with achieving *buy-in especially* from policy makers, who have to respond to immediate socio-

economic issues such as poverty alleviation, housing, health care, food security and unemployment (which will be exacerbated by the changing climate).

- It is recognised that geographically and climatologically, the OECS is not a completely homogeneous sub-region. This means that while the strategy is intended to be broadly applicable across the sub-region, the **actions proposed need to be customized and scaled** appropriately, if they are to be effective within each individual state.
- It is important to build capacity to manage climate change by taking advantage of **accessible information** systems in appropriate formats.
- **Economic diversity and diversification** remain a central strategy for managing climate variability and change.
- There is a need to have a core **focus on social protection** to help drive forward climate adaptation, related improvements which embrace social networking and shared knowledge systems.
- The value and role of **culture and cultural heritage** in defining and implementing adaptation remains of pivotal importance.
- **Gender equality and social inclusion** are central tenets of the climate adaptation process.
- There is a need to instil the essential role of **knowledge sharing and communication** to help prepare and support vulnerable populations in their climate adaptation journey.
- The challenges of **scaling adaptation policies and measures** in the region requiring coordination.

## THE OECS CLIMATE CHANGE ADAPTATION STRATEGY AND ACTION PLAN

### Vision

Globally, the current thinking on adaptation is to promote the importance of an integrated approach<sup>1</sup>. If this is also interpreted as being strategic in nature, this means that

*“Adopting a transboundary view of climate risk, which explicitly recognises the interconnections between people, ecosystems and economies in a globalised world, changes the scope and nature of the adaptation challenge and creates opportunities to reinvigorate international cooperation on adaptation”. To this extent, it is therefore necessary to ‘build momentum in addressing the global adaptation challenge by moving from a business-as-usual approach (where adaptation continues to be framed as an exclusively local-to-national issue) towards enhanced global cooperation, to enable genuine global resilience<sup>2</sup>.*

---

<sup>1</sup> IPCC 2017

<sup>2</sup> <https://www.odi.org/projects/2928-transboundary-climate-risk-and-global-adaptation>

The intended vision of the CCASAP is to coordinate a regional response to climate change adaptation while building on the strengths of Member States in the Eastern Caribbean so as to leave no one is left behind in the process.

### **Overarching Goal**

The strategy supports the goals and objectives of full members, associate members, and observers, outlining the OECSC's unique role in convening and providing technical support. It also embraces the organisations remit to exert regional leadership and to promote proven, evidence-based approaches to advance effective climate adaptation programs and policies.

The expected impact of the CCASAP is to increase the resilience of the region and its value chains to current variability and expected climate change, applying good production management practices and sharing a wide range of knowledge and experience in the region that will help improve the competitiveness of producers with linkages and social organization.

### **Strategic Building Blocks - Transformative Pathways**

The support provided to achieve this goal spans across the following three strategic transformative and resilience focused "pathways" that shall create the building blocks to guide climate compatible economic and socio-cultural development as follows:

- **Transformative pathway 1** to improve access to Data and Information to Increase Actionable Climate Knowledge (developing an analytical base).
- **Transformative pathway 2** to increase Capacity Building and Assistance to implement climate resilient socio-economic interventions (technical expertise to increase adaptation).
- **Transformative pathway 3** to enhance Leadership & Governance and Monitoring of climate change adaptation (fund and monitor sustained climate resilient efforts).

### **Risk Management**

The CCASAP entails a certain number of regionally specific climate adaptation related risks across the OECS. To some extent, those risks can be mitigated against through pursuit of an inclusive climate resilient approach (embracing the three transformative pathways above) as part of a regional strategic response to address climate change adaptation.

### **Monitoring and Evaluation System**

Based on the lessons learned from the implementation of previous regional strategies, an effective and easy to use CCASAP M&E *tool* is proposed at two levels : 1) to generate Member States Adaptation profiles and 2) at the regional CCASAP intervention level to measure the impacts of the programme.



# 1. INTRODUCTION

## 1.1 Background and context

**As a region, the Eastern Caribbean Islands are highly vulnerable to hydro-meteorological hazards of which are being exacerbated by climate change, causing substantial damage and loss.** Their developing economies rely heavily on sectors that are vulnerable to climate patterns<sup>3</sup> such as agriculture (including forestry and fishing), food security, water, health, energy and tourism. Despite the many differences among Caribbean nations, climate change perhaps poses the most serious and consistent threat to them all. They would be greatly affected by the ongoing rise in sea level, changes in rain patterns and temperatures, and increasing intensity of natural disasters<sup>4</sup>.

**In terms of addressing the threat of climate change to the Caribbean, the cost of inaction is high.** For example, in 2017, Category 5 hurricanes Irma and Maria stormed through the Caribbean region, causing 96 deaths and cumulative damage of US\$10.09 billion. Projections indicate that economic losses could total US\$22 billion annually by 2050. This is roughly 10% of the current Caribbean economy, and those projections are further elaborated with recent work showing 20% loss<sup>5</sup>. In addition, climate change financing targeted at developing renewable energy sources could help the region reduce its dependence on fossil fuels and exposure to their price variability, with gains for climate change mitigation. Nevertheless, it is recognized that the impacts and responses to climate variability and change need to be considered within the context of other stressors and development challenges in the region, with adaptation actions firmly focused on building resilience overall.

**The OECS Commission (OECSC) is firmly committed to assisting Member States, individually and collectively, in their efforts 'to build climate-resilient, low-carbon economies'.** This is achieved within the regional legal framework established under the *St. George's Declaration of Principles for Environmental Sustainability* in the OECS and the *Revised Treaty of Basseterre (2010)*<sup>6</sup> (see Annex 1: Policy Framework Guiding Climate Change Action). To this end, the OECSC works with Member States and several development partners to design, support, and implement enabling frameworks, programmes and projects at the regional, national and local levels. The OECS Region is going through a historic and important phase. On one hand, it has made progress across a host of Sustainable Development Goals<sup>7</sup>, though on the other hand, progress has continually been hampered by the needs to manage short-term,

---

<sup>3</sup> Source: Strengthening Climate Services in the Caribbean through the Sectoral Early Warning Information Systems Across Climate Timescales (EWISACTs) Regional Roadmap and Plan of Action (RPA) 2020-2030.

<sup>4</sup> Climate Trends and Projections for the OECS region. April, 2020. Link: <https://www.oecs.org/climate-&-disaster-resilience/resources.html?task=document.viewdoc&id=5>

<sup>5</sup> [http://costs\\_of\\_inaction.climateanalytics.org/index.html](http://costs_of_inaction.climateanalytics.org/index.html)

<sup>6</sup> This Treaty established the OECS Economic Union which is providing the basis (Under article 24) for Environmental Sustainability policies and measures at the regional level.

<sup>7</sup> Regional knowledge management platform for the Sustainable Development Goals (SDG Gateway), May 2020

climate-related and global crises, which is often delaying the adoption of long-term commitments required to build a climate resilient future.

Experiences in the region to date suggest that in order to maintain the climate resiliency momentum achieved, **it is important to take a regional approach to address the collective challenges** being faced that relate to the impacts of climate variability and change. With a specific focus on the Eastern Caribbean region, the CCASAP hereby seeks to:

- *Build an analytical base to systematize and share relevant climate change information, practices, tools and methods to support adaptation.*
- *Provide adaptation technical expertise and support to adaptation efforts as a "learning by doing" process rather than an end point.*
- *Identify and fund creative and sustained transformation efforts that support climate-resilient development.*

The OECS's Climate Change Work Programme is of direct relevance to all matters pertaining to climate change, which is led by the *Climate and Disaster Resilience Unit (CDRU)*<sup>8</sup>. After the signing of the Paris Agreement, the OECS is in the process of aligning its climate change work programmes to capture gaps and barriers and formulate an overall cross-cutting Climate Change Strategy and Action Plan (CCASAP) to achieve overall progress towards socio-environmental sustainability, while taking into account any tools and information networks<sup>9</sup> available at the Regional level to draw from.

## 1.2 Methodology

The methodology adopted to produce the CCASAP strategy takes a proactive, risk-informed approach to addressing climate variability and change, in the context of other risks as well as goals and aspirations, which drive action on the ground, including its gender dimensions, in the region across three interacting systems:

- Human systems;
- Natural ecosystems and;
- Governance and financial systems.

Entry points and thus potential pathways for the CCASAP are guided by these opportunities, other critical analyses conducted under this project, as well as consultations with OECS Members State representatives during a series of conference calls between July and August, 2020<sup>10</sup> (Figure 1).

**The approach taken to identifying adaptation measures, and presented within this CCASAP, is in keeping with a “transformative pathways” approach to resilience.** It identifies the decisions that need to be taken now and those in the future. Short and medium-term measures proposed in the Action Plan are expected to pave the way

---

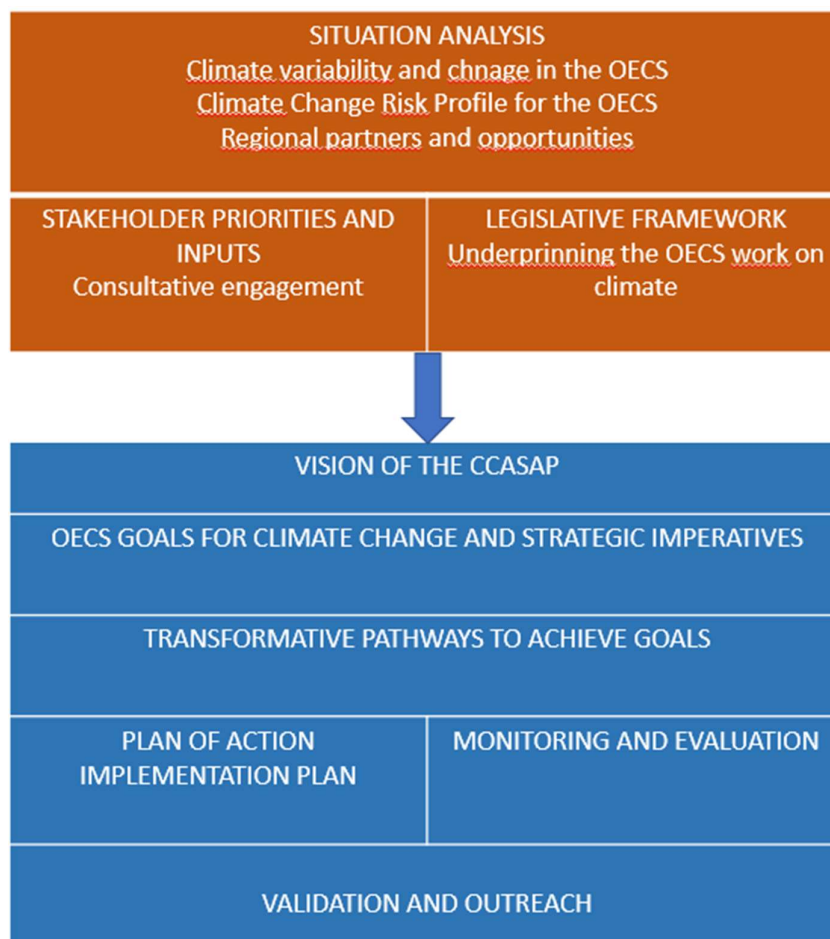
<sup>8</sup> See Annex 2, OECS climate change programmes.

<sup>9</sup> See Annex 3: MAIN REGIONAL PROGRAMMES IN THE EASTERN CARIBBEAN.

<sup>10</sup> See Addendum : Questionnaires and key contributors.

for the longer-term adaptation decisions. These pathways also support “no-regret” and “low-regret” adaptation strategies, which delivers net socio-economic benefits regardless of the climate change outcome. To this end, economies of scale in climate change adaptation actions may be achieved through improved regional coordination to consider known risks from multiple perspectives, including infrastructure, policy, and financing. While some of these actions will need to be conducted at the national scale, the shared challenges also translate into shared opportunities for regional cooperation, guided and facilitated by the OECSC.

Figure 1: Development structure of the CCASAP



The main activities, displayed in Figure 1, were designed to support the production of the following results:

- A **consolidated and comprehensive climate profile** (impacts, vulnerabilities, risks and capacities) for the OECS region highlighting common issues and differences by a leading regional scientific institution in the Eastern Caribbean;
- A **gender sensitive climate change impact and vulnerability profile** report comprising a compilation of data to highlight particular gender-specific vulnerabilities and opportunities in the OECS region in co-production with regional experts;

- An **OECS Regional Climate Change Adaptation Strategy and Action Plan (CCASAP)** that, on the basis of a broad consultation process, prioritises interventions required to address climate change vulnerabilities and capacity constraints within the context of the Paris Agreement commitments and National Climate Change Adaptation Policies of OECS States;
- An effective and institutionalised system for **adaptation monitoring, reporting** and taking into account the transparency modalities that arise from the Paris Agreement based on UNFCCC Adaptation Committee, UN SDG and Sendai UNDRR reporting frameworks;
- A final **validation event** for all beneficiaries, using outreach exercises carried out to disseminate the contents of the CCASAP.

Based on the review of existing programmes and activities in the Region (starting from the analysis of barriers and gaps), options to improve resilience to climate change are organized around three transformative pathways (details in Section 4) to reach the proposed strategic objectives to obtain the desired outcomes.

*Figure 2 Rethinking precarious neighbourhoods in a changing climate, Marie-Galante, Guadeloupe*



*Copyright: Elodie Afonso*

## 2. CLIMATE IN THE EASTERN CARIBBEAN

### 2.1 Overview

The Eastern Caribbean tends to have one dry (December – May) and one wet season (June – November) each year. Its climatology is strongly influenced by the migration of the Hadley Cell (the movement of warm air heated by the radiation from the sun hitting the surface of the Earth near the equator, which forms the trade winds) and the Inter-tropical Convergence Zone (ITCZ), a low pressure area where the northeast trade winds and southeast trade winds converge and whose migration brings rainfall) from 2-5°N in March to 12-15°N in September. Sea surface temperatures are generally hottest when the ITCZ is at its most northerly position in September/October, causing the peak of the hurricane season. The dry season, which tends to be breezy and cooler, is correlated with the southward migration of the Hadley Cell and the ITCZ with February to April being the driest part of the year (*Caribbean Institute of Hydrology and Meteorology*).

One of the most important sources of climate variability in the tropics and around the world is the El Niño Southern Oscillation, where the El Niño warm phase is characterised by anomalously warm sea surface temperatures in the equatorial Eastern Pacific and the La Niña cold phase by anomalously cold temperatures in that same region. It is well established that El Niño is one of the foremost drivers of drought in the Caribbean. The historical temperature and rainfall record in the OECS further suggests strong correlation between strong El Niño events and temperature as well as the frequency of heat waves and, to a certain extent, dry spells.





### 2.2 Trends, Projections and Critical Risks

In 2019, OECS undertook an extensive analysis of the current trends and projections of climate for the region. In terms of priorities, the latest scientific climate trends and projections indicate the following high-impact risks:

- **Increased heat stress** as a local expression of global warming (virtually certain);
- **Warmer oceans** along with steadily rising sea levels, even if global warming is halted in the foreseeable future (virtually certain);
- **More frequent and intense droughts** (high confidence), as well as more frequent dry spells (medium confidence);
- Wetter, more intense and more frequent **major hurricanes** (i.e., Categories 4 and 5 – medium confidence), accompanied by stronger storm surges which whilst an independent phenomenon, when added to by higher sea level rise will increase storm tide impacts;
- Possible **increases in storm intensity**, but reduced frequency of flash floods and long-term flooding (low confidence).

This analysis is based on data from various meteorological services across the region, as well as projections from regional circulation models (RCMs) developed by the Climate Studies Group at the UWI, (see Table 1).

Table 1: Summary of climate trends and projections in the Eastern Caribbean region

VARIABLE	HISTORICAL TRENDS	PROJECTED FUTURE CONDITIONS
<b>Temperature</b> 	<ul style="list-style-type: none"> <li>15% increase in annual frequency of hot days and hot nights.</li> <li>7% decrease in the annual frequency of cool days and 10% decrease in cool nights</li> <li>Coolest and hottest day and night temperatures all increased by roughly 1°C.</li> <li>Extreme heat more common, with recorded events rising fivefold between 1981-2010.</li> </ul>	<ul style="list-style-type: none"> <li>Temperatures will continue to rise.</li> <li>Further intensification of the heat season along with more frequent and more intense heat waves.</li> <li>The frequency of hot days and nights is further accelerated into the 2020s, when frequency is eight-fold, to end up close to a 100% of all days in the year in most years during the 2040s.</li> <li>Cool days and nights will become virtually absent as early as the 2020s.</li> <li>The number of extreme heat events will increase roughly 15-fold by the 2020s and become a nearly yearlong occurrence by the 2040s.</li> </ul>
<b>Rainfall</b> 	<ul style="list-style-type: none"> <li>El Niño episodes associated with pronounced heat and drought, La Niña with extreme rainfall.</li> </ul>	<ul style="list-style-type: none"> <li>Changes in precipitation are more difficult to project, but a slight decrease in total rainfall is anticipated, while single rain events will become more intense.</li> <li>Droughts will become more prevalent. However, the trend may only clearly manifest from the 2050s onwards.</li> </ul>
<b>Sea level</b> 	<ul style="list-style-type: none"> <li>Sea level in the Caribbean has been rising at rates of 1.8 mm per year between 1950 and 2009. The figure for the OECS region is 2.5 to 3.5 mm per year with the rate between 2 mm per year around Guadeloupe in the Leeward Islands; and up to more than 2.5 mm per year around the British Virgin Islands. In the Windward Islands, between around 1 mm per year near Grenada and the Islands of the Grenadines; gradually increasing northwards to near 2 mm per year near Dominica.</li> </ul>	<ul style="list-style-type: none"> <li>Continued sea level rise of 20 to 40cm by 2050 and up to 1m by 2090 as compared to a 1986-2005 baseline.</li> <li>Rising sea levels combined with stronger winds in the strongest storms substantially increases the impact potential of storm surge and coastal inundation.</li> </ul>
<b>Hurricanes</b> 	<ul style="list-style-type: none"> <li>An increased frequency trend is recorded between 1850 and 2015, albeit with ample variability at the multi-decadal time scale. For instance, a marked uptick in Atlantic Hurricane Season activity is noted since 1995, with the number of Category 4 and 5 hurricanes increasing.</li> </ul>	<ul style="list-style-type: none"> <li>The frequency of Category 4 and 5 hurricanes will increase by 25%–30% by the end of the 21<sup>st</sup> Century</li> <li>Rainfall rates inside hurricanes are predicted to increase by up to 30%, increasing flash flood potential by the end of the 21<sup>st</sup> Century</li> </ul>

Source: Climate Trends and Projections for the OECS Region (2019) Adapt'Action Technical Report  
<https://www.oecs.org/climate-&-disaster-resilience/resources/scientific-documents.html>

## 2.3 Critical impacts of climate change in the region

The Eastern Caribbean Islands face challenges like those faced by other SIDS around the world, including economic vulnerability due to undiversified economies, a heavy reliance on tourism, a dependence on imports of critical fuel and other resources coupled with few exports, limited capacity within governments due to small populations, and a lack of economies of scale hence driving high costs within government service structures (Figure 2).

The Climate Change Risk Profile produced at the OECS level demonstrates that increasing temperature is altering the functioning of hydrological cycles. Highlights of this report are noted below:

- Projected additional losses, from floods, for example, are potentially preventable by improving the knowledge base on existing hazards and by building resilience and response capacities.
- Climate change impacts do not affect all sectors equally; some are highly vulnerable to rising temperatures, whereas others are more greatly affected by rising sea levels.
- Climate impacts are complicated by a range of environmental (e.g. emissions from volcanoes exacerbating potential impacts) social and economic factors. Overall, adaptation actions need to focus on building more resilient systems to reduce vulnerability and develop specific system capacities that address key climate risks.
- The primary climate change risks faced by the OECS countries can be grouped into those associated with sustainable development (health, agriculture sectors) which provide an important livelihood source; and those which cut across both of them, including education, public infrastructure such as roads, communication services, utilities and international shipping services. Primarily, these all are heavily concentrated in coastal areas comprising of natural resources that require supporting all sectors in a climate resilient manner. These sectoral risks are also further complicated by the challenges of SIDS, including a high degree of reliance on strategic imports, particularly food and energy (see Figure 2).

The report concludes that *"entry points, and thus potential pillars for the forthcoming Climate Adaptation Strategy include: 1) Investments, 2) Leadership and Governance, specifically regarding institutions and planning mechanisms, and 3) Information Systems"* to address the key risks to priority sectors which also build on the regional opportunities that working at the OECS scale can offer.

### 3.3 Policy Gaps identified

Despite significant successes, key areas of concern remain, and the following were identified during numerous consultations. **There is a need to strategically be aiming to address these key gaps that cannot be effectively addressed at the country level and may not be captured at the CARICOM level and leveraging financing for these gaps that does not compete with financing sought at country level.**

They include:

- ***A dearth of impact studies to support decision-making based on the best available climate and weather data.***

Recent efforts by the Caribbean Institute for Meteorology and Hydrology (CIMH), as well as the Climate Studies Group at University of the West Indies, Mona Campus (UWI Mona), in partnership with meteorological services, have worked to address the paucity of climate and weather information, but the use of these data in impact studies is limited, particularly for slow-onset, high-impact events such as droughts. Where analyses do exist, many stakeholders involved in policy, planning and implementation do not have sufficient in-house expertise to interpret the data and incorporate it in a meaningful way into decision-making. There is a need to improve designing/coordinating climate information systems in tandem with knowledge management and sharing, which would clearly benefit from improved coordinated actions.

- ***Limited gender-disaggregated data to support decision-making.***

Men and women have different experiences when impacted by climate change. The effectiveness of adaptation responses will therefore improve if gender-specific differential impacts are considered in adaptation planning. However, there still remains the challenge of recording and tracking impact and vulnerability indicators by gender.

- ***Populations and critical infrastructure highly concentrated along the coast or in mountain areas that are vulnerable to landslides.***

Coastal areas are increasingly densely populated and crowded, not only for tourism purposes, but also with respect to critical infrastructure such as schools, hospitals, and roads. Construction on steep terrain, as well as removal of the native mountain vegetation that once helped to stabilize the soil, has increased landslide risk. Rising seas, coupled with more intense storms, larger wave run-up, storm surges and less effective coastal defences provided by degraded coastal ecosystems pose a significant flooding and erosion risk to people and assets.

- ***Key capacity constraints including limited access to climate financing***

Limited access to appropriate technologies; the absence of an enabling environment for climate change risk management; lack of awareness and information about climate change risks amongst decision makers (both public and private); and reliance on government to manage these risks. Scaling up adaptation finance in the Eastern Caribbean is therefore vital to addressing the vulnerability of the region's inhabitants



by making the agriculture, biodiversity and infrastructure sectors more resilient to climate impacts. While approved funding for SIDS has increased markedly in recent years, it remains only a small part of actual needs.

- **Sectoral policies and planning measures still lack sufficient gender and climate change considerations.**

Although significant progress has been made in recent years by the islands of the region to identify sector-level risks from a changing climate, only two OECS Member States (Dominica and Anguilla) specifically detail the need to focus on planning and managing for disasters, and few national strategies and plans pay attention to the differentiated impacts of climate change on gender. Nevertheless, the actual functional influence of gender in development planning is limited throughout the region.

- **Significant and growing adverse impacts on marine ecosystems and resources upon which livelihoods, health and economies rely.**

Vulnerability increases through inappropriate land use planning and poorly designed coastal works such as buildings on the coast without appropriate setbacks, hard engineered longitudinal coastal defences on upper beaches (seawalls, revetments), hard cross-shore coastal structures (jetties, groynes), and reclamation of wetlands and mangroves lands. Built infrastructure, including roads, settlements, hotels and coastal defences, as well as sand mining and other resource extraction and coastal activities, have jeopardized the coast and contributed to the destruction of important living resource systems, such as coral reefs, mangroves and seagrass beds. The open ocean also provides resources, especially in terms of fishing. Many islands have artisanal fishing, which provides fish to the tourism sector as well as to residents, supports livelihoods a source of income, and an activity for tourists.

- **A fragile water availability situation.**

Most of the Eastern Caribbean region already suffers from low freshwater availability, with some islands' renewable water per capita falling below one tenth of the global average. The Leeward Islands are generally water-scarce and depend heavily on desalination to meet water demands, which requires imported (and expensive) energy supplies. Shallow aquifers are at risk from drying and saltwater intrusion. In contrast, though the Windward Islands (except for Saint Vincent and the Grenadine plus Grenada) tend to receive plentiful surface water for much of the year, demand often exceeds supply during the dry season due to reduction in stream flows. Indeed, water rationing is already a reality in many countries in the region, as are disputes between communities and other sectoral water users.

- **An ever-increasing debt load.**

High debt, limited job opportunities, and climate change present important development challenges for OECS countries. An ever-increasing debt burden is incurred by many OECS territories and countries to manage climate change risks and restore economies and livelihoods after extreme events associated with climate change added to by the COVID-19 pandemic crisis and natural disasters.

- **Need to improve Regional Coordination work to enhance coastal and marine/ocean resilience**

Coastal zones in the Eastern Caribbean are highly vulnerable to changes brought about by climate change forces such as rising sea level, warming ocean temperatures, increasing ocean acidity, and the impact of storms. Rapid coastal erosion and increased salinization of coastal areas, as well as impacts on coral reefs such as bleaching, have immediate impacts on establishing meaningful Marine Management Areas (MMAs) and Marine Protected Areas (MPAs). Improved regional research and effort is needed on determining climate change adaptation needs on issues such as fisheries management, sargassum management, etc., both of which demand an appreciation of multi-country or regional approach.

*Figure 3 Beach at risk of disappearing because of erosion in the Eastern Caribbean*



*Copyright: Elodie Afonso*

*Figure 4 Floating sargassum in the Caribbean Sea*



*Copyright: Elodie Afonso*

## 4 STRATEGY AND PLAN OF ACTION

### 4.1 Overview

The Eastern Caribbean region, an area of high vulnerability and significant projected changes, is faced with enormous challenges. In this context, the formulation of an OECS Climate Change Strategy and Action Plan (CCASAP) acquires an essential position for its character of orientation to the economic development of the region in the coming years.

**The impact of the CCASAP is to increase the resilience of the region** and its value chains to current variability and expected climate change, applying good production management practices and sharing a wide range of knowledge and experience in the region that will help improve the competitiveness of producers with linkages and social organization.

**The strategy supports the goals and objectives of full members, associate members, and observers**, outlining the OECS's unique role in convening and providing technical support. It also embraces the organisations remit to exert regional leadership and to promote proven, evidence-based approaches to advance effective climate adaptation programs and policies.

### 4.2 Guiding Principles

The CCASAP is based on the principles of collaboration and capacity building that recognize and emphasize the following:

- Becoming resilient to current climate by **expanding coping capacities will automatically enhance resilience** to future climate change. When climate variability and extremes alter (e.g. more heat and drought, stronger major hurricanes, increased marine heat-waves, etc.), the adaptive elements in place to achieve climate resilience can be built upon to accommodate these shifts as part of agreed limits of coping "ranges" that have arisen from such climate extreme variables.
- **Being flexible** is important in our response to near-, medium- and long-term climate change impacts. This principle will assist with achieving *buy-in* especially from policy makers, who have to respond to immediate socio-economic issues such as poverty alleviation, housing, health care, food security and unemployment (which will be exacerbated by the changing climate).
- It is recognised that geographically and climatologically, the OECS is not a completely homogeneous sub-region. This means that while the strategy is intended to be broadly applicable across the sub-region, the **actions proposed need to be customized and scaled** appropriately, if they are to be effective within each individual state.
- It is important to build capacity to manage climate change by taking advantage of **accessible information** systems in actionable formats.

- **Economic diversity and diversification** remain a central strategy for managing climate variability and change. There is a need to have a core **focus on social protection** to help drive forward climate adaptation, related improvements which embrace social networking and shared knowledge systems.
- The value and role of **culture and cultural heritage** in defining and implementing adaptation remains of pivotal importance.
- **Gender equality and social inclusion** are central tenets of the climate adaptation process. This means that a clear and targeted **Gender Action Plan<sup>11</sup>** (GAP) should be part of any design process even at the level of a concept note formulation. A GAP helps to ensure that gender mainstreaming is clearly visible in project/programme design and implementation.
- There is a need to instil the essential role of **knowledge sharing and communication** to help prepare and support vulnerable populations in their climate adaptation journey.
- The challenges of **scaling adaptation policies and measures** in the region requiring coordination.

*Figure 5 Yellow warbler in the mangrove forest, Caravelle Peninsula, Martinique*



*Copyright: Elodie Afonso*

---

<sup>11</sup> <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201804300906---UN%20Women%20Submission%20to%20UNFCCC%20on%20Gender%20and%20Climate%20Change.pdf>.

## 4.3 Vision and Goals

### Vision

Globally, the current thinking on adaptation is to promote the importance of an integrated approach<sup>12</sup>. If this is also interpreted as being strategic in nature, this means that

*“Adopting a transboundary view of climate risk, which explicitly recognises the interconnections between people, ecosystems and economies in a globalised world, changes the scope and nature of the adaptation challenge and creates opportunities to reinvigorate international cooperation on adaptation”.*

To this extent, it is therefore necessary to

*“Build momentum in addressing the global adaptation challenge by moving from a business-as-usual approach (where adaptation continues to be framed as an exclusively local-to-national issue) towards enhanced global cooperation, to enable genuine global resilience”<sup>13</sup>.*

The intended vision of the CCASAP is that a **coordinated regional response to climate change adaptation must build on the strengths of Member States in the Eastern Caribbean and that no one is left behind in the process.**

### Overarching Goal

The CCASAP's overarching Goal is therefore to provide a driving force to support climate change adaptation measures and interventions around the OECS region, guiding directional change that facilitates Member State efforts to respond to a changing climate. Clearly, these will benefit and build on the extensive experience of partners, NGOs, civil society, regional institutions, and academia as critical contributors to the outlined tasks.

Transformative pathways were identified to reach those outcomes, to promote sustainable futures, achieve climate-informed development, increased systems resilience, and economic and socio-cultural development towards the proposed vision over the next 5 years as described in the Theory of change (See Figure 2). The identification of those pathways and proposed activities respond, either directly or indirectly, to the risks identified in the risks assessment analysis (See Figure 3).

---

<sup>12</sup> IPCC 2017

<sup>13</sup> <https://www.odi.org/projects/2928-transboundary-climate-risk-and-global-adaptation>

Figure 2: OECS CCASAP theory of change

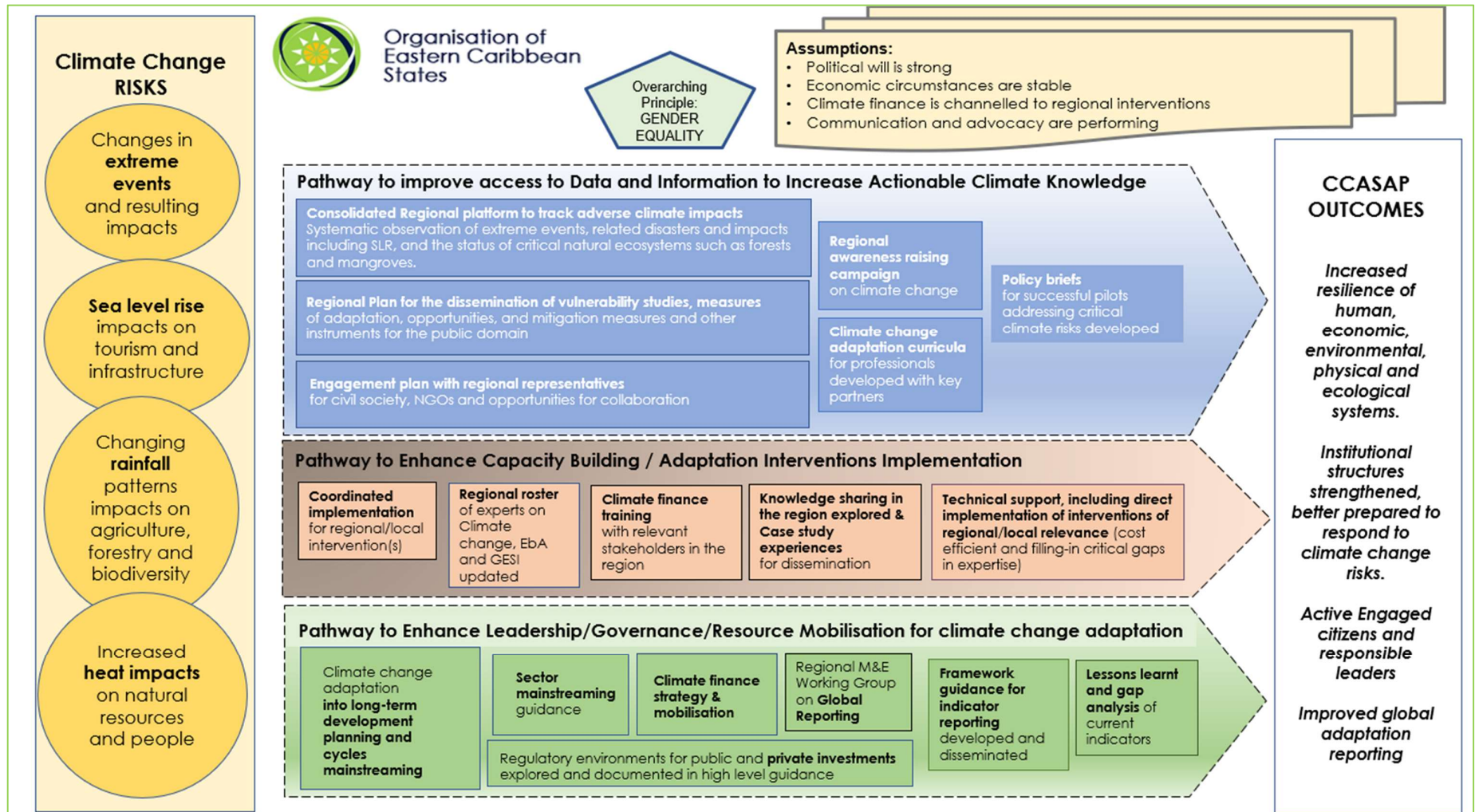





Figure 3: Sectoral and Transversal Risks and CCASAP opportunities

•CCASAP Sectoral interventions•				
PATHWAYS  ↓	HIGH PRIORITY RISKS Extreme events Sea level rise  ON INFRASTRUCTURES	HIGH PRIORITY RISKS Extreme events  ON FINANCE <i>Banking &amp; Insurance</i>	HIGH PRIORITY RISKS Increased Temperature, Rainfall, Extreme events, Sea level rise  ON NATURAL RESOURCES <i>Water, Forestry, Biodiversity, Coastal and Ocean Resources, Agriculture/Fishery</i>	HIGH PRIORITY RISKS Extreme events  ON SOCIAL SERVICES <i>Public health</i>
	Improve Climate Actionable Knowledge	—	—	+
Enhance Capacity Building and Adaptation Implementation	—	—	+	—
Enhance Leadership/Governance Resource Mobilisation for climate change adaptation	+	+	+	—

Key:  Direct relevance  Indirect relevance

## 4.4 Strategic Building Blocks - Transformative Pathways

The support provided to achieve the CCASAP goal (Section 4.3) spans across the following three strategic transformative and resilience focused “pathways”. They will create the building blocks to guide climate compatible economic and socio-cultural development that are considered in more detail below.

	<p>Transformative pathway 1 to improve access to Data and Information to Increase Actionable Climate Knowledge (<b>develop an analytical base</b>)</p>
	<p>Transformative pathway 2 to increase Capacity Building and Assistance to implement climate resilient socio-economic interventions (<b>provide technical expertise to increase adaptation</b>)</p>
	<p>Transformative pathway 3 to enhance Leadership and Governance on climate change adaptation (<b>support funding of creative sustained climate resilient efforts</b>).</p>

### ***The first transformative pathway aims to improve access to data and information to increase actionable climate knowledge***

An effective information base to support decision-making, that is both transparent and accessible to the public, can build an institutional memory that enables adjustments in priorities and actions as circumstances change. Lack of cross-organisational collaboration (to pool resources and technological capacities) for data gathering, information availability and management are major challenges across the region.

The lack of data, coupled with barriers to making data available, often hampers the understanding of vulnerabilities issues or the ability to plan and to identify appropriate adaptation strategies. Additionally, examples are abundant of innovative actions being initiated by countries and territories in the region to build climate resilience, however the findings and methodologies for potential replication or upscaling of such initiatives need to be better disseminated and shared, for the benefit of all in the region.

In the Eastern Caribbean region, as in other SIDS around the world, governments, civil society, and individuals recognize the existence of climate change as a risk multiplier, and the need to implement measures to minimise cumulative risks. However, poor institutional coordination and weak dissemination and communication systems often limit their knowledge of the type of information and resources already available to



support their decisions regarding this issue. National development discussions (including those on climate resilient development) do not systematically involve the meteorological services, even though these entities are often a country's main provider of climate information products and services. Hence potentially increasing maladaptation interventions to occur due to an inappropriate understanding of local weather patterns or monitored/modelled climate scenarios<sup>14</sup>.

This transformative pathway is therefore designed to promote cross-country learning to help improve the capacity of decision-makers at all levels (regional, country, territory, municipal, district, community – see Box 4.1). In the process, it aims to create methods to systematize, update and exchange the knowledge (scientific, technological, local/indigenous) that exists within the OECS region and in wider Caribbean basin. Its purpose is therefore to generate and disseminate the necessary knowledge, to leverage existing information to understand current hazards and emerging trends and be equipped with the tools to take action to improve adaptive responses in the face of a changing climate.

Against this background, Table 4.1 outlines a set of activities to achieve results and outputs emerging from the Gap Analysis for Improving Climate Change Knowledge Management.

*Figure 6 Automated Weather Station in Barbados (CIMH)*



*Copyright: (Dr.) Jonathan Cox, CIMH*

<sup>14</sup> i.e.: not based on downscaled General Circulation Model (GCM) projections (required at the Island level to determine differences at leeward vs. windward sides of islands, etc.) and including analysing the coping range capacity of systems to accommodate variations in climatic conditions.

See: [https://archive.ipcc.ch/publications\\_and\\_data/ar4/wg2/en/ch2s2-3-3.html](https://archive.ipcc.ch/publications_and_data/ar4/wg2/en/ch2s2-3-3.html)

#### **Box 4.1: Transformative pathway 1 To improve access to Data and Information to Increase Actionable Climate Knowledge**

##### **Enhancing regional access to climate and disaster data and information**

Capitalizing on and promoting the existing inter-institutional agreements between the OECS Region and the Caribbean Institute for Meteorology and Hydrology (CIMH), the Caribbean Community Climate Change Centre (CCCCC), and others such as CANARI, CCRIF, CDEMA, as well local universities, to build the scientific evidence base for responding to a changing climate risk profile. One example is leveraging the work conducted by the University of the West Indies in CARICOMP<sup>15</sup>, a data management programme for coastal marine resources. However, there are other opportunities, as noted throughout this document. CIMH for example is operating three databases offering specific information on Caribbean multi-hazards as a specific platform (DEWETRA, a web-GIS platform aimed to multi-risk mapping, forecasting and monitoring adapted to the Caribbean), a data base on climate impacts on sectors (health, tourism, disaster management, water etc...) and a consolidated collection of historical local climate datasets.

- ⇒ Elements to develop or enhance existing climate, disaster and critical ecosystem health tracking systems, including metadata standards such as the establishment (or upgrading of existing) of a regional platform for tracking hazards and vulnerabilities in the region, including, but not limited to spatial information on coastal zone mapping, shoreline erosion monitoring, as well as climate trends and projections.

##### **Promoting cross-country learning on adaptation action**

Over the past decade, many interventions have taken place in support of climate change adaptation. Projects that address specific stakeholder concerns or issues at national and community levels seem to be the most successful and visible. The greatest impact can be seen in specific testing projects, usually at the community or watershed level. Nevertheless, these experiences are loosely organized, and their lessons often not adequately disseminated across the region, often limiting the tangible benefits of experiences for other, similar settings. While previous efforts have already tracked adaptation experience, the implementation of a 'CCASAP' will update and expand regional experience to document and share the knowledge across the region, including methods and project information linked to shared regional priority risks, such as those in water resources management, coastal zone management and food security with the following interventions:

- ⇒ Catalogue experiences in climate adaptation pilots around the region, including capturing lessons learnt, tools developed and/or tested.
- ⇒ Develop and share a list of adaptation projects that could be replicated in states exhibiting similar risks.
- ⇒ Promote opportunities to share experiences and good practices within the region and across similar regions.
- ⇒ Build professional qualifications across the OECS on climate change adaptation.

---

<sup>15</sup> See Annex 2, page 43

Table 4.1 – Transformative Pathway 1

<b>GOAL 1 : IMPROVE ACCESS TO DATA AND INFORMATION TO INCREASE ACTIONABLE CLIMATE KNOWLEDGE / Developing an analytical base</b>	
<b>OBJECTIVE 1.1 : ENHANCING REGIONAL ACCESS TO CLIMATE AND DISASTER INFORMATION</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Assessments of at least 5 scientific regional partners to devise improved procedures to improve access to climate and disaster data and information.</li> <li>○ Cross-cutting regional platform connected to national nodes to access climate and disaster related data information is established.</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of climate change impacts on five sectors (agriculture, health, tourism, disaster management and water) in the Eastern Caribbean and review of existing climate, disaster, and critical ecosystem health tracking systems including the earth observations to determine ecosystem health.</li> <li>• Synthesis and proposed plan of action (with clear data access protocols written and endorsed) with selected regional partners<sup>16</sup>. co-production of standardized approaches to support the mapping of climate hazards and vulnerabilities, monitoring shoreline position, sea levels, wave run up and ecosystem evolution etc.</li> <li>• Updated digital Regional Data Platform providing the latest information on how climate change risks are impacting upon critical natural ecosystems;</li> </ul>
<b>OBJECTIVE 1.2: PROMOTING CROSS-COUNTRY LEARNING ON ADAPTATION ACTION</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Regional awareness raising/collaboration campaign is enhanced to include an Engagement Plan embracing specific and sustained engagement of civil society and NGOs across the region.</li> <li>○ A regional plan for the dissemination of vulnerabilities studies is produced for the public domain including all stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop of a regional knowledge management strategy<sup>17</sup>, promoting opportunities to share a list of experiences and good practices within the region and other states experiencing similar risks,</li> <li>• Creating/updating a project database with the production of "briefing notes" for successful pilots addressing critical climate risks.</li> </ul>
<b>OBJECTIVE 1.3: BUILDING GENDER SENSITIVE AWARENESS ON CLIMATE CHANGE DATA AND INFORMATION INITIATIVES WITHIN THE OECS REGION.</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Quality of available information on experiences to address key climate risks on natural resources, with special focus on gender vulnerability sensitivity is promoted with 4 good practice example policy briefs produced, outlining best practice knowledge (gender and social inclusion into climate change adaptation).</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic collection and analysis of case studies (including gender equality parameters) on relevant and suitable climate change adaptation interventions for all sectors around the OECS Region. Selection of the most relevant case studies experiences (on climate change impacts on health, tourism, disaster management and water) produced and disseminated.</li> </ul>

<sup>16</sup> This activity will be conducted in partnership with all relevant scientific regional partners including CIMH

<sup>17</sup> This activity will be conducted in partnership with civil society, NGOs and academic institutions in the region and in tandem with curriculum development.

***The second transformative pathway aims to increase capacity building and assistance to implement climate resilient socio-economic interventions***

Technically relevant and connected institutions (with a joint component of personnel training) will help to create the necessary enabling conditions from which to ensure an improved mechanism of task coordination and planning mechanisms through relevant agencies during emergency situations. Technical personnel should be competent in managing multiple functions. Currently, in the Independent States, these tasks are being delivered by staff with minimal training, which is often limiting the breadth and number of actions that can be supported at any one time. To this end, the implementation of a 'CCASAP' will support the production of the tools needed to respond to the demands of technical innovation. This shall also help to address the current lack of capacity to leverage necessary financial resources required to support local economic development. The capacity to identify risks and implement adaptation practices is often also linked to the level of preparedness and knowledge of institutions, countries, territories, and people in the region. The relatively limited size of training options within each individual government or territory often poses significant limits to the available technical capacity to address climate risks. Activities proposed within this transformative pathway (see Box 4.2) therefore seeks to build capacity within all relevant governments, agencies, and institutions to implement climate adaptation actions. Additionally, the activities seek to leverage all regional opportunities that the OECSC can provide towards supporting project implementation across regionally shared climate risks.

*Figure 7 Wind farm and sugar cane fields in the North Martinique*



*Copyright: Elodie Afonso*

**Box 4.2: Transformative pathway 2 to increase capacity building and assistance to implement climate resilient socio-economic interventions/projects**

Enhancing the connection between qualified experts and regional centres of excellence to support adaptation action. In spite of the significant progress made to date in building the adaptation knowledge base, there is still a lack of information concerning priority adaptation measures for key resources of relevance to economic development and human wellbeing in the region. Limited personnel and institutional capacities can hamper the identification of priority adaptation measures. CCASAP proposes activities to

- ⇒ Improve technical know-how and support to efforts requiring significant expertise.
- ⇒ Create or strengthen a roster of regional experts to support climate change adaptation work.
- ⇒ Make sure that concrete adaptive practices for addressing climate risks are disseminated and known.
- ⇒ Document methods, inspired by current international best practice, cross-sectoral coordination in the planning and management of resources. This includes tracking information on freshwater use, sanitation, wastewater treatment and pollution control, sustainable land use, balancing coastal livelihoods and biodiversity conservation, to enable the elaboration and implementation of planned actions for hazards risks and vulnerability reduction at short, medium and long terms, taking climate variability and change into account.
- ⇒ Identify specific regional gaps that need to be addressed as priorities to guide investment and project pipeline development.
- ⇒ Directly implement interventions/projects of regional relevance : such as small resilience projects (for example mangrove replanting, etc.) at community/local scale which could be expanded as needed for costs efficiency purposes and filling the expertise gap (linked to training programmes).

Table 4.2 below outlines a set of activities to achieve results and outputs emerging from the Gap Analysis for Improving Climate Change Knowledge Management.

*Figure 8 Sea defence in Grand 'Rivière, Martinique*



Copyright: Elodie Afonso

Table 4.2 – Transformative Pathway 2

<b>GOAL 2: INCREASE CAPACITY BUILDING TO IMPLEMENT CLIMATE RESILIENT SOCIO-ECONOMIC INTERVENTIONS / Technical expertise to increase resilience</b>	
<b>OBJECTIVE 2.1: ENHANCING THE CONNECTION BETWEEN QUALIFIED EXPERTS AND REGIONAL CENTRES OF EXCELLENCE TO SUPPORT ACTION</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Technical knowhow and support efforts with the identification of climate adaptation around the region; gaps in specific expertise are identified.</li> <li>○ A regional technical support mechanism (using new protocols/rosters) is set up and endorsed by all nations to help improve national capacity needs.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional roster of experts updated (including the existing OECS EbA-GESI roster).</li> <li>• Adopt new South-South Cooperation initiatives/programmes to improve international capacity support programmes on technical topics that Islands may require to better implement climate change adaptation.</li> </ul>
<b>OBJECTIVE 2.2: ENSURING THAT GOOD PRACTICES FOR ADDRESSING CLIMATE RISKS ARE DISSEMINATED</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ At least 3 climate change adaptation curricula for professionals in their fields of expertise are developed with key partners.</li> <li>○ A capacity-building programme is established and running for professionals in the OECS region.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination of the design of curricula with academic institutions to develop basic technical competencies on climate change data and information</li> <li>• Implementation of systematic information campaigns and regular training organized by OECS with partners.</li> </ul>
<b>OBJECTIVE 2.3: DIRECT IMPLEMENTATION OF PROJECTS OF REGIONAL RELEVANCE</b>	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Provide expertise / human capacity to implement at least 3 regional projects (from all nations) as required.</li> <li>○ A regionally coordinated climate change capacity on implementation planning is in place for regional projects such as Marine Management Areas (MMAs) and Marine Protected Areas (MPAs).</li> </ul>	<ul style="list-style-type: none"> <li>• Restoration and conservation of mangroves through community-based management interventions Implementation of several regional projects that focus on capacity development to enable the effective implementation of blue carbon development and climate change adaptation (including EbA) topics<sup>18</sup>.</li> <li>• Design a regional project document focusing on "Island Systems Management" (ISM) approach designed to protect and restore forest ecosystems<sup>19</sup>. This should include a follow-up to CC4FISH, work on resilience and creating a network of MPAs/MMAs,</li> <li>• Follow-up on SARG'COOP and other projects like UWI's SargAdapt as key climate-related issues that require a multi-country approach.</li> </ul>

<sup>18</sup> OECS Concept notes: Restoration and conservation of mangroves through community-based management to enhance resilience to climate change in the Eastern Caribbean; and Build Back Bluer" in Anguilla, British Virgin Islands and Montserrat: Enhancing Island-wide climate resilience by protecting and rehabilitating critical coastal and marine ecosystems.

<sup>19</sup> OECS Concept note: Addressing climate change and livelihood resilience through protecting forest ecosystems in six Eastern Caribbean Islands using an "Island System Management" approach.

**Finally, the third transformative pathway aims to enhance leadership and governance and access to climate finance for adaptation.**

Whilst the first two pathways focus on documenting and sharing knowledge of ongoing experiences and developing technical capacity to address the current and future risks posed by climate change, the leadership and governance pillar seeks to take advantage of the convening and organizing strengths of the OECS, including the ability for Member States to access climate finance in support of adaptation, securing support from international organizations and promoting synergies to harmonize legislation.

For example, the OECSC has successfully secured support from the Caribbean Meteorological Organisation (based in Trinidad and Tobago), via the World Meteorological Organisation, to develop harmonised Met Services legislation of Member States as well as for some other English-speaking CARICOM countries. Countries of the region for example, adopted an Action Plan in 1981 that led to the development and adoption of the "Cartagena Convention" on 24 March 1983. In this context, the OECS is able to promote a common framework for adaptation in the region, taking advantage of regional actor's commitments to the Cartagena Convention to develop Integrated Coastal Zone Management plans.

Climate finance may be derived from domestic, regional and from the international donor community (Multilateral Financial Institutions, Green Climate Fund, Global Environment Facility, Adaptation Fund, World Bank group, United Nations bodies and bilateral sources). It can also come from the public and private sector sources. The region has solid experiences with grants and loans (both concessional and commercial) mainly as they relate to climate finance with co-financing arrangements as stipulated in the various projects executed. There is also some experience with the insurance issue as per the "**Caribbean Catastrophe Risk Insurance Facility**" in addition to a range of technical assistance initiatives, sovereign bond guarantees and hurricane clauses. Whilst strengthening of regional absorptive capacity in these areas is desirable, there is also the need for the region to explore access to other innovative financing mechanisms such as green bonds, debt to equity swaps, payment for ecosystem services, fee-bates and rebates, leasing, revolving funds, concessions and markets, crowd funding, online investment platforms and private placements.

A range of challenges still exist within the region such as capacity gaps and limitations to access climate finance : economies of scale are often overseen; finance eligibility barriers difficult to overcome; the lack of awareness of available climate finance modalities and incentives to engage the private sector need to be filled in, inconsistent and incoherent regional approaches to support donor blending opportunities need to be addressed; complex socio-economic and environmental crises added to the lack economic analysis capacity to make a case as investment criteria often remain a major bottleneck.

Special mention must be made to climate financing options for Overseas Territories and Departments (eligible to funding from French and UK funding such as the

Commonwealth Secretariat and EU programmes). There is a **valid opportunity for the OECS to review the area of climate financing for the region as a whole**, given the unique construct of the OECS.

The Green Climate Fund (GCF) investment criteria now dominates the landscape for accessing climate finance for SIDS, establishing a new “paradigm shift” to support climate impact potential that is in line with Sustainable Development Goal (SDG) compatibility and country ownership needs. The OECS, and separate Member States, must have the capacity to address GCF investment criteria if the opportunity for funding is to be realised. The call for setting up an “**Eastern Caribbean Regional Facility**” to support readiness, coordination, capacity building, project preparation, learning and knowledge exchange, human resources development, data management, reporting, accessing climate finance and other related matters must now be given full consideration.

Most importantly, this transformative pathway aligns with the OECS Council of Environment Ministers (COMES) Green Climate Fund Pipeline recommendations of the June 24, 2020 meeting, in particular about “*accessing GCF readiness resources both at a national and regional level*” and encouraging “*the participation of Member States in finalizing their GCF Country Programmes and to present a robust pipeline for Funded Activities to GCF1 (2020- 2023)*” (see Box 4.3).

Figure 9: Fishermen in a warming sea, Diamond Bay, Martinique



Copyright: Elodie Afonso



**Box 4.3: Transformative pathway 3: Enhance Leadership & Governance / Resource Mobilisation / M&E for climate change adaptation measures**

**Supporting the integration of climate change adaptation response into long-term development objectives, policy, planning and implementation.**

Activities carried out in cooperation with partners will build technical capacity in project preparation to increase the quality of the documents produced by the OECS Member States guiding the regulatory framework (as it was the case for the Regional building code, see Figure 9) to mainstream climate change adaptation into sectoral policies and train civil servants to climate change and climate change adaptation; it should include elements to:

- ⇒ Develop sector-level guidance and direction for mainstreaming climate change into national policies, in particular on integrated coastal zones management (including sea level rise impacts) and the definition of a shared monitoring method/shared indicators

**Developing a climate financing strategy and facilitating resource mobilization**

The clear remit from the OECS is that climate financing must be based on needs and requirements expressed by Member States. Any climate financing strategy in the OECS region therefore should be seen as a non-prescriptive framework as the Member States advance their own perspectives on the way forward on this issue. Independent OECS Member States have been compliant with the obligations to submit the required reports including 'National Communications', 'Technology Needs Assessments', 'National Adaptation Plans', 'Nationally Determined Contributions' etc. Those reports are critical for leveraging climate finance. A necessity is emerging with the need to map climate flows in the region, to identify and categorize climate finance needs, to mobilize climate finance, to accelerate climate investments and to address the various barriers to climate financing. The call for regional programmatic approaches to benefit from economies of scale is seen as an imperative. It is necessary that climate finance be mainstreamed in national development tied to the Public Sector Investment Programme to address climate finance issues relating to access, scale, readiness, speed, flexibility, accountability and transparency of climate finance in the region. The OECS is also well positioned to promote actions, through coordinated instruments, to work on activities having positive contributions for other agendas, including actions that have positive outcomes in averting, minimizing and addressing loss and damage. Achieving scale in good experiences will require significant increases in funding, working with local and national stakeholders to secure financing for identified actions. Moving from planning, analysis and preparatory stages to on the ground implementation will require financial backing from a diverse set of funds, including global adaptation finance, domestic budgets and the private sector.

- ⇒ Strengthen capacities to access international adaptation finance to address climate risks including regular climate finance trainings, as well as developing a climate finance strategy and approach formulation.
- ⇒ Develop a robust portfolio for funding for regional adaptation needs in coordination with other relevant initiatives with a special eye towards the gender considerations.

**Building capacity to track progress on adaptation metrics**

Reporting on a set of indicators for adaptation is a global challenge, primarily because what constitutes success following adaptation interventions is itself challenging. The OECS could play a role in building a robust framework for reporting and tracking progress on adaptation target, including:

- ⇒ Organising working sessions within the Climate Change Advisory Panel to review issues on Global Adaptation Reporting and improve regional coherence.
- ⇒ Developing a framework and disseminating guidance for indicator reporting.
- ⇒ Review lessons and identify gaps in the current use of indicators to monitor progress and explicitly considering the gendered impacts and success factors of adaptation strategies

*Figure 10 Caribbean Building Standards Forum: Advancing the OECS Building Code*



**OECS**

### OECS Building Code: Implementation

Development of “best practice” recommendations for implementing the revised OECS building Codes

- Analysis of realistic administrative options
- “Best practice” recommendations based on national circumstances,
- Proposals to revise and adapt the administrative provisions of the Building Code based on a preferred “best practice”,
- Relevant proposals for amending national regulations **(and technical assistance)**,
- An action plan and associated cost to facilitate implementation,
- A public awareness and communication strategy design to support implementation.
- **Updated Building Guidelines**
- **Regional forum**




**OECS**

Source: Presentation by Chamberlain Emmanuel – OECS Commission Bay Gardens Hotel, Saint Lucia – 14th June 2018

Table 4.3 outlines a set of activities to achieve results and outputs emerging from the Gap Analysis for transformative pathway 3.

Table 4.3 – Transformative Pathway 3

GOAL 3: IMPROVE LEADERSHIP, GOVERNANCE & M&E TO ACCESS CLIMATE FINANCE / Facilitate funding and monitoring of sustained climate resilient efforts	
OBJECTIVE 3.1: SUPPORTING THE INTEGRATION OF CLIMATE CHANGE ADAPTATION RESPONSE INTO DEVELOPMENT OBJECTIVES & POLICY PLANNING	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Sector level guidance and direction for mainstreaming resilience to climate change into national policies and plans (ensuring that gender and social inclusion considerations are included) are developed.</li> <li>○ Sectoral policy and legislative environments to address resilience to climate change issues is enhanced.</li> </ul>	<ul style="list-style-type: none"> <li>• Design, production and dissemination of sector climate change mainstreaming guidance for areas identified where collective multi-country action is required to address issues at scale.</li> <li>• Policy and legislative support provided where necessary with the view to achieve SDG13 (Climate Action) implementation targets in 2030</li> </ul>
OBJECTIVE 3.2: SECURING RESOURCES TO ENABLE THE IMPLEMENTATION OF CLIMATE ADAPTATION RESPONSES	
TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Long-term strategies formulation to ensure that OECS nations are able to work with development partners to secure funding for Eastern Caribbean regional adaptation needs in line with an operational OECSC climate finance strategy including the creation of an <b>Eastern Caribbean Regional Facility</b>.</li> <li>○ Enhance the current efforts (through GCF accreditation etc.) to strengthen capacities to access international adaptation finance to address climate risks, including intensification of dialogue on blending funds for complementary programmes (for example AFD, IKI, Common Wealth Secretariat, EU and USAID etc.).</li> <li>○ Provide technical advice/leverage for "debt for climate swaps", "climate bonds" and other financing options that could be leveraged where similar economic constraints and debt burdens are evidenced.</li> </ul>	<ul style="list-style-type: none"> <li>• Support Finance strategy development to access international, regional and national grant and concessional loan funds relevant to Climate Change Adaptation, and facilitate the dissemination of funds at regional / national levels across the OECS<sup>20</sup>.</li> <li>• Organize bi-annual climate finance training with relevant stakeholders in the region is organized<sup>21</sup> and set up a "Climate Finance Expert Hub" to support future proposal development, implementation.</li> <li>• Produce Regulatory environments for public and private investments documented for high-level guidance and set-up a mechanism to support a Regional Public Private Partnerships.</li> </ul>

<sup>20</sup> Specific tailored approaches for CSOs and private sector (esp. Medium-Small Medium Enterprises) could be considered here.

<sup>21</sup> Coordination with the CCCCC to be explored for synergies

**OBJECTIVE 3.3: ENHANCE INSTITUTIONAL/FINANCIAL PREPAREDNESS TO EXTREME WEATHER EVENTS FOR DISASTER RISK REDUCTION ACROSS THE CARIBBEAN<sup>22</sup>**

TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Supporting efforts underway to improve the collection, analysis and sharing of risk data across the Caribbean and its use for impact-based forecasting.</li> <li>○ OECS Member States benefit from Technical assistance to develop more detailed multi-hazard preparedness plans and associated early action protocols, including.</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake a scoping study (including piloting of methodology) to support tracking preparedness expenditures etc.</li> <li>• Create a programme of support (including clear technical assistance needs) for Member States (with national reserve funds<sup>23</sup>) to develop the necessary governance arrangements required to support the drawing down of funds in advance of a climate shock.</li> <li>• Undertake a feasibility study<sup>24</sup> (with cost-benefit analysis) for setting up a pooled regional "reserve fund" with triggers for early action.</li> <li>• A regional SRSP (Shock-responsive social protection) mechanism, with both regional and national components (and to support those displaced by disasters) is initiated and implemented.</li> </ul>

**OBJECTIVE 3.4: CONSOLIDATING MONITORING AND REPORTING MECHANISMS FOR CLIMATE ADAPTATION PLANNING AND MEASURES**

TARGETS	ACTIONS
<ul style="list-style-type: none"> <li>○ Dialogue with Member States on needs and approaches to strengthen reporting and tracking methods for adaptation is established and institutionalized.</li> <li>○ Close operational working relationships with the relevant focal points and other key stakeholders to ensure reporting is established.</li> </ul>	<ul style="list-style-type: none"> <li>• Framework and guidance for targeted indicator reporting developed and disseminated. Lessons and gap analysis of current indicators document produced in line with implementation of SDG13 (Climate Action), Sendai Framework implementation targets and evolution of the UNFCCC-PA adaption reporting metrics.</li> <li>• Hosting joint M&amp;E meetings of the OECS Environment, Finance Ministers including Statistics department (as focal points for UNFCCC and GCF, AF and other climate funds) to discuss projects and programmes outcomes. M&amp;E and reporting to help the improved leverage of international finance from modalities such as GCF, AF etc.</li> </ul>

<sup>22</sup> See: OECS - Enhanced preparedness for extreme weather across the Caribbean - A joint work plan - Emily Wilkinson, Lena Weingärtner, Blandine Arvis, Janot Mendler de Suarez and Andrew Kruczkiewicz (March 2021)

<sup>23</sup> Eastern Caribbean states with operational national reserve funds include St Vincent and the Grenadines, Grenada and the French Overseas Territories

<sup>24</sup> Global Risk Financing Facility (GRiF) to help design the fund and potentially provide insurance premium financing

# 5 MANAGEMENT AND IMPLEMENTATION

## 5.1 Implementation Arrangements

Implementation of the CCASAP requires clear articulation of the roles and responsibilities between the OECS Commission and counter parts from all supporting Ministries/Authorities at the national level.

Member States' adoption of the CCASAP 2021-2026 (by the COMES) represents the first step in this process that needs to be supported by Memorandum of Understanding/Statements of Commitment (or similar) with existing or new strategic partnerships as needed to help implement specific activities and to source national public, private or donor related funding.

The OECS will have the responsibility for regional coordination of any approach, initiative or commitment plus oversight of any agreed implementation process. Its core staff will need to be supported by technical specialists to help implement and monitor progress on the three Transformative Pathways set out in Section 4. This may include long and/or short-term secondments of personnel with appropriate experience.

## 5.2 Risk Management

The CCASAP entails a certain number of regionally specific climate adaptation related risks across the OECS which include:

- Lack of human resources and/or capacities as well as political will and failure to secure political buy-in, which could compromise the clarity and direction of any collaborative benefits and partnerships that the OECS seek to encourage.
- Fluctuating economic circumstances; this includes the failure to secure and sustain adaptation finance to deliver solutions outlined that can impact and substantially affect the ability to achieve successful outcomes.
- Susceptibility to other shocks and stressors that are not climate related such as changes in fuel prices or pandemics can increase vulnerability.
- Ineffective or insufficient communication and advocacy can limit the reach and scale of the activities.
- Ineffective or inadequate monitoring and evaluation at institutional, state and regional levels that can lead to poor results that may impede progress on any resilience related approach.
- Changes in donor and adaptation finance priorities will shift funding away from strategic regional initiatives.

The above risks, to some extent, can be mitigated against through pursuit of an inclusive climate resilient approach (embracing the three transformative pathways above) as part of a regional strategic response to address climate change impacts.

## 5.2 Monitoring and Evaluation

At the Member States level, monitoring, evaluating and reviewing climate resilience in this context means assessing adaptive capacities such as a) the capacity to

anticipate, b) the capacity to cope and c) the capacity to recover from climate change impacts over time.

To this end, an effective, easy to use and institutionalised adaptation *M&E tool of the Climate Change Adaptation Strategy & Action Plan (CCASAP)* is proposed, based on lessons learned from implementation of previous strategies and other global reporting context.

The key principle is that monitoring, review and evaluation must focus on two aspects of performance:

- 1) At the Member States level, to assess the situation at *local/country level* to allow OECS to aggregate progress and needs.
- 2) At the Regional level, the outcomes of the implementation of specific and *regional strategies and actions*.

Two key facts are driving the choices made:

1) It is recognised that no “indicators” for adaptation have been approved globally against which to frame priority adaptation strategies (and respective NDCs when applicable), as a starting point.

2) Even if no indicators for adaptation are established, a series of other reporting tools for the SDGs and the Sendai Framework exist already in place for all Governments. These processes are expensive and time consuming. CCASAP will not create an extra burden to authorities and propose a process to ensure that the reporting indicators are clear and consistent to reduce workload already placed on the limited human resource capacity within Member States departments.

After reviewing existing adaptation indicators formulated by OECS Parties (NDCs, national plans, etc.), and based on the lessons learned from the implementation of previous regional strategies, an effective CCASAP specific *M&E tool* produced at the regional level is proposed in order to:

- Build a consensus at the OECS level on suitable baselines and indicators to support the delivery of climate adaptation, and hence providing OECS Governments with a *roadmap towards achieving climate resilience objectives* to help guide and inform regional and national development planning.
- Contribute to national reporting systems, by blending existing global sets of indicators to support compliance to the “Global Stocktake” and “Transparency Frameworks” defined by the Paris Agreement whilst enabling the development of *adaptation indicators* that are relevant to OECS Member State needs as required.
- Integrate the use of regionally relevant existing indicators already used by Member States (such as SDG13 relevant indicators, Sendai framework indicators for disaster risk reduction and other relevant national indicators) as suitable.

The CCASAP process will start building, by extrapolation, an approach generating a *Regional baseline and targets that will be assessed on a regular basis (annually or*

every second year (to be decided by the 'Monitoring-Evaluation' working group to be established under Pathway 3).

⇒ **National/Territorial Information inputs provided by Member States to the OECS Commission to generate a Regional profile**

The resilience to climate changes impacts will be assessed in the context of business continuity, economic impacts and societal impacts, including a gender sensitive approach. Tracking progress is recommended to follow a process similar to the **Tracking Adaptation and Measuring Development** approach (TAMD)<sup>25</sup>. TAMD indicators (Table 5.1) are organized by sector and essentially involve expert judgement in response to guiding questions (see Annex 2: Questions to Track and Measure Adaptation). They might be all part of the information provided by Member States or a selection can be made by the Regional M&E Working Group.

After every Member State communicates the results of its scoring level agreed upon at their own level, the OECS Commission will aggregate the information to build a regional consolidated mapping, which will provide guidance on regional key priorities.

⇒ **Information inputs provided by entities implementing regional interventions**

The OECS Commission will monitor the key performance indicators for each strategic objective. These performance indicators will be selected in a participatory manner (ensuring that they are complementary elements in the context of the Paris agreement M&E process) once strategic objectives will be confirmed over during a co-production step. This also implies that baselines will be jointly established and targets commonly agreed upon by the Regional M&E working group.

All details and background information are provided in Annex 2 (Indicators for Adaptation measuring) and a specific report entitled "**Monitoring and Reporting Framework for the Eastern Caribbean Climate Change Adaptation Strategy and Action Plan**".

---

<sup>25</sup> Tracking adaptation and measuring development (TAMD)

## ANNEXES

### ANNEX 1: LEGAL FRAMEWORK FOR CLIMATE CHANGE POLICIES IN THE EASTERN CARIBBEAN

Climate change issues are guided and regulated through several international agreements which are addressing the risks of climate variability and change, as well as disasters, in the region. If the countries of the Eastern Caribbean are all signatories to the international conventions linked (directly or indirectly) to climate change issues, there are several other regional agreements defining the legal framework, directly or transversely, applying to Caribbean countries, for regional environmental matters, including climate change.

They are summarized below.

- **Treaty of Chaguaramas**
  - The Treaty of Chaguaramas established the **Caribbean Community (CARICOM)**, including the **Caribbean Common Market**, was signed by Barbados, Guyana, Jamaica and Trinidad and Tobago on **4 July 1973**, at Chaguaramas, Trinidad and Tobago. It came into effect on 1 August 1973. This new Caribbean Community and the Caribbean Common Market replaced the Caribbean Free Trade Association (which ceased to exist on 1 May 1974).
  - In 1989, Heads of Government made the decision to transform the Common Market into a **single market and economy**, as a basis for internationally competitive production of goods and provision of services. The Treaty of Chaguaramas was revised between **1993 and 2000** by an Intergovernmental Task Force, comprising representatives of all Member States. They renamed it the "**Revised Treaty of Chaguaramas Establishing the Caribbean Community**", including the **CARICOM Single Market and Economy**.
  - Members of the Caribbean Community are: **Antigua and Barbuda** (b) The Bahamas (c) Barbados (d) Belize (e) **Dominica** (f) **Grenada** (g) Guyana (h) Jamaica (i) Montserrat (j) **St. Kitts and Nevis** (k) **Saint Lucia** (l) **St. Vincent and the Grenadines** (m) Suriname (n) Trinidad and Tobago.<sup>26</sup>
- **CARICOM Regional Framework for Achieving Development Resilient to Climate Change**

At the request of CARICOM Heads of State participating in the First Congress for the Environmental Charter and Climatic Change, (held at Ávila Mountain, Caracas, 11-13 October 2007), the Caribbean Community Climate Change Centre (CCCCC) has prepared a "*Regional Framework for Achieving Development Resilient to Climate Change*". Approved in July 2009, the Regional Framework defines CARICOM's

---

<sup>26</sup> OECS Members States signatory are indicated in bold.



strategic approach for coping with climate change and is guided by five strategic elements and some twenty goals designed to significantly increase the resilience of the CARICOM Member States' social, economic and environmental systems. It provides a roadmap for action by member states and regional organisations over the period 2009-2015, while building on the groundwork laid by the CCCCC and its precursor programmes and projects in climate change adaptation. It also builds upon the extensive work undertaken by governments, regional organisations, NGOs, and academic institutions in recent years assessing the impacts of a changing climate<sup>27</sup>.

The strategic elements of the framework are as follows:

- I. **Mainstreaming climate change adaptation strategies** into the sustainable development agendas of CARICOM states.
- II. **Promote the implementation of specific adaptation measures** to address key vulnerabilities in the region.
- III. **Promote actions to reduce greenhouse gas emissions** through fossil fuel reduction and conservation and switching to renewable and cleaner energy sources.
- IV. Encouraging **action to reduce the vulnerability of natural and human systems** in CARICOM countries to the impacts of a changing climate.
- V. Promoting action to derive social, economic, and environmental benefits through the **prudent management of standing forests** in CARICOM countries.

■ ***St. George's Declaration of Principles for Environmental Sustainability in the OECS***

Signed by the OECS in 2001, revised in 2006 and currently being reviewed, it is the benchmark environmental management framework in the Eastern Caribbean region. The Declaration is structured around four main driving Goals to guide sustainable development:

- **Goal 1:** Build the Capacity of Member States and Regional 5 Institutions to Guide and Support Processes of Sustainable Development
- **Goal 2:** Incorporate the Objectives, Perspectives, Resources and Talents of all of Society in Environmental Management
- **Goal 3:** Achieve the Long-term protection and Sustained Productivity of the Region's Natural Resource Base and Ecosystem Service it Provides
- **Goal 4:** Ensure that Natural Resources Contribute Optimally and Equitably to Economic, Social and Cultural Development

The Declaration is stating **21 principles** defining sustainable development mandates, their delivery by OECS Member States and sets out clear requirements for monitoring environmental impacts and trends in ecosystem health.

---

<sup>27</sup> See <https://www.caribbeanclimate.bz/blog/2017/07/27/2009-2021-regional-planning-for-climate-compatible-development-in-the-region/>

- Principle 1: Foster Improvement in the Quality of Life
- Principle 2: Integrate Social, Economic and Environmental Considerations into National Development Policies, Plans and Programmes
- Principle 3: Improve on Legal and Institutional Frameworks
- Principle 4: Ensure Meaningful Participation by Civil Society in Decision Making
- Principle 5: Ensure Meaningful Participation by the Private Sector
- Principle 6: Use Economic Instruments for Sustainable Environmental Management
- Principle 7: Foster Broad-based Environmental Education, Training and Awareness**
- Principle 8: Address the Causes and Impacts of Climate Change**
- Principle 9: Prevent and Manage the Causes and Impact of Disasters**
- Principle 10: Prevent and Control Pollution and Manage Waste
- Principle 11: Ensure the Sustainable Use of Natural Resources**
- Principle 12: Protect Cultural and Natural Heritage
- Principle 13: Protect and Conserve Biological Diversity
- Principle 14: Recognise Relationships between Trade and Environment
- Principle 15: Promote Cooperation in Science and Technology
- Principle 16: Manage and Conserve Energy
- Principle 17: Negotiate and Implement Multilateral Environmental Agreements
- Principle 18: **Coordinate Assistance from the International Donor Community towards the Organisation of Eastern Caribbean States Region**
- Principle 19: Implementation and Monitoring**
- Principle 20: Obligations of Member States
- Principle 21: Review

The key mechanism for delivery of the Declaration at national level is through **National Environmental Management Strategies** (NEMS), which also provides a framework for tracking progress and a basis for communicating with other Member States and regional institutions. Any national operating procedure should align with the principles within both the St George's Declaration and relevant NEMS. At least six of those principles are addressed to in the CCASAP.

■ **Treaty of Basseterre and its 2010 Revised Version**

The Treaty of Basseterre establishing the Organisation of Eastern Caribbean States was signed on **June 18th 1981** by seven Eastern Caribbean Countries: **Antigua-and-Barbuda, Dominica, Grenada, Montserrat, Saint-Kitts-and-Nevis, Saint-Lucia, and Saint Vincent-and-the-Grenadines.**

The **Revised Treaty of Basseterre, signed on June 18th, 2010**, established the **OECS Economic Union**. The OECS is governed by the Authority (which consists of member states represented by their respective Heads of Government) and is administered by a Central Secretariat located in Saint Lucia. The parties to the Treaty of Basseterre 1981 which were accorded "associate membership" of the Organisation shall continue to be associate members and include - (a) **Anguilla**; and (b) **British Virgin Islands**. The Revised Treaty of Basseterre established the basis for a common approach across Member States to policy areas.

⇒ Under article 4: PURPOSES AND FUNCTIONS OF THE ORGANISATION

It is incorporating the revised Treaty of Chaguaramas stating that the major purpose of the OECS is to promote coordination at the regional level. This allows for example all OECS Member States to be involved in "The Caribbean Regional Oceanscape Project" (CROP) activities, including British Virgin Island and Anguilla (UK OTs). It is important to stress that regional coordination at the CARICOM level can assist within national delivery, most notably through the Caribbean Community Common Fisheries Policy (CCCFP).

⇒ Under Article 13: DEVELOPMENT POLICIES

13.1 Each Protocol Member State shall participate in the setting of both general and specific developmental objectives which arise from the **OECS Development Strategy** and **OECS Development Charter**.

13.2 The general objectives, which cover the five areas identified by the Authority of Heads of Government of the Member States of the Organisation of Eastern Caribbean States under the Treaty of Basseterre 1981 at that Authority's Special Meeting of October 2002, comprising:

(a) economic transformation; (b) growth; (c) employment; (d) poverty reduction; and (e) attainment of the appropriate levels measured by Human Development Indices as set by the United Nations; shall be pursued by Protocol Member States in relation to targets to be set by the OECS Authority on an annual basis.

13.3 This pursuit shall be linked to the harmonisation, consistent with the status of an Economic Union, of the following policy programme areas – (a) fiscal; (b) monetary; (c) trade; (d) international economic relations; (e) incomes; (f) structural; **(g) social**; **(h) environmental**; and (i) other programme areas as identified by the OECS Authority.

13.4 In further pursuit of these objectives, Protocol Member States agree to coordinate policies towards:

(a) the harmonious and optimal development of the following sectors:

(i) agriculture; (ii) manufacturing; (iii) tourism; (iv) services; (v) construction; (vi) information and communications technology; (vii) education; and (viii) health.

(b) the mobilisation, development and efficient allocation of labour across the Economic Union through **education and skill training arrangements**, and the creation of an Economic Union wide labour market.

(c) the **development, creation and establishment of Research, Development and Management Centres within the Economic Union** to facilitate the international competitiveness of industries and firms; and (d) the development, integration and regulation of money and capital markets within the Economic Union to optimise the mobilisation of savings and their most efficient allocation to the sectors, industries and firms which will facilitate the growth and development of the Economic Union.

⇒ Under article 24: ENVIRONMENTAL SUSTAINABILITY

24.1 Each Protocol Member State **shall implement the St. George's Declaration of Principles for Environmental Sustainability in the OECS** to minimize environmental vulnerability, improve environmental management and protect the region's natural (including historical and cultural) resource base for optimal social and economic benefits for Member States.

To meet those commitments, each Member State further agrees to work individually and jointly to implement shared goals for environmental management, specifically:

- (a) to build the capacity of Member States and regional institutions to guide and support processes of sustainable development.
- (b) to incorporate the objectives, perspectives, resources, knowledge, and talents of all of society in environmental management.
- (c) to achieve the long-term protection and sustained productivity of the region's natural resource base and of the ecosystem services it provides; and
- (d) to ensure that natural resources contribute optimally and equitably to economic, social, and cultural development.

24.2 The Member States agree to collaborate with national, regional, and international institutions to assist the governments and their national partners to secure and maintain the technical, financial and human resources required to achieve the goals and targets of the Declaration.

#### ■ **Caribbean Community Common Fisheries Policy**

In 2014, members of the Caribbean Regional Fisheries Mechanism (CRFM) adopted the 4 main driving Goals to guide sustainable development **Caribbean Community Common Fisheries Policy (CCCFP)**. The CCCFP is a binding treaty fostering greater harmonisation across the Caribbean in the sustainable management and development of the region's fisheries and aquaculture resources, with special emphasis on promoting the most efficient use of shared resources while aiming to improve food security and reduce poverty in the region. Key elements include addressing **illegal, unreported and unregulated (IUU) fishing** and the **integration of environmental, coastal, and marine management matters into fisheries policies, safeguarding the fisheries and related ecosystems from threats and lessening impacts of climate change or natural disasters**. The framework of the CCCFP has supported regional action such as development of policies on fisheries co-management, fisher

engagement and participation, and a protocol on securing sustainable small-scale fisheries.

#### ■ **Regional Security System**

The **Regional Security System (RSS)** is an international agreement for the defence and security of the Eastern Caribbean region, **established in 1982** to counter threats to the stability of the region at that time. Initially, four members of the OECS (**Antigua-and-Barbuda, The Commonwealth of Dominica, St. Lucia, and St. Vincent-and -the-Grenadines**) signed a memorandum of understanding with Barbados to provide for mutual assistance on request. **Saint Kitts and Nevis** joined the RSS following its independence in 1983, and **Grenada** two years later after Operation Urgent Fury<sup>28</sup>. The signatories agreed to prepare contingency plans and assist one another, on request, in the following areas:

- a. national emergencies.
- b. prevention of smuggling.
- c. search and rescue.
- d. immigration control.
- e. **fishery** protection.
- f. customs and excise control.
- g. **maritime policing** duties.
- h. **protection of offshore installations**.
- i. pollution control.
- j. **national and other disasters**; and
- k. threats to national security.

#### ■ **S.A.M.O.A. Pathway**

The “SIDS Accelerated Modalities of Action”, also called the “SAMOA Pathway”, was the outcome of the Third International Conference on Small Island Developing States (SIDS Conference), **1-4 September 2014**, in Samoa<sup>29</sup>. It reaffirms the SIDS Heads of State commitment to the sustainable development of SIDS. This can be achieved only with a broad alliance of people, governments, civil society, and the private sector all working together to achieve the future we want for present and future generations.

The Caribbean region is home to a number of SIDS that face similar development challenges, such as geographic and economic isolation, limited resources,

---

<sup>28</sup> Operation Urgent Fury was a combined U.S. and RSS military intervention in Grenada. An MOU was updated in 1992 and the system acquired juridical status on 5 March 1996 under the Treaty which was signed at St. Georges, Grenada.

<sup>29</sup> <http://www.sids2014.org/index.php?menu=1537>

environmental fragility, high costs of transportation and energy, and vulnerability to climate change and natural disasters. English and Dutch speaking Caribbean SIDS members include **Antigua and Barbuda**, Aruba, The Bahamas, Barbados, Belize, **British Virgin Islands**, **Dominica**, **Grenada**, **Guyana**, **Jamaica**, **Montserrat**, **Saint Kitts and Nevis**, **Saint Lucia**, **Saint Vincent and the Grenadines**, Suriname, and Trinidad and Tobago. Other non-UN members and associated members of regional commissions who are also part of Caribbean SIDS include **Anguilla**, Aruba, Bermuda, **British Virgin Islands**, Cayman Islands, Curacao, **Guadeloupe**, **Martinique**, **Montserrat**, **Sint Maarten**, Turks and Caicos Islands, U.S. Virgin Islands and Puerto Rico.

The Conference, with the overarching theme "*The sustainable development of Small Island developing States through genuine and durable partnerships*", played a significant role in identifying SIDS priorities that needed to be considered in the formulation of the 2030 Agenda.

### ■ **Cartagena Convention**

The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (WCR) - or Cartagena Convention<sup>30</sup> - is a regional legal agreement for the protection of the Caribbean Sea. The Convention was adopted in Cartagena, Colombia on 24 March 1983 and entered into force on 11 October 1986. The Convention is supported by three technical agreements or Protocols on Oil Spills, Specially Protected Areas and Wildlife (SPAW) and Land Based Sources of Marine Pollution (LBS). It is the first and only regionally binding treaty of its kind promoting the protection and development of the marine environment of the Region and provides the legal framework for the Caribbean Environment Programme. Six Member States are direct signatories (Antigua and Barbados; Dominica, Grenada, Saint Kitt and Nevis Saint Lucia, and Saint Vincent and Grenadines) as well as France and the UK which makes it a common legal framework for all OECS Member States.

## **INTERNATIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT**

All OECS Member States are either direct signatories to those agreements as Independent States, or indirectly 'Party' to those agreements as territories of a signatory Member (France hence EU as well as the UK)<sup>31</sup>.

- **The UN Framework Convention on Climate Change (UNFCCC)** and all key subsequent decisions made by Conference of the Parties (COP):
  - **COP17** establishes as a priority the strengthening of adaptation capacities in the most vulnerable countries (2011).
  - **COP18** boosts the Green Climate Fund and proposes that support from developed countries reach \$100 billion by 2020. (2012)

---

<sup>30</sup> <https://www.unep.org/cep/who-we-are/cartagena-convention>

<sup>31</sup> Background information on those International agreements relevant for CCASAP are provided a specific report entitled "**CCASAP Monitoring and Reporting Framework for the Eastern Caribbean Climate Change Adaptation Strategy and Action Plan**".

- **COP19 - Paris Agreement** sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. It also aims to strengthen countries' ability to deal with the impacts of climate change and support them in their efforts (2015).
- The **Sendai Framework for Disaster Risk Reduction 2015-2030** was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction. It is the first major agreement of the post-2015 development agenda; it provides Member States with concrete actions to protect development gains from the risk of disasters. This Sendai Framework focuses on the adoption of measures which address the three dimensions of disaster risk, **exposure to hazards, vulnerability & capacity, and hazard's characteristics** to prevent the creation of new, or reduce existing risks and increase resilience. It outlines global targets against which to assess progress.
- **Convention on Biological Diversity (CBD)** is an agreement that focuses on the conservation of biodiversity, its sustainable use and fair and equitable distribution (1992).
- **Agenda 21** - Local government agenda that establishes measures to reverse and prevent environmental degradation, including actions for sustainable management of soil and water, use of agricultural technologies compatible with the environment, imposition of forestation and reforestation, and use of indigenous knowledge of natural resources (1992).
- **United Nations Framework Convention to Combat Desertification (CCD)** establishes a coordination and financing mechanism to combat desertification (1996).
- **UN Sustainable Development Goals (2015)** - The 17 Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda of Sustainable Development were adopted in 2015 and came into force on 1st January 2016. It includes in particular: **Goal 1.** End poverty in all its forms everywhere; **Goal 3.** Ensure healthy lives and promote well-being for all at all ages; **Goal 5.** Achieve gender equality and empower all women and girls; **Goal 6.** Ensure availability and sustainable management of water & sanitation and **Goal 13. Take urgent action to combat climate change and its impacts.**

The reporting requirements for OECS Member States for those instruments are further analysed in the CCASAP M&E Report.

## ANNEX 2 : CURRENT OECS PROGRAMMES

At the OECS Commission level, the work on environmental sustainability currently falls within four programmes:

- The OECS - **Biodiversity and Ecosystem Management Programme** utilizes an ecosystem-based management approach and supports the implementation of regional and international agreements including multilateral environmental agreements such as the Convention on Biological Diversity, the 2030 Agenda for Sustainable Development and The St. George's Declaration of Principles for Environmental Sustainability (see Annex 1).
- The **Sustainable Energy Programme** works to support countries in the area of energy efficiency, with a special focus on energy efficiency in buildings and workplaces. Other important areas of work include Eastern Caribbean Energy Regulatory Authority (ECERA) and Geothermal Energy development. The unit is engaged in adapting to the consequences of climate change, investing in the development and establishment of efficient renewable energy infrastructure.
- The **Ocean Governance and Fisheries Programme** is managing the **Blue Economy Investment Portfolio**<sup>32</sup> and promotes private sector investment and a range of national interventions identified by OECS member states. In this context, the "Caribbean Regional Oceanscape Project" (CROP, Project ID P159653) was approved on September 26, 2017 by the World Bank's. Vulnerability reduction and adaptation to climate change are embedded within the conceptual vision of the blue economy, where the creation of a science/policy interface to produce informed policy responses that address the dual challenges of sustainable development and climate change.
- The **Climate and Disaster Resilience Programme" (CDRU)** was established in recognition of the vulnerability experienced by the Eastern Caribbean Islands. Areas of intervention included activities carried out through projects such as the Island Resilience (2014-2018), supported by the European Union Global Climate Change Alliance (GCCA), the Readiness support from the Green Climate Fund (GCF); and several projects with support of the French Development Agency (AFD) under the Adapt'Action Facility and GIZ climate change programme.

These OECS programmes are analysed within the **Addendum to Climate Change Risk Profile for the OECS region** that is concluding that additional efforts thought to increase their synergies and coordinated impacts are needed.

---

<sup>32</sup> See OECS Press Briefing on Blue Economy <https://pressroom.oecs.org/global-partners-pledge-support-for-blue-economy-investments-in-the-oecs>



## ANNEX 3: MAIN REGIONAL PROGRAMMES IN THE EASTERN CARIBBEAN

Initiatives are being implemented at the wider CARICOM level<sup>33</sup> as well by the OECS and its partners. This includes country-led actions that can be used as catalysts to increase the region's resilience to climate change variability and to identify opportunities to address the associated risks that are posed<sup>34</sup>, such as:

- **Caribbean Community Climate Change Centre (CCCCC)** in Belize has several e-learning and facilitated courses on climate finance and investment towards low carbon climate resilient development. CCCCC has implemented a large number of regional climate change programmes, including the 'CARICOM Regional framework for Achieving Development Resilient to Climate Change' (See Annex 1: Legal Framework of Climate Change Actions).
- **Caribbean Risk Information System (CRIS)** within the Caribbean Disaster Emergency Management Agency (CDEMA) – offers a multi-faceted virtual platform that hosts risk management data and information accessible to stakeholders to facilitate analysis, research, and greater awareness of risk management and climate adaptation in the region<sup>35</sup>.
- **Caribbean Handbook on Risk Management (CHARIM)** – is an online handbook to support the generation and application of landslide and flood hazard and risk information to inform projects and programs in infrastructure, specifically targeted to small countries in the Caribbean region<sup>36</sup>.
- **Caribbean Coastal Marine Productivity (CARICOMP)** – is an information system for coral reef, seagrass and mangrove monitoring in the region whose principal goal is to determine the dominant influences on coastal productivity in the Caribbean Region and to discriminate between human disturbances and long-term natural variation.<sup>37</sup>
- **Carib-Coast** is implementing a Caribbean network of observation stations to monitor coastal risk prevention and adaptation to climate change.<sup>38</sup>
- **Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4FISH)** – this is implemented in six Eastern Caribbean countries: (Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, and Saint

---

<sup>33</sup> See [Regional Framework for Achieving Development Resilient to Climate Change \(2009-2015\)](#); [Caribbean Planning for Adaptation to Climate Change \(CPACC\)](#); Adaptation to Climate Change in the Caribbean (ACCC) project; Special Program on Adaptation to Climate Change: Implementation of adaptation measures in coastal zones (SPACC); Strategy for Comprehensive Disaster Management for 2007-2012; supported the Caribbean Pilot Programme for Climate Resilience (PPCR); among others.

<sup>34</sup> See also - OECS expert registry on ecosystem-based adaptation and mainstreaming: <https://oece-eba-gesi.org/Views/index.php> ; Caribbean Civil Society SDG Knowledge base: <https://hub.canari.org/sdg/> ; and others.

<sup>35</sup> See <https://cdema.org/cris/>

<sup>36</sup> See <http://www.charim.net/>

<sup>37</sup> <https://www.ima.gov.tt/portfolio-item/the-caribbean-coastal-monitoring-programme-caricomp/>

<sup>38</sup> <https://www.carib-coast.com/>

Vincent and the Grenadines)<sup>39</sup>.

- **Regional Comprehensive Disaster Management (CDM) Strategy and Programming Framework 2014-2024**<sup>40</sup>. The goal of the draft CDM Strategy 2014-2024 is to realize “Safer, more resilient and sustainable CDEMA Participating States through Comprehensive Disaster Management”. This goal is supported by four high level priority outcomes and sixteen outputs as represented in the CDM Logic Model.
- **Strengthening Climate Services in the Caribbean through the Sectoral Early Warning Information Systems Across Climate Timescales (EWISACTs) Regional Roadmap and Plan of Action (RPA) 2020-2030** with CIMH, CARDI, CWWA, CDEMA, CARPHA, CCREEE, CTO, CHTA. (2020)<sup>41</sup>. Fully established in 2017 under the 3-year (2014-2017) ‘Building Regional Climate Capacity in the Caribbean’ Programme, the Consortium of Regional Sectoral EWISACTs Coordination Partners is a key mechanism to drive the co-design, co-development and co-delivery of tailored climate products and services in the agriculture and food security, disaster risk management, energy, health, tourism and water sectors in the Caribbean.

These regional initiatives are analysed within the **Climate Change Risk Profile for the OECS region and Addendum**. Each initiative has its own geographical coverage and status (institution, project based, etc.). In some instances, they do not offer a systematic access to all climate change related impacts, risks and adaptation options.

---

<sup>39</sup> <http://www.fao.org/in-action/climate-change-adaptation-eastern-caribbean-fisheries/en/>

<sup>40</sup> EWISACTs Roadmap and Plan of Action: CIMH, CARDI, CWWA, CDEMA, CARPHA, CCREEE, CTO, CHTA. (2020). Strengthening Climate Services in the Caribbean through the Sectoral Early Warning Information Systems Across Climate Timescales (EWISACTs) Regional Roadmap and Plan of Action (RPA) 2020-2030.

<sup>41</sup> Climate Trends and Projections for the OECS region. April, 2020. Link: <https://www.oecs.org/climate-&-disaster-resilience/resources.html?task=document.viewdoc&id=5>