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ECLAC SUBREGIONAL
HEADQUARTERS
FOR THE CARIBBEAN

Synthesis of the Caribbean subregion midterm review report of the Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway

Artie Dubrie Elizabeth Thorne Luciana Fontes de Meira Omar Bello Willard Philling





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Artie Dubrie Elizabeth Thorne Luciana Fontes de Meira Omar Bello Willard Phillips



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Contents

Acronyms	5						
Abstract	9						
Introduction	11						
Caribbean SIDS midterm review of the SAMOA Pathway — Selected Regional initiatives 1							
A. Sustainable inclusive and equitable economic growth: Caribbean economic,							
financial and trade challenges	13						
1. Financial constraints							
2. Trade challenges and initiatives	15						
3. Labour market adjustments	16						
4. New economic development models	16						
5. Sustainable tourism	17						
B. Climate change and disaster risk management in the Caribbean: main initiative	es 17						
1. Climate change adaptation	18						
2. Disasters and risk management	20						
C. Natural resources management and environment protection	21						
1. Ocean governance	21						
2. Fisheries	22						
3. Biodiversity conservation	23						
4. Forests desertification and land degradation	25						
D. Advancing sustainable energy options	25						
E. Water, sanitation and waste management	27						
1. Water management	27						
2. Sanitation and wastewater management							
3. Management of solid waste including plastics	29						

	F.	Sustainable transportation: guarantying connectivity and access to environmentally				
		affordable and well-maintained transportation in the region	29			
		1. Energy efficiency in the transportation sector	29			
		2. Connectivity in land, air and marine transportation	30			
	G.	Food security and nutrition: boosting agricultural productivity, resilience and				
		diversification	31			
		1. Agricultural productivity, adaptation and disaster recovery				
		2. Agricultural research and technology				
	Н.	Health sector governance and non-communicable diseases				
		1. Health service delivery and universal health coverage				
		2. Non-communicable diseases				
	I.	Social development, gender equality and security challenges in the Caribbean				
		1. Fighting inequality through social inclusion				
		2. Gender Equality				
		3. Addressing security challenges				
	J.	Enhancing human capital through education, culture and sport				
II.	Red	commendations to strengthen the means of implementation of the SIDs priorities	20			
		· · · · · · · · · · · · · · · · · · ·				
Biblio	ogra	phy	41			
Studi	es ar	nd Perspective series - The Caribbean: issues published	/, C			

Acronyms

ACP African, Caribbean, and Pacific Group of States

ACS Association of Caribbean States

AML/CFT Anti-Money Laundering/Combating the Financing of Terrorism

BCRC Basel Convention Regional Centre
BPOA Barbados Programme of Action
CAB Caribbean Association of Banks

CANARI Caribbean Natural Resources Institute

CARICOM Caribbean Community

CARIFORUM Caribbean Forum of the African, Caribbean and Pacific Group of States

CARPHA Caribbean Public Health Agency

CCCCC Caribbean Community Climate Change Centre
CCCFP Caribbean Community Common Fisheries Policy

CCH CARICOM Caribbean Cooperation in Health

CCIMU Caribbean Creative Industries Management Unit

CCJ Caribbean Court of Justice

CCRIF-SPC Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company

CCST Caribbean Council for Science and Technology

CDB Caribbean Development Bank

CDCC Caribbean Development Cooperation Committee

CDEMA Caribbean Disaster Emergency Management Agency

CEDAW Convention on the Elimination of all forms of Discrimination against Women

CEPF Critical Ecosystem Partnership Fund

CLME+ Caribbean and North Brazil Shelf Large Marine Ecosystem

COTED Council for Trade and Economic Development

CReW Caribbean Regional Fund for Wastewater Management

CREWS Climate Risk and Early Warning System
CRFM Caribbean Regional Fisheries Mechanism

CSME Caribbean Single Market Economy

CSO Civil Society Organization

CTO Caribbean Tourism Organization

CWWA Caribbean Water and Wastewater Association

DALA Damage and Loss Assessment

DFATD Department of Foreign Affairs, Trade and Development (Canada)

EU European Union

FAO Food and Agriculture Organization of the United Nations

GBV Gender Based Violence

GCCA Global Climate Change Alliance

GDP Gross Domestic Product

GEF Global Environmental Facility

GHG Greenhouse Gas

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

HFC Hydrofluorocarbon

HIV Human Immunodeficiency Virus

IAEA International Atomic Energy Agency

ICT Information and Communications Technology

IDB Inter-American Development Bank

IFAD International Fund for Agricultural Development

IICA Inter-American Institute for Cooperation on Agriculture

ILO International Labour Organisation

IMF International Monetary Fund

IPEEC International Partnership for Energy Efficiency Cooperation

IRENA International Renewable Energy Agency

IUU Illegal, Unreported and Unregulated Fisheries

IWCAM Integrating Watershed and Coastal Area Management Project

LAC Latin America and the Caribbean

LiDAR Light Detection and Ranging Technology

MSI Mauritius Strategy for the Further Implementation of the Barbados Programme

of Action

MTR Mid-Term Review

NCD Non-Communicable Disease

NDC Nationally Determined Contribution

NREL National Renewable Energy Laboratory

ODA Official Development Assistance

OECS Organisation of Eastern Caribbean States

OLADE Latin American Energy Organization
PAHO Pann American Health Organisation

SDG(s) Sustainable Development Goal(s)
SIDS Small Island Developing States
TFA Trade Facilitation Agreement

TVET Technical and Vocational Education and Training

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme
UNEP United National Environmental Programme

UN-ECLAC United Nations Economic Commission for Latin America and the Caribbean

UNESCO United Nations Educational, Scientific and Cultural Organisation

UNFPA United Nations Population Fund
UNGA United Nations General Assembly
UNICEF United Nations Children's Fund

UNISDR United Nations Office for Disaster Risk Reduction

UNODC United Nations Office on Drugs and Crime

UN-OHRLLS United Nations Office of the High Representative for the Least Developed

Countries, Landlocked Developing Countries and Small Island Developing States

USAID United States Agency for International Development

UWI University of the West Indies

Abstract

The Small Island Developing States (SIDS) Accelerated Modalities of Action Pathway (hereafter referred to as the SAMOA Pathway) was adopted in 2014 at the United Nations Third International Conference on SIDS. The SAMOA Pathway builds on the 1994 Barbados Programme of Action for SIDS (BPOA) and the 2005 Mauritius Strategy of Implementation (MSI) for the Further Implementation of the BPOA. This document is a synthesis on the Caribbean Region- SAMOA Pathway Midterm Review Report prepared by ECLAC and in support of United Nations General Assembly (UNGA) Resolution 72/217¹. In demonstration of the approaches to implemention, it details selected national and regional activities supporting the sustainable development priorities of the Caribbean SIDS and representing the period 2015-2018.²

Resolutions 72/217: Follow-up to and implementation of the SIDS Accelerated Modalities of Action (SAMOA) Pathway and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States (2018), available at: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/72/217.

² The Caribbean Region- SAMOA Pathway Midterm Report was prepared by ECLAC and in support of United Nations General Assembly Resolution 72/217. The complete document can be found at website: https://sustainabledevelopment.un.org/content/documents/20949Caribbean_SAMOA_Pathway_Midterm_report_18_Oct.2018_final_draft1.pdf.

Introduction

The implementation modalities of the SIDS agenda in the Caribbean region³ embrace economic, social and environmental inter-linkages and coherencies with other sustainable development agendas. The SAMOA Pathway holds a special significance to the region as it provides specific recognition to the unique challenges and vulnerabilities of SIDS. A key aspect of the implementation of the SAMOA Pathway has been ensuring that the special challenges of SIDS are consistently addressed across the various global sustainable development frameworks.⁴ This document presents a synthesis of the implementation of the Caribbean SIDS sustainable development priorities as reflected in the the Caribbean Region- SAMOA Pathway Midterm Report prepared by ECLAC and in support of United Nations General Assembly Resolution 72/217. The Resolution requests the Secretary-General to submit to the General Assembly, at its seventy-third session, a report on the implementation of the Samoa Pathway, including progress made and continuing challenges faced.

Regional developmental partners in the Caribbean have recognized the unique sustainable developmental challenges of member countries. Nationally, several countries have existing national sustainable development strategies and with each country having a designated Ministry or Agency as the focal point for leading respective national sustainable development portfolios such as Jamaica and Saint Lucia⁵. However, it is also to be noted that the regional strategic plans, projects and other

List of Caribbean SIDS are: Antiqua and Barbuda, The Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. It also includes the territories of Anquilla, Aruba, Bermuda, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Sint Maarten, the Turks and Caicos Islands and U.S. Virgin Islands.

Among these are the 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, the Sendai Framework for Disaster Risk Reduction 2015-2030, the Paris Agreement on Climate Change and the New Urban Agenda. Among the Caribbean SIDS, Haiti is also a Least Developed Country and therefore will also be functioning under the Istanbul Declaration and Programme of Action for Least Developing Countries (LDCs).

Jamaica has developed a coordinating mechanism involving a National 2030 Agenda Oversight Committee and a 2030 Agenda SDGs Core Group to streamline international agreements in the national development process. Included in Jamaica's SDGs Core Group's mandate is the integration of principles outlined in the other development frameworks that are aligned with the SDGs5 (Government of Jamaica, 2018). Saint Lucia's has also made policy linkages supporting the SAMOA Pathway through its Vulnerability Resilience Country Profile (VRCP). The St Lucia-VRCP provides guidance for monitoring progress in each of the thematic area of the SAMOA Pathway and uses the resulting analyses to formulate policy and implement activities at the national level to strengthen resilience Government of Saint Lucia, 2018).

developmental approaches supporting the priorities for sustainable development are more often alignment with the 2030 Agenda and only to a lesser extent with the SAMOA Pathway. In seeking to address this requirement to enhance regional coordination in support of the implementation of the SAMOA Pathway and the 2030 Agenda in Caribbean SIDS, the Caribbean Development and Cooperation Committee (CDCC) in April of 2018, approved the CDCC Resolution 100 (XXVII) 2018, 'Ensuring Synergy in the Implementation of the SDGs of the 2030 Agenda for Sustainable Development and the SIDS Accelerated Modalities for Action in the Caribbean Subregion' (ECLAC, 2018a).

Aligned with this Resolution and in pursuit of a timely, sustained, integrated and coherent approach in the implementation of the SAMOA Pathway, some key recommendations are suggested, based on the findings of the document:

- To have programmatic institutionalized mechanisms for the implementation of the SAMOA Pathway and in synergies with other sustainable development agendas.
- To have dedicated assignment of resources on the implementation, monitoring and reporting of the SIDS sustainable development agendas.
- Countries, organizations and other stakeholders should benefit from the use of information technology platforms for data management including monitoring and reporting. This can also support reducing the reporting burdens across agendas.
- To have specific and targeted advocacy, education, outreach and awareness-raising with respect to Caribbean SIDS specific sustainable development challenges, priorities, actions, results and best practices.

The following sections of this document highlights regional projects and summarizes fidingings of the Caribbean Region-SAMOA Pathway Midterm Review Report representing the period 2015-2018, which was presented at the SAMOA review regional preparatory meeting held in San Pedro, Belize in August 2018.

I. Caribbean SIDS midterm review of the SAMOA Pathway – Selected Regional initiatives

This Section seeks to provide desk study findings on the progress made in the implementation of the SAMOA Pathway in the Caribbean and in the period 2015-2018. In the absence of an agreed- SAMOA Pathway implementing, monitoring and reporting mechanism, the findings detailed are reported against components of the SAMOA Pathway and as far as possible makes linkages with the 2030 Sustainable Development Agenda and other global sustainable development processes.⁶

A. Sustainable inclusive and equitable economic growth: Caribbean economic, financial and trade challenges

Caribbean SIDS economic development has been restrained due to a variety of factors. Among these are lack of economies of scale in production; trade and external dependency; structural unemployment and falling labor productivity and limited access to financial resources. Debt is another important constraint. The main drivers of Caribbean debt have been the large primary and current account deficits, resulting from low growth and the high cost of development finance. Moreover, frequent climate change related disasters reduces both output and government revenue and demands high levels of expenditures on disaster preparedness and reconstruction. Many Caribbean governments have been making significant efforts both to contain expenditures and to raise revenues. However, countries have had to make fiscal adjustments while attending to the needs of their most vulnerable populations (ECLAC, 2018c).

1. Financial constraints

The majority of Caribbean SIDS have been classified as middle-income countries, which greatly limits their access to multilateral and other concessional funding. Recently, Saint Kitts and Nevis graduated from official development assistance (ODA) eligibility while Antigua and Barbuda had its graduation

It should be noted also that the SAMOA Pathway does not have a procedure for the assessment on the implementation of the SAMOA Pathway. The full version of the Caribbean SAMOA Pathway Mid-term Report can be found at website: https://sustainabledevelopment.un.org/content/documents/20949Caribbean_SAMOA_Pathway_Midterm_report_18_Oct.2018_final_draft1.pdf.

status revised as a result of the devastation visited upon Barbuda during the 2017 Hurricane Season. Decreasing ODA continues to hinder the progression of the Caribbean's sustainable development agenda. The Caribbean Development Bank (CDB) has noted a declining trend in ODA to the region over the last 20 years, falling from 0.72per cent of global ODA in 2000 to 0.52per cent in 2016. Further, the ability of Caribbean SIDS to access concessional development finance has been further stymied by "weak technical capacity for project identification, complex application processes, and implementation deficits" (CDB, 2018a).

To stimulate foreign investment and develop other revenue streams, several Caribbean SIDS continue to operate Citizenship by Investment programmes. Opportunities for the consolidation and management of these national programmes under the umbrella of the OECS were discussed in 2017 to enable better harmonization, candidate vetting, and programme quality improvements (OECS, 2017a). Public-Private Partnerships (PPPs) have increased in response to current economic trends as regional governments struggle to finance critical infrastructure such as ports, roads and power generation. Derisking and its implications for the Caribbean SIDS

De-risking has represented an acute financial shock to the region as several countries had been negatively impacted by the cessation of correspondent banking relationships and services. ECLAC has observed that active correspondent banking services have on average declined for the period 2012-2015 (ECLAC 2018d). This finding was also supported by the Caribbean Association of Banks (CAB) which found that at least 21 respondent banks in 18 Caribbean countries lost at least one correspondent banking relationship as at October 2016 (CAB, 2016). Moreover, ECLAC has found that the withdrawal of correspondent banking services has resulted in a multitude of direct and indirect impacts including: (i) increased costs of banking services; (ii) impacts on human welfare and economic development given the region's high dependence on financial flows; (iii) adverse effects on initiatives aimed at alleviation of poverty and inequality to name a few (ECLAC, 2018d).

The decrease in correspondent banking relationships was addressed during the 9th General Meeting between CARICOM, its associated institutions and the UN System in July 2017. At this regional meeting, representatives communicated on issues arising from disrupted international payments and capital inflows, as well as the high cost of compliance with the Organisation for Economic Cooperation and Development-driven international tax agenda. These concerns were also voiced during the 29th Intersessional Meeting of the Conference of Heads of Government of CARICOM where the "unilateral blacklisting of countries as non-cooperative tax jurisdictions" by the European Union (EU) was cited as a major external challenge. Acknowledging the gravity of this issue, the body has mandated the formulation of appropriate solutions and the refinement of a regional strategy prepared by the CARICOM Technical Working Group (CARICOM, 2018c).

Further recommendations to counteract this development were proffered at the Twenty-Seventh Session of the CDCC and included: (i) strengthening of Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) guidelines; (ii) tax and transparency; (iii) harmonization of legislation and regulations to improve compliance with standards; (iv) consolidation of domestic banks and development of a unified compliance framework; (v) national media campaigns to address the misperceptions regarding regulatory frameworks and tax transparency in countries potentially vulnerable to de-risking; and (vi) sustained advocacy efforts with international development partners and the wider international community at senior policy and executive levels to facilitate a resolution of this issue in the interest of the Caribbean (ECLAC, 2018a).

Against this backdrop also, the Caribbean Association of Banks (CAB) has sought to explore solutions through the establishment of a Chief Executive Officer's Forum on De-risking; bringing together stakeholders to explore alternative payment modalities, implement a systematic regional approach to advocacy, and reduce the threat to the Caribbean's financial services sector (CAB, 2016).

2. Trade challenges and initiatives

The CARICOM Single Market and Economy (CSME) was discussed at Thirty-Ninth Regular Meeting of the Conference of Heads of Government of CARICOM held in July 2018. At this meeting, regional leaders reiterated the need to accelerate its implementation, adopting the Protocol on Contingent Rights (relative to free movement of skilled persons and dependents) and calling for the finalization of other supportive measures (such as an Investment Policy and Investment Code, an Incentives Regime, an Integrated Capital Market and model Securities Legislation) by July 2019 (CARICOM, 2018d).

A CARICOM Strategy for Regional Implementation of the Trade Facilitation Agreement (TFA) of the World Trade Organisation (WTO) was also developed during 2016 and 2017. This Strategy aims to leverage the TFA support and deepen regional integration through the adoption of coordinated and harmonized trade facilitation reforms to implementing eighteen measures of the TFA and across member States. Implementation of these measures will require external technical assistance and capacity building support. In this regard, priority has being given to the implementation of five broad areas, viz: The transparency provisions (specifically, the TFA provisions on publication; information available through internet; enquiry points; and publication aspects of TFA provisions on establishment and publication of average release times, general disciplines on fees and charges for customs processing imposed on or in connection with importation and exportation, and freedom of transit), risk management, post-clearance audit, Single Window and test procedures. Member states are now in the process of developing a Roadmap for implementation of the TFA. The region is also developing a Regional Single Administrative Document for CARICOM that also encompasses the Dominican Republic and in line with the objectives of regional integration of the Caribbean Forum of the African, Caribbean and Pacific Group of States (CARIFORUM) (CARICOM, 2018a).

With a view to encouraging successful engagement in trade and economic agreements, in 2018, CARICOM launched a market access facilitation system – Caribbean Exporter Gateway. This customized software application allows exporters in CARICOM, access to a readily available source of information on the market access conditions for entry into the markets of other CSME members, as well as to some countries with which CARICOM has concluded bilateral trade agreements, namely, the Dominican Republic, Costa Rica and Cuba. Information on tariffs, rules of origin, non-tariff measures including sanitary and phyto-sanitary requirements, import licenses and other duties and charges, is available on the platform. Caribbean Exporter Gateway was developed with funding from the Government of Spain (CARICOM, 2018a).

The OECS member states continue to coordinate their positions for negotiations in the WTO. OECS countries who are members of the WTO have individually ratified the TFA and have been taking steps to implement its provisions to reduce the time and costs of doing business. Members have also adopted a regional strategy and action plan to implement the TFA. This Plan has identified priority areas and technical assistance and capacity building will be sought to implement provisions of the Agreement such as risk management. Member states continue to support the Small Economies Work Programme in WTO. Work continued on the establishment of the Eastern Caribbean Economic Union particularly with respect to establishing the administrative and legal framework for the regimes for free circulation of goods and trade in services (OECS, 2018a). Additionally, the CARIFORUM-EU Economic Partnership Agreement (EPA) provides predictable EU market access for Caribbean SIDS while supporting the deepening of economic ties within the region. The EU and Caribbean Export Development Agency (CEDA) are continuing relations under Phase Two of the Caribbean Trade and Private Sector Development Programme (CEDA 2017).

3. Labour market adjustments

Strengthening labor market information continues to be a regional priority. To date, International Labour Organisation (ILO) has supported CARICOM in establishing a CARICOM Labour Market Information System in order to facilitate labor market analysis, as well as monitoring and reporting on policies and information sharing. The ILO worked to reinforce the regional capacity of workers' and employers' bodies to participate in regional development and integration processes (improved national and regional social dialogue capacity) so that CARIFORUM member states could fulfil the social chapter of the EU-CARIFORUM EPA. This work was undertaken through a three-year EU-funded project called (2015-2018), "Support to facilitate participation of CARIFORUM Civil Society in the Regional Development and Integration Process: Challenges to CARIFORUM Labour, Private Sector and Employers to fulfil their EPA obligations" (ILO, 2018).

Improved business facilitation, trade and regional competitiveness have been prioritized by many Caribbean SIDS. One such initiative was "The Made in the Caribbean Project" aimed at seeking to foster youth innovative and entrepreneurial thinking and skills using science and technology. In this regional activity over fifty camp counsellors and educators from primary and secondary schools were trained to lead Technopreneurship and Robotics camps (NIHERST 2018).

4. New economic development models

Caribbean countries continues to adopt more environmentally sustainable, inclusive and resilient economic development models. Several initiatives across the region have continued to explore concepts, principles and pathways and on the Green, Blue and Orange economies.

With respect to the blue economy, the World Bank estimates that the Caribbean's ocean economy generated 18% of the region's total 2012 Gross Domestic Product GDP.⁷ New and emerging blue economy growth industries for example that of aquaculture, carbon sequestration, marine biotechnology, deep seabed mining, and ocean renewable energy can profoundly transform the traditional ocean-based productive sectors found in the Caribbean while at the same time enhance food security, promoting environmental conservation and mainstreaming integrated coastal/ocean management.⁸ If effectively protected, managed and utilized, the Caribbean's coastal and marine resources can potentially provide a sizeable resource base through which the region can realize sustained and sustainable economic growth. As outlined in 2018 publication, "Financing the Blue Economy: A Caribbean Development Opportunity", the CDB has highlighted critical inputs for growth of the region's Blue Economy and including technical capacity building and education targeted at coastal communities; small seed financing and training; market access; improved port infrastructure and operations; minimum docking and environmental fees; and finance for marine energy exploration and investment (CDB, 2018b).

On the Orange Economy, there is a view among Caribbean governments and regional agencies that the creative industries (or Orange Economy) ⁹ can be an engine for economic growth and a mechanism for diversifying economies and improving global competitiveness (IDB, 2017a). The Association of Caribbean States (ACS) has also recognized this trend and advocates the use of Carnivals as a strategy for tourism growth. Further the art and craft industries possess the capacity to generate economic and social benefits by contributing to the diversification of the tourism experience and

Financing the Blue Economy (2018), available at: https://issuu.com/caribank/docs/financing_the_blue_economy-_a_carib.

The Caribbean SIDS traditional ocean-based economic are for example: fishing, coastal tourism, offshore oil and gas exploration, and marine transportation.

⁹ The Orange Economy includes all the sectors whose goods and services are based on intellectual property: advertising, architecture, crafts, design, fashion, film, games and toys, music, publishing, research and development, software, TV and radio, and videogames, and visual and performing arts (IDB, 2013a).

promoting local artisans. Community-based tourism is a participatory undertaking, embedded in the community development approach and involving ordinary citizens in the planning and implementation (Government of Jamaica, 2018). These trends take advantage of the unique characteristics of local communities, habitats, protect culture and heritage and increase the amount of tourist dollars that stay within the communities (ECLAC, 2014b).

5. Sustainable tourism

Tourism continues to be the major foreign currency earner in the Caribbean region. The IDB estimates that the Caribbean region receives 21.9 million tourist arrivals per annum (excluding cruise passengers) or approximately a 2 per cent share of world tourist arrivals (IDB, 2015). Despite competition from external markets and setbacks from natural disasters, the Caribbean Tourism Organization (CTO) estimates that tourist arrivals will continue to increase (CTO, 2017). It must be noted however, that the effects of the 2017 Hurricane Season have already dampened economic projections as the duration of post-disaster recovery of the tourism sector has been estimated between two and five years in some territories (ECLAC, 2018c).

Regional development partners have been advancing the sustainable development of this sector. Diversification of the region's offerings has also been observed, with authorities promoting more specialized forms of tourism. Several Caribbean SIDS are now marketing themselves as eco-tourism destinations, prioritizing environmental sustainability and low carbon footprint development above traditional mass tourism.

Marine-based tourism products have significant potential for growth; particularly cruise-based tourism, marine and coastal activities (sport and deep-sea fishing, scuba diving, and snorkeling), as well as yachting and marina services. Yachting has developed into one of the Caribbean's premier tourism sub-sectors. Increases in the number of regattas and sailing weeks have boosted international arrivals, driving an increase in demand for berthing facilities. Associated service industries (for example catering and yacht provisioning; wet storage and anchorage; charter services; boat servicing, repairs, and chandlery; accommodation and recreational amenities; and hurricane shelter) have also developed around this sector and will no doubt benefit from future growth of the blue economy (ECLAC, 2014a). The Caribbean region cruise industry has a 50per cent share of the global vessel calls and passengers, recording 29.3 million passengers in 2017 (increasing by 75per cent since 2006). However, inter-island competition and the inability of ports to handle larger vessels limits this growth in earning potential. (CDB 2018a).

B. Climate change and disaster risk management in the Caribbean: main initiatives

SIDS remain at the frontline of the fight against climate change. While contributing less than 1per cent of global greenhouse gas (GHG) emissions, the impacts of a changing climate will have a much more pronounced effect on their future development in comparison to their global counterparts. For example, by 2080, a 1 metre rise in sea level is projected to impact the GDP of Caribbean SIDS by approximately 8per cent. Inaction against climate change will have serious and lasting effects in the region. Estimated annual losses of US\$ 22 billion by 2050 and US\$ 46 billion by 2100 have been predicted by the Global Development Institute and will likely be driven by impacts to infrastructure and productive sectors such as tourism, fisheries, and agriculture (UN-OHRLLS, 2017).

Climate change and its impacts have brought increasingly significant development challenges to the Caribbean subregion over the past few decades. Caribbean SIDS have incorporated climate adaptation including resilience building into national planning policies and programmers. Regional and international stakeholders have been actively involved as partners, providing technical and financial

resources to advance the implementation of resilience building and climate change adaptation initiatives in the subregion.

Moreover, the recurrence of natural threats and concentrated population on the coastal areas makes the Caribbean one of the regions with the highest incidence of disasters in the world. Between 1990 and 2017, 408 disasters took place in the Caribbean, 90.4 per cent of which were caused by hydroclimatic phenomena such as storms, tropical cyclones and floods. A particular characteristic of the Caribbean is that disasters in the region can acquire a national dimension and have a relative magnitude that surpass those of any other part of the world. For example, in the hurricane season of 2017, for the British Virgin Islands and for Sint Maarten, the total cost of the Hurricanes Irma and Maria, was greater than 100 per cent of their GDPs (ECLAC, 2018j). This section will present some of the initiatives worth highlighting in terms of climate change adaptation and disaster and risk management in the region.

1. Climate change adaptation

All Caribbean SIDS are parties to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement¹⁰ and have set ambitious targets for emissions reduction and mitigation action in their Nationally Determined Contributions (NDCs). As of 20 June 2018, three Caribbean SIDS have completed deposit of instruments of ratification for the Kigali Amendment to the Montreal Protocol on the phasing down of Hydrofluorocarbons (HFCs) ¹¹ (CARICOM, 2018b).

Regionally, much of the developmental support including funding assigned to address climate change and its impact have been directed at the development of national and sectoral policies, plans and infrastructure solutions (CANARI, 2018). The more common constraints encountered when implementing climate change priorities are: (i) limited or unreliable climate change information collected from sector agencies for decision making; (ii) inadequate technology or institutional capacity to collect, interpret or analyze information from sector agencies; (iii) high dependence on international donors as the main source of climate finance; (iv) prolonged and tedious processes of procuring climate related funds and for procuring consultancy services; and (v) a lack of a centralized system or data base for climate change related data (Government of the Cooperative Republic of Guyana, 2018; Government of Belize, 2018).

The Caribbean Heads of Government issued a Declaration on Climate Change during the Thirty-Ninth Regular Meeting of the Conference of Heads of Government of CARICOM (July 2018) and in preparation for the Twenty-Fourth Meeting of the Conference of Parties (December 2018). This Declaration reaffirmed the special circumstances and vulnerabilities faced by SIDS and called for "a global effort to close the mitigation ambition gap and place the world on pathways for low emissions climate resilient development". Further, leaders committed to full participation in the Talanoa Dialogue process and urged the finalization of the Paris Agreement Work Programme. Still faced with massive reconstruction after the 2017 Hurricane Season, the Declaration on Climate Change emphasized the importance of loss and damage assessments and called for support to initiatives under the Warsaw International Mechanism for Loss and Damage as well as support to enable countries to submit loss and damage proposals to the Green Climate Fund (CARICOM, 2018a).

The OECS Commission with support from a number of development partners (e.g. the Nature Conservancy/Government of Germany, Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF), and New Zealand), has implemented community resilience initiatives.

United Nations (2018), UN Treaty Section, Available at: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsgno=XXVII-7d&chapte =27&clang=en.

United Nations (2018): The implementation of this agreement – known as the Kigali Amendment – is expected to avoid up to 0.5°C of global warming by the end of the century, while continuing to protect the ozone layer, Availabe at: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-2-f&chapter=27&clang=_en.

These include for example: the development and strengthening of microenterprises, training of community-based organizations in conducting vulnerability assessments and risk management techniques for reducing impacts of natural hazards and climate change in target communities (OECS, 2018a).

The Global Climate Change Alliance Initiative (GCCA+)¹² aims to support dialogue with SIDS on the issues of climate change, natural resource management and participatory decision making. Various projects have been executed in tandem with subregional organizations (such as CANARI) in addressing gaps, conducting vulnerability assessments and engendering community ownership of mitigation measures. The OECS and the GCCA+ has launched the iLAND Resilience Project; a partnership which seeks to combat climate change through sustainable land management. Nine Eastern Caribbean countries³³ are currently targeted under this €10.6 million initiative, iLAND's priority interventions were informed by a gap analysis is that considered OECS Member States' particular needs and desired outcome and including: upgraded regulatory frameworks, enhanced human and technical Capacity, heightened public awareness, improved physical adaptation measures. Alignment with several priority areas of the SAMOA Pathway and the SDGs is evident, particularly when measured against iLAND's thematic areas: drought mitigation and food security, water security, flood mitigation/management, watershed/forest rehabilitation, slope stabilization, integrated watershed and coastal management, and ecosystem restoration/rehabilitation (OECS, 2018b).

At the request of CARICOM Heads of State, the CCCCC has developed a Regional Framework for Achieving Development Resilient to Climate Change (2009-2015) and its accompanying Implementation Plan. The Framework been updated to cover the period 2018-2028, following intensive consultation with CARICOM member countries. The updated Framework draws from global and regional agreements, frameworks, policies and plans as well as concerns directly voiced by CARICOM members and detailed ten strategic elements and goals to improve climate resiliency. This regional Framework provides an assessment of the global and regional context of climate change and details potential impacts of climate change on the region. It provides the platform for Member states to set and pursue national goals and actions for the realization of resilience building. The Framework will continue to evolve as progress is realized, as new issues develop, and as best practices are developed (CCCCC, 2018a).

In May 2018, CDB finalized a grant that would map 10,000 square kilometers of the Caribbean coastline using Light Detection and Ranging (LiDAR) technology. The project is implemented by the CCCCC and supporting climate resilience in the subregion. Building on the CCCCC's 2017 acquisition of LiDAR equipment with funding from the United States Agency for International Development (USAID) Climate Change Adaption Programme, this grant serviced the development of an Intellectual Property Policy for the CCCCC and trained end-users from CDB's Member countries to use LiDAR data (CCCCC, 2018b).

Debt-for-nature/climate adaptation swaps are also increasingly being leveraged by countries for resilience financing. Countries in the region have been involved in debt swap negotiations with varying levels of success (Climate Analytics, 2018). To date, Jamaica has completed two debts for nature swaps with the Government of the United States (Government of Jamaica, 2018).

Another important proposal has been put forward by ECLAC to reduce public debt in Caribbean SIDS and to facilitate the implementation of the SDGs. The ECLAC Debt for Climate Adaptation Swap Initiative is based on the creation of a Caribbean Resilience Fund which is expected to provide financing

¹² The Global Climate Change Alliance Plus (GCCA+) is a European Union flagship initiative which is helping the world's most vulnerable countries to address climate change (2018), Available at: http://www.gcca.eu/about-gcca.

²³ OECS Member countries are: Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines as well as the British Overseas Countries and Territories of Anguilla, the British Virgin Islands and Montserrat.

for investment in climate resilience, green growth and structural transformation in the economies of the region. This proposal was endorsed at the Twenty-Sixth Meeting of the CDCC in April 2016 by virtue of Resolution 93 (XXVI) - 'Advancing a debt relief initiative for the Caribbean'. At the core of this proposed strategy is building a strong case to highlight the debt challenges faced by small vulnerable Caribbean economies (ECLAC, 2018a).

2. Disasters and risk management

Several national and regional entities are utilizing the guidelines of the Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030 to facilitate the integration of the DRM agenda into regional disaster management frameworks (ECLAC, 2017b). The implementation of the Sendai Framework in the Americas and the Caribbean was discussed during the Sixth Regional Platform for DRR (June 2018). The outcome, the Cartagena Declaration, calls on countries to develop and strengthen DRR plans and strategies at the national and local levels in line with the Regional Action Plan for implementation of the framework. This is anticipated to be accomplished through greater public-private cooperation and coordination, as well as through strengthening the development and usage of methodologies and science-based tools to implement disaster prevention and preparation measures. To further support these strategies, delegates called for greater mutual cooperation and joint research to elucidate the root causes of losses in the region. The Declaration also advocates for increased utilization of online platforms to better identify and communicate disaster losses and more effectively monitor the implementation of the Sendai Framework. At this same meeting, it was announced that Jamaica would host the Seventh Session of the Regional Platform in 2020 making it the first Caribbean island to host the Regional Platform for DRR (United Nations Office for Disaster Risk Reduction - UNISDR, 2018).

Several of the Caribbean countries have advanced in DRM strategies, (ECLAC 2017b, ECLAC 2018c and ECLAC 2018j). At the regional level that are many intergovernmental, UN agencies and other interest groups supporting of DMR. This section enlists select regional approaches and initiatives in the disaster risk management.

- The Caribbean Disaster Emergency Management Agency (CDEMA) has a Regional Comprehensive Disaster Management (CDM) Strategy 2014-2024 which puts forward four priority areas for safer, more resilient and sustainable Member States: strengthened institutional arrangements for CDM; increased and sustained knowledge management and learning for CDM; improved integration of CDM at sectoral levels; and strengthened and sustained community resilience (CDEMA, 2014). CARICOM has recognized this strategy as the Caribbean's platform for achieving risk resilience (CARICOM, 2018a). At the Sixth Regional Platform for DRR, CDEMA highlighted the five critical areas that CDEMA will focus attention in driving the Regional Resilience Agenda in an effort to achieve the future desired of "Safer more Resilient and Sustainable Caribbean Communities". These five areas include: Enhancing Social Protection for the most Vulnerable, Safeguarding Infrastructure, Economic Diversification, Environmental/Ecosystems Protection and Enhanced Operational Readiness (UNISDR, 2018).
- Association of Caribbean States (ACS): The ACS, in highlighting the priorities of the Caribbean in advancing the SAMOA continues to develop and manage projects aimed at strengthening existing DRR systems and introducing new ones where necessary. In this regard, the ACS has elaborated on the following achievements: Strengthening Hydrometeorological Operations and Services in the Caribbean SIDS: This project is implemented by the Finnish Meteorological Institute and has provided new skills and tools for National Meteorological and Hydrological Services and Disaster Management Agencies for early warning in the case of hydro-meteorological phenomena. (ACS, 2018).

- The Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF-SPC). The CCRIF-SPC offers several segregated portfolios and allowing for total segregation of risk. As at December 2017, the CCRIF pay-outs amounted to approximately US\$ 130.5 million with US\$ 55 million being disbursed to nine Caribbean SIDS as a direct result of Hurricanes Irma and Maria (CCRIF-SPC 2018)
- ECLAC has consistently offered training in DALA methodologies and has undertaken numerous economic assessments of the impact of disasters in the region. Under the terms of a Memorandum of Understanding with CCRIF-SPC, ECLAC conducted training in disaster assessment methodologies which benefitted specialists involved in disaster management from Barbados, Guyana, Jamaica and Saint Kitts and Nevis. ECLAC also hosted an expert group meeting on strengthening cooperation between telecommunications operators and national disaster offices in Caribbean countries during 2016 (ECLAC, 2017a). Additionally, ECLAC conducted disaster assessments in the aftermath of two hurricanes in 2016: Hurricane Earl, which impacted Belize in August of that year, as well as Hurricane Matthew in The Bahamas. In 2017, ECLAC undertook five DALA impact assessments in the aftermath of Hurricanes Irma and Maria. ECLAC recently completed training on updated DALA methodologies with the Eastern Caribbean Central Bank in April 2018. This regional training session, sought to train stakeholders in the practical applications of the updated DALA methodology and the incorporation of resilience and disaster preparedness elements into public policies (ECLAC, 2018i). Training in the DALA methodology was recently carried out in the island of Tobago during May 2018 (ECLAC, 2018j).

C. Natural resources management and environment protection

Environment and natural resources management are cross cutting in all realms of sustainable development. The major economies of the Caribbean SIDS are dependent on the sustainable use of natural and environmental resources. Sustainable use including conservation, protection and restoration of these resources are pivotal for development in the Caribbean SIDS. At the same time, environmental degradation in the Caribbean continues to have negative impacts on ecosystem health, sustainable economic growth, and human well-being. Caribbean countries are Parties to and continue to be strong supporters of many Multilateral Environmental Agreements. However, countries have found it difficult to sustain the agreed obligations under these agreements due of such factors as: limited financing including lack of capacity to address emerging and increasingly complex scientific and technical issues. Given the inter-dependence of environmental and sustainable development governance processes countries have identified the need for coupled strategic and political approaches (CARICOM, 2018b). This will also require investments in data generation, statistical and information infrastructures and other required coordination mechanisms. Some successful initiatives in natural resource management and environmental protection focusing on different ecosystems will be displayed the following sections.

Ocean governance

The SAMOA Pathway encourages SIDS to conserve at least 10 per cent of coastal and marine areas by 2020. Marine Protected Areas are a core element of ocean and coastal zone management and underpin the continued health and viability of the Caribbean's vulnerable marine ecosystems. Aligned with the development of blue economies, the implementation of marine reserves or no-take areas has gained prominence in the Caribbean as the region strives towards sustainable development.

The OECS has established an Ocean Governance Programme, Eastern Caribbean Regional Ocean Policy and three-year Strategic Action Plan. Implementation of this Ocean Policy has been furthered

through the World Bank's four-year Caribbean Regional Oceanscape Project which has the objective of strengthening capacity for ocean governance and coastal marine geospatial planning in participating countries. This project also assists in the transition to a Blue Economy (OECS, 2018a). Regional and international ocean governance stakeholders discussed the sustainable management of marine and coastal assets at the Eighth Meeting of the OECS Ocean Governance Team under the theme: "Unlocking Ocean Wealth in Support of Sustainable Growth and Resilience". Synergies between the World Bank's Caribbean Regional Oceanscape Project and the Commonwealth Marine Economies Programme were also identified; enabling the efficient harnessing of economic resources and the furtherance of the region's blue development agenda (OECS, 2018c).

The CCCCC continues to expand the Caribbean Coral Reef Early Warning System Network with the assistance of the U.S. National Oceanic and Atmospheric Administration and implemented through USAID's Climate Change Adaptation Programme. With existing installations in Barbados, Belize, Saint Kitts and Nevis and Trinidad and Tobago, the network has already enhanced the availability and accessibility of near real-time data which is vital to regional monitoring and forecasting efforts. Maintaining the functionality of key equipment is seen as a potential challenge; in seeking to address this, some regional governments have embraced the principle of national ownership to ensure the continued success of this project (CCCCC, 2018b).

IAEA regional projects are contributing to the development of a Caribbean Observing Network for Ocean Acidification to serve as reference centers for the monitoring of ocean acidification and its impact on harmful algal blooms. These actions directly contribute to the achievement of SAMOA Pathway which calls for the enhancement of regional cooperation to address the causes of this phenomenon (IAEA, 2018).

Moreover, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a Strategic Action Programme (SAP) for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ SAP) in 2013. The "Large Marine Ecosystem" ("LME") concept provides a meaningful geospatial concept for forging and promoting collaboration for ecosystem-based management among organizations and countries (including many of the World's SIDS) that share large areas of marine space. Through the Global Environment Facility (GEF)'s support for 2 LME-based projects, the UNDP/GEF "CLME" (2009-2014) and "CLME+" (2015-2020) Projects, the creation of partnerships in the Wider Caribbean region - involving the region's SIDS and the Inter-Governmental Organizations to which Caribbean SIDS are constituents - has been actively promoted and facilitated. A Strategic Action Programme, defining priority Strategies and Actions to achieve the long-term vision of "a healthy marine environment that provides benefits and livelihoods for the peoples of the region", referred to as the "CLME+ SAP", has been politically endorsed by the majority of Caribbean SIDS, and has been instrumental in leveraging increasing amounts of donor support for its implementation. This is in keeping with the elements of the Samoa Pathway that relate to the marine environment, and its contribution to the sustainable development and livelihoods of inhabitants of Caribbean SIDS (CLME+ SAP, 2018 n.d).

Fisheries

Small-scale fisheries account for more than 95per cent of fisheries in CARICOM and are vital for food security and employment, particularly in coastal communities (Caribbean Regional Fisheries Mechanism (CRFM), 2018). The Caribbean fisheries sector contributes between 0.32per cent and 2.3per cent of value added to GDP of CARICOM countries (Figueroa, 2017). It has been postulated that 6oper cent of commercially exploited fish species or stocks within the region have been overfished or over-to-fully fished (CDB, 2018a).

In May 2018, the Fisheries Ministerial Council of the Caribbean Regional Fisheries Mechanism (CRFM) endorsed a protocol for securing small-scale fisheries and agreed on the need for immediate implementation. This protocol also called on regional and international development partners and donors to support the protocol on small-scale fisheries and to assist Member states with implementing it as well as the Caribbean Community Common Fisheries Policy (CCCFP), to improve fisheries and aquaculture governance. The protocol will seek to address principles and standards for securing and strengthening small-scale fisheries. At this same meeting, delegates posited the following improvement strategies for this productive sector: collection and sharing of fisheries data; establishment of early warning systems; risk insurance for fisheries; gender mainstreaming; and development of critical fishery management plans (CARICOM, 2018a).

CCCRIF-SPC has collaborated with the United States Department of State, the World Bank, FAO, and CRFM towards the development of a Caribbean Oceans and Aquaculture Sustainability Facility, a parametric insurance instrument that may boost the attractiveness of investing in the Blue Economy. It is hoped that these risk insurance policies can support measures that contribute to sustainable and climate resilient fisheries management and DRR. Three feasibility type studies have already been undertaken in Jamaica and Saint Lucia. It is hoped that these policies will be publicly available by 2018 (CARICOM, 2018e).

The Western Central Atlantic Region is reported as amongst the top five most overexploited fisheries areas worldwide. Based on the FAO reports, fisheries production decreased from 2.5 million tons annually in the 1980s to 1.3 million tons in recent years. It is estimated that Illegal, Unreported and Unregulated (IUU) fisheries in the Western Central Atlantic accounts for 20 per cent to 30 per cent of total reported harvests, representing a value of US\$ 450 million to US\$ 750 million annually with dire implications for millions of peoples' livelihoods, especially in the Caribbean Islands (FAO, 2018a).

Finally, the Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing, which entered into force in June 2016, seeks to prevent, deter and eliminate IUU fishing through the adoption and implementation of effective Port State Measures as a means of ensuring the long-term conservation and sustainable use of living marine resources. Seven Caribbean SIDS are Parties to this agreement as of June 2018 (FAO, 2018b).

3. Biodiversity conservation

The Caribbean islands are one of the world's greatest centers of biodiversity. At the same time, they are under extreme pressure from many threats, including invasive species, climate change impacts, and habitat destruction and fragmentation due to unsustainable human development, agricultural encroachment and other natural resources overexploitation.

CARICOM's Natural Resources Policy Framework has as its purpose to address the protection and sustainable use of the Community's Natural Resources as laid out in the Revised Treaty of Chaguaramas and called for by the Twenty-Eighth Special Meeting of Council for Trade and Economic Development (COTED). The advancement of this Policy Framework was supported with funding from Canada's Department of Foreign Affairs, Trade and Development (DFATD), the Government of Japan and the 10th European Development Fund. The CARICOM Secretariat is also in the process of preparing a CARICOM Biodiversity Strategy. The strategy is proposed to harmonize the region's approach to achieving the Aichi Targets under the Convention of Biological Diversity. It is expected that implementation of this Strategy will involve the collaboration of the CARICOM Secretariat, the OECS Commission, UNEP and the CBD Secretariat (CARICOM, 2018g).

The Caribbean Biodiversity Fund, a regional endowment established to support governments of the Caribbean Challenge Initiative, has contributed substantially to the conservation, protection and maintenance of biodiversity through its Conservation Finance Programme and Ecosystem-based Adaptation Facility. With support from the Government of Germany, the Adaptation Facility was established as a US\$ 26.5 million fund to support projects in targeted countries including Antigua and Barbuda, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines (Caribbean Biodiversity Fund, 2018).

Another regional project is that of the Caribbean Biological Corridor initiative which began in 2007 with a political declaration from the Ministers of the Environment of Cuba, Haiti and the Dominican Republic. Funded by the EU and implemented by UNEP, this initiative aims to make an important contribution to the long-term conservation of biodiversity based on ecosystems connectivity across countries and beyond political boundaries. A second phase (2017-2020) is currently under discussion between the three countries involved, the EU and UNEP (UNEP, 2016).

The Critical Ecosystem Partnership Fund (CEPF) is a global programme that provides grants to civil society to protect critical ecosystems. CEPF's first investment in the Caribbean Islands Biodiversity Hotspot between October 2010 and July 2016 responded to these threats and produced a broad range of conservation results in eight countries and at the regional level focused on terrestrial biodiversity. Specific priorities for funding and targeted results were identified in the CEPF Caribbean Islands Ecosystem Profile and the final evaluation recognized the significant results that had been achieved. The CEPF implemented a US\$ 6.9 million investment in eight Caribbean SIDS and at the regional level through 77 grants to 68 CSOs, with 78per cent of the funds going to local and regional Caribbean CSOs. The CEPF is currently finalizing the design and programming of a second phase of investment. Under this support, Civil Society Organizations were able to achieve significant results for conservation and livelihoods. Demonstrable improvements in management were achieved in 25 Key Biodiversity Areas covering a total of 593,967 hectares, as guided by management and operational plans. Eight new protected areas were created covering 111,496 hectares in three Caribbean countries, including terrestrial and marine national parks, municipal reserves and a private protected area (CANARI, 2018).

Caribbean SIDS, with their diverse but delicate ecosystems, are particularly at risk from invasive species which can do great damage to native biodiversity. In the Caribbean, invasive alien species are a major threat to the vulnerable marine, freshwater and terrestrial biodiversity of the many islands, and to the people depending on this biodiversity for their livelihoods and well-being. Due to the nature of many of the invasive species and their ability to spread and colonize new areas, any attempt to tackle this threat will require a regional effort. Caribbean SIDS have recognized this need for a regional strategy, in line with the Convention on Biological Diversity's declaration that efforts must be made to prevent, control or eradicate invasive species that threaten ecosystems. Currently in the Caribbean, three distinct Invasive Alien Species Working Groups have been established to address mitigation of Invasive Alien Species: MTIASIC (Mitigating the Threat of Invasive Alien Species in the. Insular Caribbean), CISWIG (Caribbean Invasive Species Working Group) and CPHD (Caribbean Plant Health Directors). These groups encompassing Caribbean countries and in partnership with international and national civil society bodies, operational and biosecurity plans have worked for the eradication of invasive alien species from 19 offshore islands. Supporting local leadership helps ensure long-term sustainability of efforts, cost-effectiveness, and local community buy-in. The Critical Ecosystem Partnership Fund (CEPF) model¹⁴ provided useful lessons for other grant programmes to Caribbean SIDS, and CEPF that will build on the success of this initial investment by launching a second phase of investment in the Caribbean Islands in 2018 (CABI, 2018). The OECS developed in 2015 an Invasive Alien Species Action Plan for the OECS Regio outlining strategic and programmatic interventions required over the short, medium and long term to address the issue (OECS, 2018a).

¹⁴ CEPF is a joint initiative of l'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, and the World Bank (2018), available at: https://www.cepf.net/grants/grantee-projects/landscape-management-model-biodiversity-conservation-comoros.

4. Forests desertification and land degradation

Forest conservation and addressing threats to forest destruction, degradation and fragmentation continues to be a significant threat in Caribbean SIDS. Several Caribbean SIDS have national forest policies and have actively been protecting environmentally sensitive areas and forest reserves. FAO has indicated that the Caribbean showed a net increase in forest area between 2010 and 2015 (FAO, 2017).

FAO and CANARI has launched a strategic alliance aimed at developing a regional strategy on forests and climate change. The alliance will identify priorities for scaling up of initiatives, develop proposals to mobilize resources, and enhance readiness of stakeholders, but more will be needed to mobilize partners, build capacity and attract support. It is however to be noted that there is the need to address climate change effects on forests in Caribbean SIDS and including the impact of disasters, to build climate resilience and on rural community livelihoods. Development of a regional framework, tools and allocation of resources are needed to guide development of appropriate policies, research and practical actions (CANARI, 2018).

D. Advancing sustainable energy options

It is estimated that the Caribbean relies on imported fossil fuel for more than goper cent of its energy needs (ECLAC, 2018c). The bulk of demand across both services and commodity-based economies in the subregion lies in the commercial and industrial sectors; driven by energy intensive industries such as tourism, mining and minerals (CDB, 2018b; ECLAC, 2018c). With an average of US\$ 0.33/kWh electricity tariffs in the Caribbean are among the highest in the world thereby further inhibiting the subregion's competitiveness and growth. As a consequence of the subregion's dependence on imported fossil fuels, energy costs are particularly volatile and represent a significant proportion of public and private sector expenditures. However, heterogeneities across the landscape must be noted. Trinidad and Tobago's electricity rates, for example, are some of the lowest in the Caribbean at approximately \$0.04 per kilowatt-hour (kWh) (NREL, 2015).

Ambitious renewal energy (RE) targets have been set by many Caribbean SIDS and many are well on their way to achieving these goals. With renewables accounting for 28 per cent of power generation, Dominica leads CARICOM countries with the largest proportion of energy from renewable sources (ECLAC, 2016b). Guyana aims to be 100 percent by 2025. Saint Vincent and the Grenadines aims for 60 per cent – 100 per cent by 2030 and the Cayman Islands has set a target of 70 per cent by 2037 (CDB, 2018b). Countries have identified the challenges towards achieving these renewal energy targets. The high initial investment cost of these systems is particularly problematic given the financial constraints that bind Caribbean SIDS. Further, a lack of regulatory framework and legislation for private investors, independent power producers and power purchase agreements have restrained project development. Land use competition, monopolies in transmission and distribution, low technical capacity, and grid stability issues are also cited as serious challenges (ECLAC, 2016b).

The Caribbean SIDS have progressed in promoting energy efficiency through the employment of different tools such as: legislative, standards, tax credits, tax reductions or exemptions, pilot projects, restrictions on incandescent bulbs, appliance labelling standards and communication and outreach. Selected regional projects demonstrating additional activities supporting sustainable energy management are listed as follows:

(a) CARICOM, under its Caribbean Sustainable Energy Roadmap and Strategy, has established targets for the contribution of RE to total electricity generation: 20per cent by 2017, 28per cent by 2022, and 47per cent by 2027 (ECLAC, 2018c). Energy conservation and efficiency are also an important priority area for CARICOM, as evidenced by the recent approval of the

International Energy Conservation Code (and associated Caribbean Application Document), the EE Code for CARICOM buildings as well as the Regional Energy Efficient Building Code. The Caribbean is beginning the process of phasing out incandescent bulbs. A phase-out initiative, spearheaded by the CARICOM Secretariat and the CARICOM Regional Organisation for Standards and Quality, is scheduled to begin as early as January 2019 (Saint Lucia Times, 2018).

- (b) OECS: With funding from the EU, the development of geothermal resources is being pursued in the Eastern Caribbean region. To date, Guadeloupe has the only operational geothermal energy facility in the Caribbean. Implemented through CDB, the Geothermal Risk Mitigation Programme for the Eastern Caribbean facilitates the development of up to 6oMW of geothermal energy capacity in up to five countries - Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines (CDB, 2017b). With support of the Government of New Zealand, a project valued at NZ\$ 5.1 million (approximately US\$ 3.5million) was implemented with the objectives to improve energy security for OECS member states through sustainable use of renewable energy resources for electricity generation (Government of New Zealand, 2018).
- (c) Caribbean Development bank (CDB): To support the diversification of the energy mix in the Eastern Caribbean, CDB launched the GeoSMART initiative to encourage the development of geothermal power generation. Financing for pre-investment activities (geological studies, environmental and social impact assessments, and drilling of early exploration wells), exploration activities, and power plant development can be accessed under this programme. Under the Sustainable Energy Facility for the Eastern Caribbean (a partnership between CDB and IDB), US\$ 71 million15 has been made available in loans and grants to facilitate the growth of RE in the Eastern Caribbean. In addition, the Sustainable Energy for the Eastern Caribbean Programme (a multi-partner loan and grant facility with a budget of approximately US\$26 million) is promoting the use of RE and EE among the CDB's BMCs in the Eastern Caribbean (CDB 2018b).
- (d) The International Civil Aviation Organization (ICAO) working alongside its member states upon their request, sought to explore the use of RE sources to power aircrafts while they are docked at the gates. It successfully launched the pilot project in April 2018 in Jamaica at the Norman Manley International Airport. The system developed to run the aircrafts' heating, cooling and other on-board systems will comprise of a gate electrification system and a solar powered generation facility. The ICAO noted that this would contribute to lowering aviation carbon emissions which will be practical and efficient for SIDS (ICAO, 2018).
- (e) Led by the International Renewable Energy Agency (IRENA), the SIDS Lighthouses Initiative was launched in 2014 and aims to support energy transitions in SIDS with the support of the World Bank, UNDP, the Clean Energy Solutions Centre, the Clinton Climate Initiative, Rocky Mountain Institute - Carbon War Room, Sustainable Energy for All (SE4ALL) and other development partners (IRENA 2017).
- (f) In supporting the progress for energy policies in the subregion, ECLAC conducted technical reviews and updates to the national energy policies of the Cayman Islands and Saint Vincent and the Grenadines during 2016 (ECLAC, 2017a). Further, ECLAC has collaborated with the French Environment and Energy Management Agency, the French Development Agency, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to carry out the Baseline

¹⁵ IDB (2018), Inter-Ameircan Development Bank: Approximately US\$ 42 million has been pledged by the IDB. Available at: http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=EZSHARE-522669563-1262.

Energy Efficiency Indicator (BIEE) Programme under the International Partnership of Energy Efficiency Cooperation (IPEEC) (IPEEC, 2018). The BIEE programme seeks to: (i) improve data reliability and evidence-based decision-making; (ii) promote comparability at the national and sectoral level; and (iii) monitor and assess EE policies and programmes (ECLAC, 2018h).

(g) The Caribbean Energy Statistics Capacity Enhancement Project, supported by Latin American Energy Organization (OLADE) and the World Bank has the objectives of improving capacity for planning and management of energy statistics in five Caribbean countries. Approved in 2017, the project will provide resources to organize energy sector data, focusing on capacity and management of energy statistics and information systems. OLADE will provide technical support, training and the provision of technological infrastructure, as part of effort to promote regional and subregional energy integration (Government of the Cooperative Republic of Guyana, 2018).

E. Water, sanitation and waste management

Climate change and associated sea level rise have already begun to impact the region's water resources. It is expected that Caribbean SIDS with larger dependence on groundwater sources will face significant challenges due to saltwater intrusion and the salinization of aquifers (UN-DESA, 2018). Moreover, wastewater collection and treatment of wastewater is one of the areas to be further developed in most Caribbean SIDS. Rapidly expanding urban populations, un-planned development, and inadequate or poorly designed and malfunctioning sewage treatment facilities have been cited as serious challenges to this sector (CReW, 2016). Some initiatives to tackle these challenges are presented below.

1. Water management

Primary water sources vary greatly in the Caribbean with groundwater accounting for approximately 52 per cent of supply, surface water 35.8per cent, desalination 11.6per cent, and rainwater harvesting less than 1 per cent. The tourism sector, which represents the region's primary economic driver, stresses regional water resources with studies indicating that hotels may utilize between 10per cent and 15per cent of all water supplied by municipal distribution systems. Sustainable water management in the Caribbean has largely suffered due to institutional deficiencies such as fragmented governance frameworks, insufficient data, poor coordination between agencies, technical capacity, and low levels of investment to replace aging infrastructure. Additionally, Caribbean SIDS face the following challenges: (i) damage and disruption of infrastructure due to water-related hazards; (ii) increasing demand, inefficient water use and leakage; (iii) increasing climate variability; (iv) vulnerability of agricultural production to seasonal rainfall and drought; (v) ineffective management of water resource quantity and quality; and (vi) escalating costs of flood-related damage and losses (CCCCC, 2018e). While the OECS has sought to develop a common water policy, CARICOM has yet to put forward a regional water sector development agenda (IDB, CDB & CWWA, 2018).

Caribbean Countries are investing in desalination technologies to meet the demands for potable water (CCCCC, 2018e). Rainwater harvesting is also increasingly being viewed as a crucial mechanism for ensuring the security of water supplies in the Caribbean. Approximately 500,000 persons across the region are fully or partially dependent on rainwater harvesting to address their water needs. Integration and mainstreaming of rainwater in regional water policy and planning is critical given the predicted effects of climate change and climate variability on freshwater resources (Dempewolf et al, 2015). While rainwater harvesting is actively encouraged or legislated in many countries, reinvigoration of this declining practice is being achieved across the region through a number of initiatives (Global Water Partnership-Caribbean, 2015). In 2014, FAO completed a feasibility studies in selected Caribbean

countries on rainwater harvesting for agriculture. Additionally, advocates have called for increased rainwater harvesting to "augment existing water supplies, particularly after disaster events, when access to municipal water supplies may be disrupted" (Dempewolf et al, 2015).

Significant progress has been made by Caribbean SIDS towards the development of a Strategic Action Plan for Governance and Building Climate Resilience in the Water Sector. Supported by the CDB, IDB, Caribbean Water Works Association (CWWA) and other development partners, the plan focusses on: (i) governance in the water sector; (ii) non-revenue water; (iii) regional coordination in the water sector; and (iv) capacity building and resource mobilization, including investment and financing. The Strategic Action Plan is carded for endorsement at the 14th High Level Forum of Caribbean Ministers Responsible for Water in October 2018. Additionally, CWWA is advocating the development of national action plans for governance and building climate resilience in the Caribbean (UN-DESA, 2018).

UNEP has assisted several Caribbean SIDS countries in water management projects. These include the GEF-funded project for Integrating Water, Land and Ecosystems Management in Caribbean SIDS (IWEco) as well as Integrating Watershed and Coastal Area Management Project (IWCAM)-Integrating Watershed and Coastal Area Management in SIDS. Selected achievements of IWCAM include more sustainable use of freshwater supplies; improved freshwater and coastal water quality; better land use; and improved hygiene and sanitation. Within IWEco, projects are underway across eight Caribbean countries with specific key targets covering water, wastewater management, forest conservation/land management and improvements in water quality. Expected outcomes include the implementation of climate-change resilient approaches in sustainable land management and Integrated Water Resource Management; strengthening of ecosystems monitoring; strengthening of the policy, legislative and institutional reforms; and enhancing knowledge exchange (UNEP, 2018a).

Sanitation and wastewater management

While there has been improved compliance with and monitoring of effluent standards, a significant proportion of wastewater remains untreated. For example, a 2005 UNEP study estimated that 85per cent of wastewater entering the Caribbean Sea remained untreated. More alarmingly, 51.5per cent of households lacked sewer connections and only 17per cent were connected to acceptable collection and treatment systems (UNEP CEP, 2016).

According to the Joint Monitoring Programme of UNICEF and World Health Organization (WHO), 83 per cent of the population in Latin America and the Caribbean had access to improved sanitation in 2015 – an increase from 67per cent in 1990 (UNICEF & WHO, 2017). While this is a considerable improvement, there are notable disparities in access between urban and rural populations in the Caribbean. Urban improved sanitation coverage in the Caribbean stood at 79per cent in 2015 (decreasing by 2per cent since 1990), while rural access increased from 5oper cent to 62per cent within the same period (UNICEF & WHO, 2017). The challenge of universal coverage in access to water systems adds to the need to increase the proportion of wastewater that is treated, improve the quality of services in terms of continuity and quality, and for the protection of water sources. This is particularly relevant in light of climate change scenarios that indicate reductions in rainfall (and therefore in water availability), and critical subjects for the Caribbean SIDS (Permanent Mission of the Dominican Republic to the United Nations, n.d.).

While several Caribbean countries have realized the potential opportunities that efficient wastewater management can provide for their local economies, the development of this sector requires significant infrastructure investment, incentives for private sector participation, and a coordinated and inter-sectoral approach to achieve this goal (UN-DESA, 2018). Emerging use of waste water in the agriculture, mining and energy sectors has increasingly been observed; for example, the Jamaica Public Service Company has begun utilizing treatment plant effluent for cooling and other purposes in the electricity generation process. Within the tourism sector, several countries have mandated that hotels have on-site wastewater treatment plants; for example, Antigua and Barbuda and Barbados. In these cases, wastewater is typically repurposed for use in golf course irrigation (CReW, 2016).

3. Management of solid waste including plastics

Waste management is an important SIDS priority, due to the finite nature of natural resources, increasing consumption demands and limited space for safe disposal. Solid waste management poses a serious challenge for the Caribbean SIDS.

Additionally, many Caribbean SIDS have introduced policies, education and awareness raising activities to encourage sustainable production and consumption. The UN Environment Programme and the Dutch Government are furthering this agenda by developing a regional approach to waste management (UNEP 2018b). Many Caribbean countries have proceeded to establish trade import controls on single use plastics and other non-biodegradable materials.

Caribbean SIDS are represented in the Regional Strategy on Sustainable Consumption and Production for the 10 Year Framework of Programmes on Sustainable Consumption and Production (10YFP) in Latin-America and the Caribbean (2015-2022) (UNEP, 2015b). Towards this purpose, the role of the private sectors will be fundamental. In emphasizing this function, during the second meeting of the ECLAC's Forum of the Countries of Latin America and the Caribbean on Sustainable Development (April 2018), the role of the private sector participation in the implementation of the 2030 Agenda was identified as crucial and goes way beyond "corporate social responsibility" (ECLAC 2018b).

F. Sustainable transportation: guarantying connectivity and access to environmentally affordable and well-maintained transportation in the region

The development trajectories of SIDS are crucially dependent on well-functioning and reliable access to transportation services – in particular maritime and air transport – to support trade, meet import-dependent consumption needs, and service their highly strategic tourism industry. Coastal seaports and airports are the essential in most of SIDS. These said infrastructures are also highly vulnerable to the effects of climate change, especially sea-level rise and extreme weather events. The significance of weather and climate-related threats has been underscored by the recent impacts of Hurricanes Irma and Maria and other storms that wreaked havoc on several Caribbean airports and seaports during the 2017 Hurricane Season. The strong interdependence between tourism and transportation further magnifies this challenge (UNCTAD, 2018).

CARICOM's Strategic Plan 2015–2019 emphasizes that the development of the region's air and maritime infrastructure and services is essential for improving the region's competitiveness and improving the accessibility and mobility of people and goods. Further, the ACS remains committed to the development of sustainable transport in the region and reported that its commitments for transport include: access to environmentally sound, safe, affordable and well maintained transportation; advancement of the safety of land, sea and air transportation; viable national, regional and international transportation arrangements, including improved air, land and sea transport policies, management of transport infrastructure; and increased energy efficiency in the transport sectors (ACS, 2018).

1. Energy efficiency in the transportation sector

The IMF estimates that approximately 36 per cent of the total primary energy consumed in the Caribbean region is within the transportation sector (IMF, 2016). With approximately 50 per cent of imported fuel allocated to land and sea transport in the OECS (ECLAC, 2014c), the transportation sector greatly contributes to GHG emissions. Energy efficiency and fuel diversification is therefore an

important component on the Caribbean SIDS sustainable development agendas. Several Caribbean SIDS have introduced fiscal incentives for the importation of electric, hybrid and fuel cell vehicles (ECLAC, 2016c). With respect to the importation of used vehicles, a number of Caribbean SIDS have introduced legislation control on the importation of used vehicles. These import controls include for example: limits on age of vehicle, mileage, fuel type and other environmental taxes.

2. Connectivity in land, air and marine transportation

Connectivity issues impacts on the achievement of the sustainable development goals in particular for multi-island states as The Bahamas and larger countries in the region such as Belize, Guyana. Deficiencies in road transportation and waterway infrastructure have limited integration of these mainland territories with surrounding economic markets. Poor accessibility has affected agricultural production, human development of rural communities and has limited these countries' tourism opportunities (especially remote historical and ecotourism sites) (IDB, 2013). These challenges are further intensified during the rain and hurricane seasons.

Air transport remains a costly transportation option within the Caribbean region. IDB notes Caribbean airports and routes provide reasonable service to large origin hubs for tourism and mainly from North America and Europe) but less so for intra-regional travel. While trends suggest the market is shrinking, air transport in most Caribbean SIDS is well above the world average due to its tourism dependence.¹⁶ Demand, however, is seasonal with a disparity of 3oper cent in the number of seats on offer between high and low seasons (IDB, 2015).

While regional airlines provide a lifeline for the Caribbean population, aggregated accumulated deficits of the three-major government-owned airlines of the Caribbean region amount to approximately US\$ 1 billion and require annual subsides from their governments. CDB attributes this to: small economies of scale, volatile fuel costs, poor financial management, competition from better capitalized foreign airlines, pressure to operate unprofitable routes from governments, and limited integration of regulatory frameworks (CDB, 2015a). Bilateral and Multilateral Air Services Agreements have been signed to facilitate the development of the industry and minimize hurdles limit the region's competitiveness. For example, the CARICOM Multilateral Air Services Agreement "expands the scope for airlines owned by CARICOM nationals to provide air services throughout the Community. It allows for no restriction on routes, capacity or traffic rights and should facilitate increased intra-regional travel and provide more cargo options for exporters and importers with resulting cost savings" (CARICOM, 2018f). Saint Vincent and the Grenadines was the most recent signatory to this agreement in February 2018.¹⁷

With respect to marine transportation, although served by a number of international air and sea carriers which enable the transfer of tourists and goods into the region, the movement of goods and people among Caribbean islands remains unreliable and costly. Given its large maritime space and high ratio of sea to land mass, maritime passenger transportation has immense potential for the region. Reliable year-round sea transportation also has the potential to encourage trade, tourism and ease of movement of persons thereby ensuring that essential economic and social links are maintained. In the specific case of tourism, many visitors to the region already utilize specialized ferry services for the intrinsic pleasure of the journey itself, as well as to enhance their Caribbean vacation experience. Hence, maritime passenger transportation can serve to expand the range of choices, relative to the set of economic and social activities which may exist among various Caribbean destinations (ECLAC, 2017d).

¹⁶ In 2015, over 70 airports in the region were serviced by more than one weekly international flight (IDB, 2015).

¹⁷ CARICOM's Multilateral Air Services Agreement has been signed by all member states except The Bahamas, Jamaica and Montserrat.

G. Food security and nutrition: boosting agricultural productivity, resilience and diversification

Many Caribbean SIDS spend in excess of 50 per cent of revenues on food imports. Food imports into the Caribbean are nutritionally poor, thereby contributing to the escalated obesity rates and chronic non-communicable diseases (NCDs). Notwithstanding, the region has progressed since undernourished persons has been declining (FAO, 2016). While key challenges remain, assiduous efforts to tackle land degradation, high energy costs, the lack of storage facilities for agricultural products, and poor rural agricultural infrastructure are evident.

1. Agricultural productivity, adaptation and disaster recovery

Several developmental partners are supporting the Caribbean SIDS in these fields. Efforts to reduce the region's importation bill included: the Organization of Eastern Caribbean States (OECS) Growth and Development Strategy (OECS, 2018a). Another initiative being implemented in the Caribbean is the "Cassava Industry Development Market Assessment and Technology Validation and Dissemination Project" and "Sustainable Approaches to Agribusiness and Value Chain Development for Roots and Tuber Crops" Training Initiative in collaboration with the Caribbean Development Bank (CDB) and FAO is (United Nations Caribbean, 2018).

In the area of climate change adaptation and mitigation financing the Caribbean Community Climate Change Centre (CCCC) collaborated with Inter-American Institute for Cooperation on Agriculture (IICA) to boost agricultural productivity and rural development (CCCCC, 2018d). Affected Caribbean countries received support from FAO to assist in boasting productivity in the aftermath of Hurricane Maria and Hurricane Matthew respectively and in partnership with UN Women and the International Fund for Agricultural Development (IFAD-in the case of Haiti). Investment in the region's cocoa industry and its entrepreneurs to secure a niche place in the international market was supported by the University of the West Indies (UWI) Cocoa Research Centre and Centre for Development of Enterprise Project, funded by the EU/African, Caribbean and Pacific Groups of States (ACP)¹⁸ and providing technical assistance to entrepreneurs within the cocoa sector in (UWI, 2018).

Agricultural research and technology

Technology use is closely connected with enhanced agricultural productivity and resilience to future climate related challenges. IICA in collaboration with CARICOM launched a sweet potato biofortification project in Jamaica and to foster research and development on this field (IICA, 2018). IAEA supported the Scientific Research Council's research programme to increase production yield and improve longevity and resistance of crops: onions, sweet yam and ginger, to diversify the agriculture and improve competitiveness (Government of Jamaica, 2018). Notably, the Dominican Republic eradicated the Mediterranean Fruit Fly through the Sterile Insect Technique through support from the IAEA, the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, the United States Department of Agriculture, the International Regional Organisation for Plant and Animal Health and IICA.

H. Health sector governance and non-communicable diseases

Implementing the SAMOA Pathway and advancing the regional health agenda requires a "whole-of-government approach". However, there are major challenges for implementation, which include

The beneficiaries included Belize, Commonwealth of Dominica, Dominican Republic, Haiti, Jamaica, Grenada, and Trinidad and Tobago

interference from the industry, ensuring policy coherence, and lack of political will to advance laws and regulations (PAHO/WHO, 2018). In this regard, PAHO/WHO provided technical support to the identification of the strategic priorities related to health in the CARICOM Caribbean Cooperation in Health (CCH) to encourage an interdisciplinary and inter-sectoral response, some of the achievements in the sectors will be listed below.

Health service delivery and universal health coverage

Many of Caribbean SIDS are improving Universal Health Coverage. The OECS Growth and Development Strategy focuses on securing a better quality of life for the citizens from OECS member states. (OECS, 2018a). CARICOM member states endorsed the PAHO/WHO Caribbean Roadmap on Human Resources for Universal Health at the 2017 CARICOM Council for Human and Social Development (COHSOD) and ten Caribbean countries have (or are in the process of finalizing) Human Resource Plans for Universal Health. (PAHO/WHO, 2018).

CARICOM member states are focused on improving efficiency in health service delivery and sustainable financing to improve the resilience of health systems. The OECS Council of Ministers of Health in 2017 established a Technical Working Group on health financing to facilitate discussions on a sub-regional OECS approach to NHI, with the support from PAHO/WHO. Advances were also made in national action plans on antimicrobial resistance and advancing implementation (PAHO/WHO, 2018).

Notably, PAHO/WHO is working on migration and mobility in the Caribbean to quantify the level of mobility of health professionals within CARICOM and the migration of health professionals out of the Caribbean. This will inform regional policy on migration (PAHO/WHO, 2018).

Further, the Caribbean Public Health Agency (CARPHA) collaborated with PAHO/WHO to establish a Caribbean Regulatory System to strengthen regulatory capacities for medicines. ¹⁹ PAHO/WHO is also supporting CARPHA launch a post market surveillance program to test medicines and strengthen pharmacovigilance and improve reporting of substandard and falsified medicines (PAHO/WHO, 2018).

In the field of Technological advancement in the health sector: ICT and smart health facilities PAHO/WHO is supporting the CARICOM Roadmap on Information Systems for Health. The roadmap endorsed by the COHSOD identifies the main activities to advance an integrated and interoperable information system for health (PAHO/WHO, 2018a). Additionally, the PAHO/WHO Smart Hospital initiative established an integrated approach to building and retrofitting health care facilities to ensure that they are environmentally friendly and disaster resilient funded by UK DFID, is being implemented in seven countries²⁰ (PAHO/WHO, 2018a). A number of Practical Arrangements were signed between IAEA and regional agencies to enhance nuclear technology cooperation to collaborate on many levels including radiation medicine in the treatment and management of cancer, pest management and implementation of the International Basic Safety Standards for Radiation Protection and Safety of Radiation Sources in support to the Health Regulations. In 2016, IAEA provided emergency response to those Caribbean countries affected by the outbreak and rapid spread of the Zika virus. The IAEA has also provided nuclear-derived early detection tools and training were made available to Latin American and Caribbean countries, to enable rapid identification of cases of the Zika virus (IAEA, 2018).

2. Non-communicable diseases

The implementation of measures to prevent and control NCDs are still very incipient in the SIDS countries. To date, nine countries have multi-sectoral national strategy/action plan that integrates the major NCDs and their shared risk factors (PAHO/WHO, 2018a). The CARICOM Secretariat, with

¹⁹ Trinidad and Tobago benefited from this programme in procuring the recommended HIV medicines at lower costs.

²⁰ Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, and St. Vincent and the Grenadines.

collaboration from PAHO/WHO have investigated the status of and progress of NCDs in the Caribbean towards global recommendations and support policies, which promote harm reduction, such as taxation of tobacco, alcohol, and sugary foods as a fiscal measure to support the health sector. Furthermore, work is being done with the Caribbean Court of Justice (CCJ) on health and laws related to sugar sweetened tax legislation. Towards seeking to address this, a Letter of Agreement has been established between the FAO and the Caribbean Institute for Health Research for a regional study to strengthen multi-sectoral actions to enhance food security and decrease the prevalence of obesity and related NCDs (FAO, 2018c).

I. Social development, gender equality and security challenges in the Caribbean

To ensure its future sustainability, the Caribbean region will have to address several critical social challenges. These include tackling poverty and inequality; poor housing; unemployment, especially among youth; access to inclusive and equitable education; guaranteeing gender equality; inadequate social protection; access to quality health and social care; preparation for an ageing population and safety and security of its communities (ECLAC, 2018c). This subsection will present a series on regional initiatives in this regard.

1. Fighting inequality through social inclusion

Caribbean Governments are implementing a range of programmes to address poverty and inequality. These include cash transfer programmes, national insurance schemes, in-kind programmes (such as school meals, food baskets and medicines), active labor market policies (covering areas such as adult literacy, skills training, and small business support), social care services for persons with disabilities, older persons and victims of abuse, and community-based programmes (ECLAC, 2018c).

The question is not only fighting poverty but guaranteeing the economic rewards are well distributed within societies. In terms of inequality, one of the clearest expressions in Latin America and the Caribbean is territorial heterogeneity, visible in areas such as slums and informal settlements with inappropriate housing, reflecting the deeply rooted development gaps between the rich and the poor and the inherent urban segregation it entails. Land tenure security among the poor is a critical aspect of poverty reduction in the region. On a regional approach, the Caribbean Urban Forum²¹ held in June 2018 assisted in streamlining the collective approach towards the finalization and implementation of the Subregional Action Plan (Sub-RAP) for the Implementation of the New Urban Agenda²² in the Caribbean. The forum sought to underscore the importance of good-quality housing in reducing poverty and vulnerability in the Caribbean (ECLAC, 2017e).

Youth development in general, and youth unemployment in particular, have become increasingly growing concerns for Caribbean countries, as approximately half of the region's population is under 25 years old. Several countries are currently implementing youth policies and programmes in response to these concerns and have designed National Youth mechanisms for implementation.²³ However, the structural lack of analysis and monitoring of the situation does not allow for targeted and efficient action

²¹ The Caribbean Urban Forum has been held annually since 2011 and brings together relevant policy makers, academics, municipal managers and other urban professionals to provide a space for policy dialogue, knowledge sharing and training (ECLAC, 2017e).

The New Urban Agenda seeks to guide sustainable urban development over the next 20 years. It contributes to the implementation of the 2030 Agenda and the achievement of the SDGs, particularly but not limited to Goal 11 of creating inclusive, safe, resilient and sustainable cities and human settlements. See: https://repositorio.cepal.org/bitstream/handle/11362/42147/1/S1700845_en.pdf.

²³ A recent CDB study found the average youth unemployment rate was nearly 25per cent for the countries in the Caribbean for which data were available more than three times the adult rate of 8per cent. Gender differences were evident, with young women experiencing unemployment rates of over 3pper cent, compared with 2pper cent for young men. (ECLAC, 2018c & CDB, 2015b).

for long-term successful outcomes. Despite the multiple efforts to assist policy makers to bridge this policy-practice gap, more needs to be done to ensure that the data available is analyzed to provide the empirical background information for evidence-based policy formulation and monitoring of the efficiency and effectiveness of the efforts undertaken. Moreover, having committed to the SDGs and other SIDS-specific development platforms, member states now need to synergies these programmes and platforms to guarantee the full participation of youth in the implementation and monitoring stages (ECLAC, 2018c).

While still youthful, Caribbean societies are in the midst of a demographic transition process that has already begun to affect the age and sex composition of the majority of the countries (ECLAC, 2008). Between 2015 and 2040, the number of older persons will double in the Caribbean from 1.2 million, which corresponded to 14per cent of the population in 2015 to 2.1 million or the equivalent of 23per cent of the population in 2040. Moreover, a 2016 ECLAC study indicated that there are still many older persons living below national poverty lines (ECLAC 2016e). All States and territories across the Caribbean are, therefore, concerned by this demographic transformation, although the dynamics of ageing vary from country to country. Regarding long-term care institutions, most countries provide government run homes but most of these institutions are run by private sector or community-based organizations, with limited government monitoring and regulation, which poses a series of concerns in terms of accessibility, affordability, and sustainability and thus, the quality of such care offered to older persons Moreover, while several countries have social protection, systems guaranteeing a minimum income for older persons, the coverage of social security systems, however, varies significantly from country to country according to the extent of formality or informality in each economy (ECLAC 2017d).

Social inclusion also needs to focus on other vulnerable groups such as the indigenous population, especially when it comes to preserving their culture and guaranteeing participation in larger political processes. In the Caribbean, there are a number of indigenous peoples' groups active in preserving raising awareness regarding their language and culture. To stimulate effective participation in policy processes, indigenous and tribal associations have been working tirelessly across the region to promote indigenous rights, sustainable development and environmental protection. With funding from Canada's Improved Access to Justice in the Caribbean (IMPACT Justice) project, several representatives of these groups met in March 2018 to discuss the way forward for the Network of Indigenous and Tribal Peoples. Formed in October 2017, the network was an outcome of meetings jointly hosted by IMPACT Justice and the University of Guyana regarding the American Declaration on the Rights of Indigenous Peoples (Caribbean News Now, 2018).

CARICOM's Regional Food and Nutrition Security Action Plan 2012-2026 acknowledges the need to combat hunger, malnutrition, and the relatively higher incidence of poverty among indigenous peoples. It also highlights the need to identify and build on successful indigenous knowledge and strategies for climate adaptation, resilience building and agricultural management (CARICOM, 2011). Additionally, the CARICOM's Draft Environmental and Natural Resources Policy Framework recognize that the engagement of the region's indigenous peoples is critical to the success of environmental and sustainable development processes (CARICOM, 2017).

Gender Equality

The SAMOA Pathway re-emphasized the importance of promoting and enhancing gender equality and women's equal participation, including in policies and programmes in the public and private sectors in SIDS. The region has achieved some progress in the areas of political participation, economic empowerment and physical autonomy of women with several countries implementing projects in all these areas. However, challenges remain, such as the collection of gender disaggregated data and persistent high rates of violence against women. A crucial part of the Gender Work Programme is to strengthen the institutional capacity of the machineries especially as it relates to having national policies updated, e.g. their Domestic Violence Act, Gender Policies and monitoring their reporting

commitments to the various international Conventions that these countries have ratified; chief among them being the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW).

In terms of political participation, ECLAC notes that with the exception of four countries, ²⁴ women still account for less than 20per cent of cabinet members in the majority of Caribbean countries (ECLAC, 2018c). At the national level, progress has been reported in the case of Guyana where, women occupy key ministerial positions and represent 52per cent of the permanent secretaries, and more than 30per cent of regional democratic councils.²⁵ In addition, the revised Local Government Act enables political parties to submit a list of candidates which must comprise at least twenty-five women who will be eligible for selection.²⁶This progress is also related to the work being done by organizations such as the Caribbean Institute for Women in Leadership at the regional level (with significant support from UN Women), the Women Leadership Institute in Guyana, the Institute for Women in Leadership in Trinidad and Tobago, and the Women Political Caucus in Jamaica.

In terms of economic empowerment, available data on women's participation in entrepreneurship activities show variations across Caribbean countries. For example, the World Bank's 2010 enterprise surveys show that female ownership of small firms was uneven, ranging from 76 per cent in Saint Vincent and the Grenadines to 58 per cent in the Bahamas and Guyana, 38 per cent in Jamaica, 41 per cent in Dominica and only 18 per cent in Suriname. Some of the projects are aiming at promoting gender mainstreaming within the private sector such as Jamaica's Gender Equality Seal Certification Programme; an initiative introduced in collaboration with the Planning Institute of Jamaica and the Bureau of Gender Affairs (UNDP, 2017).

Regionally, UN Women and IDB recently collaborated in conducting Gender Based Violence (GBV) Prevalence Surveys in the region. Within the context of the "Safe, Cohesive and Just Caribbean" pillar of the UN-Multi-Country Sustainable Development Framework, a Virtual Policy Network has been re-launched with a focus on combatting GBV. Further, UN Women has supported an Access to Justice Project with the CCJ - JURIST Project (funded by the Government of Canada) and the Caribbean Association of Judicial Officers(UN Women, 2018).UNFPA in collaboration with CARICOM has been advocating for the development of National Sexual and Reproductive Health Policies with various governments in the region, providing financial and technical support as required (CARICOM, 2018a).

3. Addressing security challenges

Security is an issue of growing concern in the Caribbean region that has been intensified by regional and global challenges. Initiatives spearheaded by CARICOM have aimed at tackling illegal arms trade and transnational crime; increase trans-border intelligence and information sharing; establish appropriate legal frameworks; strengthen partner country's security institutions and enhance capability to detect, monitor, investigate, interdict, and prosecute illicit trafficking; target criminal assets and prevent criminal facilitation of illicit activities; and reduce demand for illicit commodities (CARICOM, n.d.). In the field of money laundering, during 2017-2018, UNODC provided support to CARICOM member states in the implementation of Financial Action Task Force Recommendation 32 on Cash Smuggling (UNODC, 2018).

On Counter-Terrorism, a Regional Counter-Terrorism Strategy was adopted during the 29th Inter-Sessional Meeting of the CARICOM Heads of Government on 1st March 2018. The strategy articulate measures by Member-States to promote sustainable peace through: the prevention of violent extremism; denying terrorists the means and opportunity to carry out their activities; disrupting extremist and terrorist activities and movements in the region; improving preparedness and defense

²⁴ These are Cuba, Grenada, Haiti and Puerto Rico.

²⁵ Guyana: Report on the Implementation of the Montevideo Consensus on Population and Development, 2013-2018, p.35.

²⁶ Guyana, CEDAW/C/GUY/9 (17 April 2018), para. 69.

against terrorist attacks and responding effectively to terrorists and promoting a culture of resilience (CARICOM, 2018).

In March 2016, CARICOM member states finalized the Regional Cyber-Crime Action Plan. The Plan contains key activities on training, legislation, technical capacity and law enforcement in Member States. It was also aimed at curtailing the activities of terrorist linked to previous cyber-attacks on financial institutions, as a way of raising finances for their activities (CARICOM, 2016c) Also notable is the "Strengthening Evidenced Based Decision Making for Citizen Security in the Caribbean" (CariSECURE) Programme implemented in 10 southern and eastern Caribbean countries with the aim of reducing youth involvement in crime and violence. USAID is funding this venture that seeks to use 'evidenced-based decision-making' to develop and approved programs and policies. Here, intervention logic will be used as it focuses on preventing disease/injury rather than treating the consequences of same (UNDP, 2016).

J. Enhancing human capital through education, culture and sport

The Caribbean region has identified that to become economically competitive, there is the need to enhance the capacities of its human capital development and education systems by maintaining efficient social equity and protection policies for individuals while increasing quality and accessibility at all levels of education and training. Focusing on science, technology, engineering and mathematics development, particularly for youths and adults is of urgency.

The Caribbean countries have comparative good primary and secondary education participation rates however the results in examinations entries, sittings and performance scores are to be addressed. The pass-through rate to tertiary education in the Caribbean — currently about 15 per cent — should serve as a benchmark to begin to approach levels in the more developed world, which are now more than twice the level of that in the Caribbean (ECLAC, 2018c).

CARICOM countries have been guided by a number of strategic policies including the Regional Technical and Vocational Education and Training (TVET) Strategy, Regional Framework for Action for Children and regional mandates such as Health and Family Life Education, Culture in Education, and Health in Education (CARICOM, 2018a). CARICOM, UNFPA, UNICEF and UNESCO have supported the implementation of Health and Family Life Education curriculums in the Caribbean which are geared towards the empowerment of young people by building on their individual capacities (UNFPA, 2018).

The adoption of the CARICOM Human Resource Development 2030 Strategy in 2017 aimed at contributing to education and training reform in the sub-region and embedding skills and competencies appropriate to globally competitive 21st century economies and society. The strategy is a consolidated effort to review existing documents and frameworks and determine suitability for the Region's response to 21st Century demands. The strategy is intended to create a seamless education system that promotes access, equity, relevance and quality in education (CARICOM, 2018a).

With respect to addressing culture as a driver and an enabler for sustainable development, there is an increasing view among Caribbean governments and regional agencies that the creative industries can be an engine for economic growth and a mechanism for diversifying economies and improving global competitiveness (IDB, 2017b). During the Twenty-Sixth Inter-Sessional Meeting of the Conference of Heads of Government of CARICOM (2015), Caribbean leaders acknowledged the potential of the cultural and creative industries in contributing to the development of the region. To further develop an enabling environment for this sector, CARICOM and CEDA proposed the establishment of the Caribbean Creative Industries Management Unit (CCIMU) (CARICOM, 2015). Launched in 2016, CCIMU is envisioned as a key catalyst in the process of building sustainable cultural

and creative economies in the Caribbean (Fleming, 2016). Four sectors have been prioritized by CCIMU: Music, Animation and Film, Fashion, and Festivals (Fleming, 2016).

The ongoing challenges for bringing into functioning these regional bodies include: requirement for national focal institutional, limited cooperation among Caribbean states, an inconsistent approach to positioning and promoting the overall Caribbean creative industries portfolio, disparity in IP frameworks across the region and poor IP implementation in terms of copyright protection and enforcement, inadequate accreditation of creative education and skills provision and low levels of access to finance, investment and investor readiness. In spite of these challenges, regional organizations are forging new mechanisms to support the development of the creative industries sector. In 2017, CDB announced the establishment of a Cultural and Creative Industries Innovation Fund as a pilot intervention by providing grants and technical assistance to governments, business support organizations and academia that support this sector (CDB, 2017d).

Cultural heritage preservation is also another area of focus. As examples of national plans, Saint Vincent and the Grenadines has developed a plan that serves State Parties and UNESCO by monitoring and updating heritage policies and measuring the contribution of the Caribbean Action Plan for World Heritage (UNESCO, 2014). Antigua and Barbuda has developed a Cultural Heritage (Protection) Bill in 2016 (Antigua and Barbuda, 2016).

Sports are also listed in the SAMOA Pathway as a component in the development and implementation of health society (paragraph 75). The Caribbean has a strong heritage of sporting excellence and has distinguished itself in many areas of competition. Additionally, sport is increasingly being utilized as a tool for community development and social interventions in response to crime and violence, particularly among youth and men (Government of Jamaica, 2018). CARICOM has identified several major challenges confronting the development of this sector including: (i) a lack of international funding for Caribbean Sportspersons; (ii) absence of a regional policy on sports; (iii) absence of a regional database detailing facilities and expertise; (iv) weak regional cooperation on anti-doping issues; and (v) lack of a robust mechanism for harnessing sports for uniting and improving the health of the Caribbean citizens (CARICOM, 2016b).

II. Recommendations to strengthen the means of implementation of the SIDs priorities

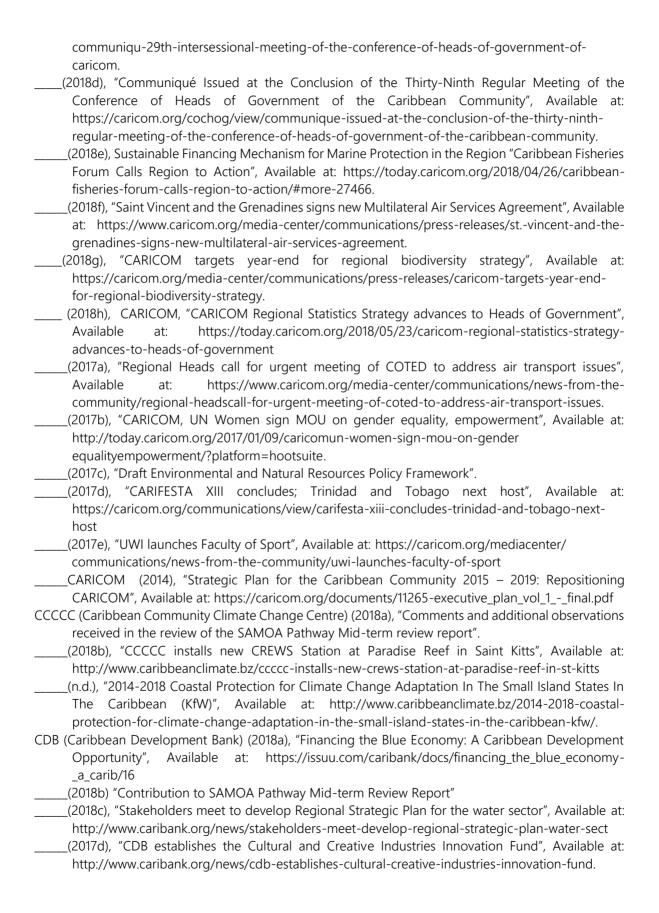
Although the objective of this document is not to provide an in-depth analysis of the institutional barriers or a critical overview of the development approaches in the region, some additional institutionalities and resources listed bellow were identified requirements for the successful implementation of the SAMOA Pathway in the upcoming 5 year-period:

- (i) Data and statistics: Member countries have established or are in the process of establishing National Statistical Offices. However, they continue to face challenges for data needed to comply with national, regional and international reporting requirements. While efforts are being made to bridge data gaps there continues to be lack of resources in key areas such as Environmental and Social/Gender Statistics (CARICOM, 2018a). There are also recommendations for the identification of a subset of SDG indicators to allow for sustainable monitoring of the goals with focus on regional and national priorities as well as SIDS priorities as contained in the SAMOA Pathway Outcome document (ECLAC, 2016a). The United Nations Environment Programme (UNEP) is also assisting Caribbean SIDS in systematic data collection and to develop information systems for governments to better monitor and report on their international multilateral environmental commitments. UNEP is also assisting the region to establish environmental indicators relevant to the Caribbean SIDS and which can be used in supporting the Agenda 2030 and its SDGs reporting requirements (UNEP, 2018a).
- (ii) Information access, communication and technology: Access to information, technology and the internet underpins the commitment to many of the thematic areas within the SAMOA Pathway. Information, Communication and Technology (ICT) adoption, cost of access, usage as well as funding for ICT programmes were flagged as issues which need to be addressed urgently for the CARICOM Region and registered as a serious challenge for economic growth and sustainable development for the region. In 2017, the CARICOM Heads of Government approved a roadmap and workplan for the CARICOM Single ICT Space (CARICOM, 2018a). The International Telecommunication Union (ITU) has actively supported the Caribbean SIDS in the updating of legislation in the telecommunication sectors, preparation of roaming Billing, Development of Master

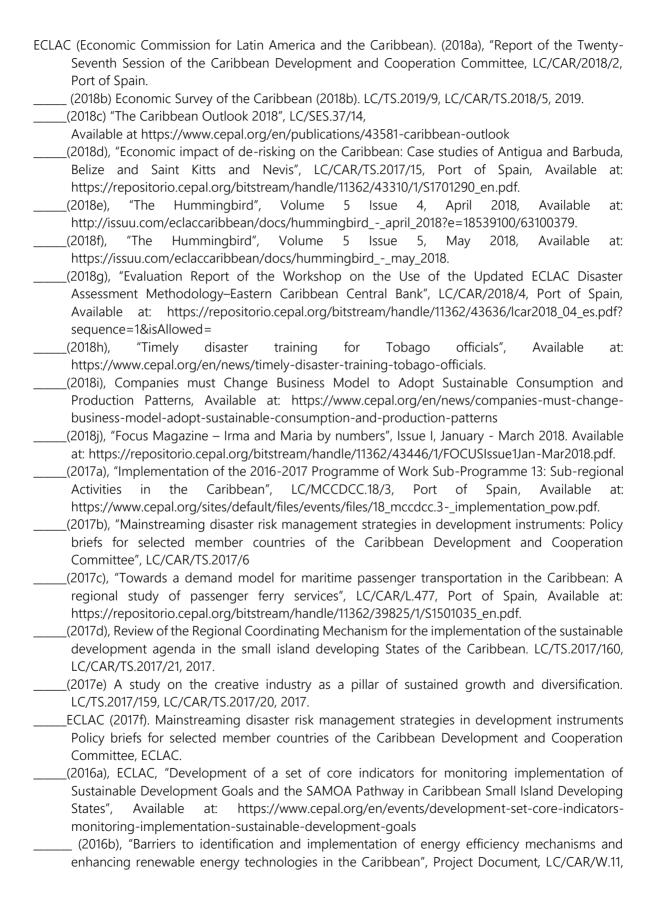
- Plans for Spectrum Management, Development of National ICT Master Plans, ICT training etc. (ITU, 2018).
- Advocacy and awareness raising: SIDS specific advocacy and awareness raising are (iii) pivotal for raising awareness of Caribbean priorities, challenges and opportunities for sustainable development. One of the recommendations of this report is to have SIDSspecific advocacy, communication and awareness raising and for all sectors. It is important also that the SIDS agenda be included at all levels of the education system.

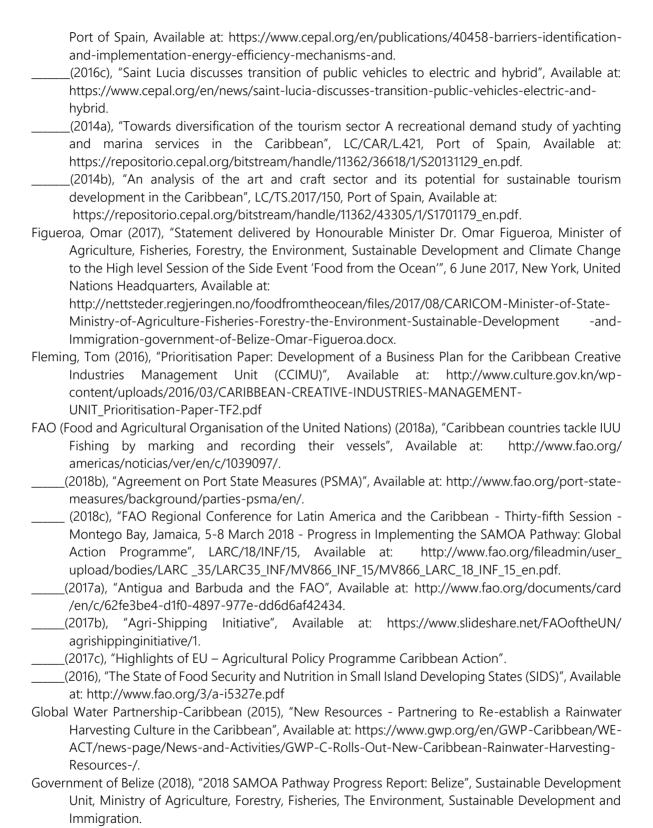
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