



Towards Sustainable Blue Economies in the Caribbean

The Caribbean region is one of the most interconnected and dynamic environments in the world, with multiple socio-economic and ecological benefits derived from diverse economies, cultures and ecosystems. The value of the ocean economy in the Caribbean has been estimated at US\$407 billion¹, and the ocean economy is expected to further contribute to Sustainable Development and the 2030 Agenda. To maintain the continued provision of the benefits we derive from *'natural marine and coastal capital'* as the foundation of sustainable development, the multiple impacts on marine and coastal environments need to be addressed holistically.

In this sense, a transition towards inclusive and sustainable economic models is needed. 'Sustainable blue economies' and 'sustainable ocean-based economies' are two recent terms describing current and future delivery of benefits from marine and coastal ecosystems through integrated policy and sustainable management approaches, with the aim of generating long-term socio-economic shifts that create viable jobs, eradicates poverty, and strengthen resiliency to climate change, and reconciles environment and development planning.

Existing activities provide the foundation for a Sustainable Blue Economy

Transitioning toward inclusive, cross-sectoral and sustainable models of development and production has already begun across the region, with a number of local, national and regional initiatives advancing various components necessary for sustainable ocean-based economies. When considered holistically, these initiatives—some of which are documented here—can provide the foundation of a regional sustainable blue economy strategy.

Within the Wider Caribbean Region, there are various initiatives which focus on integrated ocean governance, marine spatial planning, land use planning, integrated watershed and coastal zone management, and an ecosystem-based approach to managing shared living marine resources sustainably across the region (see Annex 1). These initiatives provide critical institutional developments and opportunities for knowledge sharing, contributing to the development of a regional Sustainable Blue Economy framework.

¹ Patil et al. (2016). Toward a Blue Economy: A promise for sustainable growth in the Caribbean: An overview. Washington D.C. (USA): The World Bank. Available at: <http://documents.worldbank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf>.



Such regional activities have also been complemented by national marine and coastal spatial and development planning processes, framed around the potential for sustainable ‘blue growth’ (e.g. Grenada’s Blue Growth Coastal Master Plan; see Case Study #1).

Case study #1. Grenada’s [Blue Growth Coastal Master Plan](#),

Grenada is one of the first countries within the Organisation of Eastern Caribbean States (OECS) to create a vision for managing and protecting national waters as well as setting a path to ‘blue growth’. Grenada’s Blue Growth Coastal Master Plan sets out a strategy to harness Grenada’s coasts to provide new jobs and alternative livelihoods, expanding their economy whilst also committing to preserving their natural environment.

Nine areas have been identified as centers of excellence for blue growth activities, including marine research. In particular, Northern Grenada has been identified as a significant location for marine research due to its pristine ocean waters, leatherback turtle nesting areas near Levera, and its offshore volcano.

The Integrated Coastal Zone Management Policy for the three islands (Grenada, Carriacou and Petite Martinique) provides a vision for the management of the coastal zone that accounts for all sectoral activities which have an impact upon the coast’s natural resources. The policy goals are focused around three areas: good governance, sustainable development, and capacity development.

There are several programmes, projects and activities supporting national governments in achieving global and regional targets and commitments, such as the 2030 Agenda for Sustainable Development, the Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway and, at the regional level, Multilateral Environmental Agreements such as the Cartagena Convention for the Protection and Development for the Wider Caribbean Region. These include Green Economy objectives not necessarily focused on marine and coastal environments, but addressing elements equally relevant to a Sustainable Blue Economy, such as climate change resilience and circular economies (for a non-exclusive list of these activities, see Annex 1).

Nature-based solutions, natural capital assessments and accounting are being increasingly integrated into decision-making within the Caribbean, for example with support from the ‘Wealth Accounting and the Valuation of Ecosystem Services’ (WAVES) partnership and other initiatives.



One example of a recent initiative is the collaboration between Belize’s Coastal Zone Management Authority and Institute, The Natural Capital Project and local stakeholders to identify different management scenarios and trade-offs with regards to ecosystem services and natural capital using InVEST software, which helped to inform Belize’s coastal plan (see Arkema *et al.*, 2015). A similar process is now underway for The Bahamas’ Andros Island (see Case Study #2).

Case study #2. Sustainable Development Master Plan for Andros Island: Natural Capital in the Bahamas².

The Andros Master Plan aims to identify “public and private investment opportunities, policy recommendations, land and sea zoning guidelines, and other management actions, to guide sustainable development of the island both for its people and the environment”.

The framework and action plan guides decision-making and investment over the next 25 years by addressing eight key pillars identified by the people of Andros during a stakeholder process: freshwater supply throughout the island; accessibility to opportunities and services; education and training for better job prospects; livelihoods and income equality; land use planning; health and wellbeing; strengthened local government; and coastal resilience.

Alternative scenarios were developed for Andros: the ‘Sustainable Prosperity’ scenario, which combines human development and nature safeguards to establish a ‘nature-based economy’, was eventually selected. Expected benefits include an increased export value of lobster catch provided by Andros by almost 50% relative to current management, whilst also securing nursery habitats supporting the country-wide lobster catch, worth approximately \$66 million USD annually. This scenario would also result in improved habitats which can buffer the coast from the impacts of erosion and flooding pressures.

Strengthening sustainable approaches integrating multiple benefits across sectors

Sector-based approaches to implementing ‘blue growth’ have also been advanced. Regional examples include assisting small- and medium-sized businesses in achieving social, environmental and economic benefits such as the development of sustainable aquaculture or opportunities for youth employment. While a Sustainable Blue Economy takes an integrated perspective, many of the elements will be sector-based approaches.

Sustainable financing

The recent *Financing the Blue Economy* report, published by the Caribbean Development Bank with support from the United Nations Development Programme, outlines financing options such as blended financing, blue bonds, debt-for-nature swaps and engagement with the private sector³. They further note the burden brought by natural disasters on Member States’ debt-to-GDP ratio, which could be helped

² More information available at: http://www.vision2040bahamas.org/media/uploads/andros_master_plan.pdf.

³ For more information, see: <https://www.undp.org/content/undp/en/home/blog/2018/leveraging-innovative-finance-for-caribbean-blue-economy-growth.html>



through greater investment into integrated climate-resilient development and nature-based conservation solutions.

Existing mechanisms such as The Caribbean Biodiversity Fund and associated National Protected Area Trust Funds, as well as National Conservation Trust Funds also offer resources, and are complemented by the InterAmerican Development Bank and Caribbean Development Bank, covering many of the underpinning principles featuring within sustainable blue-green economies, including inclusiveness, environmental sustainability, and climate resilience.

Advancing an integrated approach towards a Sustainable Blue Economy

While these examples demonstrate the efforts that has been made over the last decade towards strengthening capacity to sustainably manage the Caribbean's marine and coastal environments and resources, recent commitments made at the Sustainable Blue Economy Conference in Nairobi, Kenya (2018), and progress toward national and international targets, such as those outlined in the 2030 Agenda for Sustainable Development, suggest that greater harmonization across activities and a shared vision towards sustainable oceans and coast across sectors are still required, building on what has been achieved.

The *Financing the Blue Economy* report highlights the distinct differences between the Caribbean and the rest of the world, noting the need for tailored approaches to Sustainable Blue Economy implementation. The report further identifies opportunities brought by regional, transboundary coordination, enhancing benefits obtained across sectors through efficient allocation and use of marine resources. In the absence of regional coordination leading to an integrated roadmap towards a sustainable blue economy, unregulated or unsustainable offshore oil and gas exploration, commercial and recreational fishing, mariculture, coastal tourism, pollution and waste disposal, and coastal infrastructure development can all form potential threats that might impact Governments' capacity to fully benefit from blue economy opportunities.

Together, the foundations outlined here (see Annex 1 for further details) can be used to develop a coherent and interconnected sustainable blue economy roadmap for the Caribbean, mitigating such threats and delivering multiple national goals and aspirations linked to sustainable development, climate resilience, poverty reduction, inclusiveness, and food and economy security, among other objectives.

Supported by five mutually supporting components, as outlined in UN Environment's Sustainable Blue Economy Initiative, a regional 'Caribbean Sustainable Blue Economy Decision-support and Enabling Framework' would enable and assist countries in advancing policies and strategies for sustainable,



efficient and equitable use of marine and coastal resources, balancing economic, environmental and social priorities (see ‘Preparation of Regional Strategy for Sustainable Ocean-based Economy in the Wider Caribbean Region’, UNEP(DEPI)/CAR IG.42/INF.13, for further information⁴).

Annex 1. Non-exhaustive list of related frameworks and activities in the Wider Caribbean Region

- The Caribbean Environment Programme, as the UN Environment administered Regional Seas Programme for the Wider Caribbean Region promotes regional co-operation for the protection and sustainable development of the marine environment of its 38 Member States and Territories of the Wider Caribbean Region. Established in 1981, it formed the basis for the development and adoption of the Cartagena Convention and its Protocols on Oil Spills, Marine Biodiversity (Specially Protected Areas and Wildlife – SPAW) and Pollution (Land Based Sources of Marine Pollution – LBS).
- The Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+) Strategic Action Programme, which adopts an ecosystem-based approach to managing shared living marine resources sustainably across the region. Endorsed by 35 ministers across the Wider Caribbean Region, this program centers on regional cooperation, institutional reform and capacity building activities that address pressures such as overfishing, pollution, habitat degradation and climate change^{5,6}.
- The United Nations Development Programme (UNDP) has launched 60 accelerator labs around the world. In the Caribbean, the UNDP lab will focus on experimenting and finding solutions at the community level to address challenges presented by the blue economy⁷.
- The Eastern Caribbean Regional Ocean Policy (ECROP), which outlines a shared vision for ocean governance supported by integrated cross-sectoral management, marine spatial planning, and valuation of marine ecosystem goods and services.
- The complementary Caribbean Regional Oceanscape Project (CROP), components of which include the development of national blue growth strategies, marine spatial plans and integrated, transboundary management techniques.
- The International Maritime Organization (IMO) is supporting the development of Country Maritime Profiles and Maritime Transport Policies, while a recent Ministerial Resolution from Ministers responsible for maritime transport recognizes the vital role played by the ocean in the economies of Caribbean States, and the importance of building regional capacity “to contribute to the achievements
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⁴ Available at: http://gefcrew.org/carrcu/18IGM/Info-Docs/IG.42_INF.13-en.pdf.

⁵ More information is available at: http://eascongress2018.pemsea.org/wp-content/uploads/2018/12/S7.3-1.-Towards-a-thriving-sustainable-blue-economy-in-the-Wider-Caribbean_PDebels.pdf; <https://www.clmeproject.org/clme-sap-booklet-en/>

⁶ More information available at: http://gefcrew.org/carrcu/18IGM/10SPAWCOP/Info-Docs/Coord_Mech_CLME+-en.pdf.

⁷ More information is available at: <https://pressroom.oecs.org/the-caribbean-and-the-blue-economy-we-need-you-for-the-undp-accelerator-lab>



of the targets of the Sustainable Development Goals and the continued development of the Caribbean Sea”⁸.

- At the sectoral level, the Caribbean Regional Fisheries Mechanism, which promotes and facilitates responsible use of the region's fisheries and other aquatic resources, and has been exploring opportunities for aquaculture to contribute to a sustainable blue economy within the region⁹.
- The Caribbean Pacific Alliance for Marine Conservation Finance (Caribbean Biodiversity Fund, the PACIFICO platform and MAR Fund), with the aim to exchange experiences and information for collective learning and strengthening of its members, representing efforts in 16 countries in Mesoamerica and the Caribbean. The “Blue Challenge”, is a joint initiative of the Alliance that also includes impact investors and experts to mobilize financial and technical support for innovative investments with market or near-market returns in fisheries and tourism, developed under social and environmental principles that guarantee the sustainable use of coastal and marine resources.
- The Caribbean Marine Protected Areas Management (CaMPAM) Network and Forum has developed and implemented several activities to improve marine ecosystems management capacity, particularly within marine protected areas¹⁰.
- A number of projects supporting the CLME+ Strategic Action Programme¹¹, including the ‘Integrated ridge-to-reef management of the Mesoamerican Reef’ (MAR2R) project, designed to strengthen regional governance, enhancing national capacity for marine spatial planning and establishing public-private mechanisms for integrated watershed management in Belize, Honduras, Guatemala and Mexico.
- The World Bank’s PROBLUE programme is a multi-donor trust fund, which forms part of its broader ‘Blue Economy’ program and takes a multi-pronged, coordinated approach to ensuring the protection and sustainable use of marine and coastal resources, focusing on four themes: management of fisheries and aquaculture; threats posed by marine pollution; sustainable development of oceanic sectors, such as tourism, maritime transport and offshore renewable energy; and building government capacity¹².
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⁸ High-Level Minister Symposium: “Maritime transportation: Harnessing the blue economy for the sustainable development of the Caribbean”, Montego Bay, Jamaica, 27th February 2019. Jamaica HLMS Resolution 2019.

⁹ Available at: http://www.crfm.int/index.php?option=com_acymailing&ctrl=archive&task=view&listid=2-crfm-news&mailid=34-press-release-aquaculture-as-gateway-to-blue-economy-in-the-caribbean&tmpl=component,

¹⁰ See UNEP(DEPI)/CAR WG.40/INF.5, available at: http://gefcrew.org/carrcu/18IGM/10SPAWCOP/Info-Docs/CaMPAM_Stat_Rpt_2018-en.pdf.

¹¹ For more information, see: <https://clmeplus.org/other-projects-initiatives/>

¹² For more information, please visit: <https://www.worldbank.org/en/topic/environment/brief/the-world-banks-blue-economy-program-and-problue-frequently-asked-questions>



- CLME+ has also recently launched a report, titled ‘Proposals for a permanent Coordination Mechanism and a Sustainable Financing Plan for Ocean Governance in the Wider Caribbean’, available as an information document¹³.

Sustainable development and blue-green economies

A number of activities toward the implementation of the Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway and the Cartagena Convention and its Protocols also support progress towards an integrated approach to sustainable blue economy implementation across the Caribbean.

- Investments in strengthening climate resilience to reduce vulnerability to extreme weather events in the Caribbean islands, such as the Caribbean Climate Change Centre’s Regional Framework for Achieving Development Resilient to Climate Change¹⁴, which guides CARICOM’s strategic approach, the Caribbean Climate-Smart Accelerator (2017)¹⁵, and the recent Technical Assistance Program for Disaster Risk Financing Insurance in Caribbean Overseas Countries and Territories (2019)¹⁶;
- Projects promoting circular economies, waste reduction and development of innovative financing mechanisms (e.g. [CReW+](#));
- Ambitions to conserve at least 20 per cent of the marine and coastal environment by 2020, as proposed under the public-private partnership forming the [Caribbean Challenge Initiative](#) (CCI);
- Transboundary coordination and knowledge sharing activities, such as the ‘Climate Resilient Eastern Caribbean Marine Managed Areas Network’ Project and CANARI’s Caribbean Green Economy Action Learning Group (see Geoghegan et al., 2014), which may be expanded to include perspectives related to sustainable development, and to ensure inclusive approaches to developing a sustainable blue economy strategy that has benefits across locations and scales;
- Previous work supporting the transition toward green economies in the Caribbean, such as the [‘Assisting Caribbean States’ Sustainable Development through Green Economy](#)’ (ACSSD-GE) project, can be linked to demonstrate how activities on land (e.g. agriculture) impact the ocean, and the importance of integrated and cross-sectoral management at the land-sea interface;
- Recent reports such as *Toward a Blue Economy: A promise for sustainable growth in the Caribbean*, which outlines challenges and opportunities associated with advancing an integrated

¹³ Available here: <https://www.unenvironment.org/cep/events/conference-parties-cartagena-convention-cops/spaw-cop10>

¹⁴ For more information, see: <https://www.caribbeanclimate.bz/2009-2021-regional-planning-for-climate-compatible-development-in-the-region/>.

¹⁵ Available at: <https://www.caribbeanaccelerator.org/>.

¹⁶ For more information, see: <https://www.worldbank.org/en/news/press-release/2019/01/31/euro-30-million-to-help-caribbean-enhance-climate-resilience-and-adaptation>.



sustainable blue economy in the Caribbean region, referencing work achieved through green economy approaches (Patil et al, 2016).

Strengthening sectoral and cross-sectoral integration of sustainable blue economy approaches

Sector-based approaches to implementing ‘blue growth’ have been advanced, though there have been fewer cross-sectoral examples. The following represent examples of initiatives that are helping to integrate sustainable practices and emerging sectors into local economies:

- The Caribbean Natural Resources Institute (CANARI) has produced a self-assessment tool--the Local Green-Blue Enterprise Radar--that provides ideas assisting small- and medium-sized businesses in achieving multiple ‘green/blue’ benefits that include positive social and environmental outcomes, while continuing to grow economically¹⁷.
- As part of FAO’s Blue Growth Initiative, FAO has been collaborating with the local government of Barbados to develop sustainable aquaculture systems that combine hydroponics to produce protein-rich tilapia for local communities and high-value lettuce for restaurants¹⁸.
- The Caribbean Development Bank has also reviewed opportunities for youth employment that could emerge from a blue economy¹⁹.

Resources

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¹⁷ More information available at: <http://www.canari.org/wp-content/uploads/2018/10/canari-local-green-blue-enterprises-radar-profile-1-1.pdf>.

¹⁸ The FAO’s Blue Growth Initiative supports SIDS with the following four components: marine and inland capture fisheries; aquaculture; livelihoods and foods systems; and economic growth from ecosystem services.” More information available at: <http://www.fao.org/3/a-i7862e.pdf>

¹⁹ For more information, see: https://www.cepal.org/sites/default/files/presentations/2b_cdb_blue_economy_and_youth_employment_-_final.pdf



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