



MARCH 2021

Maritime Economy Plan **Antigua and Barbuda**

Department of the Blue Economy Gap Analysis



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Abbreviations and Acronyms

ADOMS - Antigua and Barbuda Department of Marine Services and Merchant Shipping

A&B - Antigua and Barbuda

CBD - Convention on Biological Diversity

CBO - Community-Based Organization

CCA - Carrying Capacity Assessment

CME - Commonwealth Marine Economies

CO₂ - Carbon Dioxide

DoBE - Department of the Blue Economy

DoE - Department of Environment

ECROP - Eastern Caribbean Regional Ocean Policy

EEZ - Exclusive Economic Zone

EIA - Environmental Impact Assessment

FAD - Fish Aggregating Devices

FAO - Food and Agriculture Organization

FFA - Forum Fisheries Agency

GCF - Green Climate Fund

GDP - Gross Domestic Product

GHG - Greenhouse Gas

ICA - Institutional Capacity Assessment

ICZM - Integrated Coastal Zone Management

IDB - Inter-American Development Bank

IMO - International Maritime Organization

INDC - Intended Nationally Determined Contribution

IOC - Intergovernmental Oceanographic Commission

IUU - Illegal, Unreported and Unregulated

JICA - Japanese International Cooperation Agency

MEP - Maritime Economy Plan

MFAET - Ministry of Foreign Affairs and External Trade

MMO - Marine Management Organization

MoSTBE - Ministry of Social Transformation and the Blue Economy

MSP - Marine Spatial Planning / Marine Spatial Planning

MTDS - Medium Term Development Strategy

NEMMA - North-East Marine Management Area

NGO - Non-Governmental Organizations

NOGC - National Ocean Governance Committee

NOP - National Ocean Policy

NPOA - National Plan of Action



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ODA - Overseas Development Assistance
OECS - Organization of Eastern Caribbean States
SAP - Strategic Action Plan
SDG - Sustainable Development Goal
SEA - Strategic Environmental Assessment
SIDS - Small Island Developing States
SINOP - Solomon Islands National Ocean Policy
SLR - Sea Level Rise
SMART - Specific, Measurable, Achievable, Realistic, Timely
SOA - Seychelles Ocean Authority
SPC - Secretariat of the Pacific Community
SPREP - Secretariat of the Pacific Regional Environment Programme
SVG - St Vincent and the Grenadines
SWOT - Strength, Weaknesses, Opportunities and Threats
TCP - Technical Cooperation Project
UK - United Kingdom
UNCLOS - United Nations Convention on the Law of the Sea
UWI - University of the West Indies

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Maritime Economy Plan
Antigua and Barbuda



1. Introduction



1. Introduction

1.1. The Commonwealth Marine Economies Programme

The Commonwealth Marine Economies (CME) Programme was launched in 2016 and aims to support 17 Caribbean and Pacific Small Island Developing States (SIDS) in conserving their marine environments and making the most of their maritime resources to catalyse sustainable economic development. It is designed to promote growth, innovation, jobs and investment whilst safeguarding healthy seas and ecosystems, and it helps to address climate change, the UN Sustainable Development Goals (SDGs) and the Paris Climate Change Accord.

As part of the CME Programme, a draft Maritime Economy Plan (MEP) was formulated in consultation with the Government of Antigua and Barbuda during 2019 – 2020. From discussions and feedback on the draft MEP, the potential to support Antigua and Barbuda in the creation of a Department of the Blue Economy (DoBE) as part of the Ministry of Social Transformation and the Blue Economy (MoSTBE) was identified.

1.2. Background to the report

Antigua and Barbuda is formed by three large islands located in the Eastern Caribbean (Lesser Antilles). Antigua is the main island covering 108 square miles. Barbuda is a flat coral island of approximately 68 square miles located 30 miles north of Antigua. The third and smallest island Redonda, is an uninhabited nature reserve, located 30 miles west of Antigua. It has a population of nearly 100,000 people distributed approximately 80:20 between the islands of Antigua and Barbuda.

Antigua and Barbuda has an Exclusive Economic Zone (EEZ) of 110,089 km² that supports multiple maritime activities, which together are an important contributor to national GDP and the potential for additional sustainable economic opportunities from new industries and technology; (e.g., marine biotechnology, offshore renewables).

The Minister of Social Transformation and the Blue Economy would like to establish a specific DoBE within the Ministry. The Ministry has a clear agenda to deliver positive change for the people of Antigua and Barbuda. Clear synergies exist between this new blue economy requirement and other parts of the Ministry. Most notably this includes; Gender Affairs, Community Development, Public Service and also Disaster Preparedness. Antigua and Barbuda is highly vulnerable to climate change and extreme weather events, with Hurricane Irma destroying significant infrastructure in 2017. The country is still in the process of recovery and rebuilding¹.

The aim of this project was to **undertake an institutional gap analysis to provide information to support Antigua and Barbuda to establish a new Department for the Blue Economy (DoBE) to promote and develop the blue economy of the country.**

The project undertook a high-level review of the institutional capacity of (MoSTBE and more widely, across the Government of Antigua and Barbuda with the aim of providing information to inform the Ministry in its plans to establish a new DoBE in the Ministry.

It is the intention that this Gap Analysis will provide the Government of Antigua and Barbuda and MoSTBE in particular, with information and analysis to assist the Ministry in its work towards establishing an effective blue economy function for Antigua and Barbuda.



Figure 1-1 - Map of Antigua and Barbuda

Source: <https://www.worldometers.info/maps/antigua-and-barbuda-maps>

¹ <https://www.bb.undp.org/content/barbados/en/home/about-us/where-we-work/antigua-and-barbuda.html>



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1.3. Understanding the blue economy

Critical to the success of Antigua and Barbuda's proposed new DoBE is developing a shared, 'whole government', understanding about what the blue economy is and in turn, develop a nationwide understanding about how to develop and realise the benefits of a blue economy. Key to this is asking, and answering the following questions for the whole of Antigua and Barbuda:

- > What does the blue economy mean to Antigua and Barbuda?
- > How can Antigua and Barbuda develop and realise the benefits of the blue economy?

There is no internationally agreed definition of the blue economy, and a pitfall associated with work in this area is the risk that it can become 'all things to all people.' It is important in planning for a new Government DoBE, that there is a common understanding of what the term means.

The blue economy can include diverse components, from established ocean industries such as fisheries, tourism and maritime transport, to emerging activities such as offshore renewable energy, aquaculture and marine biotechnology. In particular, the blue economy should specifically recognise and include sustainability and equity concepts, such that progress towards a blue economy can help achieve a range of UN SDGs, including SDG 5 (Gender Equality), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable Cities and Communities), and SDG 14 (Life Below Water). The term blue economy and blue growth are often used interchangeably.

- *"Blue Growth is an umbrella of actions to promote business ideas relating to the local sea and aquatic resources through environmental & economic approach"*
(Marine Business Conference)
- *The Blue Growth Initiative (BGI) - Supporting food security, poverty alleviation and sustainable management of aquatic resources*
(FAO)
- *WWF has usefully developed a set of principles that usefully characterize a Blue Economy. These include making it clear that the Blue Economy must respect ecosystem integrity, and that the only secure pathway to long-term prosperity is through the development of a circular economy, assuring good coastal and marine governance across the public and private sector, also making the shift towards blue growth action focused. Principles For A Sustainable Blue Economy*
(WWF).
- *"So the search for growth in this sector – blue growth – is something of a balancing act. The varied and sometimes conflicting stakeholders all have a legitimate interest in the process, while the overall health of the seas themselves is a common concern. What is clearly needed is collaboration within and across different sectors to address impacts and reduce conflicts".*
(Koji Sekimizu. Secretary-General, International Maritime Organization)

Figure 1-2 – Some definitions of blue growth and the blue economy

1.3.1. What does the blue economy mean to Antigua and Barbuda?

In the development of the Maritime Economy Plan, the blue economy has been defined as:

"economic activities that:

1. take place in the marine environment or that
2. use sea resources as an input, as well as economic activities that
3. are involved in the production of goods or the provision of services that will directly contribute to activities that take place in the marine environment"².

The mix of activities should provide social and economic benefits for current and future generations, restoring and protecting the diversity, productivity, resilience and natural capital of marine ecosystems.

1.3.2. How can Antigua and Barbuda develop and realise the benefits of the blue economy?

In developing a national approach towards operationalising the blue economy it is useful to consider the work needed to establish a DoBE under three categories.

1. What are the Operating Principles for approaching work on the blue economy?
2. What should be the Primary Functions of a DoBE?
3. What actions / activities need to be prioritised to address the Primary Functions and by whom?

² Ecorys & European Agency for Small and Medium-sized Enterprises (EASME) Service contract: EASME/EMFF/1.3.1.13/SI2.718095. Study on the Establishment of a Framework for Processing and Analysing of Maritime Economic Data in Europe, Final Report, MARE/2014/45. https://www.msp-platform.eu/sites/default/files/ea0217517enn.en_.pdf. (Accessed October 2019.)

1.3.2.1. Category one – Blue Economy Operating Principles

During consultation with stakeholders across government, the following matters have been raised with regards to governance and planning for a Blue Economy in Antigua and Barbuda. It is important to collectively discuss and agree what each one means for the country and whether these are the overarching principles required, noting also the importance of the Regional Level Eastern Caribbean Regional Ocean Policy (ECROP) Principles, which have recently been updated³.

- > The operations and activities that occur across the Antigua and Barbuda blue economy will need to cascade from and be driven by the National Ocean Policy (NOP), which is currently in preparation. It should also take account of other overarching development strategies and economic plans that affect the marine area. The NOP is being drafted to align with existing plans, strategies and policies, so that blue economy activities that are aligned with the NOP should also align with / be driven by existing policies, etc. Future policies, plans and strategies will need to align with the NOP, such that blue economy operations and activities will also align with (and potentially drive) other development strategies and economic plans. The DoBE and the MoSTBE have a key role in shaping the NOP, with other government Departments and Ministries, through the NOGC. Gaining Cabinet level sign up to the NOP will ensure cross-government implementation of the NOP through the roles and responsibilities of Departments with responsibilities in the marine area;
- > The principles of **low carbon, resource efficiency, social protection and social inclusion** are important considerations to shape the blue economy of Antigua and Barbuda;
- > To safeguard **fair and equitable governance**, there are benefits in maintaining some distance between Ministry specific development control, maritime and fisheries regulatory functions and cross-governmental co-ordination;
- > The DoBE should focus on **marine citizenship**. This encompasses **the social, environmental, health and wellbeing** of people and their relationship to the sea. The DoBE should facilitate **an understanding and growth of the blue economy** to help provide more **diverse, sustainable and resilient economic activities**. This is a key reason why the new DoBE is located in MoSTBE.
- > Once agreed, the MEP Implementation Pathways would be a useful foundation for initial blue economy actions in Antigua and Barbuda. These could form part of the NOP, once it is completed (e.g. as an appendix).

The 'cornerstones' of potential operating principles for the blue economy can be summarised in Figure 1-3. These are important to operationalise the blue economy as a whole across Antigua and Barbuda. As such they are important not just to the new DoBE, but to all Ministries and Departments with a role to play in the blue economy.

Signposting strategic opportunities

Aim: Combined knowledge and skills across Government and Society plan and explore the future Giving a taste of what is possible. Planning and accessing funding.



Nurturing a positive future

Amidst a changing and challenging context, the future is bright Aim: anticipate and prepare for change, and position the Country to maximise potential future growth opportunities.

Blue Economy
Cornerstones

Integrating land, coast and sea

Transversing boundaries Aim: thinking strategically about the links between terrestrial, coastal and off-shore activity and interests in order to maximise future opportunities for sustainable 'blue' economy development.



Sustainable development

Balancing the interests of environment, society & the economy Aim: visioning a future, which has a healthy society, with a flourishing environment and growing blue economy at its heart.

Figure 1-3 – Blue economy cornerstones

1.3.2.2.1. Social Inclusion

In line with MoSTBE's requirement to assure an inclusive, livelihoods-focused DoBE, the following social inclusion factors also come to the fore in considering the operating principles of a new DoBE

Gender equality

To realise the targets enshrined within SDG5 (Achieve gender equality and empower all women and girls), there are a number of elements to consider and include in the development and operation of a DoBE.

The creation of a new DoBE offers an excellent platform from which to take tangible steps towards overcoming gender-based socioeconomic disadvantages and increase the representation of women in leadership positions.

According to available information, women perform a range of roles across the whole of the blue economy of Antigua and Barbuda, including senior leadership jobs in public service, through to vulnerable jobs at risk from climate change such as in fishing, food and fuel provisioning and tourism^{4,5}. Ocean facing jobs, regardless of gender, can be particularly susceptible to climate change driven risks, presenting an ongoing threat to human security.

The COVID-19 pandemic has highlighted gender equality issues as the majority of caregivers, at home, in communities and in health care, are women. Although those most affected by COVID-19 are reportedly men, the elderly, and people with chronic diseases and weak immune systems; women and girls are disproportionately impacted by both the disease and the public health measures to contain it. Women are at increased risk of infection due to their caregiving role; and loss of livelihood, due to jobs being in service sectors that have been closed; or in part time or informal work. By addressing gender equality issues more generally, a DoBE will contribute to the COVID-19 recovery process.

³ Howell Marine and Sustainable Seas Ltd, 2019, Regional Level ECROP Principles

⁴ Antigua and Barbuda | UN Women – Multi-Country Office – Caribbean, <https://caribbean.unwomen.org/en/caribbean-gender-portal/antigua-and-barbuda>

⁵ Directorate of Gender Affairs, Antigua Barbuda | Facebook, www.facebook.com/GenderAffairs/



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Climate change and extreme weather

In common with many Small Island Developing States (SIDS), Antigua and Barbuda is one of the countries least responsible for climate change, yet it is among the most vulnerable to its impacts.

In 2017, Hurricane Irma completely devastated Barbuda; now in 2021 the country is still very much focused towards restoration and recovery with the international community helping it to build back better where it can. Swathes of public infrastructure are having to be rebuilt and the state's GDP will take a very long time to recover⁶.

There are a range of direct and knock-on impacts of climate change specific to the blue economy. Those particularly significant to Antigua and Barbuda are set out in Annex 1. Within its Intended Nationally Determined Contribution (INDC), Antigua and Barbuda has set out a series of conditional actions towards fulfilling the sentiments of the Paris Agreement⁷. The new DoBE will need to work productively alongside expert Government colleagues working on climate change and in climate finance, to maximise the potential contribution the Blue Economy can make towards adapting to and mitigating climate change. Ensuring that identified blue economy actions are embedded in the Antigua and Barbuda Country Programme will help to move blue economy activities forward.

Human security and wellbeing

It is very important to remember that the impacts of climate change are not simply limited to physical climate impacts. The financial, and social toll of climate change must never be underestimated. 'Building Back Better' is very difficult to achieve completely, when the next extreme event may be only a few months away. The frequency and repetition of extreme weather events pose a risk to the mental and physical wellbeing of citizens across Antigua and Barbuda. Hurricane season can be relentless and as a community recovers from the destruction caused by a weather event, another episode can occur. The only way to overcome this problem is to work to build climate resilience at all levels of society. The blue economy has a critical role to play in climate driven risk to human security and MoSTBE is already engaged in the associated human wellbeing factors that form a key consideration for a Blue Economy Department.

Livelihoods and social inclusion

MoSTBE has a very clear social inclusion agenda. In the face of COVID-19; there has never been more of a need for the people of Antigua and Barbuda to seek out new livelihood opportunities and create and strengthen local economies. There is a risk that post-pandemic recovery will focus on getting back to pre-pandemic levels of activity as soon as possible, which could adversely impact on the blue economy and result in livelihoods being no more resilient than they were before COVID-19.

The focus of MoSTBE on the blue economy provides the perfect opportunity to grow new and diverse small businesses

⁶ Antigua and Barbuda UNDP in Barbados & the Eastern Caribbean, <https://www.bb.undp.org/content/barbados/en/home/about-us/where-we-work/antigua-and-barbuda.html>

that are focused towards the marine area. It also provides the opportunity to raise the importance of the marine area in supporting livelihoods and the need to protect and enhance the marine environment in order to support and increase sustainable livelihoods. Harnessing community engagement in blue economy decision-making and working to create headroom for business incentivisation is a key potential function for the new DoBE and a key ambition for the Minister in the proposed establishment of the new DoBE.

1.3.2.2. Category 2 - What should be the Primary Functions of a Blue Economy Department?

Noting that a significant number of blue economy related regulatory and operational functions already sit within other Government Ministry's the following whole government functions can be most usefully coordinated by a DoBE:

- > Serve as the **main point of contact** for all regional and international blue economy engagements, representing the interests of the twin-island states on these external platforms
- > **Lead on the creation of a new MSP unit**, working with ADOMS and the NOGC. The MSP unit should work towards the **creation of a national MSP** to help manage the country's marine resources and activities in a balanced and sustainable manner over the long term. The MSP unit will be a positive catalyst to improve the management and collation of data and information on the marine area, including the value of the marine area and blue economy. There is an opportunity to agree common data standards across Antigua and Barbuda; and to work with other countries across the region under the ECROP framework, which provides a framework for the development of MSPs across the region.
- > The development, review and update of policies, procedures and other legislative frameworks to manage marine resources and support the growth of the blue economy. Domestic and International policy advocacy; promotion and uptake of best practice. Tracking international and regional best practice and embedding it across the Government of Antigua and Barbuda. Assessing the overall impact of existing and emerging new Government policy on the blue economy as a whole. The MSP process will make it easier to monitor the progress and success of policies.
- > **Working as a community livelihoods champion**
 - Encouraging the concept of marine citizenship to increase the connection to the marine area, raise awareness and understanding of the importance of the seas in supporting ecosystems and livelihoods and encourage people to value the marine area and to be more involved in decisions regarding it. Seeking out the views of local people and empowering ownership of local level actions to boost the blue economy. Creating a communications strategy and social media based platform for coordinating community views and action. Encouraging and incentivising livelihoods transition towards

⁷ Intended Nationally Determined Contribution Antigua and Barbuda <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Antigua%20and%20Barbuda%20First/Antigua%20and%20Barbuda%20First.pdf>

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blue growth. There is an important overlap between increasing engagement from a blue economy perspective and that for wider marine management and decision making, which is needed under the developing NOP;

- > **Cross Ministry and Agency coordination – to assure a whole government approach.** Coordinating and communicating on the Blue Economy across Government. Working closely with the National Ocean Governance Committee (NOGC) to implement the NOP and ease the transition towards a blue economy. Design and deliver monitoring and evaluation tasks aimed at measuring and improving effective NOP and MEP implementation.
- > **Domestic and International policy advocacy; promotion and uptake of best practice.** Tracking international and regional best practice and embedding it across the Government of Antigua and Barbuda. Assessing the overall impact of existing and emerging new Government policy on the blue economy as a whole.
- > **Tracking blue economy financial flows and the strategic capture of funds.** Collaborating closely with expert Ministry of Finance and Climate Finance colleagues to gain a clear understanding of how money is spent in the blue economy. Seeking to grow revenues for blue economic actions via bilateral and multilateral funding streams. Negotiating and monitoring investments in new, emerging and developing sectors. Working with other Departments and Ministries to identify potential revenue-raising activities, including licensing, collection of fees and special taxes; and who should be responsible for collection and enforcement of fees.

1.3.2.3. Category 3 – What actions / activities need to be prioritised to address the Primary Functions and by whom?

Blue economy actions and activities will need to cascade from and be driven by the developing NOP. They can also be informed by the Maritime Economy Plan (MEP), as a strategic document that sets out draft priorities and



Shirley Heights, Antigua view

actions that aim to help Antigua and Barbuda demonstrate a clear vision and direction that takes account of national issues, international commitments and the challenges of a small island state in working towards a blue economy.

Actions should aim to support economic growth, livelihoods and jobs and reduce losses from natural hazards, weather events and climate change.

The MEP sets out a series of sector specific implementation pathways that require a coordinating mechanism to deliver, by defining critical enablers and working with existing National Planning Processes and maritime operations.

ACTIONS TO BUILD BACK BLUER AFTER THE COVID-19 PANDEMIC⁸

The spread of COVID-19 has had a devastating impact on the global economy. The pandemic has exposed each nation to unprecedented levels of economic uncertainty with GDP projections for 2020 ranging from -4.5% to below -10% in some OECS Member States (OECS, 2020⁹). New and innovative sources of investment and diversification of income streams are essential in developing a blue economy, particularly in a post-COVID world.

The extent of the impact and the subsequent economic crisis will not be the same across all blue economy sectors and activities. The tourism and hospitality sector is of particular relevance to the economy of Antigua and Barbuda. The effective closure of tourism and hospitality sector has had knock on impacts to other blue economy activities such as fisheries, agriculture and manufacturing / industry as well as the creative industries.

The introduction of restrictive trade measures imposed by some countries on staple agricultural products could lead to widespread food insecurity, with potential for disruptions in global agricultural trade supply chains. These developments reinforce the need for Antigua and Barbuda to expand national food production, including new sources of protein from sustainable fisheries and aquaculture.

Similar to other countries, Antigua and Barbuda has put in place comprehensive economic policy responses to help mitigate the impacts of the COVID-19 crisis. These include coordinated actions taken at a regional level e.g. the OECS Commission has created sector-specific task forces with the shared objective of collaborating with relevant national authorities, industry stakeholders, and frontline workers to establish common, region-wide protocols that will facilitate a measured approach to reopening economies.

⁸ Sustainable Seas Ltd (2020) Interim Evaluation Report. Interim Evaluation of the Integrated Flood Management to Climate Resilience of the Vaisigano River Catchment in Samoa. (PIMS5919/FP037)", Report for UNDP Samoa on behalf of the Green Climate Fund. An independent consultant review of the "Integrated Flood Management to Enhance Climate Resilience for the Vaisigano River Catchment Project (PIMS 5919)", September 2020, All rights reserved. © 2020 UNDP

⁹ OECS, 2020, COVID-19 and Beyond. Impact Assessment and Responses. An economic and social impact assessment evaluating the effects of the COVID-19 crisis on economies and populations of OECS Member States, Economic Affairs and Regional Integration Division, OECS Commission



2. International Practice – Blue Economy Institutional Arrangements



2. International Practice – Blue Economy Institutional Arrangements

This section of the report presents an overview of international best practice in institutional and policy delivery that is associated with successful blue economy realisation around the world.

Pursuing a sustainable blue economy and progressive governance of marine space requires a sustained effort to continually understand the health of marine ecosystems, the level of human activity, the social and economic returns associated with marine resource exploitation and the effectiveness of management interventions to control activities that may impact on the integrity of marine and ocean ecosystems and its users.

Less than 20 countries globally have produced NOPs or blue economy policies to date. Australia and China became the first in 1998, but before 2010, only 11 countries had adopted such an approach whereby a plan was formally adopted and endorsed by government so that it became a driver for planning and decision making. Since 2010, a further six countries have formally adopted NOPs or similar relating to the management of their seas. Of these, five are SIDS - Vanuatu, Fiji, Seychelles, Solomon Islands and Saint Vincent and the Grenadines (see Table 2-1).

This is not to say that only states with formally adopted NOPs or blue economy policies can operationalise the development of the blue economy, however, the process by which such cross-cutting plans are formally adopted at a Cabinet level signals the importance of the integration and co-operation between all government Departments and agencies to further the blue economy. A formally adopted policy / plan is more likely to be successful than one which is only adopted by a single Ministry or has no formal sign off.

To assist and inform this process Annex 2 provides a series of Case Examples selected as good exemplars blue economy operational practice that have been taken into consideration. The following points are of particular consideration for Antigua and Barbuda:

- > The establishment of truly cross Departmental models in blue economy planning take time and money to ensure they are fully functioning. Establishing any Agency or Non-Departmental Public Body requires primary legislation.
- > It is important that Antigua and Barbuda consider the regional dimensions of the blue economy in the function and work of the DoBEto gain support and input, as appropriate, from OECS including via the national interpretation of the revised ECROP (2019).

Table 2-1 - Countries with formally endorsed National Ocean Policies or blue economy policies

1	Australia (1998)
2	China (May 1998)
3	Russian Federation (2001)
4	Norway (2002)
5	Canada (2002)
6	USA (2004)
7	Brazil (Feb 2005)
8	Colombia (2007)
9	Japan (2007)
11	Portugal (March 2007)
12	UK (2011)
13	Fiji (2020)
14	Solomon Islands (Nov 2018)
15	Vanuatu (2016)
16	Saint Vincent and the Grenadines (2018)
17	Seychelles (2018)

The Seychelles example sets out how blue economy arrangements are designed to keep operational functions within individual government Departments, whilst creating oversight bodies to help with delivery; one for economic development and one for MSP implementation. This is similar to the model emerging for MoSTBE, in relation to the functions of ADOMS and the Ministry of Fisheries.

Whilst the intent behind this is understandable, there are issues already emerging in the Seychelles relating to accountability, governance and operational delivery, with concerns that there are too many layers of bureaucracy. Although the Seychelles does not currently have a coordinated mechanism for marine science, there is a well-established means of monitoring human activity at sea, with a focus on Illegal, Unreported and Unregulated (IUU) fishing. This is coordinated with neighbouring states through the Regional Centre for Operational Coordination and the Regional Maritime Information Fusion Centre.

This model further points to the significant harmonization potential offered via the new Government of Antigua and Barbuda and the University of the West Indies (UWI) collaboration to develop a Centre of Excellence for Oceanography and the Blue Economy at UWI's recently established Five Islands Campus.



ISSUES FOR DECISION-MAKERS:

The following summary provides some key observations, lessons or gaps from this section that may be of value/applicability to inform blue economy capacity building in Antigua and Barbuda: applicability to inform blue economy capacity building in Antigua and Barbuda:

1. Globally, there are **only five ocean policies that are cabinet mandated** for SIDS - in Vanuatu, Fiji, Seychelles, Solomon Islands and St. Vincent and the Grenadines (SVG). Within the OECS, Dominica, St Kitts and Nevis, Grenada and Saint Lucia have prepared National Ocean Policies (though are not Cabinet endorsed). Beyond the OECS, Belize has recently (November 2020) established a Blue Economy Ministry, focussing on marine resources and climate change. This reinforces that this is a **new area of policy development** where the lessons learnt are still emerging and there is the opportunity to both learn from others and provide global leadership.
2. The majority of international governments who have a well-developed blue economy or ocean policy framework, have established a stand-alone marine spatial planning (MSP) delivery function within government whose job is to understand and represent the policy interests of all government Departments when developing MSP. This requires them to not only have responsibility for developing a marine spatial plan, but also to **understand and coordinate blue economy policy interests across the whole governmental structure;**
3. Away from SIDS, only England and Scotland have set up truly cross Departmental models that are good examples for blue economy implementation. The Scottish model relies on centralizing control as much as possible, which is achievable due to the smaller size of their blue economy relative to GDP. England however, has a delegated model that possesses a strong coordinating function across government Departments, that reflects the size of government as well as the complexity of the English sea space;
4. In the Solomon Islands, "Oceans 12" was formulated with officers from 12 national Ministries, as a national Working Group tasked to develop the Solomon Islands NOP (SINOP) and build on existing policies and sectoral priorities, including those for fisheries, environment, and development planning. **The high-level support** of the Office of the Prime Minister and Cabinet gave a powerful impetus for action and cooperation, and was key to its success;
5. A key observation from the Solomon Islands of relevance to Antigua and Barbuda, is that although the Ministry of Foreign Affairs and External Trade (MFAET) is well suited to having a national coordinating role, it depends heavily on **technical input from others, including regional bodies** for expertise and policy implementation (e.g. Pacific Community (SPC), the Forum Fisheries Agency (FFA) and the Secretariat of the Pacific Regional Environment Programme (SPREP)). Similar regional parallels potentially exist in Antigua and Barbuda to align blue economy work with the OECS Eastern Caribbean Regional Ocean Policy (ECROP) which has recently been updated to help support member states. The Solomon Islands provides Antigua and Barbuda with a valuable framework that may be considered for ocean governance and represents a possible template for national ocean policy development;
6. Regarding the Seychelles, a newly formed Seychelles Ocean Authority (when formally set up) will be empowered to coordinate and adaptively manage the implementation of Seychelles' Marine Spatial Plan. It will fall under the President's or Vice-President's Office to ensure it can fulfil its **cross-portfolio role**, but will otherwise be **fully independent** with no existing mandates to ensure that it is not biased towards any one policy portfolio or set of interests;
7. Many blue economy initiatives often face significant accountability, governance and operational delivery challenges where countries have too many layers of bureaucracy. This is important for Antigua and Barbuda to bear in mind when planning for and establishing their own DoBE – the organisational structure should be no more complex than is necessary.

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3. Strategic Assessment of the Legal, Policy and Institutional Framework



3. Strategic Assessment of the Legal, Policy and Institutional Framework

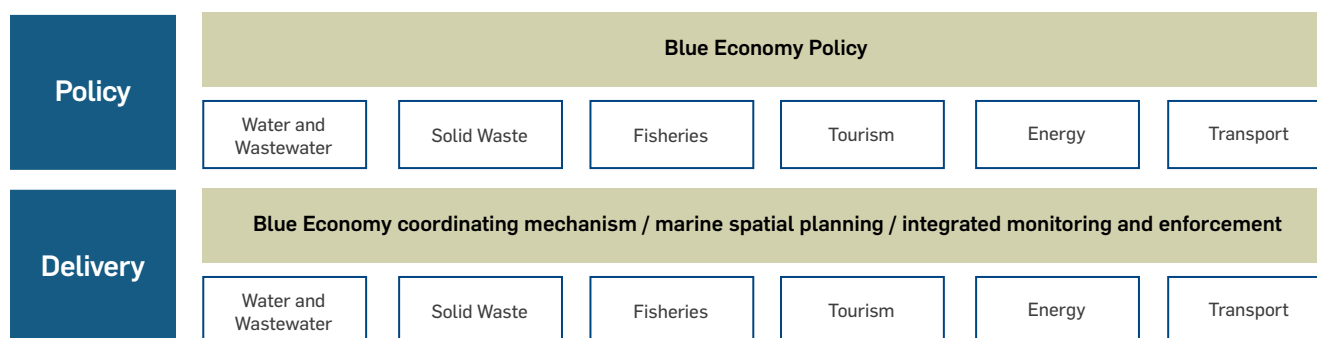
This section presents a strategic assessment of the current legislative, planning and regulatory framework relating to the needs of a blue economy for Antigua and Barbuda, including details of private groups, associates and institutions of relevance (within and outside of MoSTBE). A gap analysis of national laws, policies and institutional structures is also presented¹⁰. The outcome of this section is used to help identify the gaps that require attention to deliver a blue economy in the future (see Section 5).

3.1. Overview

The challenge of governance in the blue economy is in part linked to the need to transition from traditional market-economy sectoral governance to a more integrated and coordinated approach. When assessing whether an institutional framework can support this approach, consideration needs to be given to how individual units deliver for their sector, alongside their ability to operate in a coordinated and integrated way when necessary. This coordination and integration can be delivered differently when considering government policy, which directs delivery, and the operational delivery or management of different sectors.

As set out in Figure 3.1, this coordination and integration can be delivered differently when considering government policy, which directs delivery, and the operational delivery or management of different sectors.

Figure 3-1 - Framework for Antigua and Barbuda's blue economy "Policy" and "Delivery" per Sector



3.2. Regional and National Policy Direction

3.2.1. Eastern Caribbean Regional Ocean Policy (ECROP 2019)

In 2013, the OECS approved and adopted the ECROP to promote a common approach to ocean governance in all member states and mandated that each member develop a National Ocean Policy (NOP) to support the overarching regional policy. This was updated in 2019 to contain a number of priorities and goals, many of which are synergistic with the SDGs and therefore of relevance to the Maritime / Blue Economy. As part of the OECS, Antigua and Barbuda is fully integrated into the ECROP programme and is in the process of developing its own NOP within the following ECROP framework and policies:

- > Secure access to resources – clearly defined maritime boundaries, monitoring, compliance, surveillance and enforcement
- > Adopt multiple-use ocean planning and integrated management
- > Maintain and improve ecosystem integrity
- > Promote public awareness, participation, and accountability

- > Promote social and economic development
- > Support research and capacity building
- > Build resilience and manage for uncertainty

This updated ECROP (2019) sets the foundation for the NOP currently being produced for Antigua and Barbuda and hence is pivotal towards aligning national policies and plans that are presented in this section. The DoBE and the MoSTBE have a key role to play in shaping the NOP; and policies and plans that will flow from that, including a national MSP, working with the NOGC.

Antigua and Barbuda is currently undergoing a negotiation process to delimit its maritime boundaries under UNCLOS. Economic activity in the maritime area is predicated heavily on maritime transportation for importing and exporting goods and for serving its tourist industry, such that the current maritime economy is heavily skewed towards service and amenity provision. Extractive activities centre on fisheries (including conch and lobster). Opportunities for other exploitative activities have not been explored and remain unknown. It is recognized that the waters of Antigua and Barbuda support a broad range of important and sensitive marine habitats that provide a broad range of valuable economic, social and cultural benefits, particularly inshore

¹⁰ Information used in this section includes that sourced from the Marine Policy Stocktake Report (Coastal Matters Ltd 2017), which is currently being updated and presented within the NOP which is due for completion by mid 2021



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and coastal habitats. The management approach has largely been one of environmental conservation rather than exploring opportunities for sustainable resource use and management.

3.2.2. National Direction

Legislation relating to the marine space does exist in Antigua and Barbuda. The area contained within claimed maritime boundaries is not currently subject to any specific policy or management to plan for activities that either currently or in the future take place within the EEZ. The pending NOP (and the supporting Strategic Action Plan – SAP) will need to outline a plan of collective action(s), and identify supporting regulations and knowledge, in order to manage markets that may seek to exploit resources and space, as well as to deal with the uncertainties of externalities (e.g. climate change, global economic change).

Antigua and Barbuda, like other Caribbean states, is attempting to find new sources of growth to reduce its vulnerability to global economic stresses, climate change and natural disasters in the face of increasing competition at a global level, ending of trade preferences and declining donor resources. These challenges are coupled with internal fiscal imbalances and high debt ratios.

All OECS countries are in the top 15 of the world's most indebted emerging markets (relative to GDP). Antigua and Barbuda's economic base is very narrow – heavily dependent on tourism for foreign exchange earnings, employment and revenue (in excess of 50% of GDP). It is a major challenge to maintain a balance between economic growth and environmental sustainability because of limited land area as well as natural, technical and financial resources, and the urgent need to expand the economy to create productive employment opportunities.

In common with many other SIDS, the large marine EEZ is viewed as providing the opportunity for social and economic gain that the land does not afford. However, equally in common with other SIDS, the EEZ is a largely unknown space whose characteristics and resources are undetermined.

The draft Medium Term Development Strategy (MTDS) identifies one of its six 'flagship' priorities as 'Better Utilization of our Marine Space'. The MTDS is founded on a development planning and implementation framework that will complement the free market mechanism. This framework is itself embedded within a sustainable development framework to develop and implement actions towards reaching a national vision. In terms of maritime policy development this approach is significant because, in common with principles of integrated and holistic management required by maritime planning, it advocates a systems approach that treats the public sector machinery as a single system working towards a singular goal.

3.2.3. Legislative Framework

There are some 30 areas of legislation and regulation (some still in draft form) in Antigua and Barbuda that govern the management of the marine space and coastal zones or other aspects of the environment (see Annex 3 for a summary of the legislative framework).

3.2.4. Institutional Arrangements

The following presents a strategic overview of existing Ministries and supporting departments, units and institutions that are presently in place, whose collective remit would contribute towards implementing a blue economy. More information is presented on specific Ministries (and their capacity to deliver) in Section 4.

3.2.4.1. Ministry for Social Transformation and The Blue Economy (MoSTBE)

The Ministry has a clear agenda to deliver positive change for the people of Antigua and Barbuda. Clear synergies exist between a new blue economy requirement and other parts of the Ministry. Most notably this includes Gender Affairs, Community Development, Public Service and Disaster Preparedness.

3.2.4.2. The National Ocean Governance Committee (NOGC)

The NOGC is charged with providing advice to the Government of Antigua and Barbuda on the management of its various maritime zones – internal waters, archipelagic waters, territorial sea, contiguous zone, and EEZ – over which Antigua and Barbuda exercises sovereignty, sovereign rights or jurisdiction in accordance with international and domestic law. This advice covers issues relating to maritime boundary delimitation; management and sustainable use of fisheries and other living marine resources; exploration and exploitation of non-living marine resources including hydrocarbons; protection of the marine environment; marine scientific research, maritime customs and immigration enforcement, and maritime administration including shipping.

NOGCs have been, or are being formed, in all OECS countries that are part of the ECROP project. The NOGCs are being established to ensure an intersectional coordinated approach to planning and managing each country's marine space and resources. Ocean governance is about the systems put in place to manage the ocean. Good ocean governance provides a balanced and coordinated way to manage the competing demands on marine resources through an approach that achieves the goals of economic development while ensuring that ocean ecosystems are sustained. It determines equity and efficiency in resource and services allocation and distribution. It determines who gets what, when and how, and who has the right to ocean resources and services, at any particular time.

A blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health. It offers a way to capitalise and benefit from the shared ocean wealth while improving ocean health through smart planning and improved governance of ocean resources.

There is a strong link between the blue economy and good ocean governance, such that the DoBE has a key role on the NOGC and the NOGC has an important advisory role across all Departments and Ministries with a role in managing Antigua and Barbuda's marine space for the benefit of the country and the blue economy.

ISSUES FOR DECISION-MAKERS:

1. A successful blue economy institutional framework in Antigua and Barbuda must retain the focus of individual decision-making that supports different policy areas, whilst incorporating the overarching direction set within any blue economy (or National Ocean) Policy. For blue economy to be a success in Antigua and Barbuda, it is important to consider how a Ministry (and its respective divisions/units) delivers against its **legal mandate** in addition to its ability to operate in a **coordinated and integrated** way when necessary.
2. Antigua and Barbuda is taking its first steps towards meeting the challenges of delivering a blue economy through the establishment of the MoSTBE in 2020. The blue economy dimension within MoSTBE is however a **very new concept** and hence technically immature in some key areas.
3. There are clear arrangements in place in Antigua and Barbuda for maritime boundaries (EEZ boundaries with neighbouring states). No formal government policy exists that can be built on to support the identification of partnership agreement opportunities for socio-economic development, mutual resource management and environmental protection (possibly through the use of social partnerships as a way to improve collaboration).
4. MoSTBE needs to have a closer working (partnership) relationship with other agencies and the NOGC (including new operational activities such as oil and gas exploration). The findings of the recent IMO Audit of Antigua and Barbuda should also be taken forward. It is important to seek out and work with parts of government and individuals with lower ocean literacy. This limits the risk of a government function working only with the 'converted' (an 'echo chamber' effect).
5. Whilst Antigua and Barbuda commands internationally respected leadership credentials in climate finance, there needs to be more emphasis placed on consolidating a range of topics (including a marine biodiversity and ICZM strategic framework) from policy to operational delivery, with a focus on marine conservation from the coast out to the extent of the EEZ.
6. There is no clearly defined function for coordinating the delivery and policy requirements for the blue economy for Antigua and Barbuda, either to develop future blue economy policy options, or more operationally, to deliver marine spatial planning of activities at sea. There is no formal coordinating mechanism to articulate the benefits of a blue economy to business communities, financiers and investors, insurers and the private sector to support strategic economic planning across blue economy sectors. This should be addressed as part of evolving National Ocean Policy and in turn via the establishment of Standard Operating Practices in MoSTBE.
7. There is a lack of any Strategic Environmental Assessment (SEA) procedures within Antigua and Barbuda which is critically important for policy / plan / programme implementation and issues pertaining to MSP and to ensure that both ICZM and blue economy issues can co-exist in harmony.
8. The concept of marine citizenship should be considered for inclusion within MoSTBEs corporate strategy as the general Ministry has sole responsibility to develop social engagement and ocean related stewardship for all citizens.
9. An improved marine research structure is needed to encourage innovation across all blue economy related sectors and institutions. The new UWI Centre of Excellence could assist greatly in this regard.



4. National Institutional Arrangements and Capacity to Deliver



4. National Institutional Arrangements and Capacity to Deliver

4.1. Purpose and Overview

This section comprises an institutional capacity assessment of the specific Ministries / Departments where information has been ascertained via a questionnaire undertaken by the project team.

It includes an assessment of the mandate, structure and ability of individual units / divisions / sections within the Government of Antigua and Barbuda using an adapted Inter-American Development Bank (IDB) Institutional Capacity Assessment (ICA) methodology to support the development and implementation of a future NOP in Antigua and Barbuda and from this, an analysis of future blue economy capacity requirements.

The analysis uses four broad headers identified by the project team as most relevant to this assessment:

- > Governance and organization
- > Planning and programming
- > Resource management
- > Internal controls

It is acknowledged that Antigua and Barbuda is at the beginning of a process of pursuing blue economy implementation, and that the key Ministry (MoSTBE) is young and largely technically unassimilated on the blue economy. The following analysis represents a 'snapshot' of current observations. The comments presented should be used to help provide an instructive steer for the way forward, plus to support the needs of the NOP which is being formulated at present.

A questionnaire and high-level one-to-one interviews were undertaken in February 2021. Responses were received from the following to help support the production of the report¹¹.

- > Ministry of Health, Wellness and Environment - The Department of Environment (DoE) is responsible for the management of the country's (Antigua and Barbuda's) natural environmental resources and provide technical advice on the environment and related sustainable development issues to the public, provide guidance for developmental matters, and to support stakeholders. The DoE is responsible specifically for coastal wetlands, is the regulator for beach sand mining and all EIAs (as regulator). They are the National Focal Point for Climate Change, biodiversity and persistent organic pollution.
- > Ministry of Legal Affairs, Public Safety and Labour - The Ministry of Legal Affairs will be responsible for amending the legislation necessary to make any legal changes necessary to actualize the blue economy.
- > Ministry of Civil Aviation, Public Utilities, Transportation and Energy - Energy Division

¹¹ Questionnaires were collated from Heads of Legal Affairs, Dept of Environment and the Ministry of Energy only to help support the analysis.

4.2. General Findings

4.2.1. Governance and Organization

4.2.1.1. Description and Approach

This capacity area addresses the governance structure of an institution including whether its mandate and purpose provides scope for blue economy delivery and to what extent.

It was used in the assessment to examine the source of the institution's mandate to undertake its responsibilities, whether by law, policy or Cabinet approval, as well as the extent to which local government is included within its governance framework. The following questions were considered:

- > Does your current mandate include scope for delivery aspects of a blue economy in Antigua and Barbuda?
- > Is there a clear focal point within your Dept / Division / Unit to support delivery aspects of a blue economy in Antigua and Barbuda?
- > Do you feel that your Dept / Division / Unit has the regulatory authority to support the undertaking and implementation of a blue economy on behalf of MoSTBE in Antigua and Barbuda? (e.g., laws, policies, etc. to implement these? If so, which ones?)
- > Do you feel that other agencies (outside of MoSTBE) are properly involved in the actual "implementation" of blue economy related activities?
- > Do you feel that NGOs are properly involved in the actual "implementation" of blue economy related activities?

4.2.1.2. Observations and Commentary

The discussions with stakeholders suggest that everyone across government is aware of the inclusion of blue economy within the portfolio of MoSTBE, and that the DoBE and the Minister is the focal point for blue economy issue and responsible for taking them forward. Less clear is the understanding of what this means in practical terms (see section 4.3). The focal point within the MoSTBE is currently the Minister, who has been raising awareness internationally of how Antigua and Barbuda intends to move into implementing a blue economy. Despite this, there remains no legal platform to promote a blue economy (despite the existence of a number of pieces of sectoral legislation).

There is uncertainty over whether agencies and sectors responsible for aspects of the blue economy outside of MoSTBE are properly involved in blue economy implementation at the moment. For example, whilst the Fisheries Division have responsibility for the management of some marine biological resources, their role needs to be expanded with financial and technical support as appropriate (see Resources section below).



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In general, the MoSTBE needs to be more informed in relation to the work of Agencies (and NGOs) that may be linked in some way to the blue economy. The fact that many sub-sectors that make up an integrated and complete blue economy (in any country) often fall outside of any one Ministry means that a coordinated delivery response is required. This means that governance and subsequent delivery of any blue economy is out of the control or direction of any one Ministry (i.e.: MoSTBE).

No 'visions' or 'objectives' have been determined for the MoSTBE, and hence they do not yet fall within a Cabinet endorsed Strategic (or Corporate) Plan. A series of draft MoSTBE objectives should be set. It is recommended that objective, mission and vision alignment is undertaken as part of the ongoing development of a future NOP to allow for direct 'line of sight' between the blue economy policy, the vision for the MoSTBE and the delivery objectives or mission of the divisions within it. This will help to solidify the leading role of DoBE and MoSTBE in setting and delivering blue economy policy. The engagement with other government Departments and Ministries necessary to determine and communicate the vision and objectives will help to raise the level of understanding of the blue economy across government and help articulate the relationships with DoBE and how that interfaces and supports other areas of government with marine related responsibilities.

The engagement process necessary to prepare a clear vision for MoSTBE will require the clear articulation of the aspirations for the blue economy. This clear message will help form the basis for a wider, effective grassroots community engagement on the blue economy.

The role of non-governmental organisations (NGOs) in supporting blue economy delivery needs particular attention. For example, significant complaints are being received from local fishers (and their associations) about the lack of consultation and consideration of the management of fishing grounds. This includes concerns for illegal fishing by foreign vessels as well as concern over damage to reefs, seagrass beds, mangroves and beaches (pers comm DoE, Feb 2021).

4.2.2. Planning and Management

4.2.2.1. Description and Approach

This area addresses processes for planning and management, including whether these mechanisms could work to deliver blue economy related activities. It was also utilized to examine how the ongoing and future plans, programmes and activities of the agency are aligned with laws and policies relevant to a blue economy. In this context, this capacity area assesses the mechanisms established to facilitate multi-sectoral engagement with other relevant agencies and public participation. The following questions were considered:

- > Is the mandate of the Dept / Division / Unit consistent with laws and public policies relating to delivering a blue economy mandate?
- > Are existing planning 'instruments' (e.g.: codes/ permits etc) being produced and updated to include blue economy related issues?

- > Is the Dept / Division / Unit integrating most recent blue economy knowledge and best practice into the way it communicates to others outside of MoSTBE?
- > Is the Dept / Division / Unit adopting participation approaches (stakeholder engagement) to promote key blue economy related knowledge learned to date?

4.2.2.2. Observations and Commentary

Discussions with stakeholders provided a mixed view when determining whether existing planning instruments are sufficient (or are being updated) for operational delivery in Antigua and Barbuda. For example, there appears to be limited update to existing planning development protocols to embrace blue economy issues. This further points to the need for MoSTBE to lead the creation of a new MSP function / team for the country.

There appear to be gaps in terms of the ability for any Ministry (including MoSTBE) to effectively demonstrate the inclusion of new blue economy related knowledge to help inform a more integrated strategic planning approach towards implementing a blue economy. Despite there being a legal mandate to share information with the general public (so as to better include them in decision making), delivering a more coordinated approach that is targeted to deliver a financially and socially acceptable blue economy, is still needed. There is no coordinated platform for sharing spatial data, such as an MSP portal, either for use within government or as a public facing information and awareness raising tool. It is not clear if there is a standardised or coordinated approach to data management, particularly spatial data e.g. metadata standards, use of GIS platform, etc. This would be a key cross-governmental coordination role for DoBE and would lay a strong foundation for the development of MSP for the country.

Mechanisms for a participatory public consultation strategy that would support blue economy delivery over the long term, is not formally established. The DoE, however, is committed to the full implementation the Escazu Agreement (international treaty to promote public engagement as a right in the management of environment and sustainable development issues) and these principles are also captured in the Environment Protection and Management Act 2019 and the Freedom of Information Act. There is a clear role for the DoBE to lead on engagement with business, NOGs and the wider public on raising awareness of the blue economy, promoting the concept of marine citizenship and on MSP.

4.2.3. Resources

4.2.3.1. Description and Approach

This capacity area addresses the human, technical and financial resource needs of an institution, where they have been satisfied and what needs still exist, including resource allocation and prioritisation strategies, to help implement blue economy related activity in Antigua and Barbuda.

The following questions were considered:

- > Is the agency adequately staffed (numbers, qualifications, competencies are sufficient to implement a future blue economy related policy)?
- > Are staff sensitized on blue economy issues to enable them to incorporate these considerations into functions?

- > Are suitable training programs/exercises in place for your staff to help build technical capacity in blue economy?
- > Is sufficient internal funding available to sustain the implementation of blue economy related activities?
- > Is appropriate technical equipment available to your institution staff to enable them to undertake their tasks functions in the future (to fulfil the expectations for a blue economy policy?)

4.2.3.2. Observations and Commentary

Discussions with stakeholders suggest the lack of human and financial resources that are available is likely to undermine the ability of agencies (including MoSTBE) to effectively achieve their mandates and to collaborate in the way that would be needed to deliver a coordinated blue economy approach. This has not been helped by the lack of an integrated resourcing strategy aligned with a NOP that focuses on the future resource needs. For example, there are currently only two officers handling legal requests. If legislation needs to be drafted it often needs to pass through further channels/officers within the Ministry in order to get completed.

There is a need to develop a mechanism, or a series of mechanistic frameworks, that enhance and improve staff knowledge and coordination and exchange. These mechanisms should, where possible, link political institutions, research institutions and the community level (civil society, NGOs) and enable coordination and exchange of ideas, products and experiences that have been generated between different subject areas.

The DoBE currently is comprised of the Minister for Social Transformation and Blue Economy, his Private Secretary (both of which have numerous other calls on their time) and one full time member of staff. For the DoBE to function effectively as both a cross-government facilitator and lead for key blue economy and marine management tasks, an increase in staff and resources is necessary. Building a the DoBE will need to strike a balance between growing too quickly, so that is difficult to manage logistically and create a sense of team cohesion and not growing sufficiently, such that it is too small to make a meaningful change.



Beach in Antigua

4.2.4. Internal Controls

4.2.4.1. Description and Approach

Internal controls that support the effective implementation of agency mandates are addressed under this area. Therefore, mechanisms for data management and sharing, research, and stakeholder communication are in focus within this capacity area. The following questions were considered:

- > Are there any overlaps or conflicts between your Dept / Division / Unit's current mandate regarding data management and that of any other agencies? What are they and with which agency (which Ministry?)
- > Does your Dept / Division / Unit believe that MoSTBE has a sufficient blue economy related monitoring and evaluation team in place? Where should such a team reside?
- > In order to improve outreach and education on blue economy matters, does your Dept / Division / Unit have an existing outreach portal/mechanism that could be built upon within MoSTBE?
- > In order to improve knowledge management, does your Dept / Division / Unit have a specific Information and data-management team to help develop effective data protocols for more effective transfer/use of blue economy information?

4.2.4.2. Observations and Commentary

Stakeholder feedback suggests that data sharing, information exchange and communication among agencies remains a major hurdle. Without exception, and in spite of the efforts of many agencies across Government, this point is noted as being one of the country's greatest challenges. There is currently no formal centralised system for ocean or marine data storage, meaning that data access and sharing is facilitated at the discretion of specific agencies or individuals. The DoE stated that efforts are currently underway to develop a national spatial database. Notwithstanding this development, better coordination is needed (internal controls) with regard to data, collection, analysis and interpretation. There is a clear need for coordinated standards in spatial data management, which under a MSP role, DoBE would be well placed to facilitate.

There is a need for Antigua and Barbuda to enhance its capability to identify threats to its maritime space in a timely manner by sharing and integrating intelligence, surveillance, and navigation systems into a common operating picture. Taking a regional approach to maritime domain awareness in the Caribbean Sea, by working with other countries, will reduce duplication of effort and allow limited resources to be shared and more effectively deployed.

There is a need to deploy the latest technology to enhance maritime domain awareness. By combining satellite, drone and vessel tracking technology with innovative tracking and analysis tools, Antigua and Barbuda could create a system that will help close the gap on illegal fishing and related criminal activity. Such cooperation, coupled with greater coordination across governments, can help reduce costs and accelerate the transition to the integrated governance approaches that are needed.



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Importantly, very little priority is given by agencies to measuring, evaluating and reporting on the outcomes of programmes and activities within their own units, institutions or organizations, and thus learning from experiences and addressing inefficiencies is not being undertaken in an organized manner. This aspect requires attention within any future blue economy and NOP planning. Tracking international and regional best practice, embedding it across government and assessing the impact of policy implementation are important functions in good ocean governance and interface naturally with the MSP role.

Consideration should also be given towards the need for MoSTBE to set up its own outreach portal to help communicate blue economy related issues (based on annual dataset collation and analysis). Other data agencies do not operate a formal reporting system that captures blue economy related environmental statistics or state of the ocean information. It is therefore suggested that such an approach could be adopted in the future, which may be linked to a new reporting function to assess progress against, for example, SDG 14. Specific existing IT systems (and internal working teams') could also perhaps be adapted to enhance any future Ministerial blue economy related data systems. The role of raising the profile of blue economy, marine citizenship and MSP all require a focus on engagement across government and with wider stakeholders. MSP lends itself to a visual interface platform that could provide a focal point for increased engagement with all stakeholders and communities.

4.3. Staff Capacity, Skills and Technical Expertise

A questionnaire was used to help determine staffing capacity and technical competence in a range of blue economy related topics to understand how human resource skillsets are currently set up and how they need to be amended to progress the blue economy (to embrace MoSTBE future needs etc). Due to project time constraints coinciding with increased COVID-19 management controls in Antigua and Barbuda, only a limited number of questionnaires were returned. As such, no quantitative analysis of the returns could be carried out.

The following presents a qualitative understanding of the current and required staff capacity, skill and technical expertise required for a DoBE and across government to progress a blue economy. This is based on the questionnaire responses as well as more general interviews with stakeholders across government and experience of similar processes elsewhere (see Annex 2).

In general, the concept of the blue economy is not well understood across government Departments. Activities related to the management of the blue economy are carried out, but in a more 'traditional', sectoral manner. The importance of the ocean and coasts to the economy of Antigua and Barbuda is recognised, but this is also on a sectoral basis. Understanding of the linkages or benefits of a more integrated approach, or of the links between environmental degradation and ecosystem services or economic growth may be appreciated in a conceptual way, but how to operationalise a blue economy approach to either day to day working or strategic planning is less well understood.

The ongoing development of the NOP and the re-starting of the NOGC process has reignited interest in the blue economy. This is bolstered through its inclusion in a Ministerial portfolio, however, more progress is needed on how to translate this concept into practical co-ordination and co-operation related tasks across Ministries / Departments in addition to upskilling staff in this new way of thinking. Beyond this, there is a similar task to be undertaken beyond government to the wider population, although some non-governmental bodies may already have a good level of understanding on blue economy related principles.

The three greatest capacity needs (sectors/specific technical areas/topics etc) that were mentioned by responders were:

1. Baseline data of the resources of the marine environment with GIS compatibility;
2. Wide-area remote monitoring capabilities;
3. Coastal engineering.

4.4. Consultant Recommendations for Staffing and Organisation

This section sets out recommendations for the organisational structure and staffing for establishing a DoBE. This is based on the findings from the previous sections, the experience of the consultancy team and knowledge from other countries. It should be recognised that as no quantitative analysis of skills across government was possible, this is based on expert judgement. The development of the DoBE should be seen not as a single action, but as a process, as the concept of the blue economy is more understood and the ocean governance procedures being supported through the ECROP are developed. The role of the DoBE should evolve and grow in order to meet the needs of the country.

There is a need the government of Antigua and Barbuda to identify funding for these recommendations and the DoBE. While this report has been funded under the CME Programme, it does not commit either the Programme or the UK Government to provide resources for their implementation.

DEPARTMENT OF THE BLUE ECONOMY OPERATING PRINCIPLES

- > Operationally led by MoSTBE with a cross-Governmental overview provided by the **Cabinet agreed NOP**, which is in line with and implements the country's national and internationally agreed policies and commitments. DoBE's role takes account of and implements other overarching development strategies and economic plans that affect the marine area.
- > Apply principles of principles focused on **low carbon, resource efficiency, social protection and social inclusion** for the marine area.
- > Safeguard **fair and equitable governance**. There are benefits in maintaining some distance between Ministry-specific development control, maritime and fisheries regulatory functions and cross-governmental co-ordination from DoBE functions for transparency.

Maritime Economy Plan Antigua and Barbuda

- > Facilitating the establishment and growth of the blue economy sector to **provide diversified economic activities for sustainable and less volatile livelihoods** for residents of Antigua and Barbuda.
- > Use MEP Implementation Pathways as the **foundation for action**.

PRIMARY DoBE FUNCTIONS

- > Work collaboratively with ADOMS and other Departments / Ministries through the NOGC
- > Create a **new Marine Spatial Planning (MSP) Unit** in the DoBE.
- > Use MSP to be the positive catalyst to **improve the management and collation of data** and statistical information on **marine resources, marine based livelihoods and the importance of the marine area to society** in Antigua and Barbuda.
- > Develop, review and update **evidence-based policies, procedures and other legislative frameworks** to manage marine resources and support the growth of the blue economy. Monitor and tracking progress on blue economy aims, including international and regional best practice.
- > **Work as a community blue economy champion**
– Encourage and promote the concept of **marine citizenship** to increase the connection to the marine area, raise awareness and understanding of the importance of the sea in supporting livelihoods, the economy and environmental health. Actively seek out the views of local people and empower ownership of local scale actions to boost the blue economy.
- > Create a **communications strategy and social media based** platform for engaging with communities on their views and on actions related to the blue economy.
- > **Cross Ministry coordination to ensure a whole government approach.** Work as a leading member of the NOGC and with other members the NOGC to implement the NOP and ease the transition towards a blue economy. Demonstrate a collaborative approach to working across government to be a role model for integration and cooperation.
- > **Track blue economy financial flows and the strategic capture of funds.** Collaborate closely with expert Ministry of Finance and Climate Finance colleagues to build a clear understanding of how money is generated and spent in the blue economy. Seek to grow revenues for blue economic actions via bilateral and multilateral funding streams.
- > **Explore and develop opportunities to raise revenue from marine activities nationally.** Lead on negotiating and monitoring investments in new, emerging and developing sectors. Work with other Departments and Ministries to identify potential revenue-raising activities, including licensing, collection of fees and special taxes; and who should be responsible for collection and enforcement of fees.
- > Prepare a **blue economy applied research strategy** to help fill identified gaps in training and capacity.

Work with national and regional training and education delivery partners to develop relevant resources for the country and support regional level upskilling for blue economy and maritime careers; and to provide research and data needed to support policy development and marine management decisions. Research, data and training should be delivered through MoUs with UWI and other providers.

The following operational issues should be taken into account in how the recommendations set out above should be addressed:

- > A blue economy approach cannot be achieved by one Department / Ministry alone. A whole government approach is required to address the blue economy, with MoSTBE and the DoBE providing leadership and acting as a catalyst for change.
- > Many marine related laws and statues are already in place and are implemented and enforced by other government Departments.
- > The DoBE should act as a secretariat to the preferred coordinating mechanism for ocean governance (NOGC) to champion and facilitate coordination between Departments and Ministries. This is a vital role in improving and implementing appropriate blue financial mechanisms; monitoring and evaluation reporting; and MSP. It is important that the DoBE is aligned to or linked in some way to the Ministry of Finance to track and coordinate financing the blue economy.
- > A phased approach to the development of the DoBE is likely to be the most sensible approach (see Figure 4-1). Initially the DoBE will need to bear the full economic costs or its running. The aim is for the DoBE to be revenue generating, but this will take time to develop. It is important, therefore, not to overburden the MoSTBE with the cost of the DoBE's initial operating structure with too much overhead in the first instance.
- > The NOP is the overarching policy for all marine related activities for Antigua and Barbuda, incorporating blue economy activities. The DoBE should play a key role in the NOP's development and implementation, with other Ministries.
- > The NOGC is a senior level executive advisory committee to the whole government of Antigua and Barbuda. It should provide expert advice to the DoBE, as it does to all government Departments. This advice to all Ministers will support Cabinet level decisions.
- > Science and analysis to support evidence based policy-making can be supplied by the new UWI Centre of Excellence, once established. A formal MoU (revisited every three to five years) between UWI and the government, negotiated by the DoBE should be put in place to support the supply of research, information and training in line with the recommended research strategy.
- > It is anticipated the new DoBE will develop an effective collegiate multidisciplinary culture, operating with a think tank style approach, with staff that offer a high level of technical acumen and exhibit exemplary behavior towards working with and supporting others.



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4.4.1. Staffing and skills

A number of positions are recommended at various levels to help deliver an effective DoBE framework over the coming five years while the DoBE becomes established. These positions may involve the secondment, loan or adaptation of existing staff positions, or be bespoke new positions. They should address a range of titles from Blue Finance Specialists, Marine Resource Economists to Blue Economy Business Strategists and Technical Assistances. There is also a need for strong project management and people management skills.

There will need to be a suite of strategic capacity development (training) topics and products for DoBE staff to embrace within a formal training and capacity building strategy to support the development of the new Department. Topics should include Marine Spatial Planning theory and practice; policy and programme monitoring and evaluation; and Natural Capital and Blue Economy financing, as well as project management and established government mandatory training.

4.4.2. Performance Management

The suggested goals, objectives and indicator headers developed by the Intergovernmental Oceanographic Committee (IOC) are recommended for MoSTBE to use, adapt and develop to create a formal performance management and evaluation system for blue economy delivery.

The structure shown in Figure 4-1 and the operational functions table (Table 4-1) also makes some early provision for a new cross governmental MSP function in line with ECROP supported goals and the emerging NOP.

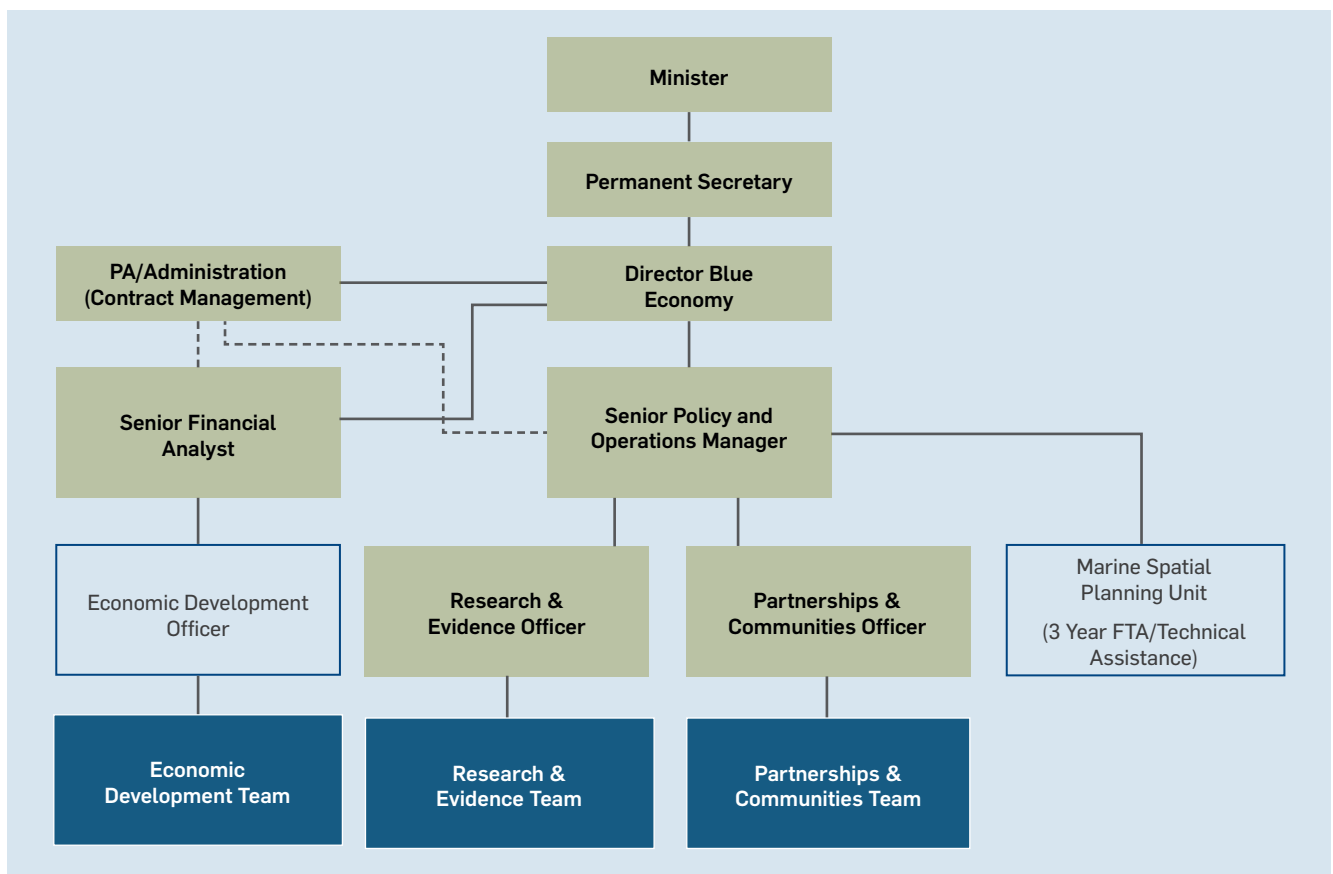


Figure 4-1 - DoBE Structure

Caution needs to be made with regard to insisting that specific blue economy related qualifications are required by DoBE staff. Firstly, there are not many examples internationally of such courses being in existence, such that to insist on such qualifications would severely restrict the available pool of resources. Secondly, this would delay the immediate placement of staff who are in possession of transferable expertise in terms of economics, planning, science, socio-economics, communication, outreach and education. Table 4-1 provides an overview of the expected staffing levels and associated expected expertise requirements to help build the necessary capacity of the DoBE.

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Table 4-1 - Operational Functions

Role	Function	Relationships	Qualifications and skills
PHASE 1 - INCEPTION			
Director – Head of Department (Reports to PS)	<ul style="list-style-type: none"> > Leads the team > Acts as the National Focal Point for NOP implementation > Advises Government via PS and Minister > Represents and negotiates for the government at national and international meetings > Serves on NOGC > Budget holder 	Works closely and collaboratively with: <ul style="list-style-type: none"> > MoSTBE colleagues > ADOMS > All OGDs with maritime accountabilities > Regional and international bodies 	<ul style="list-style-type: none"> > Experienced and respected leader. > Understands clearly the culture and operating protocols of the government > Post-graduate / MBA qualified.
Senior Policy and Operations Manager (Reports to DoBE Director)	<ul style="list-style-type: none"> > Monitors and reports on NOP implementation > Provides Secretariat to NOGC and UWI Oceans Centre Steering Group > Manages junior staff > Advises others on emergent and existing MEAs and regional policy > Oversight and management of MSP function > Tracks and reports on policy and compliance. 	Works closely and collaboratively with: <ul style="list-style-type: none"> > MoSTBE colleagues > ADOMS > All government Departments / Ministries with maritime accountabilities > Regional and international bodies 	<ul style="list-style-type: none"> > Graduate level or above > Experienced operational leader > Strong staff development skills > Experienced policy maker > Able to working at national and international level
Senior Financial Analyst (Reports to DoBE Director)	<ul style="list-style-type: none"> > Tracks, tags and monitors blue economy flow of monies; > Leads departmental M&E and audit function > Works closely with other government financial experts to secure and prudently spend climate finance and other funds 	Works closely and collaboratively with: <ul style="list-style-type: none"> > Ministry of Finance > Ministry of Environment (Climate Finance Team) > Wider government economics function 	<ul style="list-style-type: none"> > Highly qualified accountant / economist. > Understands and influences fiduciary processes > Analytical and highly numerate > Politically aware
Research and Evidence Officer • (Reports to Senior Policy Operations Manager) *Consider that this role might be funded by the new UWI CoE as the main operational level bridging role across to the new CoE.	<ul style="list-style-type: none"> > Departmental contact point with UWI Centre of Excellence; > Leads and coordinates Departmental research function; > Prepares and Applied BE Research Strategy > Influences the research programmes and priorities of others > Grows the function and the team 	Works closely and collaboratively with: <ul style="list-style-type: none"> > UWI Oceans Centre > Others with research functions and expert advisory roles > Across Government > Research institutions 	<ul style="list-style-type: none"> > Post-graduate qualified scientist or social scientist. > Analytical > Strong Strategist. > Strong project management skills
Partnerships and Communities Officer • (Reports to Senior Policy Operations Manager)	<ul style="list-style-type: none"> > Leads communications function for DoBE; > Coordinates and oversees design of social media presence; > Community engagement and outreach; > Contact point on gender, equalities and livelihoods for blue economy (as support to other expert colleagues in MoSTBE) > Grows the function and the team 	Works closely and collaboratively with: <ul style="list-style-type: none"> > Communities > Gender > Disabilities and equalities > Government Press Office and Communications specialists > Communities, interest and umbrella groups, including NGOs. 	<ul style="list-style-type: none"> > Qualified communications, community or journalism professional > Exceptional communicator > Experienced Social media manager. > Strong project management skills



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Role	Function	Relationships	Qualifications and skills
PHASE 2 - CONSOLIDATION			
Marine Spatial Planning Unit (3 years FTA) (Reports to Senior Policy Operations Manager)	<ul style="list-style-type: none"> > Designs and oversees MSP including contract management, working closely with Exec. Admin Function (Director) 	Works closely and collaboratively with: <ul style="list-style-type: none"> > MoSTBE colleagues > All sectors interested in MSP production. > Communications and Communities Officer > Regional colleagues 	Multi-disciplinary short-term team. Composition to be based upon content of ToR for MSP, including: <ul style="list-style-type: none"> > Policy Development > Coastal and marine management > GIS > Conflict resolution Stakeholder engagement.
Economic Development Manager Reports to Senior Financial Analyst	<ul style="list-style-type: none"> > Develops and delivers blue economy economic development projects > Focus on innovation and livelihoods change > Grow the function and team 	<ul style="list-style-type: none"> > MoSTBE colleagues > Ministry of Finance > Private Sector > Chamber of Commerce 	<ul style="list-style-type: none"> > Economist, Business Development or marketing professional > Clear strategist > Good communicator and project manager
PHASE 3 – GROWTH Team based growth from above catalyst roles (*). Speed and direction of growth is dependent on the funding success to develop implementation actions; or discrete projects based on research needs			
Research and Evidence Team Members		For example, this might include: <ul style="list-style-type: none"> > Marine lastics Officer > Marine Climate Change Officer > Data and information Officer 	
Partnerships and Communities Team Members		For example, this might include: <ul style="list-style-type: none"> > Blue Health and Wellbeing Officer > Social Media Officer > Youth engagement Officer 	
Economic Development Team Members		For example, this might include: <ul style="list-style-type: none"> > Marketing Officer > Business Development Officer > Aquaculture Development Officer (or other sector development roles) 	

ISSUES FOR DECISION-MAKERS:

The following summary provides some key observations, lessons or gaps to inform blue economy capacity building in Antigua and Barbuda:

- > The current mandate and objectives of the MoSTBE do not cover all aspects of a successful blue economy. This needs to be addressed in the future NOP which could align (in legal terms) to existing legislation. It should be recognised that MoSTBE does not need to do / be responsible for all the activities across a blue economy in order to successfully facilitate a blue economy approach across Antigua and Barbuda.
- > There are gaps in terms of the ability for MoSTBE to effectively demonstrate the inclusion of new blue economy related knowledge to help inform a more integrated strategic planning approach towards implementing a blue economy in Antigua and Barbuda.
- > There is a need for Antigua and Barbuda to enhance its capability to identify threats to their maritime space in a timely manner by sharing and integrating intelligence, surveillance, and navigation systems into a common operating picture. A regional Caribbean Sea approach could help reduce duplication of effort and more effectively share limited resources.
- > Ocean related scientific research and knowledge management does not appear to be integrated into decision-making across Government and other agencies.
- > Human and financial resource restrictions (in all divisions) is undermining the ability of agencies to effectively achieve their mandates and to collaborate in the way that is needed to deliver a coordinated blue economy approach. This has not been helped by the lack of an integrated resourcing strategy aligned with an adopted NOP. There is a need to develop a framework to improve staff knowledge coordination and exchange. Whilst national resourcing is always the responsibility of national governments, best use should be made of South-South cooperation and associated regional initiatives such as the proposed Centre of Excellence for Oceanography and the Blue Economy being taken forward by UWI and the Government of Antigua and Barbuda. The OECS presents potentially the greatest opportunity for collaboration, under the common direction of the ECROP.
- > Data sharing, information exchange and communication among agencies remains a major challenge. There is no formal centralised system for ocean or marine data storage. Better coordination is needed with regard to data, collection, analysis and interpretation (potentially through the use of improved IT solutions),
- > MoSTBE should establish an outreach portal to help communicate blue economy issues (based on annual dataset collation and analysis). An approach could be adopted linked to a new reporting function to assess progress against SDG 14.



5. Opportunities to Finance the Blue Economy



5. Opportunities to Finance the Blue Economy

This section presents a review of those blue economy public expenditure flows available to the project team. Some work is presented on budgetary order of magnitude identification, as well as revenue needs and possibilities. Potential multi-lateral funding opportunities are also reviewed.

5.1. Review of blue economy Public Expenditure flows

Antigua and Barbuda has minimal headroom for significant new investment. The Honourable Gaston Browne, Prime Minister and Minister for Finance, Corporate Governance and Public Private Partnerships named the 2021 budget speech "Maintaining a Healthy Nation and Restoring a Vibrant Economy", reflecting the deep impacts of the COVID-19 pandemic and noted that "the entire sub-region was dramatically and grievously impacted". Any proactive path towards the blue economy must bear this economic legacy for a number of years.

Prior to the pandemic, investments which could come under a blue economy label were limited. Using the latest available budget estimate figures of 2020, from which actual outturn maybe 10% lower than estimate, the fiscal headroom was limited with a total recurrent budget of \$1,020,229,661¹². Critical shortages in capacity, basic office functions and various sector-specific equipment can be identified in Ministries' business plans.

No items in the 2020 budget appear to be targeted specifically at integrated coastal / marine / ocean planning. Financial allocation follows historic sector based lines and the established institutional architecture. The budget is more akin to input-based budgeting (based on the perceived needs of Departments) against results-based budgeting where performance and achievement are supported.

Budget allocations for key economic sectors which make up a blue economy are identified below:

- > **Tourism** has dominated Antigua and Barbuda's economy accounting for nearly 60% of GDP and 40% of investment; though 2020 saw a 62.5% reduction from the 1.05 million visitors recorded in 2019. The mandated administration is the Ministry of Tourism and Investment. In the 2020 budget plan the Ministry identified a range of imperatives in which to invest, including Priority 7 Execute an awareness program for sustainable tourism; Priority 8 Develop a Work-Plan (2020-2021) for the Destination Stewardship Committee; Priority 10 Provide support to the hosting of a number of Marine-based events; Priority 19 Construction of Six Lifeguard and Beach Security Stations.
- > Based on activities of the Tourism Headquarters and Beach Safety and Protection Unit a recurrent budget which is blue economy-related of \$22,598,017 can be estimated. Further small allocations to beach and marine activities can also be found (code 80.500540 Tourism and economic development: Marine-based tourism\$ 19,000; and code 80.33207 Marine vessel insurance \$15,000).

- > Total marine focussed tourism expenditure may thus be around \$22.5 million
- > Fisheries provides jobs for around 1,900 people¹³ and represents about half of the agricultural production. The Ministry of Agriculture, Fisheries and Barbuda Affairs has responsibility for most areas of fisheries and aquaculture. Within the Ministry the fisheries work is based in the Fisheries Division. The recurrent budget of the Division makes up a budget of \$1,680,356 (code 20.2004, with >90% salaries) and \$849,940 capital expenditure. However, there are suggestions of budget limitations which make comprehensive delivery of the remit challenging. For example, the Antigua budget statement says of the Fisheries Division 'Limited enforcement capability. Foreign illegal fishing, especially by the French, continues unabated. It is estimated that as minimal some EC\$2.5 Million worth of fish is taken from our waters each year. Very few persons are caught due to our lack of enforcement capability'. This estimated loss of value into the fisheries is greater than the blue economy related expenditure in fisheries.
- > Maritime affairs are under the Ministry of Finance and Corporate Governance, mainly divested to ADOMS. However, ADOMS is absent as an administrative entity in the 2020 budget, and ministerial priorities outlined in the budget document do not relate to the scope of maritime affairs and/or shipping. A core ADOMS function seems to be as a service supplier related to the flag registry and international instruments. Virtually all the day to day operational issues affecting the Antigua and Barbuda fleet are carried out in offices in Oldenburg (Germany). It is not clear how such revenues are accounted for from the available budget documents of 2020.

A total estimate of a **blue economy-related budget would be \$25.1 million** based on 2020 data, of which about 90% is related to tourism. This represents **about 2.1% of the overall government expenditure** (2020, approved estimates). It should be noted that this is an estimate as information is highly fragmented and it is solely drawn from identifiable budget lines related to economic sectors of the blue economy.

Whilst the pressures on the budget are apparent even in the budget prepared for early 2020, there appears to be no allocation to coordination or integration of the blue economy in the identified budget lines. Just from a planning and budgeting stance, this suggests that there are no existing processes, which absorb identifiable budget allocations, for coordination or integration of the marine sector. From a planning and budgeting perspective, there is no specific allowance for the blue economy as a theme, only to economic sectors that have a relationship with the ocean and could, therefore, be considered part of the blue economy.

¹² Note, all figures are in local currency EC\$, unless specified as USD \$

¹³ <http://www.fao.org/fishery/facp/ATG/en>



5.2. Revenue needs and possibilities

There appears to be very limited existing capabilities or functions for revenue raising within Ministries that would be considered to make up the blue economy.

The Ministry of Tourism has expectations of raising revenue of \$4,000, which is <0.02% of the marine related Tourism Ministry budget lines. A legislative base is being developed to raise park fees for the North-East Marine Management Area (NEMMA) although limited ability to ensure collection of such fees is presented as a challenge. Some estimates of revenue are even smaller, with Barbuda Council estimates of Hotel Tax being \$10 in 2020.

Negative revenue would also appear to be an issue. If the estimated value of illegally caught fish from national waters by the Ministry of Agriculture, Fisheries and Barbuda Affairs is around EC\$2.5 Million, this would be similar to the total blue economy-related spend on fisheries.

It is not clear how the revenue generated by the ADOMS flag registry activities is accounted for or used from the publicly available budget documents. The national flag fleet was 7,487 in 2019 (0.38% of the world merchant fleet)¹⁴; this has declined from 12,359 in 2015. Based on a rough estimate of USD \$20m per 1,000 vessels from other registries, this would make the revenue in the order of USD 150 million per year (or EC \$400 million per year). Increased clarity around how this revenue is accounted for in budget documents would give a better indication of resources that could be available for blue economy activities.

5.3. Review of multi-lateral funding opportunities

Antigua and Barbuda received relatively small amounts of ODA (Overseas Development Assistance, as per OECD definition), averaging less than USD \$1.5 million per year between 2014 and 2016. This has recently increased to USD \$18.1m (gross ODA) in 2018 and USD \$28.9m in 2019. In 2019, ODA represents 7.5% of overall government expenditure.

The recent increase in ODA would seem to be related mainly to two factors:

1. Humanitarian response due to Hurricanes Irma and Maria in September 2017 – this led to a significant international response which is captured in the ODA figures.
2. Systemic strengthening within one part of government which has been effective in mobilising ODA compliant funds.

The ODA is a mix of multilateral, bilateral, regional funds and international funds (see Figure 5-1). The largest source is the Caribbean Development Bank, but UAE is also a significant contributor. International funds include the Adaptation Fund and Green Climate Fund (GCF).

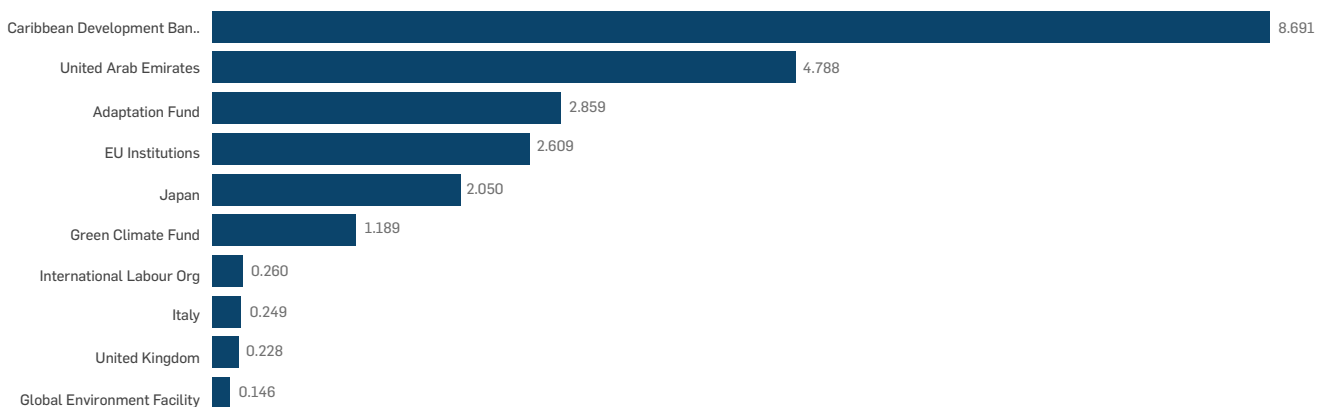


Figure 5-1 - Top ten ODA donors (2018 – 2019 average, USD million)

¹⁴ <https://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/028/index.html>

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Although the global funds are quite rigid in the themes which they support, bilateral funds can cover a wider variety of sectors. Much of the bilateral aid is focussed on humanitarian aid (65%, average of 2018 – 2019) and other social infrastructure (houses etc, 27%) (see Figure 5-2). This may reflect the vulnerability of the country to hurricanes and significant impacts from hurricanes.

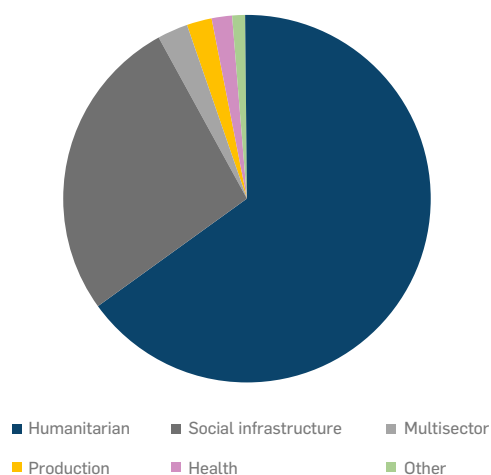


Figure 5-2 - Bilateral ODA by sector (2018 – 2019, average)

The Government of Japan, through the Japanese International Cooperation Agency (JICA), has supported the fisheries sector in the construction and refurbishment of Fisheries Complexes and provided technical support through the provision of long-term experts based at the Fisheries Division. There has been Grant Assistance under the Economic and Social Development Programme for the improvement of the Fisheries Division in Antigua and Barbuda from 2019. The allocation of around US \$1.8 million dollars was destined for fisheries-related equipment such as fish aggregating devices (FADs), a hydraulic boat lift, pick-up trucks and a waste water treatment aerator system to improve the operational efficiency and a hygienic environment.

The Fisheries Division has also received technical support from FAO for updating the fisheries legislation, as well as in the development of national plans of action for IUU fishing, standards for fishing vessel construction and the assessment of infrastructure requirements for fisheries trade. FAO also supported shark assessment studies in Antigua to enable the development of a national plan of action (NPOA) for sharks in the near future. During 2013 - 2015 a fisheries component for the Zero Hunger Challenge –Antigua and Barbuda was implemented, which generated about 50 new jobs for the poorest youth and women-headed households in the fisheries sector. The project involved practical capacity building in fish trap making, vessel repair, fish processing, angling and organisation of fish fries and employment support services.

In terms of aquaculture, the country is part of a FAO Technical Cooperation Project (TCP) which is focusing on developing tilapia aquaculture as part of the Blue Growth Initiative, with expected benefits of strengthening the aquaculture sector in the country as well as increasing the availability of locally produced fish and fish products for the domestic market.

¹⁵ UNFCCC (2018) Assessment and Overview of Climate Finance Flows: Antigua And Barbuda 2014–2017

The DOE's programme of institutional strengthening has been incredibly successful in leveraging ODA into Antigua and Barbuda to support initiatives within the Ministerial portfolio. Developing projects that had a high degree of 'readiness' was an important factor in this success. The DoE also has more autonomy in the management of its finances than other Departments, which may have helped to enable the approach to ODA funding application. The DoE's success is outlined in Box 1.

Belize has recently created a Ministry of Blue Economy and Civil Aviation, focusing on marine resources and climate change. The expansive portfolio encompasses renewable energy, human resources, and job creation without negatively impacting Belize's natural marine environment. This approach highlights natural linkages between MoSTBE (blue economy) and DoE (climate change) functions, such that greater collaboration between the two Departments could increase the strength of future ODA funding applications.

Box 1. How institutional strengthening has mobilised a multi-million ODA budget in Antigua and Barbuda

- > The Department of Environment (DoE) in the Ministry of Health and the Environment has been successful in mobilising ODA from global funds.
- > The Ministry has developed a project called "An integrated approach to physical adaptation and community resilience in Antigua and Barbuda's northwest McKinnon's watershed" which was granted USD \$9.97m in March 2017. The DoE was the Implementing Entity and the Project Management Unit of DoE was the Executing Agency.
- > Five projects for readiness from the GCF were approved with a financial volume of USD 4.8m. These were related to "readiness" for mobilising, managing and delivering climate finance.
- > The DoE achieved Accredited Entity status to the Green Climate Fund (GCF); this requires advanced project management and fiduciary standards to be constructed. This was achieved in October 2017.
- > A detailed climate finance assessment¹⁵ was carried out from 2014 – 2017 which reviewed public and external finance flowing into Antigua and Barbuda. The analysis looked at flows between years and was broken down by each Ministry. It found about 3% of the budget was climate relevant, mainly focussed at adaptation. The report provided a detailed landscape of climate finance from which to target further mobilisation.
- > A GCF three country project (Antigua and Barbuda, Dominica and Grenada) in integrated physical adaptation and community resilience was approved for USD \$22.6m in March 2018 with the DoE as the Accredited Entity.
- > A further GCF project on resilience to hurricanes in the building sector in Antigua and Barbuda was approved in August 2020 with a project value of USD 46.2 million.
- > This case study demonstrates the potential for institutional strengthening for the mobilisation of ODA.



5.4. Target innovative forms of blue economy finance

More innovative approaches for generating finance from / for the blue economy may also be worthy of consideration to provide blended financial provision for the DoBE and sustainable financial provision. Two examples for consideration are:

Debt for Nature Swap

Raise impact capital from international markets by issuing a blue bond investment entity to purchase discounted existing Antigua and Barbuda sovereign debt. The government would retire existing bonds and assume a newly restructured loan on more favourable terms (lower interest rate and extended tenor). The loan amount could be in the multiple USD \$10's to low \$100's million.

The newly restructured loans will create capital which could be used for one or more of the following blue initiatives:

- > Finance cash flow for biodiversity and conservation activities on the ground in Antigua and Barbuda;
- > Undertake a national of Marine Spatial planning process (under the proposed Marine Spatial Planning unit);
- > Capitalise an endowment to provide funding for marine conservation in perpetuity (this could be a Trust under the DoBE).

For the wider government the benefits of this approach are a reduced debt burden through interest cost reduction due to the debt discounting and extension of the debt duration.

Government commitment towards marine conservation, such as legally designation of 30% of its EEZ and territorial waters for marine biodiversity protection, can facilitate or secure such arrangements.

A feasibility study should be undertaken on the financial mechanics and institutional arrangements to determine the possibility of this under national regulations.

“Greening” the flag registry

Given Antigua and Barbuda's large national flag fleet and ADOMS' flag registry activities, one potential source could be the International Maritime Organisation (IMO) Greenhouse Gas (GHG) emissions strategy, which provides incentives for ships registered under a flag state to reduce CO₂ emissions, and potentially play a role when it comes to ensuring the collection of future fees or contributions associated with CO₂ emission.

- > This action would require working closely with ADOMS.

ISSUES FOR DECISION-MAKERS:

Resourcing options moving forward

1. Significant increases in domestic resources to the blue economy unit are unlikely due to limited fiscal headroom in the budget in normal times. The pandemic is likely to create further fiscal strain over the next few years.
2. Future mobilisation of ODA, or other sources of international funding, is a possible avenue and has been proven to be successful in relation to climate change. Pursuing this option would require a number of interim aspects to be achieved:
 - i. Founding blue economy centrally within the (i) national development strategy being developed in 2021 under the Ministry of Finance and Corporate Governance; (ii) the NOP being developed under ADOMS. A clear policy lever for blue economy to help support funding requested.
 - ii. Build strong partnerships with knowledge and expertise to help in rationale, justification and design of blue economy relevant interventions and provide technical / “think tank” style support. For example, with the Centre of Excellence for Oceanography and the Blue Economy¹⁶.
 - iii. Review blue economy related finance from national and external sources in a similar fashion to the work carried out on climate finance. Look towards introducing a budget tagging system for blue economy alongside the climate tracking process already being developed.
 - iv. Form a DoBE in which project management, fiduciary processes and other required fund management skills are targeted and developed, such as the innovative funds set out above.

¹⁶ <https://www.acu.ac.uk/news/antigua-and-barbuda-to-establish-centre-of-excellence-for-oceanography-and-the-blue-economy/>

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6. Recommendations and Way Forward



6. Recommendations and Way Forward

Effective implementation of an integrated blue economy will require, and lead to, institutional changes. This is because decision-making across all aspects of sustainable marine development delivery in Antigua and Barbuda currently involves multiple agencies. To move towards an integrated blue economy will require change to the current organisational structure.

Notwithstanding the critical future role of MoSTBE as the Ministry with the portfolio responsibility for the blue economy, it is important that a **whole-government approach** is taken.

Building on the findings from the review and analysis set out in this report, the following key observations have been extracted to help support MoSTBE in the design of a preferred intra-governmental and coordination framework:

- > **Observation 1:** There is a need for MoSTBE to define what the blue economy is and set a **clear vision and purpose** for the new Department that can be communicated to other Government Departments and wider stakeholders. All these elements need to clearly and specifically **link to the developing NOP** to ensure a consistent message from Government about the management and value of the marine area. The existing NOGC forms a potentially useful cross-governmental knowledge pool from which key staff may be seconded / loaned to DoBE to assist more rapid capacity building and help assure that a collegiate whole government approach is adopted.
- > **Observation 2:** MoSTBE needs to be clear exactly who are the right individuals (and institutions) to deliver exactly what is required (i.e. the right people for the right task). The DoBE **does not need to do / be responsible for all blue economy activities in order to successfully facilitate a blue economy approach** across Antigua and Barbuda;
- > **Observation 3:** MoSTBE need to define a clear process which articulates **suitable and measurable performance goals** to track progress on blue economy initiatives. Demonstrating progress on targets will help raise the profile of blue economy across government and with citizens. It will also help to demonstrate that funding (from national / international sources) is used effectively;
- > **Observation 4:** It is important to ensure that the pending NOP is designed as a living and pragmatic document that is aligned to ECROP (2019), and the new National Development Plan; and is embedded within existing and future policy settings. All of this requires high level support and a clear commitment to team work particularly across DoBE and the NOGC.
- > **Observation 5:** Build strong partnerships with knowledge and expertise to help in rationale, justification and design of blue economy relevant interventions and provide technical / think tank style support e.g. working with the UWI and other international academics to develop the Centre of Excellence for Oceanography and the Blue Economy¹⁷ in a way that will **build the knowledge base and capacity of the new DoBE, across other Government Departments and beyond.**
- > **Observation 6:** Review blue economy related finance from national and external sources in a similar fashion to the work carried out on climate finance. Look towards introducing a budget tagging system for blue economy alongside the climate tracking process already being developed. MoSTBE can learn from the approach taken by the DoE. **Knowledge sharing and partnership working between MoSTBE and DoE** could develop successful joint projects for ODA funding that could achieve both blue economy activities that meet both Ministries' goals.
- > **Observation 7:** Fiscal headroom is unlikely to provide significant domestic resources to support the blue economy. This means the **capacity to ensure future mobilisation of ODA, and other more innovative sources of blue finance** is an imperative. To achieve this, capacity needs to be developed within the DoBE, as well as functioning partnerships with other key government units and regional / international external entities. Post-COVID recovery funds are likely to be significant and a potential source of revenue to enable the country to build back bluer and achieve MoSTBE aims for the blue economy.
- > **Observation 8:** International examples illustrate that **regional support and collaboration opportunities should be nurtured.** The OECS (and the ECROP) represents a viable and consistent approach for Antigua and Barbuda to embrace and devise a consistent blue economy delivery approach across the wider Caribbean region.
- > **Observation 9:** International examples illustrate that **regional support and collaboration opportunities should be nurtured.** The OECS (and the ECROP) represents a viable and consistent approach for Antigua and Barbuda to embrace and devise a consistent blue economy delivery approach across the wider Caribbean region.

Table 6-1 is designed to help determine the recommended next steps by analysing the Strengths, Weaknesses, Opportunities and Threats to the delivery of a blue economy approach in Antigua and Barbuda. It is recommended that this is further elaborated within the pending NOP, which will need to focus in more detail on strategic institutional arrangements needed to help support blue economy implementation.

¹⁷ <https://www.acu.ac.uk/news/antigua-and-barbuda-to-establish-centre-of-excellence-for-oceanography-and-the-blue-economy/>



Table 6-1 – SWOT Analysis for the delivery of blue economy in Antigua and Barbuda

STRENGTHS	WEAKNESSES
<p>The Government has identified the better utilisation of its marine space as one of the seven priorities in its Medium- Term Development Strategy (MTDS) (Ministry of Finance and Corporate Governance, 2015). This is a key strength as this seeks to ensure that Antigua and Barbuda develops its physical infrastructure, while preserving the country’s delicate environment, as well as mitigating the effects of climate change. All institutional and capacity efforts appear to focus on delivering against the MTDS.</p> <p>Having both MoSTBE and NOGC with coordination responsibilities is a potential strength to support future project implementation and management of the NOP and the MEP, as it provides a drive to collaborate in more than one area of government. There is national impetus to see the Blue Economy and the intentions of the NOP to succeed in reducing barriers (political or coordinator) in the future.</p>	<p>There is a lack of ocean governance related capacity in the country. There is a need for project management support and capacity development. There is limited availability of skilled staff necessary to implement blue economy related actions, but also with an ability to monitor progress and undertake research to support key sectors and communities in the benefits of a blue economy.</p> <p>Lack of coordination between ongoing agencies and sectors represents a logistical weakness and a challenge especially amongst public, private, research and NGO/CBO. This limits the ability to prevent duplicating efforts; develop joint working on projects / policies / funding streams; sharing of lessons learned (such that mistakes can be repeated)... Ocean governance matters appear to not be sufficiently mainstreamed or high profile into some key sector strategies.</p> <p>There is an absence of adequate financial resources to undertake activities.</p> <p>There is limited facility to exchange / share information or data on the blue economy in Antigua and Barbuda.</p>
OPPORTUNITIES	THREATS
<p>The A&B NOP Strategic Action Plan with phased and achievable (SMART) indicators, assigned to each activity in order to align with the ECROP (2019) Strategic Action Plan, will provide the framework for a successful initial phase of delivery for the NOP</p> <p>There are strong potential roles and responsibilities for the NOGC and MoSTBE. It is likely that external consultants will be needed to help move forward the activities in the short term due to a lack of capacity within the Government of A&B. A cooperative approach between MoSTBE and others on the NOGC presents an opportunity to pool resources and achieve shared outcomes and capacity raising.</p> <p>Given the focus across OECS to progress coordinated ocean management, there is significant opportunity to share resource, coordinate activities, make joint funding applications, and learn lessons across the whole region.</p>	<p>There are inadequate levels of human resources, including specialist skilled resources; along with limited public awareness and education on ocean education matters and livelihood diversification opportunities.</p> <p>There is no agency that has been tasked with the responsibility for ocean related research coordination. (The Centre of Excellence presents a potential opportunity in this respect).</p> <p>Local entities involved in supporting the delivery of specific aspects of the NOP may require separate support to meet the agreed reporting and fiduciary standards required by funding agencies.</p> <p>Few NGOs and CBOs have the internal capacity (technical or financial), to manage the administrative requirements and execute any specific activity, though their role in education, awareness and outreach should be actively encouraged.</p>

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Annexes



Annexes

Annex 1 - Summary of primary climate impacts on the Blue Economy

Climate impact	What is happening?	Impact on the Blue Economy
Increasing levels of sea temperature	By the 2080s, average sea surface temperatures in the Caribbean region could be 2-3 oC warmer than the period 1976-2005.	<ul style="list-style-type: none"> > Coral bleaching and break up will reduce storm resilience > Potential for changes to fish and fisheries in terms of species distribution and catch size. > Heightened risk of waterborne disease will be significant if not coupled with clear waste management solutions.
Sea level Rise (SLR) across the OECS Region	SLR has risen by around 20 cm over the past 100 years, Global mean sea level is projected to rise by a further 26-82 cm (10-32 inches) over the coming century.	<ul style="list-style-type: none"> > Sea level Rise will result in the coastal zones of OECS country being further 'squeezed' as the sea begins to encroach the land. > Many people live along the coast and it will be difficult in some instances to 'make space for water'. > Building control and regulations and critical infrastructure; for example, ports and waste management facilities will need to be designed with sea level rise in mind > Projected rise in sea level and severe storms is likely to increase the risk of storm surge events.
Extreme weather events	As exemplified by Hurricanes Irma and Maria to the north of the OECS, there will likely be a future increase in the strongest category 4 and 5 storms may increase by 80% in frequency over this century, with higher winds and rainfall rates associated with these storms.	<ul style="list-style-type: none"> > Hurricanes impact directly on human and food security. An increased level of planning around water availability and a need to increase the resilience of food supply will be needed, as well as the development of more resilient coastal infrastructure to storm damage and flood risk. > In blue economic development, particular attention will be needed to address the risk posed to less robust infrastructure for example fishing gears and aquaculture facilities. > Opportunities to shift to renewable energy will need to build in climate resilience. > Ocean craft will move to 'safer havens' in response to extreme weather. This may exacerbate marine spatial planning challenges for marine space.
Ocean Acidification	If atmospheric CO2 concentration continues to rise as predicted, by the next century the average pH of oceanic waters could decrease by 0.3 – 0.4 pH units below pre-industrial levels. Ocean acidification will exacerbate the current global warming effects on coral reefs and is likely to lead to greater degradation of coral reef conditions.	<ul style="list-style-type: none"> > Ocean acidification will exacerbate the current global warming effects on coral reefs and is likely to lead to greater degradation of coral reef conditions, with potentially serious consequences for reef building and deep corals, as well as crustaceans (e.g. lobster) and molluscs (e.g. conch). > Throughout the Caribbean, ocean acidification is also likely to adversely affect the physical strength of corals making Caribbean coastal areas more vulnerable to the action of waves and storm surges.



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Annex 2 - Case Examples

United Kingdom

The United Kingdom (UK) was one of the earliest adopters of an integrated approach to marine policy in the world. The UK is made up of four devolved administrations (England, Scotland, Wales and Northern Ireland), which have competencies that are devolved (e.g. environment, culture) and others that are reserved by central UK government (e.g., energy, defence).

As such, when the UK approached the creation of an integrated approach to marine policy in what can now be seen as a blue economy approach, there were issues on how to integrate not only between government Departments and policy areas, but also between administrations.

Its solution to integrated policy and delivery is set out in below. It consists of the following key components:

- > **UK Marine Policy Statement (MPS)** that applies to all administrations and all relevant policy and decision-making bodies within those administrations. This consists of:
 - Guidance on developing marine spatial planning;
 - A vision and objectives for the marine environment;
 - Policy objectives across 11 activities
 - Marine Protected Areas
 - Defense and National Security
- Energy production and infrastructure development
- Ports and shipping
- Marine aggregates
- Marine dredging and disposal
- Telecommunications cabling
- Fisheries
- Aquaculture
- Surface water management and waste water treatment and disposal
- Tourism and recreation
- > **UK Marine Strategy** which provides the framework for delivering the UK vision for the marine environment.
- > **UK Marine Science Strategy** which sets the general direction for future marine science across the UK for the period 2010 to 2025 by:
 - identifying high level priority areas for marine science
 - tackling cross-cutting barriers, to help deliver the science
- > **Marine Spatial Plans** across each devolved region that look across all relevant policy areas to set out priorities and directions for future development within the plan area, inform sustainable use of marine resources and help marine user understand the best locations for their activities.

England	Scotland	Wales	Northern Ireland
UK Marine Policy Statement			
UK Marine Strategy			
UK Marine Science Strategy			
Joint Fisheries Statement			
Regional Marine Plans	National Marine Plan	National Marine Plan	Marine Plan for Northern Ireland
25 Year Environment Plan	Strategy for Marine Nature Conservation	Marine and Fisheries Strategic Action Plan	DAERA Business Plan
Industrial Strategy	Inshore Fisheries Strategy	Industrial Strategy	Industrial Strategy
Clean Growth Strategy	Scottish Energy Strategy	Clean Growth Strategy	Clean Growth Strategy
Maritime 2050	Maritime 2050	Energy Wales: A Low Carbon Transition	Offshore Renewable Energy Strategic Action Plan
National Planning Policy Framework	National Planning Framework	Maritime 2050	Maritime 2050
Heritage Statement	Our Place in Time: Historic Environmental Strategy	Planning Policy Wales	Strategic Planning Policy Statement for NI
		Historic Environment Strategy for Wales	
Marine and Coastal Access Act 2009	Marine Scotland Act 2010	Marine and Coastal Access Act 2009	Marine Act (Northern Ireland) 2013

Figure A2-1 - UK Blue Economy Policy Framework (adapted from EQO-NIXUS 2021)

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From a delivery perspective, each devolved administration has chosen a different approach which is best suited to their own administrative, political and geographical needs. This is set out below:

- > **England** created an independent non-departmental public body (the Marine Management Organization (MMO)) which reported to five government Departments (Environment, Food and Rural Affairs; Transport; Energy and Industrial Strategy; Communities, Housing and Local Government; and Defense). They are responsible for managing fisheries, marine protected areas, marine infrastructure licensing and marine spatial planning. There are still delivery functions that sit outside of this agency (e.g., oil and gas, maritime affairs, nationally significant infrastructure permitting), but they all operate within the framework set down by the MMO as Marine Plan Authority.
- > **Scotland** combined all devolved functions to do with the marine environment (fisheries, marine protected

areas, marine infrastructure licensing, marine spatial planning) into one government Department (Marine Scotland), that has responsibility for policy making, operational decision making and science across these functions. This has created a “centre of excellence” within Scottish Government for marine matters that has both policy and operational control as well as responsibility for delivering the science to inform decision making.

- > **Wales** have a small marine policy team with most of the operational decision-making being located within Natural Resources Wales, a non-departmental public body, whose remit is the sustainable management of Wales’ natural resources, both on land and at sea.
- > **Northern Ireland** has a very small administration and the assembly was suspended from 2017 to 2020. As such, they have put all the policy and operational decision making within a small team in the Department for Agriculture, Environment and Rural Affairs.

England	Scotland	Wales	Northern Ireland
UK Marine Policy Statement			
UK Marine Strategy			
UK Marine Science Strategy			
Joint Fisheries Statement			
Regional Marine Plans	National Marine Plan	National Marine Plan	Marine Plan for Northern Ireland
Marine Management Organisation	Marine Scotland	Natural Resources Wales	Department of Agriculture Environment and Rural Affairs
Department of Environment Food and Rural Affairs	Directorate of Local Government and Communities	Economy Skills and Natural Resources	Department for Communities
Department for Business Energy and Industrial Strategy	Directorate of Energy and Climate Change	Education and Public Services	Department for the Economy
Department for Transport	Directorate of Culture and External Affairs	Department for Business Energy and Industrial Strategy	Department for Business Energy and Industrial Strategy
Ministry of Communities, Home and Local Government	Department for Transport	Department for Transport	Department for Transport
Department of Communications, Media and Sport	Ministry of Defence	Ministry of Defence	Ministry of Defence
Ministry of Defence			

Figure A2-2 - UK Blue Economy Institutional Framework (adapted from EQO-NIXUS 2021)

As well as these regional delivery models, there are national coordinating mechanisms in place for:

- > Assessing environmental status (UK Marine Strategy);
- > Coordinating science needs (UK Marine Science Strategy); and
- > Monitoring and surveillance of human activity at sea across all functions, including fishing, navigation, safety at sea, customs, defense and security services (National Maritime Information Centre, Joint Maritime Operations Command).

Of these models, it can be argued that only England and Scotland have set up truly cross-Departmental models that are good examples for blue economy implementation. The Scottish model relies on centralizing control as much as possible, which is achievable due to the smaller size of their blue economy. The English model, however, has a delegated model that possesses a strong coordinating function across government Departments, that reflects the size of government as well as the complexity of the English sea space, which is one of the most congested (in terms of use) and busiest (in terms of marine transport) in the world.



Solomon Islands

The Solomon Islands has embraced the regional Blue Pacific and Pacific Oceanscape concepts for sustainable oceans management and translated the core principles into a series of national actions. The Solomon Islands National Ocean Policy (SINOP 2018) was launched in November 2018 to safeguard its rich fishing grounds that provide food security, livelihoods, and government revenue. SINOP (2018) represents a useful example of the political and multi-jurisdictional commitment required to apply regional ocean frameworks nationally.

The SINOP (2018) is a response to growing regional ocean pressures and national challenges. From an institutional arrangement perspective, the preferred delivery approach was for Officers, from 12 national Ministries, to be instructed to formulate a national Working Group (entitled "Ocean12") that are tasked to develop the SINOP and build on existing policies and sectoral priorities, including those for fisheries, environment, and development planning. The aim of Ocean 12 was to develop an "integrated effort, not one of competing silos".

The bipartisan, high-level support of the Office of the Prime Minister and Cabinet gave a powerful impetus for action and cooperation, and was a key to success. Reflecting on the collaborative effort to produce the SINOP, the drafting team members from the lead Ministries of Fisheries, Environment and Climate Change, and the Prime Minister's Office separately identified other key success elements, which is summarized in Figure 2.3.

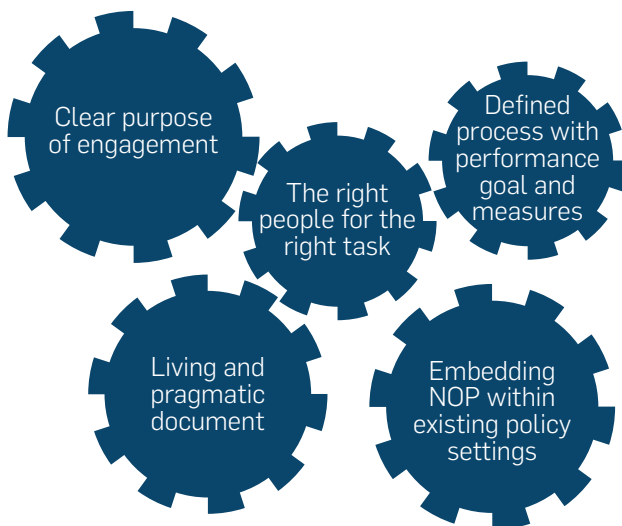


Figure A2-3 - Solomon Island SINOP principles for a successful blue economy

In 2015, with a clear understanding of policy goals, timelines and high-level expectations, the line agencies took ownership of the SINOP process, which was led (due to national needs) by the fisheries and environment portfolios. External technical support from the International Union for Conservation of Nature (IUCN)/MACBIO programme was also made available; however, the SINOP was developed and written by local officials/experts to ensure it was context relevant. Agency responsibilities and resource inputs were outlined in an agreed policy development road map that secured consistent personnel engagement and timely expert advice.

Early on in the SINOP design process, an analysis of existing policies and gaps was conducted to ensure the SINOP would advance policy action, not duplicate it. The Ocean12 then identified elements of an 'effective' ocean policy that could later inform key performance criteria for SINOP as follows:

- > a clear legal framework;
- > ongoing capacity development;
- > marine spatial planning;
- > sustainable financing;
- > agreed multi-sectoral decision-making systems;
- > well-defined management jurisdictions;
- > strong compliance regimes; and
- > multi-jurisdictional stakeholder engagement and knowledge brokering.

The Ocean12 group also defined key criteria for implementation success, such as customary marine tenure recognition, ocean legislation harmonization, and dispute resolution mechanisms.

Broad-based consultations with non-governmental organizations (NGOs), industry, and provincial and local government occurred early. Despite efforts at early and ongoing consultation, integrating policies with different priorities became challenging in the implementation phase. There was an understanding that, given the complexity of ocean governance, the implementation processes would need to evolve and thus be based on adaptive management processes ('a living document') and adjusted as experience was gained and lessons learnt.

The hard task of developing an agreed action plan still remains, and this is where difficult compromises will inevitably occur. For example, the priorities of agencies concerned with fisheries, environment, mining, forestry and transport sectors are likely to differ with respect to ocean resource use and conservation. To manage potentially conflicting interests among technical and sectoral agencies, oversight of the SINOP was transferred from the policy development chair in the Ministry of Fisheries and Marine Resources, to the Ministry of Foreign Affairs and External Trade (MFAET). MFAET has subsequently established a division for Oceans and Climate Change to oversee SINOP implementation.

A key observation from the Solomon Islands that is of relevance to Antigua and Barbuda, is that although MFAET is well suited to having a national coordinating role, it will still depend on technical agencies for expertise and policy implementation. MFAET could face substantial hurdles as the mediator for competing sectoral interests. There are questions concerning how MFAET will coordinate implementation and ensure political support, line-agency action and appropriate resourcing over the long term. It is not clear whether the new division will duplicate work or draw expertise out of line agencies, which already lack resources.

Compounding this challenge is that the implementation phase requires more engagement with provincial and local governments. This adds to the competing stakeholder interests and management complexity from working across scales — customary and national/provincial/private fisheries jurisdictions and management regimes. About 80 per cent of

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coastal fisheries are under customary marine tenure, with an increasing number coming under community-based resource management regimes. At the local and provincial levels, there is weak capacity for service delivery, regulation of pressures (especially external ones) and enforcement of regulations. This could impact on policy implementation and collaboration.

Given capacity gaps in the Solomon Islands, there is a strong role for regional agency support, including the Pacific Community (SPC), the Forum Fisheries Agency (FFA), the Secretariat of the Pacific Regional Environment Programme (SPREP) and NGOs (such as WorldFish). The SINOP will help focus effort; however, there remain challenges in consistent and timely access to regional expertise and resources (Keen et al. 2018) and multi-jurisdictional coordination for locally relevant resource provision (Vince et al. 2017).

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Seychelles

The Seychelles was one of the first SIDS in the world to take a proactive blue economy approach to managing their marine space. As set out below, at a policy level this consists of the following main components:

- > **Blue Economy Roadmap** as approved by the Government of Seychelles on 31st January 2018 is an integrated approach to ocean-based sustainable development which brings together economy, environment and society, consistent with the Sustainable Development Agenda 2030 (SDGs), Aichi Target 11 of the Convention on Biological Diversity (CBD) and the Paris Agreement on Climate Change (2015). It articulates the Seychelles "Blue Economy Brand" as a unique comparative advantage based on its sustainability credentials, building on Seychelles national and international legal and policy frameworks, successful flagship initiatives such as marine spatial planning (MSP) and innovative financing through blue bonds whilst advancing a prioritised agenda for action and investment to 2030.

- > **Seychelles Marine Spatial Plan** (www.seymmsp.com) is a government-led process aimed at supporting the sustainable and long-term use and health of the waters throughout Seychelles' 200 nautical mile EEZ. It is an integrated, multi-sector approach to address climate change adaptation, marine protection, and support the Blue Economy and other national strategies.

Although the MSP Authority is the Ministry of Environment Energy and Climate Change, whose mandate (defined within the MSP) is to have 30% of Seychelles EEZ as a marine protected area, they clearly recognize the need for integration and coordination across government Departments. As such, they have established, or are in the process of establishing, two cross governmental bodies as follows:

- > **Department of the Blue Economy (DoBE).** This is an independent Department whose mandate is to provide strategic direction and coordination of blue economy implementation, as part of the continued sustainable development of Seychelles. They are responsible for delivering the "Blue Economy Strategic Policy Framework and Roadmap: Charting the Future (2018-2030)". This focuses on four key strategic priorities for action and investment, and proposes 2030 objectives and strategic actions to inform sector-based planning and development. The DoBE's role is focused more on the development of the blue economy from the perspective of creating the right socio-economic enablers for sustainable economic growth, skills, innovation, resilience, and partnerships rather than ocean management, which is carried out by relevant agencies with oversight from the Seychelles Ocean Authority (SOA) which is outlined below in more detail.
- > **The Seychelles Ocean Authority.** The SOA (when formally set up) will be empowered to coordinate and adaptively manage the implementation of Seychelles' Marine Spatial Plan. It will fall under the President's or Vice-President's Office to ensure it can fulfil its cross-portfolio role, but will otherwise be fully independent with no existing mandates to ensure that it is not biased towards any one policy portfolio or set of interests. It will function as a governance agency and will not perform operational functions that are already assigned to existing relevant authorities. Direct implementation will be undertaken by line agencies that manage protected areas or management areas under the MSP as set out in specifically produced policy maps.

The mandate of the SOA is still under consideration but as of the 30th October 2020 it included tasks that embrace:

- > Governance, monitoring and evaluation of marine spatial planning and its implementation by line agencies.
- > Provide information/expertise to support in matters of marine governance.
- > MSP scientific practices including data requirements and an MSP research agenda
- > Development of funding options to support the sustainable implementation of the MSP.
- > Public education, stakeholder communication and outreach.



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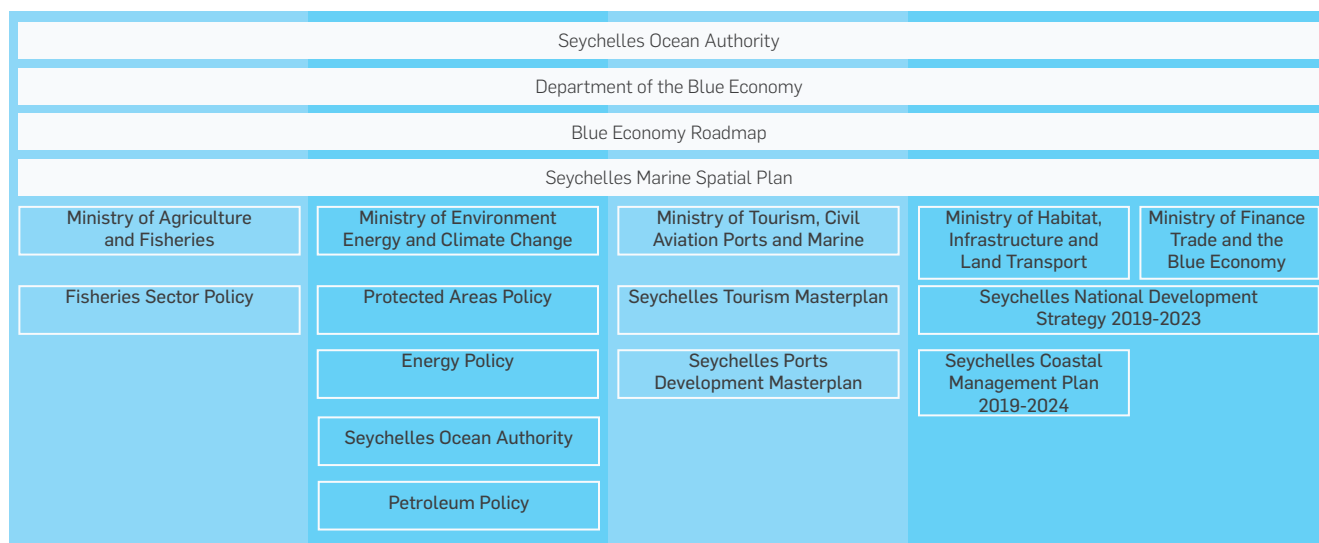


Figure A2-4 - Seychelles Blue Economy Policy and Institutional Framework (adapted from EQO-NIXUS 2021)

Annex 3 - Summary of Legislation

Relevant Area/ Law	Description
Land Use	
1. Town and Country Act (Cap 432, 1948) Town and Country Planning Regulations (SRO No. 24, 1953)	Establishes the Central Housing and Planning Authority to prepare or adopt a town planning scheme or a regional scheme.
2. Land Development and Control Act (Cap. 235 of 1977)	Establishes the Development Control Authority to institute a survey of Antigua and Barbuda for the development of Antigua and Barbuda or the planning of its development. The DCA has responsibility for regulating the use and development of land for urban, economic and infrastructure development.
3. Crown Lands (Regulation) Act (Cap 120, 1917) The Crown Lands (Land Settlement) Regulations (SRO No. 24, 1930)	Addresses lands acquired by the Government and regulations with respect to the terms and conditions on which Crown Lands may be rented, leased, occupied, sold or otherwise dealt with.
4. The Physical Planning Act (Cap. 620, 2003)	Makes provision for the orderly and progressive development of land, buildings upon it and to preserve and improve its amenities.
Marine	
5. Maritime Areas Act (Cap. 260 of 1986) (formerly Territorial Waters Act)	Implements UNCLOS into national law. Establishes the principles for the setting of the territorial seas, contiguous area and continental shelf of Antigua and Barbuda. It also defines the EEZ and fishery zone and the area under which Antigua and Barbuda exercises sovereign rights.
6. The Fisheries Act (Cap. 173, 1989)	The principal fisheries legislation in Antigua and Barbuda. It was enacted in the context of the initiative to introduce harmonized OECS fisheries legislation throughout the OECS and is modelled on the harmonised OECS Fisheries Legislation of 1983.
7. Draft Fisheries Act (2004)	An act to provide for the development and management of fisheries and related matters. It covers registration and construction of local fishing vessels, authorisation of fishing and processing operations, aquaculture, marine reserves and conservation measures and enforcement.

^[1] Studies predict by 2030, Solomon Islander fisheries will not meet local subsistence needs (Bell et al. 2009)

^[2] <http://macbio-pacific.info/>

^[3] Oceans12 stated "We did not want to re-invent the wheel, or have a policy that would later conflict with existing policy and regulations".

^[4] <https://seymsp.com/>

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8. The Fisheries Regulations (No. 2, 2013)	Establishes the Fisheries Advisory Committee and its tasks covering local and foreign fishing vessels, licencing and recording of commercial fisheries, the placing and operation of artificial reefs and fish aggregating devices, as well as fishery conservation measures.
9. Draft High Seas Fishing Act (2004)	The purpose is to implement the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, adopted by the Conference of the Food and Agriculture Organization of the United Nations on 24 November 1993; to implement the Agreement for the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted at New York on 4 August 1995; and to establish a system for the regulation of fishing vessels of Antigua and Barbuda operating outside areas under national jurisdiction.
10. The Antigua and Barbuda Merchant Shipping Act (Cap. 28, 1986) and various amendments between 1998 and 2003	Sets out regulations applying to the registration and operation of shipping in Antigua and Barbuda. This act implements the IMO convention at national level.
11. The Boats Regulation Act (Cap. 55, 1933)	Allows the Cabinet to make regulations to govern all traffic, boats and persons in and upon the waters and vessels within the territorial seas.
12. The Carriage of goods by Sea Act (Cap. 76, 1926)	Sets rules for the carriage of goods by sea in ships carrying goods from any port in Antigua and Barbuda to any port outside Antigua and Barbuda.
13. The Defence Act (Cap. 239, 2006) and The Defence (Amendment) Act (Cap. 253, 2007)	Directs Coast Guard to enforce harbour and port regulations; fisheries; territorial waters and economic zones; and safety at sea.
14. The Disaster Management Act (2002)	Includes responsibility for advising on mitigation of disasters and dealing with pollution events.
Environment and Protected Areas	
14. Draft Environmental protection and Management Act (2014)	The purpose of the Act is to provide a framework for regulation, including; protection of the environment for the present and future generations and protection of human health; conservation of biological diversity in conformity with the natural biogeographic characteristics of Antigua and Barbuda; the control and management of factors damaging the environment; the exercise of control over the state of the environment and over the sources of pollution; the prevention and limitation of pollution; the establishment and management of the National Environmental Information Management and Advisory System; environmental strategies, programmes and plans; collection of, and access to, environmental information; the economic organization of environmental protection activities; the rights and the obligations of the State; and the juristic in respect of environmental protection. Includes climate change.
15. The National Parks Act (Cap. 290, 1984) National Parks (Amendment) Act (Cap.548, 2004) The Marine (Restricted Areas) Order (SRO No. 47, 1973)	Makes provision for the preservation, protection, management and development of the natural, physical, ecological, historical and cultural heritage of Antigua and Barbuda.



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<p>16. The Marine Areas (Preservation and Enhancement) Act (Cap 259, 1972) The Marine Areas (Preservation and Enhancement) Regulations (SRO No. 25, 1973)</p>	<p>Gives the minister responsible for Fisheries, the power under the act to designate any area a restricted area that is necessary for the protection of the flora and fauna in the area. The minister can assign the management of the area to anybody deemed competent.</p> <p>The minister is also empowered to acquire lands in the vicinity of a protected area by agreement or compulsorily under the land acquisition act. There is school of thought that this act should be repealed because much of its provisions are adequately covered even now under the Fisheries Act and the Marine Areas (Act 1972).</p> <p>Two Marine Reserves have been designated under this Act (Diamond Reef –off the North-West coast of Antigua and Palaster Reef –off the South coast of Barbuda), no management plans have been completed for these areas and neither area is managed.</p>
<p>17. The Turtle Act (Cap.449, 1927)</p>	<p>Establishes protection for turtles.</p>
<p>Beaches</p>	
<p>18. Beach Control Act (Cap. 45, 1959)</p>	<p>This act vests all rights in and over the foreshore of Antigua and Barbuda and the floor of the sea to the outer limits of the Territorial Sea in the Crown. It also prohibits the encroachment on or use of the foreshore or floor of the sea for any public purpose or in connection with any trade or commercial enterprises except as provided by the act. The minister with responsibility for Crown Lands may grant licenses for the use of the foreshore or floor of the sea for the aforementioned purposes. Nothing in the Act shall be deemed to affect any land used for Agriculture or any prior rights and uses of the beach including by fishermen. This act has significant teeth in the interest of environmental protection .The powers under this act have been subsumed under the new Physical Planning Act 2003, but there is no evidence of it been repealed.</p>
<p>19. Beach Protection (Cap. 46, 1957) Beach Protection (Amendment) Act (Cap. 113, 1993)</p>	<p>This act makes it unlawful for any person to remove sand, stone, shingles or gravel from any beach or foreshore in Antigua and Barbuda except in accordance with a written permit from the Director of Public Works. The act as written has no application to Barbuda.</p>
<p>Trade</p>	
<p>20. The Organisation of Eastern Caribbean States Act (Cap.302, 1986)</p>	<p>Gives effect to the Treaty signed on the 18th day of June, 1981 at Basseterre for the establishment of the Organisation of Eastern Caribbean States</p>
<p>21. The Port Authority Act (Cap. 333, 1973) and The Port Authority (Validation of Regulations) Act (Cap. 334, 1985)</p>	<p>Establishes the Port Authority for the operation of ports and responsibility for aids to navigation.</p>
<p>22. The Petroleum Act (Cap. 326, 1949)</p>	<p>Addresses the rules and regulations pertaining to petroleum products, import and transportation including ship movement and mooring.</p>
<p>23. Petroleum Industry (Encouragement) (Cap. 327, 1963)</p>	<p>Relates to the bunkering of petroleum products by West Indies Oil Company including movements of material through the territorial seas.</p>
<p>24. The Minerals (Vesting) Act (Cap. 282, 1949)</p>	<p>Places all minerals being in, on or under any land of whatsoever ownership or tenure are subject to the control of the Crown. Authorises government to issue licences and receive royalties.</p>
<p>25. United States Bases Territorial Sea (Navigation restriction) (Cap. 456, 1946)</p>	<p>Allows the Cabinet to place restrictions on access and shipping channels adjacent to US Bases.</p>

Waste Management	
26. Dumping at Sea Act (Cap. 141 of 1975)	Sets out the restrictions on dumping in the sea.
Barbuda specific	
27. The Barbuda Local Government Act (Cap.44, 1976)	Establishes the Council for Barbuda that includes administration of fisheries, environment and local coasting trade.
28. The Barbuda (Coastal zoning and management) Regulations (no. 34, 2014)	Covers all waters and submarine areas under the jurisdiction of the Barbuda Council to 1 league (3 nautical miles) seaward of the baseline. The regulations allows for the creation of zones to manage all commercial and non-commercial activities.
29. The Barbuda (Fisheries) Regulations (2014)	Sets out the regime to implement and enforce these regulations, in compliance with the Fisheries Act, 2006 and its regulations.
30. The Barbuda (National Parks Authority) (Establishment) Regulations (2014)	Establishes authority to exercise of the powers contained in section 3(3) of the National Parks Act, CAP. 290, as amended by section 27 the Barbuda Land Act, 2007.

Annex 4 - Monitoring and Evaluation (Performance Management)

Monitoring is interpreted as observing whether intended processes, outputs, results, and impacts are being delivered. Best practice dictates that a complete set of **Governance indicators for the blue economy** should be established by MoSTBE which measure the performance of programme components and help guide the path towards the intended outcome (e.g., status of blue economy planning and implementation), as well as the progress and quality of interventions and of the blue economy governance process itself. The indicators required for Antigua and Barbuda (when produced possibly as part of the NOP) should be monitored throughout their implementation and information on their changes should be communicated to the relevant multilevel stakeholders. The results of monitoring should be communicated to the indicator users and they could lead to changes in the indicator systems and to redefining the objectives. Furthermore, the information on indicators should feed into evaluations on ICZM and Marine Spatial Plans (MSPs) as appropriate in due course.

A good working model is set out by the Intergovernmental Oceanographic Commission (IOC) (2006), which states that governance performance indicators should be designed to measure the performance of the responses to mitigate human pressures on the coastal and marine environment. They also measure the progress and quality of the governance process itself, that is, the extent to which a program is addressing the issue(s) that triggered the development of the program in the first place. Governance indicators focus on variables related to inputs, processes, outputs, outcomes and impacts of any Blue Economy function. The governance performance indicators set out by IOC are recommended for adaptation into the Antiguan context. It is felt that these can be developed to evaluate MoSTBE progress plus towards achieving the high-level goals and objectives set for Antigua is in four main areas:

1. Institutional coordination and coherence to ensure that (i) the functions of administrative actors are properly defined, including through the establishment of a coordinating mechanism; a legal framework exists to support blue economy delivery and the pursuance of coherent objectives; the impacts of sectoral plans, programs and projects potentially affecting marine space are taken into account through procedures for environmental impact assessment (EIA), strategic environmental assessment (SEA) and carrying capacity assessment (CCA); and conflict resolution mechanisms are available to anticipate, resolve, or mitigate conflicts over the use of marine areas and resources;
2. Quality and effectiveness of management by (i) the formal adoption of integrated management plans; (ii) active implementation of these plans; (iii) routine monitoring and evaluation of management and its outputs, outcomes and impacts, as well as the consideration of results in adaptive management; and (iv) the sustained availability of human, financial and technical resources to enable effective management;
3. Improved knowledge, awareness and support by ensuring (i) the production of results from scientific research, its use for management and its dissemination to a wider audience; (ii) the participation of stakeholders in decision-making processes; (iii) the activities of NGOs and CBOs; and (iv) the introduction of blue economy related subjects into educational and training curricula for the formation of blue economy cadres;
4. Mainstreaming blue economy into sustainable development by (i) the development and application of technologies that can enable and support blue economy; (ii) the use of economic instruments to promote blue economy objectives through the private sector; and (iii) the incorporation of blue economy objectives into broader sustainable development strategies.

