



RISING UP
FOR
SIDS

ACTION BRIEF

an ocean of opportunities

HOW THE BLUE ECONOMY CAN TRANSFORM
SUSTAINABLE DEVELOPMENT IN SMALL
ISLAND DEVELOPING STATES

FEBRUARY 2023

*How
inappropriate
to call this
planet Earth
when it is
clearly ocean.*

—
Arthur C. Clarke

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Foreword

In times of increasing global turbulence and uncertainty caused by planetary pressures and the inequities of the Anthropocene, Small Island Developing States (SIDS) have the additional burdens of geographic vulnerabilities.

Adopting sustainable ‘blue economy’ development pathways can help SIDS turn their challenges into opportunities by harnessing their unique advantages. This requires a complex set of measures to mitigate and adapt to climate change, create decent jobs and diverse livelihood opportunities, improve food security, and reduce poverty and inequality, all by sustainably managing and conserving their biggest asset: ocean and coastal resources.

At the time of writing, eight Pacific SIDS have already adopted national policy frameworks for ocean management, marine ecosystem service valuation exercises have been undertaken in several countries, Marine Spatial Planning (MSP) processes are being adopted, and pioneering financing tools

are being developed. At the regional level, the concept for a Blue Pacific Economy Strategy, encompassing a blue economy component developed with UNDP’s support, has been endorsed by the Pacific Islands Forum Economic Ministers Meeting in August 2022. All this paves the way for a Pacific Roadmap for Economic Development with the ‘blue economy’ as a key driver for its success.

It is noted that the use of the blue economy narrative in multiple fora, be it on environmental conservation, climate or economic development, reveals the absence of a common definition (and is sometimes used synonymously with ‘ocean economy’). This ambiguity raises concerns among some stakeholders that an uncontrolled ‘ocean economy’ rush by large interest groups would accentuate inequalities and support unsustainable - and potentially destructive - extractive activities.

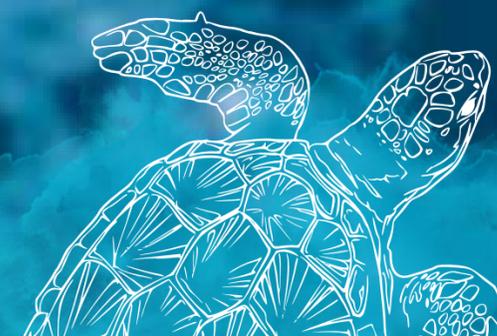
UNDP, therefore, encourages the adoption of the sustainable blue economy concept, defined as “the sustainable use of ocean resources for economic growth, jobs and social and financial inclusion, with a focus on preservation and restoration of ocean ecosystems and the services they provide”.

Adopting such an integrated ‘blue economy’ approach is aligned with UNDP’s Strategic Plan 2022-2025. Over the last 25 years, UNDP has mobilized more than US\$1 billion for ocean protection and restoration in more than 100 countries. UNDP’s ambition is to support a global blue economy that sustainably utilizes ocean resources for inclusive and sustainable development. This is also detailed in UNDP’s Ocean Promise and its SIDS integrated offer – *Rising Up for SIDS* - which prioritizes climate action, blue economy acceleration, and digital transformation. New financing will be a necessary enabler to help SIDS respond to this agenda and make progress on the

SAMOA Pathway objectives and the 2030 agenda.

SIDS - or ‘large ocean states’ - are uniquely positioned to harness the ecosystem services of the ocean through such a ‘blue economy’ approach. This action brief provides practical ways how and aims to inform decision makers in the Pacific SIDS and beyond on policy frameworks to accelerate these transformations for the benefit of their people. We also hope that business leaders, scientists and civil society groups will find this brief useful to better understand the concept and how they might engage with and contribute, as key stakeholders, to a sustainable blue economy.

KANNI WIGNARAJA
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Introduction

As a critical component of the global economy, the ocean and its ecosystems provide important goods and services and support numerous activities essential for economic development, such as capture fisheries, maritime transport and ports, coastal tourism, coastal protection, and energy. These sectors collectively contribute to the ocean economy, estimated to be US\$2.3 trillion per year in market goods.

At the same time, we must not overlook that the ocean and its ecosystems provide non-market services that are critical for our survival, such as generating oxygen, absorbing excess heat, and providing nature-based solutions to climate change adaptation and mitigation challenges. Their ability to continue providing these vital services has been threatened by a number of pressures

such as pollution, overfishing, habitat loss, and climate change, driven by unsustainable economic activities.

Poorly planned economic development and unregulated resources exploitation in the ocean are further exacerbating these pressures and causing irreversible adverse impacts leading to an unsustainable and sub-optimal level of economic, social, and development returns. This underscores the importance of a coordinated and integrated approach to ocean economy development with a long-term sustainability in mind.

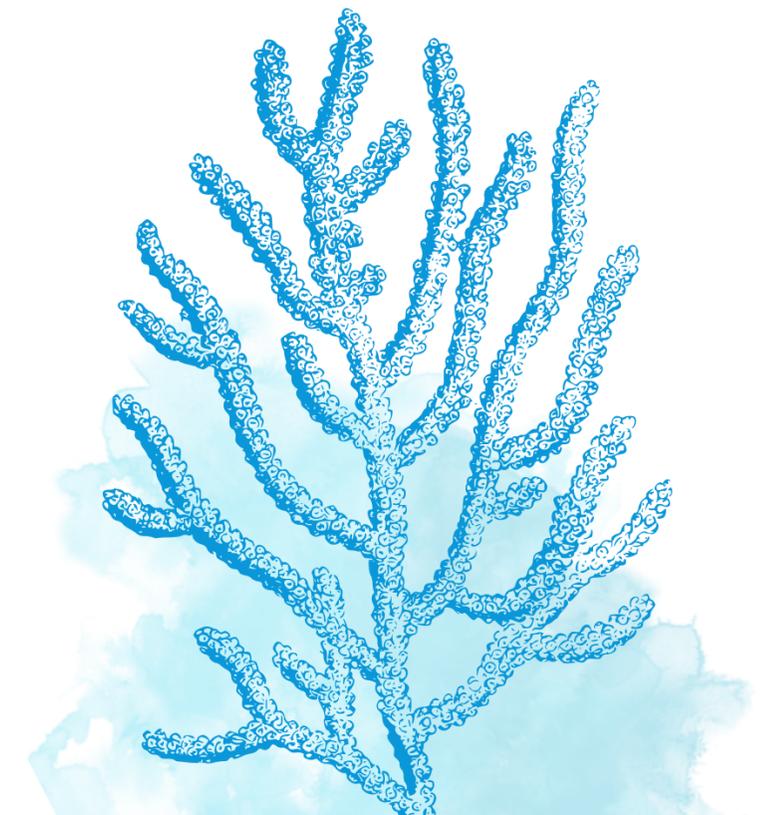
In recent years, the concept of the blue economy has emerged as a significant potential driver of sustainable economic growth. Recognizing this potential, coastal and island nations, both large and small, are looking to their marine waters to

discover new opportunities for investment and employment and to spring back from economic and development losses that they experienced through COVID-19.

Many SIDS are particularly keen to explore the opportunities presented by the blue economy. This is especially true for Pacific SIDS, as their combined Exclusive Economic Zones are about 38 times larger than their total land areas. In support, UNDP is aimed at transforming the blue economies of SIDS in the Pacific region and beyond. An ongoing challenge, however, remains the lack of a clear and unified understanding, among policy makers and economic planners, about the concept of the blue economy and what it takes to ensure sustainability.

Through this action brief, UNDP seeks to strengthen the knowledge base of the blue economy, challenge views on

what it means, and clarify how SIDS can benefit from it. More specifically, it provides a blueprint for a multisectoral, integrated approach to the blue economy. It is primarily intended for decision- and policymakers with responsibility for planning and delivering social and economic benefits and ensuring the long-term sustainability of the ecosystem services provided by the ocean.



Part 1: What is the blue economy and how can Small Island Developing States benefit?

The term 'blue economy' has been applied in different ways, with similar terms such as 'ocean economy', 'blue growth' or 'marine economy' often used interchangeably and without clear definitions. Some of these applications refer simply to ocean-based economic activities for economic development, while others recognize the need to restore and protect the health of the ocean and to de-couple socio-economic development from the degradation of ocean ecosystems.

According to UNDP's definition, the concept of the blue economy emphasizes equity and takes into account the health of the ocean, as it strives to balance the three dimensions of sustainable development: economic, social and environmental. This interpretation promotes growth that is sustainable, and

In this part, we will share:

- 1 **How ocean goods and services contribute to national economies via boosting GDP and creating jobs; and as a tool to reduce the impacts of climate change and natural hazards**
- 2 **How the blue economy can contribute to the sustainable development of small island developing states (SIDS), and what is needed to get there**

development from economic activities that minimize environmental degradation, biodiversity loss and unsustainable use of resources, while maximizing economic and social benefits.

UNDP's definition ranges from sustainable use and livelihoods to ecosystem health and conservation. It defines a new paradigm of ocean economy, one that is in balance with the long-term capacity of the assets, goods and services of marine ecosystems, and that considers social inclusiveness.

In this way, the blue economy moves beyond business as usual to consider economic development and ocean health as mutually reinforcing elements of the same concept. Thus, while it is tempting to

view the blue economy in isolation, it should not be seen as a development strategy in and of itself, but rather, conceived in the context of a broader sustainable development framework, particularly in terms of how it can contribute to the broader post-COVID-19 economic recovery.

Services provided by the ocean

It is conservatively estimated that ocean industries and the marine ecosystems and resources that support them contribute between one to five percent to GDP. Globally, over a billion people depend on fish as their primary source of protein.

Approximately 350 million jobs are linked to oceans through fishing, aquaculture, coastal and marine tourism, and research activities. Services with networks into the wider economy, such as tourism and shipping, make up the largest proportion of ocean-based GDP followed by marine resources and manufacturing.

With recent advances in technology, new opportunities have emerged that are gradually being realized, including advances in aquaculture, ocean-based renewable energy, deep seabed mining and marine biotechnology.

This dependence on the oceans as a major source of resources and services will only grow as human populations increase. For SIDS, with limited land areas but with jurisdiction over 19.1 percent of the world's Exclusive Economic Zones, the oceans represent a way of life and provide a broader range of essential goods and services including: provision of food and raw materials; provision of regulating and supporting functions such as flood control and coastline protection; waste management; water balance; climate regulation and other processes; and benefits arising from cultural and amenity values.

UNDP defines the blue economy as the sustainable use of ocean resources for economic growth, jobs, and social and financial inclusion, with a focus on the preservation as well as restoration of the health of ocean ecosystems.

In simplest terms, there are two elements for the blue economy:

- 1 **The need to protect and, in some cases, restore existing ocean resources that billions of people rely on.**
- 2 **The development of opportunities for enhanced or new sustainable economic activities derived from the ocean.**

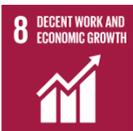
aquaculture and tourism.” However, Goal 14 is estimated to receive the lowest level of investment of all the 17 SDGs at the global level.

In the context of SIDS, the ocean plays a critical role in climate adaptation and resilience. Many countries are exploring a range of ocean-based actions to curb greenhouse gas emissions and better adapt to the impacts of climate change. As such, the blue economy can present many opportunities for ocean-based sectoral mitigation, policies, or measures for countries to include new or updated nationally-determined contributions.

While Goal 14 and the Oceans and seas cluster of the SAMOA Pathway are certainly important, an effective blue economy, supported by the protection and sustainable use of marine ecosystem services, should also map across several of the SDGs and the SAMOA Pathway priorities, with the potential to drive progress in several others, significantly contributing to economies and societies. Such an economy will also be more diversified and less vulnerable to external shocks.

Blue economy, the SAMOA Pathway and the Sustainable Development Goals

The link between the SAMOA Pathway, the Sustainable Development Goals (SDGs) and the blue economy is an important one. Goal 14 (Life Below Water) in particular, clearly articulates the link between oceans and sustainable development in a way that has previously not been explicitly stated: It places oceans more centrally on the development agenda. More specifically, Target 14.7 calls upon countries to “increase the economic benefits to Small Island Developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries,

<u>SDG</u>	<u>SAMOA Pathway</u>	<u>Description</u>
 No poverty		Healthy marine ecosystems mean healthier local communities, thanks to better quality, sustained livelihoods, supplies of food, and having less pathogens of consequence to humans
 Zero hunger		Marine resource protection, management and enforcement will provide long-term sustainable and renewable supplies of food
 Affordable and clean energy		Solar energy can reduce remote states’ near-total dependency on fuel imports. The ocean can house wind farms, and also provide wave, tidal and other sources of renewable energy
 Decent work and economic growth		Marine tourism, for example, can be a major contributor to GDP for islands and coastal areas
 Climate action		Shallow coastal water ecosystems such as mangroves, tidal marshes and seagrass meadows are key to managing essential natural carbon sinks
 Climate action		Coastal habitats such as coral reefs, mangroves and coastal marshes protect from episodic events such as cyclones and hurricanes, and guard against coastal erosion, flooding from storms and increasing sea levels

What the blue economy may look like in SIDS

1. Recognizes the value of and invests in natural 'blue capital'

- Blue capital describes the stock of natural resources found in coastal and marine environments, such as coral reefs, mangroves and seagrass beds
- Ensures a greater focus on the protection and restoration of ocean ecosystems
- Recognizes the true value of marine environment goods and services



2. Maintains inclusive growth, fosters 'blue' business and promotes jobs in 'blue' sectors:

- Supports socio-economic development that is inclusive, fair, and equitable in terms of the sharing of benefits with all relevant stakeholders
- Creates an enabling environment that fosters private sector investments in inclusive and sustainable 'blue' sectors
- Supports an investment environment that prioritizes the growth of local enterprises
- Promotes partnerships to support micro, small, and medium sized enterprises and local communities
- Emphasizes science, technology, digital tools, data and innovation to drive sustainable growth
- Encourages existing ocean industries to reduce environmental damage from their operations



3. Promotes energy from low or zero-carbon sources

- Increases the production of energy from renewable sources helps mitigate climate change and also reduces dependency on imported fuels and exposure to their rising prices



4. Addresses resource scarcity and promotes resource efficiency and circularity

- Recognizing the risks of resource scarcity will highlight the need to conserve resources, use them efficiently, and opt for renewable resources and circularity wherever possible
- Managing living marine resources (such as fisheries) in the context of values, challenges and issues of the broader ecosystems involved



5. Ensures resilience to foreseeable impacts of climate change

- Recognizes the increasing, and inevitable, risks of climate change and manages those risks through adaptation and resilience-building strategies that recognize the vital role coastal habitats play in the protection of coastal communities and infrastructure



6. Grows human capital

- Identifies future skills needs and adapts and develops educational, vocational and professional training programmes
- Raises public awareness and knowledge of the marine environment
- Builds a skilled and experienced workforce through the transfer of knowledge at the local level
- Recognizes, nurtures and uses traditional knowledge for the management of marine and coastal ecosystems
- Develops marine science capability to increase understanding of the marine environment, its natural processes and cultural marine heritage



The importance of the blue economy in Small Island Developing States

Despite the increasing interest in the blue economy, the idea of using the sea for social and economic benefit is not new. Island nations, in particular, have benefited from the ocean for centuries, with it contributing significantly to their development and culture.

What is new, however, is the growing appreciation of the critical role that ocean resources play in sustainable economic growth - and therefore, a greater appreciation of the need to better manage, restore, and protect the resources that underpin that growth.

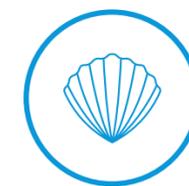
For SIDS, the importance of the blue economy stems from the fact that

most are endowed with extensive marine areas that far exceed their land space. Countries that fully implement the blue economy concept have the triple potential of realising socio-economic development benefits that address economic structural challenges and inclusion ambitions, while at the same time improving environmental sustainability and climate resilience.

Sustainable blue economy opportunities for SIDS cover a broad spectrum of sectors including but not limited to dominant sectors such as fisheries, aquaculture, coastal and marine tourism, ports, and shipping. These sectors have a direct impact on the aquatic ecosystems and the fauna and flora they sustain.

There is no single model that fits all countries, and the scope of the blue economy in each country will vary depending on sector.

Key blue economy sectors in SIDS:



Ocean Health & Ecosystem Services

- Marine Ecosystem Services
- Habitats & Conservation



Ports & Shipping

- Shipping
- Ports



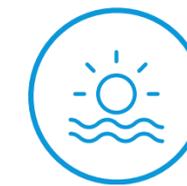
Marine Living Resources

- Commercial Fishing
- Recreational & Sport Fishing
- Aquaculture
- Blue Biotechnology



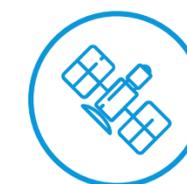
Non-living Resources & Energy

- Renewable Energy
- Sustainable Marine Minerals
- Fresh Water Production



Tourism & Leisure

- Maritime Tourism
- Coastal Tourism
- Leisure - Amenity

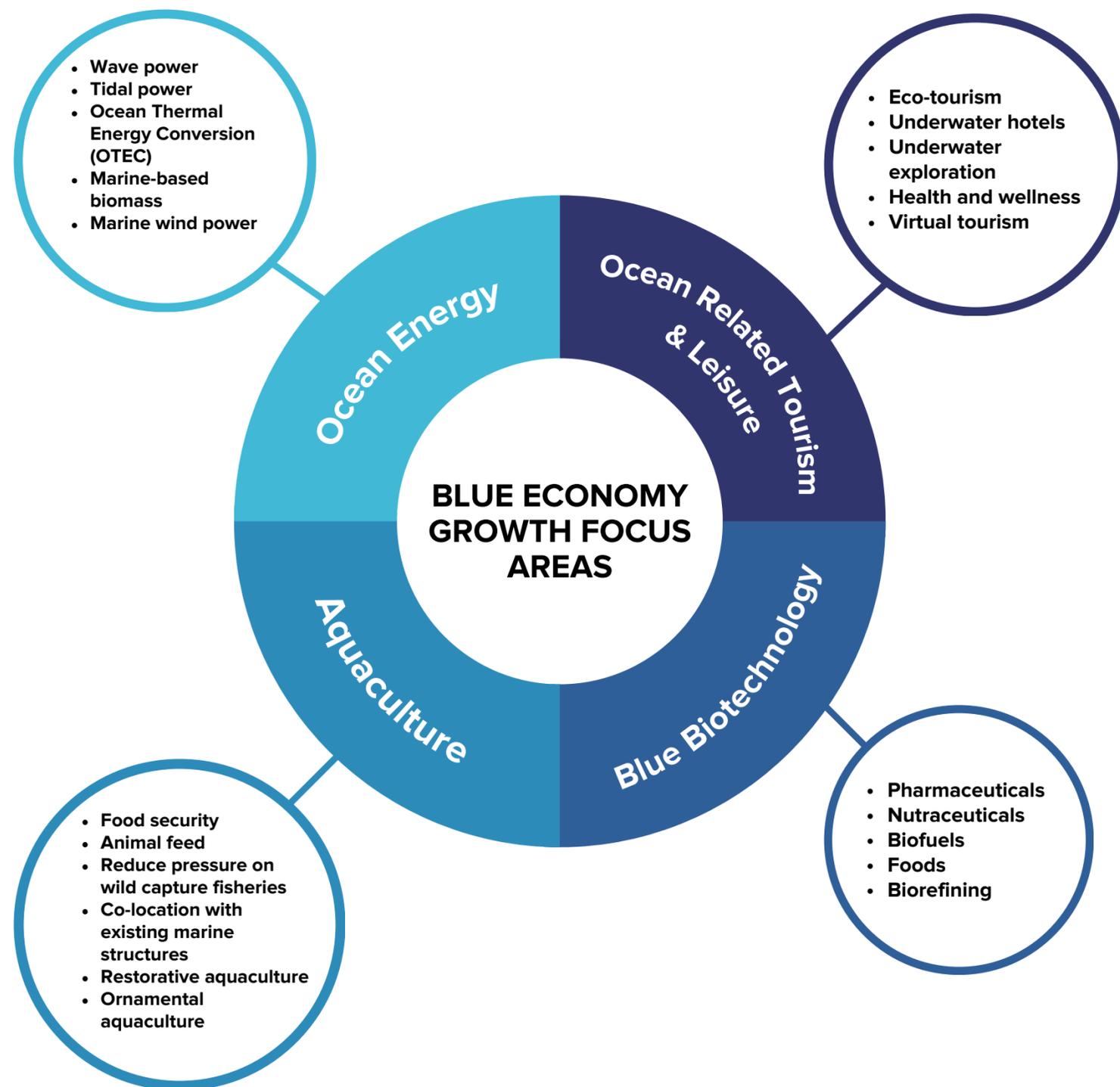


Monitoring & Surveillance

- Environmental Monitoring
- Maritime Surveillance

For SIDS, the importance of the blue economy stems from the fact that most are endowed with extensive marine areas that far exceed their land space.

Looking ahead, there are a number of new and emerging opportunities that can contribute to the development of the blue economy. Those with particularly strong potential in SIDS are highlighted below:



In summary: The main benefits of a blue economy approach for SIDS



Strengthens the protection and management of ocean ecosystems, thereby securing the long-term sustainable supply of critical resources and ecosystem services that contribute to climate change mitigation and adaptation, and providing social and economic benefits and supporting livelihoods



Increases investment in existing ocean-based economic sectors to increase social and economic benefits from existing resources



Stimulates development of new blue economic sectors, thereby diversifying the economy, reducing pressure on 'traditional' marine resources and creating new jobs



Increases the number of businesses operating and the number of people benefiting in an inclusive, fair, and equitable way from the blue economy



Generates new knowledge and creates a better understanding of the essential value of a healthy marine environment which supports the blue economy

CASE STUDY



British Virgin Islands

Spiny lobster aquaculture in the British Virgin Islands



Region: Caribbean



Land Area: 150 km²



Exclusive Economic Zone: 80,117 km²



Coastline Length: 80 km



GDP Per Capita (2019): US\$47,914

Sources: Worlddata.info, Google and Wikipedia

In 2017, Caribbean Sustainable Fisheries (CSF) started a pilot lobster farming facility in the British Virgin Islands (BVI). BVI was selected due to its high quality

marine environment, stable governance, and suitable climate for growing the Caribbean spiny lobster (*Panulirus argus*).

CSF is currently the only such facility in the entire Eastern Caribbean. It has the potential to catalyse a significant industry that the BVI could be the epicentre of, provided the right enabling conditions are provided to support the venture.

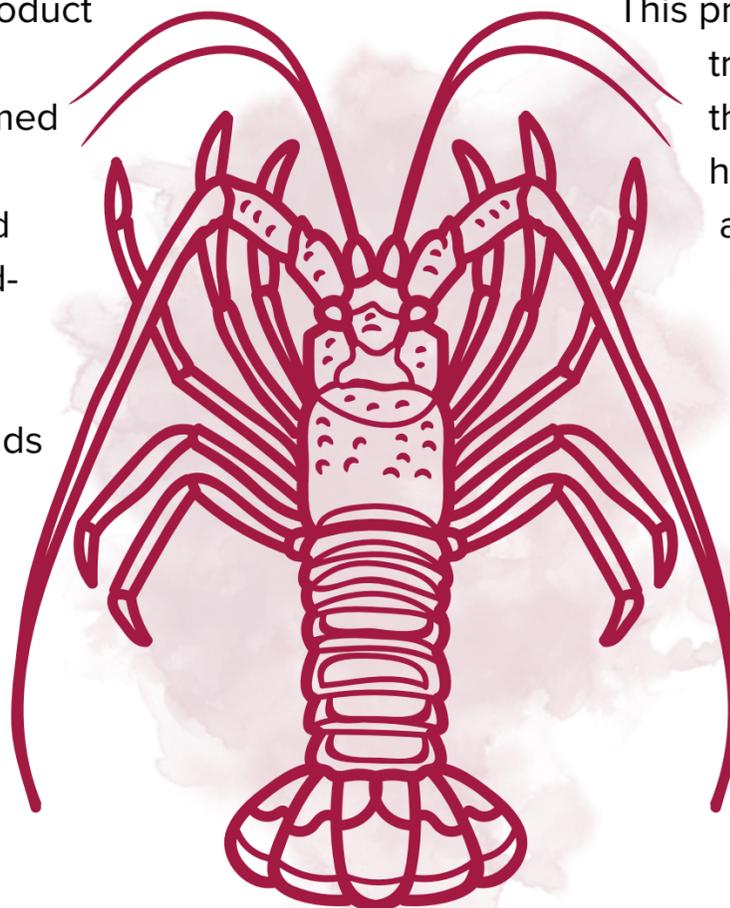
The value of farmed lobster is high because of the consistently high product quality and the continuity of supply of fresh product to the market. As a result, prices for farmed lobster command a premium of around 30 percent over wild-caught lobster.

Instead of using ponds or pens, the CSF facility uses a land-based recirculation system. This means all the variables that affect lobster

marketability, such as size, availability, and freshness, can be controlled. At present, in its pilot project form, the facility has the ability to produce approximately 15,000lb (~6,800kg) annually. However, the farm has now received government approval to allow for a staged expansion to full scale production. Once approved, the facility will produce around US\$4 million worth of lobster annually, with potential for further expansion in the future, either in BVI or another island in the region.

This project provides significant trade opportunities into the high-end seafood and high-growth sustainable aquaculture sectors.

Country-wide, the BVI benefits directly through a contribution to GDP from an export industry and diversification of the economy, as well as being positioned at the forefront of a new biotechnology or aquaculture sector.



The facility is projected to create around 40 full-time positions, along with jobs in support industries such as supply chain logistics, management, finance and administration, R&D, and the education sector, and part time roles, including fishermen, scientists, marine biologists, aquaculture technicians, engineers, mechanics and electricians.

Along with its employment creation potential, this project provides significant opportunity for capacity building within the local workforce, and provides opportunities for education and training in new and emerging areas such as aquaculture and aquaculture technology.

All the variables that affect lobster marketability, such as size, availability, and freshness can be controlled.

PART 2

*—
Overcoming challenges to
enable the blue economy
in Small Island
Developing States*



Part 2: Overcoming challenges to enable the blue economy in Small Island Developing States

In this part, we will share:

- 1 **What threats the ocean faces that are undermining SIDS' ability to fully realize the benefits of a sustainable blue economy**
- 2 **What barriers are preventing SIDS from benefiting from a sustainable blue economy**
- 3 **What measures SIDS can deploy to address these concerns, and grow the blue economy**

While the blue economy does offer opportunities for sustainable development, many SIDS are not yet fully embracing the economic potential of the ocean.

In Part 1, we explained how marine ecosystems sit at the heart of many of the world's global challenges: climate regulation, food, medicines, new sources of clean energy, job creation and inclusive growth. However, several barriers are preventing SIDS from applying the blue economy model to national development.

What's more, there are myriad threats to the health of our oceans that further complicate SIDS' efforts in this space. Addressing these threats and barriers requires robust governance and policy frameworks that integrate environmental, social and economic considerations as they build a blue economy.

Finally, while there is a growing literature on the virtues and potential

opportunities of the blue economy, much of the focus has been on 'why' the blue economy is important and 'what' the opportunities are. In contrast, there is little guidance to policymakers in SIDS on the 'how' SIDS can overcome barriers to realising a sustainable blue economy transformation in a systematic and integrated manner.

In the following pages, we identify a number of tools and the necessary governance arrangements that respond specifically to the identified threats and barriers, and that SIDS can deploy to implement a framework for the sustainable blue economy.

Attaining the full potential of a sustainable blue economy may seem a daunting task. However, many of the elements required for a sustainable blue economy already exist in many SIDS, and the evolution of current approaches are both possible and realistic.

Identifying and addressing a few priority issues could significantly drive and enable progress in this direction; Parts 3 and 4 will provide more details about how this can be achieved.

Addressing these threats and barriers requires robust governance and policy frameworks that integrate environmental, social and economic considerations.



Setting the scene: The threats that our ocean faces

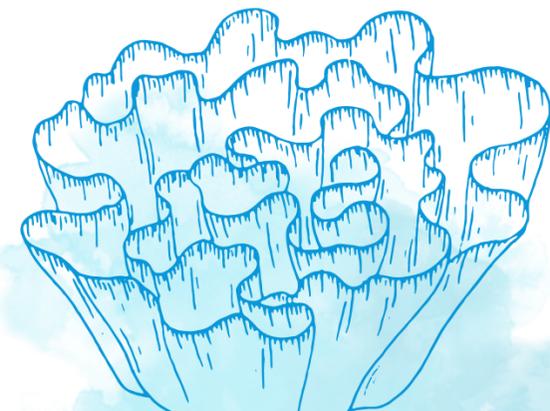
While ocean ecosystems offer SIDS the potential to create considerable socio-economic and cultural benefits, it is clear that they have also been pushed to the brink of collapse.

At a global level, the overexploitation, destruction and the clearing of coastal habitats, pollution, and poor management of the ocean has resulted in lost opportunities, heightened food insecurity and diminished economic opportunities for some of the world's poorest people. These problems are exacerbated by the impacts of climate change, especially in SIDS which, paradoxically, generate less than 1 percent of global greenhouse gas emissions.

The decline in ocean health is starting to erode the benefits to economies in SIDS, and the support that the ocean can provide in addressing multiple challenges.

It is important to recognize that the opportunities offered by the blue economy will never be fully realized unless we restore the health and secure the protection of ocean ecosystems. For example:

- The recovery of depleted fish stocks, through better management, effective monitoring, and transparent seafood supply chains, can deliver higher, sustainable fish yields, associated jobs, and livelihoods
- The protection and restoration of coastal ecosystems such as coral reefs, seagrass and mangroves help to protect coastal areas from storm surges and sea level rise as well as providing enhanced opportunities for tourism and fisheries
- Coastal areas that reduce pollution from the land, in turn, enjoy higher fish yields, increased tourism revenue and reduced risks on human health



Addressing these threats will require measures that serve to protect and restore ocean ecosystems, improve our knowledge of the ocean so that better decisions can be made, and raise the awareness of stakeholders about the importance of a healthy ocean ecosystem.



The impact of climate change and sea level rise

Changes in the marine environment, such as elevated sea surface temperatures and ocean acidification, will disrupt critical ecosystem services and lead to biodiversity loss. Climate change is already impacting coral reefs in most SIDS, through bleaching, disease outbreaks, ocean acidification and physical damage from stronger hurricanes.

Heat stress-induced coral bleaching is the most visible, wide-spread and iconic manifestation, with major events occurring in 1998, 2010, and 2015/2016.

In addition, ocean acidification is likely to diminish the structural integrity of coral reefs, making coastal areas even more vulnerable to waves and storm surge.

Sea level rise presents a major challenge for low-lying SIDS, leading to increased exposure to storm surges, damage to coastal infrastructures and economies.



Unsustainable and harmful fishing practices

Illegal, unreported and unregulated (IUU) fishing is estimated at between 20 and 30 percent of global reported production levels. In addition, many fisheries are beyond their sustainable limits and, in many cases, close to collapse.

According to FAO, the fraction of fishery stocks within biologically sustainable levels decreased from 90 percent in 1974 to 64.6 percent in 2019.



Pollution from land-based and marine sources

The pollutants constituting the greatest threat to coastal and marine ecosystems and to public health include petroleum hydrocarbons, sediments, nutrients, pesticides, litter and plastic debris, and toxic wastes. Untreated wastewater contaminating coastal waters, however, is one of the most significant pollutants affecting SIDS.

Because of the large volumes of plastic debris that circulate in the Pacific Ocean, many Pacific SIDS experience significant accumulations of beached plastic waste, which can impact communities' use of beaches and coastal areas, economic activities and local wildlife.



Marine invasive species

The introduction of invasive species to new environments has been identified as a major and growing threat to marine biodiversity. The development of maritime activities, in particular, has provided new and enhanced pathways for the global spread of invasive species, which have now been documented in the majority of the world's marine ecoregions.

The impacts of invasive species vary widely but may include: changes to the local biodiversity and/or alteration of ecological processes caused by that species; direct and indirect impacts to infrastructure and business resulting in reductions in efficiency, physical damage and increased costs, and impacts to public health through the introduction of pathogens.



Habitat modification and destruction resulting from coastal development and extractive industries

Coral reef-mangrove-seagrass complexes are characteristic of coastal ecosystems throughout SIDS and host significant species diversity, including endemic and threatened species, as well as commercially valuable species. These complex ecosystems have, however, been severely degraded due to human overfishing, pollution, climate change and the synergies among them.

Decades of anthropogenic and natural stresses has resulted in widespread poor status and worsening trends in most SIDS. Coral reef ecosystems are changing with many SIDS experiencing a decline in live coral cover and a negative shift in the composition of these systems in recent decades.

Barriers to realizing the blue economy

For many SIDS, barriers to realizing the blue economy often result from the inherent structure of their economies. These structural development challenges include heavy debt burdens (worsened by additional borrowings during responses to COVID-19), lack of economic diversification, and dependency on global supply chains (especially for key inputs such as fossil fuels). The socio-economic impacts of the COVID-19 pandemic have intensified these vulnerabilities. In addition, sovereignty necessitates the provision of certain public services, such as data collection, policy formulation, regulatory activities and security—all of which come with associated costs.

Here are a few of the common barriers:



Inadequate ocean governance arrangements

Traditional institutional frameworks governing ocean management, and the legal instruments and tools they employ, have struggled to meet tensions arising between different sectors as ocean activities increase in scope and extent. Current governance arrangements to manage human activities in the ocean have failed to adequately respond to the need to manage ocean resources in an integrated manner. This has led to:

- Jurisdictional gaps and overlaps
- Lack of inter-agency communication and coordination
- Competition for scarce management resources
- Inter-agency and intergovernmental conflict



Unsustainable use of marine resources

The coral reefs and associated biodiversity are of critical importance to SIDS from environmental and economic perspectives, due to SIDS' strong reliance on the tourism and fisheries sectors. However, many coastal and marine resources, particularly fisheries, are under considerable pressure as a result of overharvesting; a lack of

regulations and enforcement; and a lack of other employment resulting in more people fishing as a livelihood.



Inappropriate regulation and weak enforcement

Although legal frameworks for the regulation of marine activities do exist to some extent in many SIDS, these frameworks are often outdated, limited in scope, poorly implemented, and not enforced. What's more, such frameworks often do not anticipate or provide an enabling environment for future uses of the marine environment.

The international ocean governance framework is evolving to respond to concerns about the management of marine areas beyond national jurisdiction and the development of new sectors, such as deep sea mining. The outcome of this evolution may have implications for the blue economy.



Limited capacity

The lack of capacity and limited education and training opportunities in SIDS is leading to chronic gaps in technical capacity for marine research, planning and decision making. A more coordinated linkage

between the existing research, educational facilities, and international partners would be key to addressing gaps in research skills and capacity building.



Limited knowledge of the marine environment

Knowledge of the marine environment is critical for effective decision making. However, the marine environment in many SIDS is rarely completely understood. A lack of data and research capacity hampers the potential development of new sectors and is a major impediment to effective development of a sustainable blue economy. This has an impact on R&D and innovation.



Lack of financial resources

The required capital for financing the post-COVID-19 transition to a sustainable blue economy is beyond the resources available to most SIDS. One of the major barriers is, therefore, the lack of financing structures, business models, partnership arrangements, and sustainable operating mechanisms needed to support implementation of sustainable blue economy investment projects.

The structural development challenges on the previous page have been magnified and exacerbated by the COVID-19 pandemic, which hit SIDS disproportionately due to their reliance on tourism income and, in some cases, international remittances. The strategic investment of post-COVID-19 recovery and stimulus funds into the blue economy offers opportunities to accelerate the sustainable and equitable growth of blue economy sectors, thereby securing the long-term health and resilience of the ocean and blue economy.

Overcoming threats and barriers

The threats and barriers that we have outlined present governments and ocean users with significant challenges towards building a sustainable blue economy. The blue economy approach must address them in order to be successful and at the same time, reverse the current declines in ocean health and the over-exploitation of ocean resources.

Efforts to implement the blue economy must be strategic, integrated and cross-sectoral. They must clearly recognize the interdependencies of the environmental, social and economic pillars of sustainable development as well as the importance of

promoting gender equality and women economic empowerment to bring transformative sustainable development at all levels. These efforts must seek to integrate environmental management directly with economic development, fiscal policy and social goals, to support the transition to a sustainable blue economy.

Environmental Pillar

A sustainable blue economy concept decouples socio-economic development from environmental degradation. This means recognizing and incorporating the true value of natural or blue capital into all aspects of economic activity.

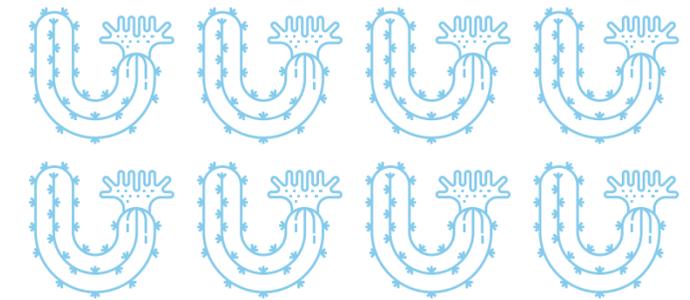
Social Pillar

The blue economy must allow for the participation of all stakeholders through meaningful employment, access to education, and the development of necessary skills and capacity. It is essential to identify future skills needs, and develop educational and professional training programmes to meet them. It is equally important to invest in promoting gender equality and women economic empowerment.

Economic Pillar

The blue economy emphasises the importance of sustainable ocean-based growth and the evolution of society and business towards more efficient and less harmful economic activity and prosperity. This means focusing on the development of core economic sectors as the basis for future growth, as well as transforming patterns of economic investment that act as barriers to progress—including recognizing the financial value of blue capital.

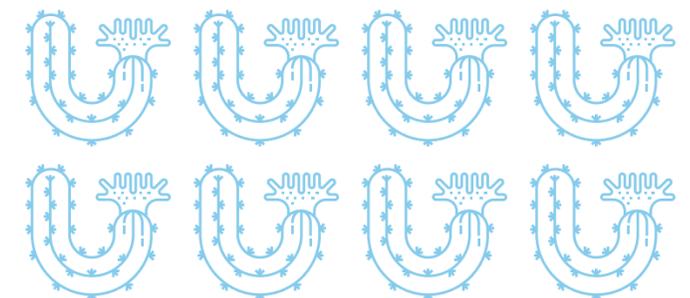
Efforts to implement the blue economy must be strategic, integrated and cross-sectoral.



A quick look at: Sea cucumbers

An example of such efforts is the aquaculture of sea cucumbers. These creatures are critical ecosystem ‘engineers’ that help oxygenate sediments and cycle nutrients between sediment layers on the seafloor.

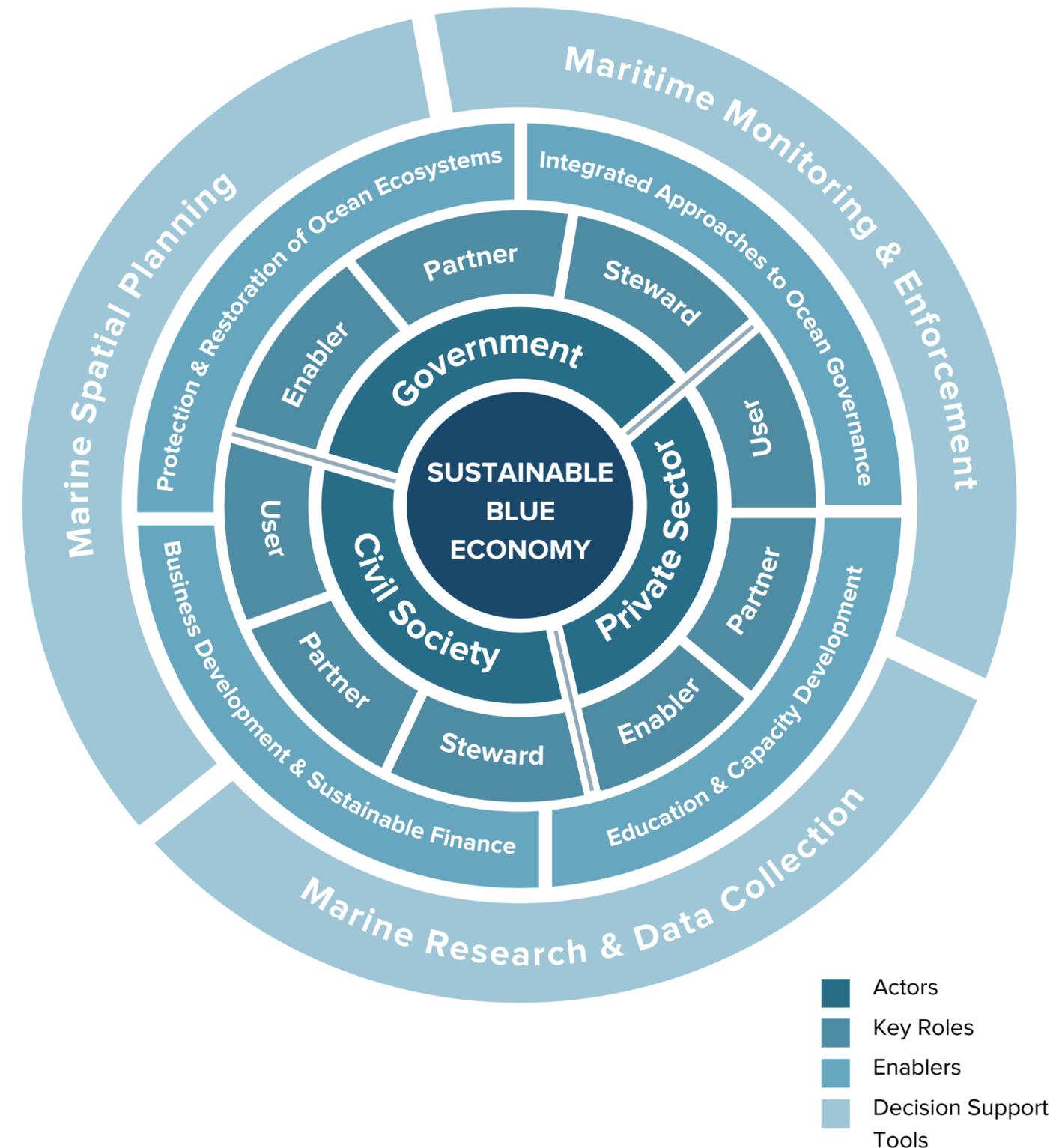
They are in high demand in some parts of Asia, and the overexploitation of sea cucumbers can have a significant impact on coral ecosystems—but they can be cultured with very little environmental impact. This activity can help create new jobs and export income, while at the same time, reducing the impact of the overharvesting of wild sea cucumbers.



Introducing: The sustainable blue economy governance wheel

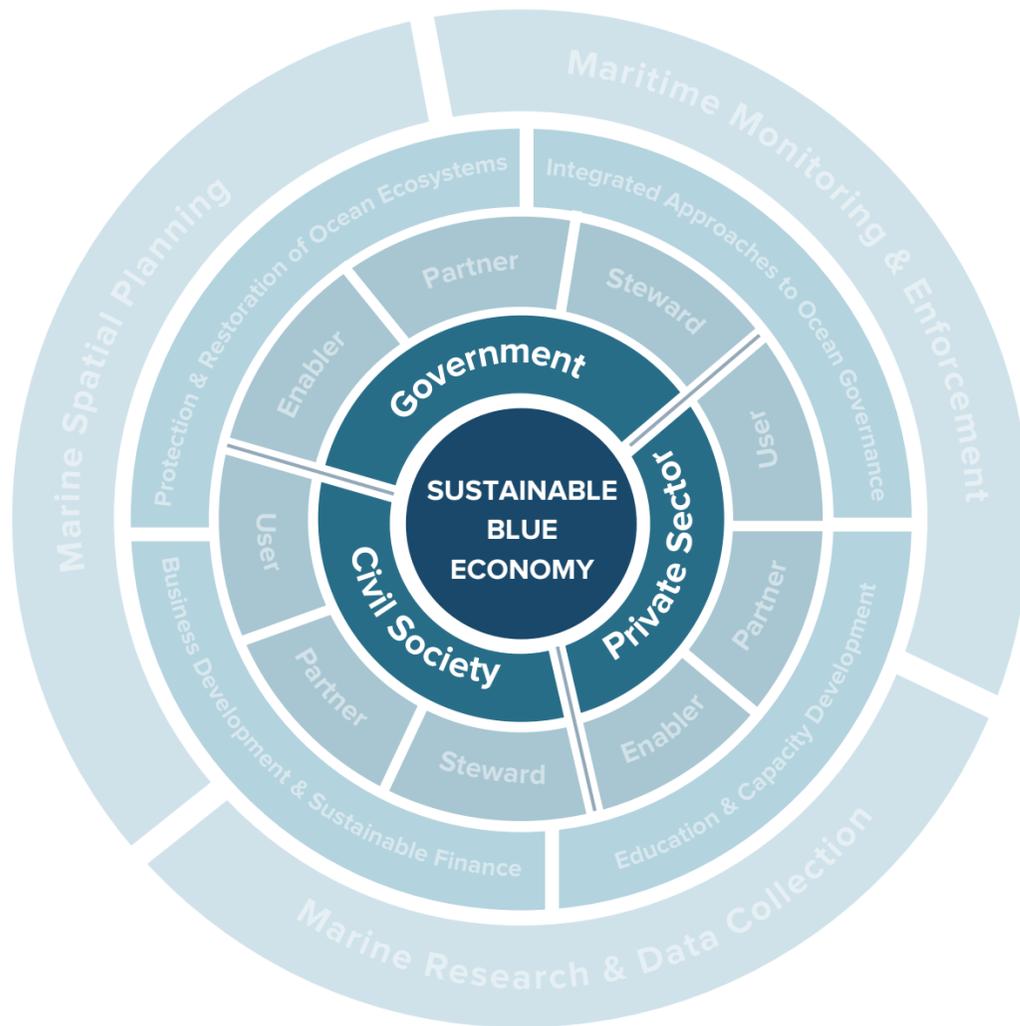
Underpinning the three previously mentioned pillars—Environmental, Social and Economic—should be a governance approach that integrates and coordinates the sustainable blue economy. After extensive analyses, UNDP has developed an overarching framework that highlights the most important components.

Starting at the centre of the circle and moving towards its outer edge, the framework encompasses four dimensions that we find in all effective blue economy governance frameworks and presents a set of possibilities for each.



Actors

Implementation of a national blue economy framework requires the inclusion and participation of all relevant sectors and stakeholders, such as:



Government

Government has the mandate and judicial responsibility for leading and organizing the management of ocean space and the resources it supports.

Governments should:

- Provide effective policies and regulatory regimes to enable sustainable private sector operations and investments
- Establish and implement tools to ensure the accounting, protection and preservation of blue capital, such as legal protection, surveillance and monitoring
- Ensure the enforcement of such tools and other regulations



Private Sector

Despite its critical role as an enabler, the government has limited capacity to grow the blue economy. For this, private sector investment is critical, although the role of the private sector (including industry organization, entrepreneurs and investors) is often under-appreciated or overlooked.

For SIDS, it is important to recognize the role micro-, small- and medium-sized enterprises play. Not only are they important as innovators and job creators, but they also drive capacity-building to build the blue economy.



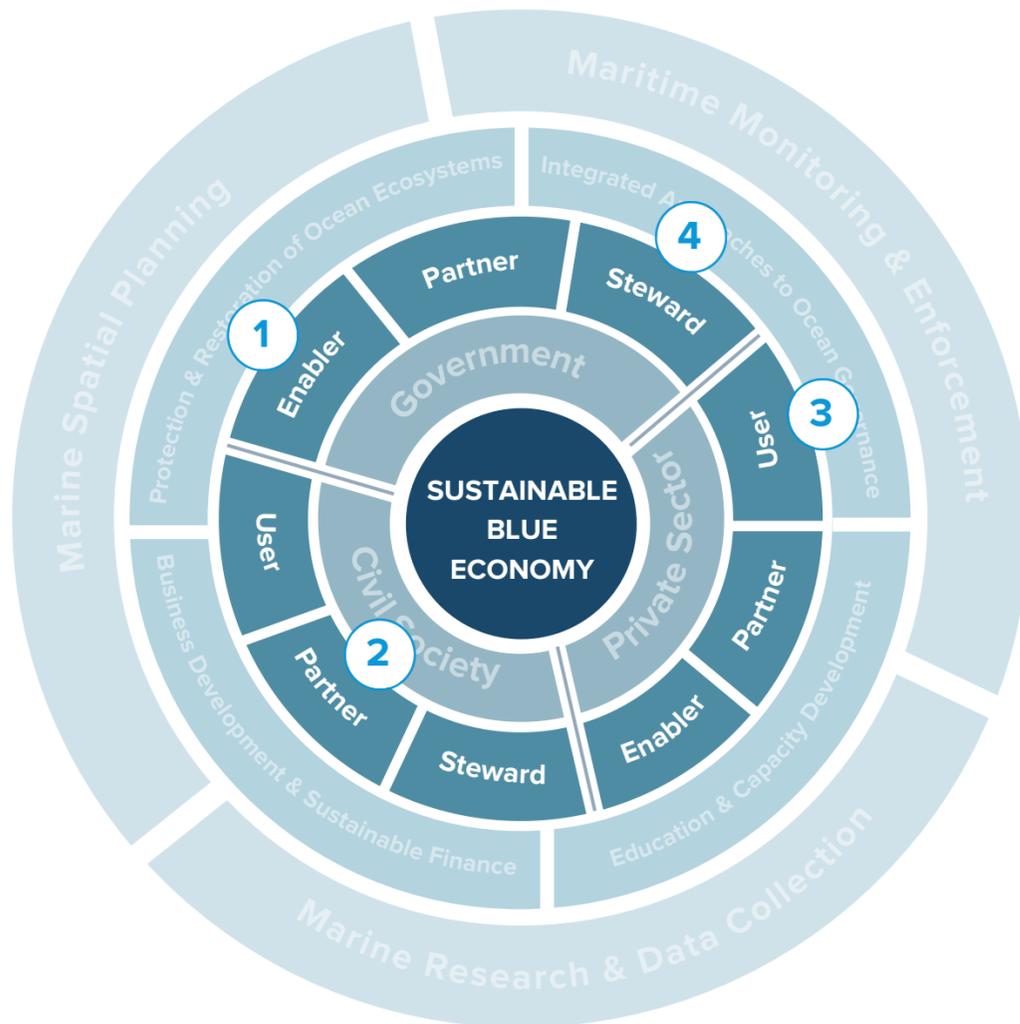
Civil Society

The lack of appreciation and awareness of the importance of the marine environment by the civil society and the wider community (including communities, scientists, and civil society organizations) could be a key challenge. To fully implement the blue economy, it is necessary to invest in measures that support awareness creation, public participation and consultation.

Taken together, these measures by all three actors will greatly assist in sensitizing all stakeholders to the importance of the marine environment in the nation's development.

Key roles of actors

Actors play four main roles, some of which are unique:



1 Enablers

Enablers support innovation and investment through creating conditions that reduce risks both to the marine environment and to those wishing to invest in the blue economy.

For example: The government introducing fiscal policies that provide incentives and reduce investment risk.

2 Partners

Partners work collectively with other actors to co-design or co-implement specific interventions and solutions.

For example: The co-management of fishery resources or protected areas that involves both the relevant government agency and local communities and businesses who jointly manage and make decisions about the area in question.

3 Users

Users are the primary beneficiaries of the provision of ecosystem services, resources or the socio-economic activities they support.

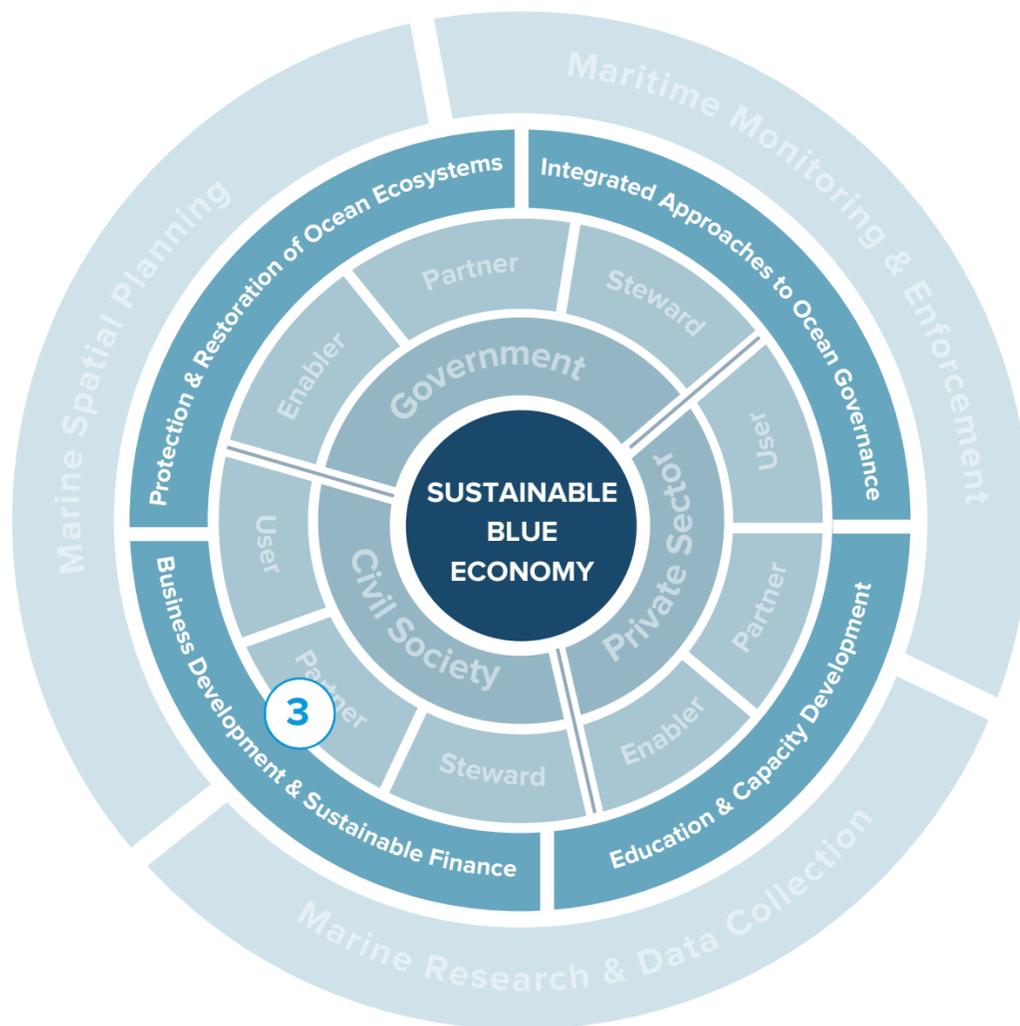
For example: Commercial fisherfolk who have a licence to catch fish.

4 Stewards

Stewards work to ensure the long-term protection and preservation of the resource base that underpins the sustainable blue economy.

For example: Coastal communities who have authority to manage locally managed marine areas for conservation and local livelihood purposes such as fishing.

An enabling environment for the blue economy



3 Supporting business development and sustainable finance

SIDS suffer from a narrow fiscal space and heavy debt burdens. And yet, advancing the blue economy will require investments in technology, infrastructure, conservation, institutional and human capacity development, as well as information-sharing and knowledge-building. Considering the level of investment that will be needed to achieve these objectives, SIDS must find new and innovative ways to finance investments in an inclusive and sustainable blue economy.

Existing opportunities could significantly increase available public resources, as well as private sector finance and investment for blue economy initiatives. However, the realization of these opportunities will require strategies that:

- Further support and develop existing sectors (such as capture fisheries and coastal tourism)
- Promote investment and innovation to support the development of new sectors (such as mariculture, marine renewable energy and marine biotechnology)

- Ensure that development of resources is done with a view to minimizing potential negative impacts

In SIDS, perhaps the greatest potential for value addition and job creation lies with the development of micro-, small- and medium-sized enterprises (MSMEs) within the blue economy value chains. There is, therefore, a need to secure innovative and sustainable finance for MSMEs, and reduce the barriers to private sector investment.

In addition, to support for business investment, there is also a need for sustainable financing mechanisms that will provide long-term and reliable funding to support blue economy activities, including restoration, conservation and sustainable management initiatives for marine and coastal resources as well as the wider environment.

An enabling environment for the blue economy



4 Education and capacity development

The development of a sustainable blue economy will depend to a large extent on the availability of relevant skill sets to respond to the needs of the market. However, a lack of qualified and experienced personnel is constraining the ability of many SIDS to design and implement effective blue economy frameworks.

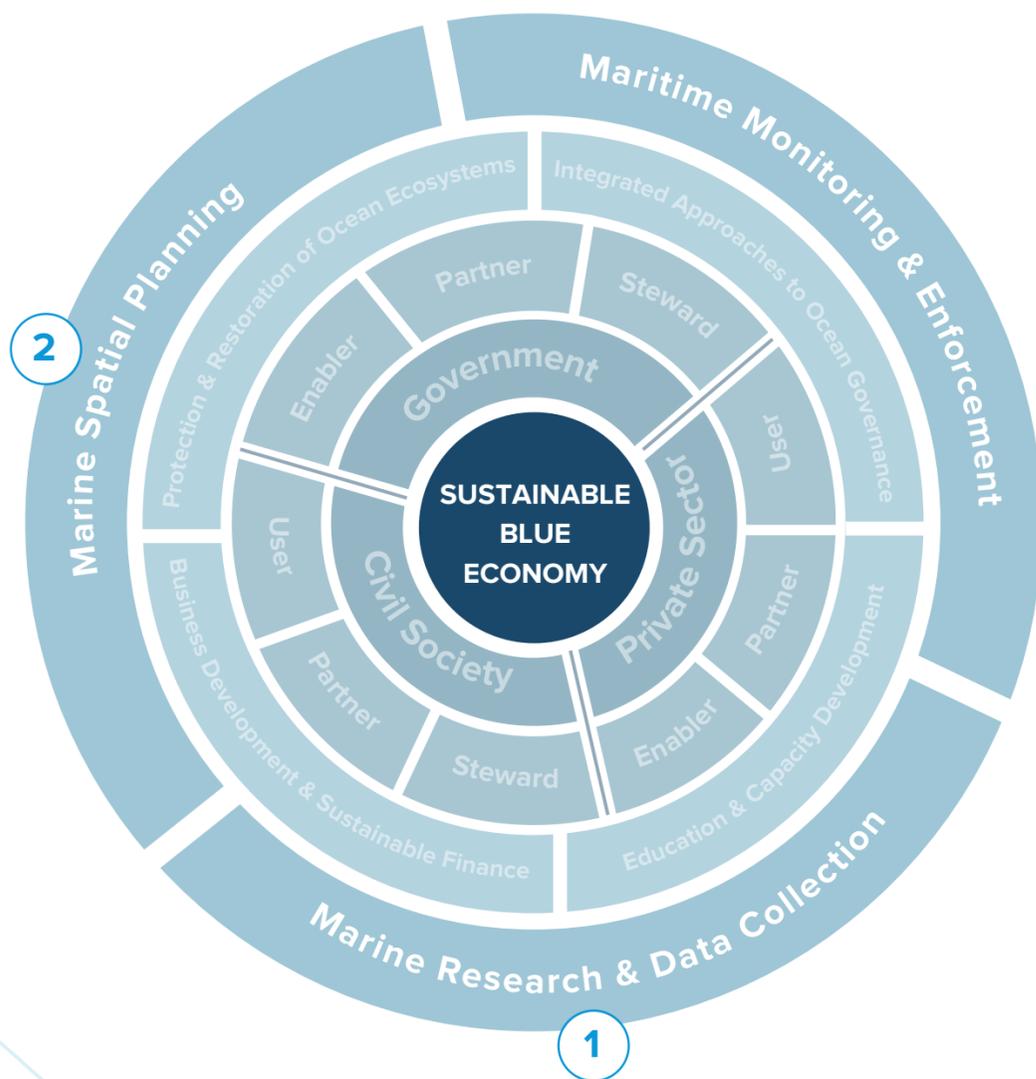
The lack of adequate education and training opportunities in many SIDS has clearly led to chronic gaps in the technical capacity to support key sectors, as well as more broadly for marine research, planning and decision making. Upgrading the skills and understanding of decision makers and professionals in all sectors will therefore be essential to fully realize the benefits of the blue economy, but requires strong public leadership.

Identifying future skill needs and labour market supply and demand trends, and adapting and developing existing education, vocational, and professional training programmes to meet them, will be essential if the blue economy is to become a reality for SIDS. The use of digital tools can make SIDS remoteness irrelevant and help accelerate the bridging of the capacity gap, and make education virtually accessible to all.



Beach of La Digue Island, Seychelles. Photo: UNDP Ecosystems & Biodiversity

Decision support tools



Different actors will use a range of tools to support effective planning, decision-making and conflict resolution around allocation and use of ocean resources, while also balancing the needs of all stakeholders.

They must consider how to:

- Protect ecosystem integrity
- Enable equal and equitable economic opportunities for all those involved
- Minimize conflict between competing interests



Marine scientific research and data collection

Marine scientific research and other knowledge-generating activities support sustainable economic growth and job creation through:

- Development of new products and services suitable to opportunities of SIDS
- Creating new knowledge about the marine environment
- Guidance for better management and protection of marine ecosystems
- Informing policy, governance and regulation of the marine sector

The transition to a blue economy must start with access to accurate, sex-disaggregated data and knowledge about the marine environment, to inform effective policy and integrated planning, which in turn enables effective governance along with targeted public and private investments.

The marine environment is, however, far from being completely understood. Furthermore, the quality of marine information is often highly variable, leading to considerable uncertainty in decision-making.

Emerging digital technologies can play a role in helping SIDS improve data collection efforts. When envisioning data collection, it is

important to ensure that data is collected according to recognized standards, so that it is interoperable at the regional and global scales.



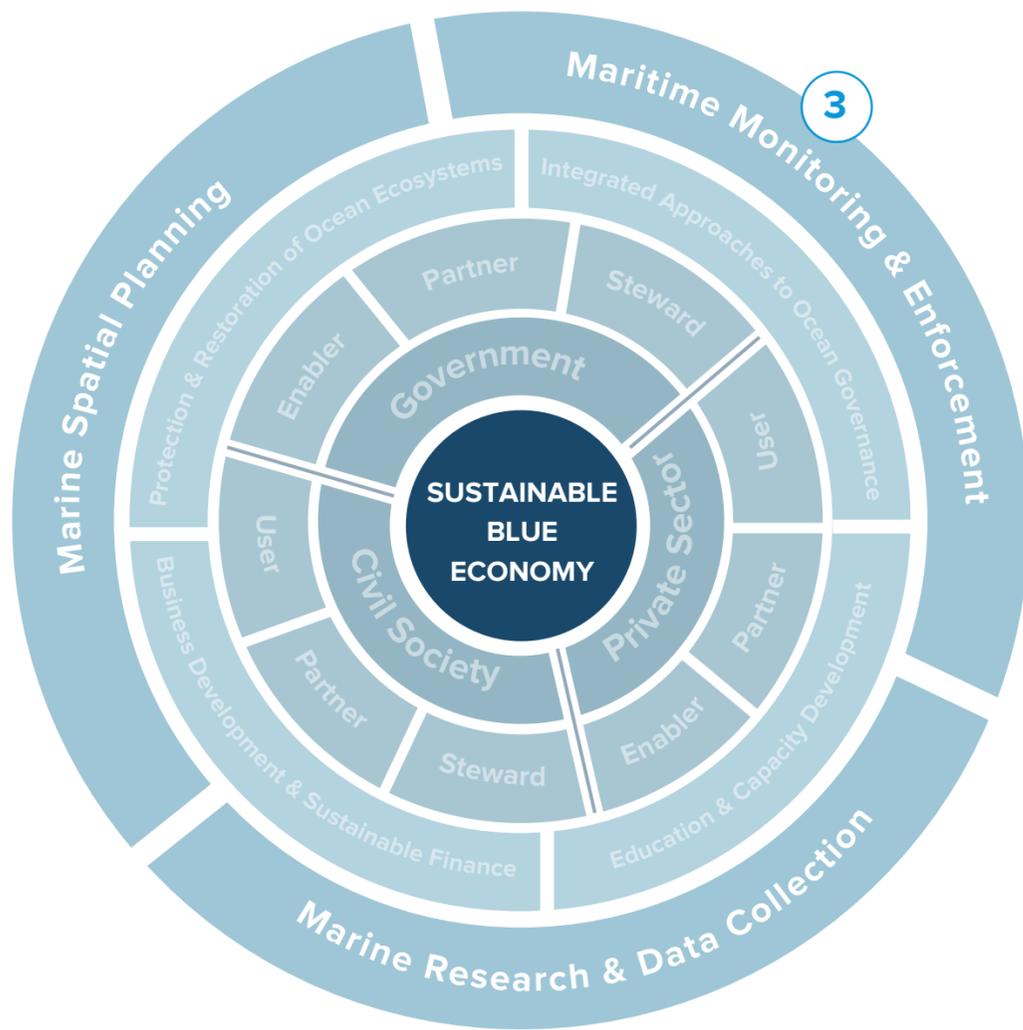
Marine Spatial Planning

Marine Spatial Planning (MSP) is an integrated approach to allocating and managing ocean space, particularly as blue economies mean an increasing demand for maritime space and more pressure on marine and coastal resources. MSP allows decision makers to minimize conflict, avoid cumulative impacts, and find ways to collaborate.

In the context of increasingly busy ocean spaces, it can promote multi-uses as well as identify sites for new and emerging uses. Through an ecosystem-based management approach, key principles such as sustainability and equity can also be achieved. Ocean accounts, defined by the Global Ocean Accounts Partnership as integrated records of data concerning ocean environment assets, economic activity and social conditions, can support this process.

Finally, MSP helps to increase investor confidence by introducing transparency and predictability, in turn boosting investment in innovation and blue technologies.

Decision support tools



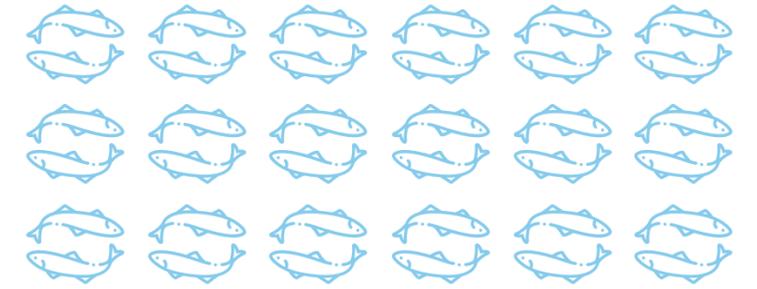
3 Maritime monitoring and enforcement

Many countries face challenges enforcing existing rules and regulations, especially when it comes to illegal, unregulated, and unreported fishing. This is a particular concern for SIDS, where Exclusive Economic Zones can be hundreds of times larger than the land areas, making it difficult to carry out monitoring or surveillance.

Enforcement of legislation in the Exclusive Economic Zones assumes a knowledge of illegal activity. This is often impossible due to a lack of awareness of the activities that are ongoing in the maritime domain. If countries are to effectively protect and manage their ocean resources, they must:

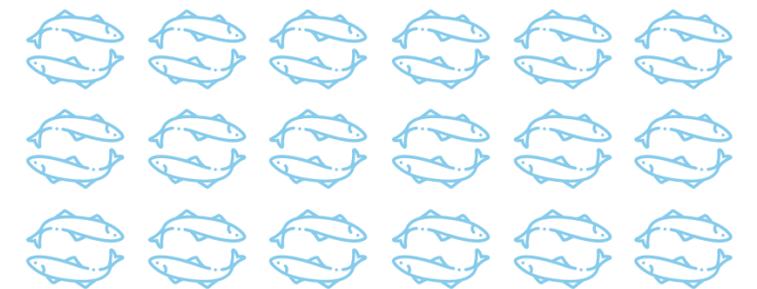
- Improve the procedures for monitoring, surveillance and enforcement
- Clearly define the organizational responsibilities for the management of marine activities and resources

The use of digital tools can transform geographical dispersion and small size into an opportunity. In fact, the lack of outdated legacy systems and processes—a burden of many higher economy countries—can actually accelerate the deployment and scaling of these solutions within SIDS.



A quick look at: [Global Fishing Watch](#)

This partnership between Google, Oceana and SkyTruth has established a powerful web-based data portal that enables real-time monitoring of marine activities, such as fishing, across large oceanic areas using satellite data. The system is starting to revolutionize our understanding of human uses of the ocean, and is making it increasingly difficult for operators to fish illegally.



CASE STUDY



Barbados

Barbados' national blue economy strategic roadmap



Region: Caribbean



Land Area: 430 km²



Exclusive Economic Zone: 183,773 km²



Coastline Length: 97 km



GDP Per Capita (2019): US\$18,149

Source: UNCTAD Development and Globalization: Facts and Figures 2021

Like many SIDS, the Government of Barbados has recognized the importance of a sustainable blue economy as a critical element of

building a climate-resilient economy. In 2018, Barbados created the first ministry in the Caribbean dedicated to the development of the blue economy, along with an overarching development vision. This embedded the blue economy in Barbados' overall national development framework.

Despite the preparation of a number of related strategies and policies, no single overarching strategy or policy framework exists to harmonize the management and development of Barbados' blue economy. The Government of Barbados, with support from UNDP and the Inter-American Development Bank (IDB), developed an integrated blue economy framework reflecting the interrelated nature of maritime activities and the need to ensure coherence among them.



The resulting blue economy roadmap sets out the pathway for Barbados to follow if it is to successfully attain the goal of a sustainable blue economy. Based on the three mutually supporting pillars of sustainability—environmental, social and economic—the roadmap will assist the government to achieve a number of objectives, including:

- economic development;
- safeguarding the natural environment; providing for sustainable development; and preserving a way of life that has sustained Barbados for generations.

Implementation of the Roadmap will be based on: (i) strong inter-governmental coordination; (ii) partnerships with non-government organizations, the private sector, civil society and international partners; and (iii) broad-based community engagement and involvement.

The government of Barbados has recognized the importance of a sustainable blue economy as a critical element of building a climate-resilient economy.

To support implementation of the blue economy, Barbados will focus on key enabling conditions, including: innovative financing mechanisms, sustainable certification and market development, and a robust digital platform.

CASE STUDY



Belize

Using autonomous surface vehicles to map coral ecosystems in Belize



Region: Caribbean



Land Area: 22,810 km²



Exclusive Economic Zone: 36,182 km²



Coastline Length: 1,996 km



GDP Per Capita (2019): US\$4,815

Source: UNCTAD Development and Globalization: Facts and Figures 2021

In 2018, under the UK Government’s Commonwealth Marine Economies Programme, scientists from the UK’s National

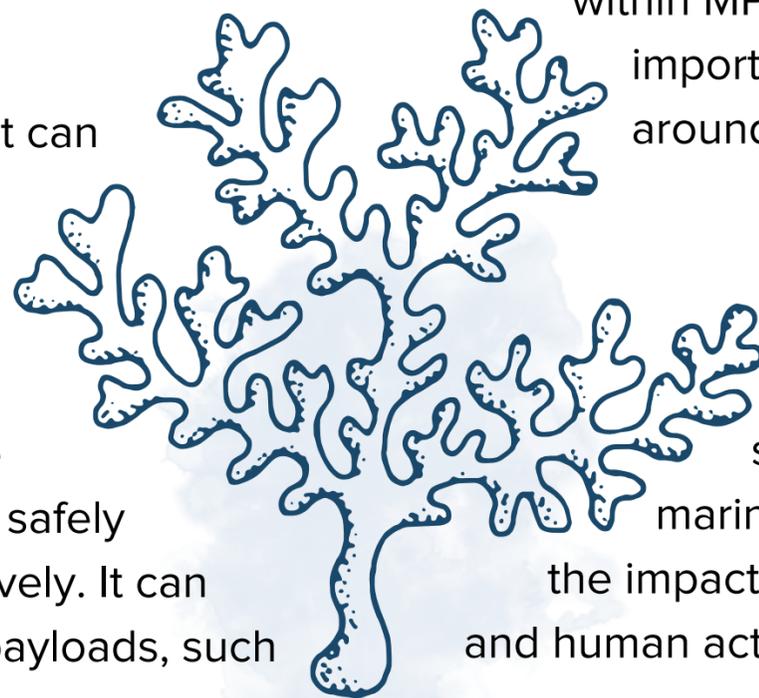
Oceanography Centre worked with government scientists from Belize to deploy an innovative portable marine science laboratory known as CAMEL (Containerized Autonomous Marine Environmental Laboratory). The CAMEL facility consists of an autonomous surface vehicle and a mini remotely-operated underwater vehicle, as well as a fully-featured mobile laboratory, control centre and a small inflatable boat with an outboard motor.

The system, that can be operated autonomously or remotely, enables a wide range of marine surveying tasks safely and cost-effectively. It can carry different payloads, such

as a hydrographic payload with a multibeam echo sounder; a geophysical payload with a side scan sonar system and sub-bottom profiler; and a variety of water-quality sensors.

CAMEL was deployed at Turneffe Atoll – the largest Atoll on the Mesoamerican Reef – to survey the lagoon and assess the impact of sea level rise on sensitive mangrove environments. Other surveys have also been conducted within MPAs and across important shipping lanes around Belize City.

Together, these surveys are helping to characterize the sensitivities of the marine environments to the impacts of climate change and human activities, and are



The programme has already delivered high-resolution mapping of seagrass meadows.

providing the best possible data to support decision-makers in managing Belize’s coastal environments.

As a result, the programme has already delivered high-resolution mapping of seagrass meadows, detailed bathymetric surveys, and an extensive programme of river water sampling further inland.

CASE STUDY

Enhanced socio-economic benefits from the world's largest tuna fishery

Fisheries play an important role in economic development, food security, employment, and livelihoods. In the Pacific region, aquatic foods contribute between 20 and 50 percent of total animal protein intake. In Pacific SIDS, fisheries contribution to goods exports is as high as 90 percent in the Federated States of Micronesia and 80 percent in Kiribati. The Western and Central Pacific Oceanic fishery provides 60 percent of the world's tuna. However, Pacific islanders don't directly receive all the economic benefits emanating from these fisheries as many fishing fleets are owned by foreign corporations.

Through 20 years of partnership between UNDP and the Pacific Islands Forum Fisheries Agency (FFA), financed by the Global Environment Facility, Pacific nations increased their share of economic benefits from the Western and Central Pacific tuna fisheries, achieved 100 percent sustainability in these transboundary fisheries, and increased its sustainable benefits in a more equitable manner.

The Western and Central Pacific Ocean is now the only ocean where all four major stocks of tuna are harvested at a biologically sustainable level.

By empowering Pacific SIDS to negotiate and make better economic decisions, fisheries access fees increased from US\$420 million in 2015 to US\$550 million in 2019 and direct employment has also risen from 18,134 to 23,861 over the same time. In addition, the economic benefits from tuna harvest and processing activities have risen from US\$736 million in 2015 to US\$896 million in 2019. This demonstrates how the adoption of a sustainable approach, based on capacity building and access to data, can allow SIDS to ensure the conservation of their fisheries resources while deriving increased social and economic benefits.

PART 3

—
*Developing
a 'blueprint' for blue
economy transformation
in SIDS*



Part 3: Developing a 'blueprint' for blue economy transformation in SIDS

It is a complex and challenging endeavour to shift from 'business as usual' to implementing the blue economy. It requires all the key development sectors, both public and private, to work together on a relatively new and unknown approach to national development, for which there is no existing blueprint. This section will provide guidance to policymakers on the process of developing a blue economy policy and a strategic framework.

Policies are a set of principles, ideas and proposals for action, that guide and eventually lead to government decisions in a particular field of national importance. Once endorsed by the government, it becomes the reference document for making decisions, including in

In this part, we will share:

1 The process of implementing a blue economy strategic framework at the national level

the development of legal instruments within that particular field.

Policies also guide government decisions in the allocation of resources, especially human and financial ones. Most importantly, they provide the guiding principles and the basis for the drafting of sectoral strategies and plans.

Such a process normally requires several months of building awareness and understanding primarily within and across the government, amongst its key partners within the private sector and the civil society. Much effort and resources are required to support this process and provide the decision makers and their partners with the relevant information in a manner that can be easily digested and absorbed by them. This means governments must invest in the sourcing and compiling of the necessary information collected from a wide range of sources. The process involves a series of steps each contributing towards strengthening

the ability of the government to deliver on its vision and ideas.

Building a sustainable blue economy

There are two key documents governments need to operationalize and implement for the blue economy approach: a set of clear policies and a strategic framework. The policy document provides guidance on what the government and its partners wish to achieve and the strategic document sets out the *modus operandi* to implement it.

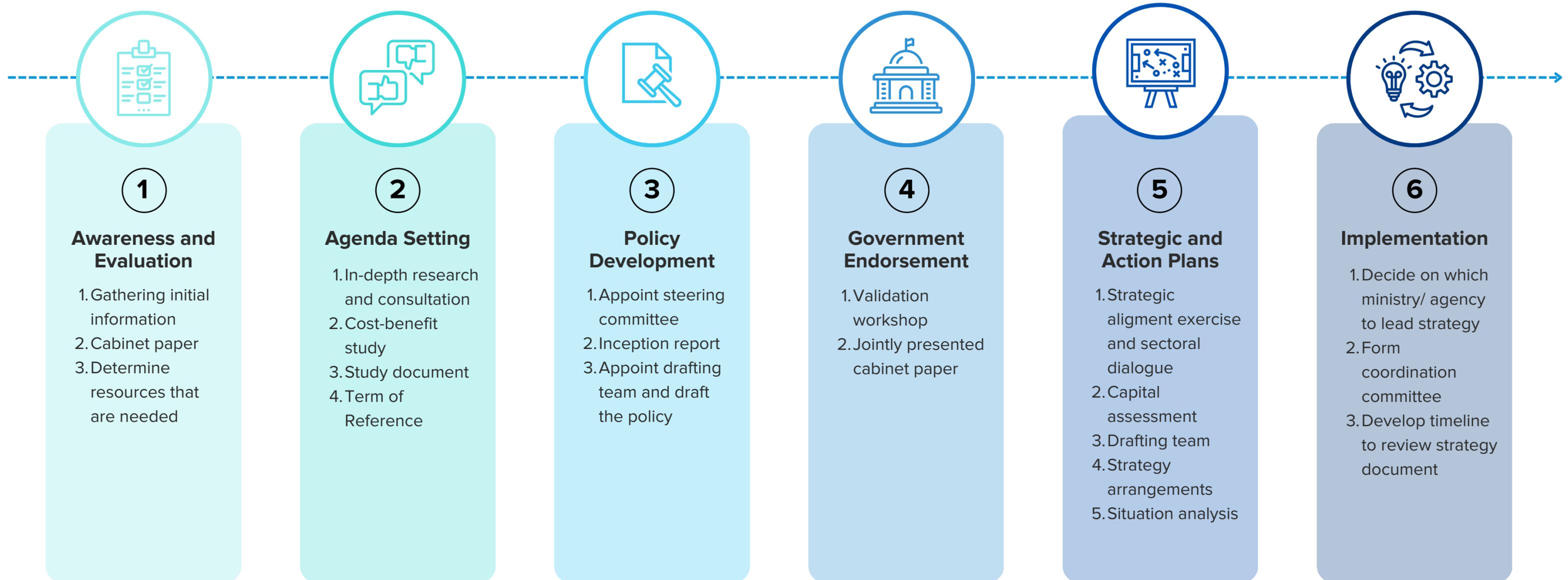
Once the strategy is approved by government, the operationalization starts. It will be led by a designated government agency with a coordinating body consisting of senior government, private sector, and civil society representatives. This is necessary to keep in line with the multi-sectoral and multi-dimensional nature of the blue economy.

The process of developing the necessary policy and strategic documents for the blue economy is similar to preparing national development documents. It starts with the highest government decision-making body endorsing a cabinet of ministers' paper that is requesting approval to pursue the blue economy.

To increase its probability of success, the government has to work closely with the private sector and civil society to secure their contributions and buy-in through a well-planned and executed consultative and participatory process. The private sector is an important partner in implementing the blue economy; the majority of the investments needed will have to come from private investors and without their commitments, the blue economy has a very limited chance of success.

There are two key documents governments need to operationalize and implement: a set of clear policies and a strategic framework.

A step-by-step approach





Step 1: Awareness, evaluation and governmental approval

The adoption of the blue economy approach normally starts with a member or members of government becoming aware of and deciding to pursue it.

Once that decision has been taken, the next step involves the gathering of initial information about the blue economy, determining the advantages or disadvantages of such an approach, and what benefits it can bring towards the development of the country in terms of

creating wealth, jobs and other opportunities.

Such tasks are usually assigned to senior government officers, who through desktop studies and consultations with other colleagues, both at the national and international level, gather the necessary information. The aim of these initial research activities is to enable the decision-makers to determine whether there is sufficient grounds to pursue this issue further.

Should the senior officers and their minister be convinced of the blue economy's potential, then a cabinet paper is prepared and submitted for discussions. The aim of the paper at this point is twofold:

- Inform the cabinet of ministers of the preliminary findings of the initial research
- Seek the government's approval to conduct more extensive research and consultation with the objective of possibly developing a policy paper

Government approval at this stage is key. It will determine whether resources in the form of funds and human capital will be allocated to pursue this approach further and, crucially, which government ministry, department and/or agency will be assigned the responsibility.

At this stage, the government may decide to seek assistance from bilateral and multilateral partners. This is the recommended approach for SIDS and other countries with limited resources as

it will enable them to access international experts and critical resources unavailable in their respective countries.

Countries may also decide to seek technical and financial support from friendly foreign countries and multilateral bodies e.g. UNDP and the World Bank.

Government approval at this stage is key. It will determine whether resources in the form of funds and human capital will be allocated.



Step 2: Gathering information on the blue economy and setting the agenda

The next step involves more detailed, in-depth research and consultation and it may involve a cost-benefit study of the blue economy in the context of the particular country.

Some countries may choose to invest in a cost-benefit study to better assess the advantages and disadvantages of adopting the blue economy approach. This may prove difficult because most countries are still at the initial stage of developing or implementing it. There is today no existing

country with sufficient experience to base such a study on, which means most findings will probably be based on assumptions.

The information gathered should be sound, factual and up-to-date because of its importance as background reference material for the elaboration of the policy document, and also as the main source of information for policymakers. The information gathered must cover:

- A stocktake on the relevant sectors and whether they are operating on a sustainable basis or not
- Current information on key sustainable marine sectors and valuation of sectors that may have previously been overlooked
- Potential to further develop and improve these sectors, either through efficiency or innovation

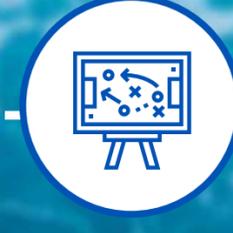
- Potential to create new opportunities, in particular through job creation
- Potential to restore ecosystems, improve sustainability and reduce environment impacts

The detailed study document has to be presented to key government representatives from different ministries, departments and agencies to inform them and also to provide them with the opportunity to seek and obtain clarification. Above all, it is important to secure their support for both the process and the governments' decision on the blue economy. Government may decide at this stage to have initial discussions with some key members of parliament, the private sector and civil society.

Based on the results of the detailed and in-depth study of the blue economy and the consultations, the government may decide

Some countries may choose to invest in a cost-benefit study to better assess the advantages and disadvantages of adopting the blue economy approach.

to appoint an internal drafting team or a consultancy firm to draft the blue economy policy. This will require the drafting of a Term of Reference with a clear scope of work and list of deliverables that takes into consideration the aspirations of the government, private sector and civil society. It must also stipulate the need to produce a balanced policy document in terms of sustainability, and also take into consideration the cross-cutting nature of the blue economy and the need to integrate it into development, social and environmental sectors.



Step 3: Development of blue economy policies

The drafting of the blue economy policy follows the same normal procedures to develop government policies. But because it is cross-cutting in nature, it will involve the participation of not one but multiple key government bodies in the process.

These should include representatives from the following: ministries, departments and agencies representing the environment; finance; fisheries; tourism; ports and marine transport; with direct interest in marine or coastal resources. The navy and/or coast guard should also be included as the organization with the capacity to provide surveillance against illegal maritime activities and support safety and other monitoring efforts by government agencies.

To facilitate and manage the process, an institutional framework will be required. This includes the appointment of a dedicated ministry, department or agency to lead the process, a coordinator to manage it

Policies as part of the government decision-making process have direct implications on:

- Rules and regulations
- Public expenditure and distribution of resources
- Strategies and plans

and a steering committee made up of representatives of key government agencies, the private sector and civil society to oversee it.

To guide the drafting process and to ensure proper representation, the

government should appoint a steering committee to guide and provide support to the drafting team. Most governments will need the assistance of external experts to assist with the drafting or to draft the policy.

At the outset, there should be an inception report prepared by the drafting team, which should be presented to the steering committee members for evaluation, modifications and subsequent endorsement. Following this presentation, there should be other meetings and presentations set at specific milestones to enable the steering committee to contribute towards the elaboration of the document.



Step 4: Endorsement of the blue economy policy by government

Once a first draft of the policy is available, a validation workshop with a wider participation should take place.

Government may also decide to organize a series of consultative meetings with specific groups such as parliamentarians, the private sector and civil society. At this stage, it is important to broaden participation, obtain contributions from various groups and incorporate their contributions and ideas in the draft policy.

Upon concluding the drafting and consultative process, the ministry that has been given the responsibility to manage the process will then present the policy to the government for further discussions and potential endorsement. It is possible for the cabinet paper to be jointly presented by several ministers because of the multi-sectoral nature of the blue economy.

The objective of the cabinet paper should be to:

- Present the draft policy to the members of the cabinet including the head of government and provide them with an opportunity to discuss it, and
- Gain approval from the highest national decision-making body for the draft policy

Importance of stakeholder consultation and participation

When preparing policies on a relatively new, complex and multi-sectoral concept as the blue economy, there is the need to build in from the very beginning a well-planned consultative and participatory process to gather knowledge and gain support from all the partners and stakeholders.

The partners and stakeholders must be identified, notified and engaged from the very beginning, that is, as soon as the government feels it is ready to do so. It is common knowledge that most people resent being presented with a *fait accompli* for them to rubber stamp, so this should be avoided at all cost. This may lead to unnecessary opposition and conflict, which may derail the whole

process. Being part of the process creates a sense of being valued and belonging. Once there is a sense of ownership, they will be more amenable towards contributing towards the policy and enriching it. They will also be more prepared to promote it amongst their peers within their specific sectors and communities, and even defend it if necessary.

While representation in the consultation meetings should be inclusive and gender balanced, it must be targeted at senior professionals and group leaders who are knowledgeable about their sectors and have the capacity to meaningfully contribute towards the final policy document.



Step 5: Drafting a strategy and action plan

While policies state a government's vision, principles and ideas about an issue of national importance and provide guidance to those working in that particular field, by themselves they are insufficient to transform those ideas into action.

To implement these principles, proposals and ideas, governments need a strategy or a vehicle to assist it to achieve its goals and objectives. In many cases, in addition to the strategy, there will be an action plan to spell out the activities, targets, indicators, the responsible agencies and partners, timeline and the resources required to deliver the desired results. So, the strategy and/or strategic action plan operationalizes the

policies and provides the government and its partners with a clear roadmap or plan to implement or transform the policies into action on the ground.

Strategic alignment exercise and sectoral dialogue

Taking into consideration the complex, multi-sectoral and multidimensional nature of the blue economy, it is important to implement a strategic alignment exercise and dialogue. The aim of these activities is to identify existing differences, contradictions and gaps in the economic and environmental sectoral policies and strategies, which pose a problem in aligning these sectors to these policies. The key sectors requiring harmonization and/or alignment are fishing and mariculture, seafood processing, marine transportation, coastal and marine tourism, mining, desalination, marine biotechnology and marine-based renewable energy.

Again, an experienced team will have to be given the mandate to conduct the strategic alignment exercise, including consultations with senior government officers in key positions and those in the private sector. Their findings and recommendations must be documented and presented to the highest government decision making body and utilized for the drafting of the strategy. The strategic alignment exercise can contribute markedly towards the alignment of the various existing relevant policies and strategies within the overall strategy.

Blue capital assessment

Blue capital is the term used to describe the natural resources of value, existing within a country's coastal, marine and oceanic space. Before a government can decide which sector or sectors to focus on, it needs to know which sectors have the necessary potential to develop sustainably and grow the economy in an inclusive manner.

For it to make that decision, it needs to know which resources are available within its Exclusive Economic Zone, their potential utilization, and worth. This is where a blue capital assessment becomes crucial. Before governments initiate the drafting of a national blue economy strategy, it should consider funding a blue capital assessment.

The information captured through such a study will strengthen the decision-making ability of all involved in the process, including the highest national decision-making body. With such information, they could base their decisions on facts and science, rather than on assumptions.

The information gathered under the blue capital assessment is complementary to the cost-benefit analysis, the research conducted before drafting the policy and the country and sectoral analysis. Together, they form a sound basis for the development of the strategy.



Appointment of a drafting team and the drafting process

The quality of the strategy and its action plan determines the final delivery of the government's vision and ideas. It is therefore important to ensure the drafting team or expert has the necessary experience and abilities to translate the government's vision and ideas, and also those from the parliamentarians, private sector and civil society, into strategies and activities.

Of special importance are the findings of the strategic alignment exercise, which should be taken into consideration in drafting the strategy, to ensure it provides a comprehensive and integrated approach to the blue economy. The strategy must do the following (Otherwise, there will be no difference between existing national development plans and the blue economy):



Challenge the current status quo and paradigm

- Establishing and developing accelerator labs to facilitate uptake of new concepts and ideas
- Re-imagining tourism by, for example, targeting digital nomads or promoting virtual tourism
- Promoting the application of Fintech and innovative financing in mature industries



Focus on sustainable use of blue capital

- Promoting sustainability labels in fisheries
- Implementing environmental audits in businesses to promote sustainability
- Investing in optimizing sustainable harvesting and use of natural resources along the value chain, thereby minimizing wastage



Promote inclusivity, gender equity and shared prosperity

- Upskilling and reskilling of workers to support full integration
- Facilitating access to financing and other resources
- Diversifying economic activities with emphasis on value addition
- Strengthening of public-private-civil-societies platforms



Promote research and innovation

- Applying digital and new technologies to redefine fisheries, tourism and other mature economic sectors
- Investing in research in biotechnology, marine renewable energy and aquatech
- Domesticating the use of submersible robotic technologies and satellite imagery to map out marine resources and bathymetry



Protect and restore critical marine ecosystems

- Supporting research and management of high value biodiversity areas
- Investing and applying cost-effective blue technologies including drones for surveillance purposes
- Developing and supporting the implementation of Marine Spatial Plans

Similar to the preparation of the blue economy policy, a Term of Reference or TOR is needed to spell out the scope of work, tasks and deliverables required from the drafters. The best approach is to simply use the same steering committee that was responsible for coordinating and guiding the work of the drafting team that produced the blue economy policy.

The government may seek additional support in terms of resources from bilateral and multilateral donors to produce the strategy. However, it is considered good practice to include at least a local consultant on the drafting team to contribute towards a more in-depth assessment of local circumstances.



✓ **Arrangements for producing the strategy**

For the drafting of the strategy, certain specific arrangements must be in place. These are similar to those established for the drafting of the blue economy policies. These are the appointment of a national coordinator and a steering committee; this is a consultative and participatory process

The steering committee must be consulted and given the opportunity to contribute towards the final inception report and the work plan.

with key partners and stakeholders properly represented. The steering committee must be consulted and given the opportunity, upon submission of the inception report, to contribute towards the final inception report and the work plan.

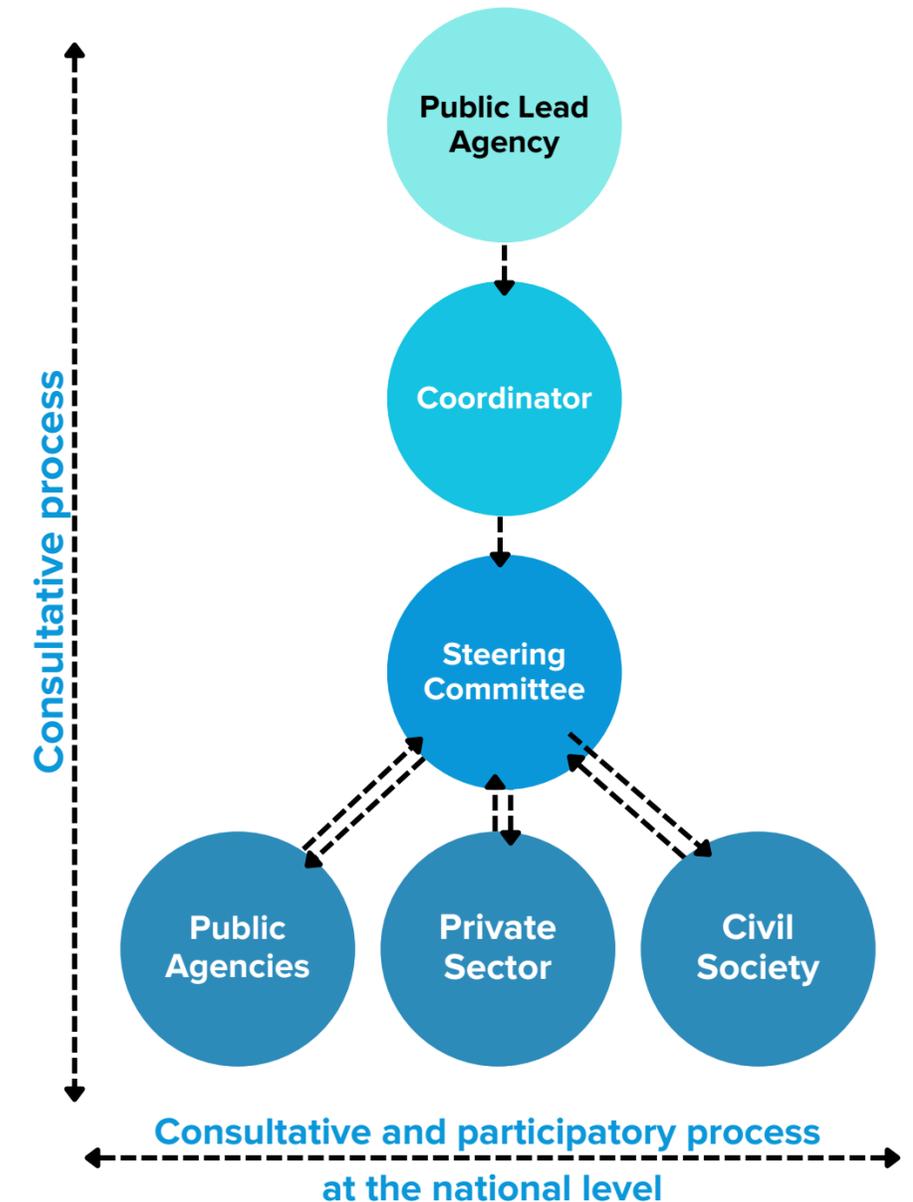
In addition, in the work plan, a schedule of consultative meetings must be built in to enable the members of the steering committee to be consulted at key stages of developing the strategy. These could be for example:

- Once the country and sectoral analyses have been completed
- At the beginning of the drafting of the operational strategies
- Upon completion of the first drafts

- Before the final validation workshop with other parties

The objective of the milestone consultations is to ensure the representatives have the opportunity to contribute towards the document throughout the drafting process, and thereby enable them to identify and address any contentious issue or gap at an early stage.

Institutional arrangements are as follows:





✓ **The situation analysis**

Next, it is time to carry out a country analysis spanning the political, economic, social and environmental landscapes within the country. Special emphasis must be placed on covering the impacts of economic activities on the health of the marine environment. The blue economy is about sustainability, meaning all efforts must be made to abate, control and reduce the negative impacts of development on the marine sector.

Consideration should also be given to other similar processes taking place at the regional level and within other SIDS and coastal states, and lessons should be derived from both their positive and negative experiences.

The objective of this analysis is to provide the drafting team with a clear

understanding of the current status of the development of the economic sectors, and the challenges and opportunities that exist within these sectors. It is also important to determine which of the mature sectors - for example, tourism and fisheries - still have capacity to grow by minimizing wastage, applying innovative measures and practices, and diversifying into undeveloped niches. Above all, it will contribute towards the very important process of selecting the key economic sectors that the government should focus on.

One of the key decisions the government has to make, with the support of its key partners and stakeholders, is which sectors should be given priority for investments and additional support. It also has to decide whether some sectors will be given priority at the initial stage and give others similar attention later, or whether there will

be a progressive approach to implementation of the blue economy across a number of sectors. For this, a set of selection criteria needs to be established and applied. This can be done by the strategy drafting team in consultation with the steering committee but the final decision will have to be taken by the cabinet of ministers based on recommendations from the steering committee and the drafting team.

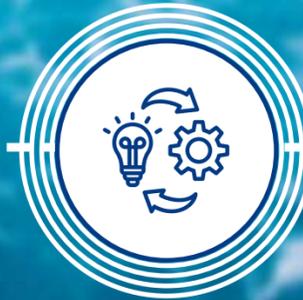
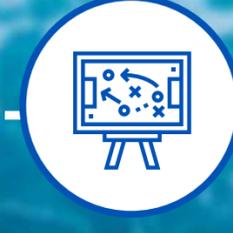
✓ **Vision, mission and goals**

The next step is for the drafting team to develop the vision, mission, and goals for the strategy and set the duration for its implementation. Agreement must be reached on the main area of focus; in particular, those with the capacity to produce an enabling environment to facilitate the implementation of the blue economy across the selected sectors.

The proposed draft strategy must go through validation by the steering committee and subsequently by a wider group of representatives from key public, private and civil society and parliamentarians. The final validation of the draft strategy is done by the cabinet of ministers through a presentation by the drafting team.

The final process involves publishing and widely disseminating the strategy. Awareness programmes should form part of the implementation process to improve understanding of the blue economy policy and strategy across all government agencies, within the private sector, and civil society.





Step 6: Implementation of the strategy

The final step is to develop the institutional arrangements necessary to operationalize the strategy and action plan.

Blue economy ministries and departments are today increasing in popularity in SIDS and coastal countries as they search for the right institutional framework to develop and

implement the blue economy. First and foremost, the government will need to decide whether one of the existing ministries, departments or agencies should lead the implementation of the strategy or whether it will need a new organization to coordinate and monitor the implementation.

To strengthen the governance framework, an additional layer of coordination will be required to provide the other key public, private and civil society organizations with the opportunity to contribute towards the implementation. This should be in the form of a coordination committee.

This committee should be made up of senior government, private and civil society representation and chaired by a very senior member of the cabinet of ministers, who has the respect and ears of the other members of the cabinet of ministers.

Finally, within the blue economy strategy, a timeline for reviewing the document must be included. In most cases, this should take place halfway through its implementation schedule. At this stage, the implementation of the strategy should be evaluated and the necessary adjustments completed before continuing with implementation.

To strengthen the governance framework, an additional layer of coordination will be required to provide the other key public, private and civil society organizations with the opportunity to contribute towards the implementation of the blue economy.

CASE STUDY



Grenada

Grenada's National Ocean Policy



Region: Caribbean



Land Area: 340km²



Exclusive Economic Zone:
26,133km²



Coastline Length: 252km



GDP Per Capita (2019):
US\$10,818

Source: UNCTAD Development and Globalization: Facts and Figures 2021

Grenada is well positioned to take advantage of the possibilities of the blue economy. Its Exclusive Economic Zone is almost 75 times larger than its terrestrial territory. With the right governance and enabling conditions in place, the island country could integrate the sustainable use of its marine resources and blue capital with economic growth and diversification, job creation, and more.

Grenada developed its Blue Growth Masterplan in 2016 to guide blue economy development. The plan has identified potential investment options with attractive returns valued at over US\$1 billion.

Opportunities for investment are based upon Grenada's Blue Growth Vision: to optimize the benefits derived from

coastal, marine, and ocean resources to become a world leader and international prototype for blue growth and sustainability.

The country's National Ocean Policy is another step in this direction. Its vision emphasizes the importance of sustainably managing the coastal and marine resources to maximize the potential of the blue economy, ensure resilience to climate impacts, protect and restore marine ecosystems and nurture the natural and cultural heritage.

There are three key principles to Grenada's policy:

- Island Systems Management
- Ecosystem Based Management
- Environmental Stewardship

The National Ocean Policy is a framework

The Blue Growth Masterplan has identified potential investment options with attractive returns valued at over US\$1 billion.

for integrated marine planning and management of Grenada's marine space and associated activities from 2020 until 2035. It states principles that will be applied to policies, plans, regulations, and actions affecting the access and use of marine environment; identifies policy outcomes and goals; and lays out a strategic action plan to deliver on the ambition of the national ocean policy.

CASE STUDY



Seychelles

Blue financing in the Seychelles



Region: Atlantic & Indian Ocean



Land Area: 460 km²



Exclusive Economic Zone: 1,331,964 km²



Coastline Length: 747 km



GDP Per Capita (2019): US\$17,381

Source: UNCTAD Development and Globalization: Facts and Figures 2021

Mangroves, seagrass beds, and salt marshes are among the most efficient carbon sinks on earth. These blue carbon ecosystems can be up to 40 times faster than tropical rainforests in storing carbon. In addition, they provide other ecosystem

services such as nurseries for fishery species, provide habitat for vulnerable species, maintain water quality, and protect coastal areas from the impacts of climate change.

Recognizing the importance that these ecosystems play in meeting its Paris Agreement commitments, as well as their rapid decline due to the cumulative impacts of climate change and coastal development, Seychelles has committed to protecting 50 percent of its seagrass and mangrove habitats by 2025 and 100 percent of these habitats by 2030. This will help it retain its status as a net carbon sink as opposed to a net carbon emitter.

A series of projects involving both international and local partners, including the Pew Charitable Trusts, the University of Seychelles, the University of Oxford, the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT), the Island Conservation Society, the James Michel Foundation and the Deakin University, are

exploring blue carbon opportunities to develop a better understanding of marine assets that can mitigate climate change and adapt to its impacts.

These projects will not only help put this island nation at the forefront of international efforts to incorporate blue carbon within climate change mitigation strategies, but will also contribute to job creation, economic growth, and the preservation and restoration of coastal ecosystems. They will provide Small Island Developing States like Seychelles with new opportunities to enter into the carbon trade, which for many years remained a distant dream because of the small size of their forested areas.

To fund such initiatives, Seychelles was the first nation in the world to launch a sovereign blue bond in 2018, which raised US\$15 million from international investors to support sustainable marine and fisheries projects. Grants from the bond are provided through the Blue Grants Fund that is managed by the SeyCCAT, a public-private partnership that grants at least US\$700,000 per year.



The funding goes mainly to locally-led projects and programmes by Seychellois businesses, government agencies, and even citizens. The SeyCCAT's grant has supported initiatives to better understand blue carbon systems, combat pollution, develop sustainable aquaculture, and improve fisheries management.

Seychelles' initiative could serve as a model for other SIDS interested in including blue carbon ecosystem protections as part of a climate response policy, and financing their blue economies.

These blue carbon ecosystems can be up to 40 times faster than tropical rainforests in storing carbon.

PART 4

—
*How the blue economy
can support national
inclusive and equitable
sustainable development*



Part 4: How the blue economy can support national inclusive and equitable sustainable development

We have covered how ocean health is intrinsically linked to sustainable development, especially that of Small Island Developing States. To recap, the blue economy focuses on the sustainable use of blue capital and ocean resources in creating economic opportunities, while at the same time promoting ocean health.

This is reflected in the SAMOA Pathway, a set of ambitious commitments to sustainable development that was made by SIDS leaders in 2014. In it, SIDS acknowledge that oceans, seas and coastal areas form an essential component of the earth ecosystem and are intrinsically linked to sustainable development. It further notes that the main building blocks for a sustainable ocean-based economy include sustainable fisheries and aquaculture, coastal tourism, and potential sources of renewable energy.

In this part, we will share:

- 1 How to align a blue economy policy and strategic framework with national development plans
- 2 The enabling conditions required for success
- 3 The institutional framework necessary to support the entire process

Finally, it recognizes that gender equality and women's empowerment have a transformative and multiplier effect on sustainable development and are a driver of economic growth.

The blue economy spans over a wide range of economic, social and environmental activities. They are directly or indirectly connected to the coastal, marine and ocean space and resources. Most of these economic activities offer many opportunities for socio-economic development of coastal states and SIDS, through innovation in established traditional marine economic sectors and diversification in new subsectors and niches.

This means that because of the cross-cutting and multisectoral nature and the

complexity of the blue economy, the approach towards its implementation must include the harmonization and alignment of existing sectoral policies, strategies and regulatory frameworks. Having a coherent approach will help create a unified effort towards its implementation.

Existing non-aligned sectoral regulatory and policy frameworks, as well as gender-blind legislations and action plans, may act as barriers to the implementation of the blue economy, which may derail government efforts and leave vulnerable groups behind. They can even inadvertently undermine blue economy goals and targets. Further, it is not only local policies and regulatory frameworks that may impact implementation, but also international agreements such as those around trade and development cooperation. These will also need to be scrutinized and assessed.

The importance of communication

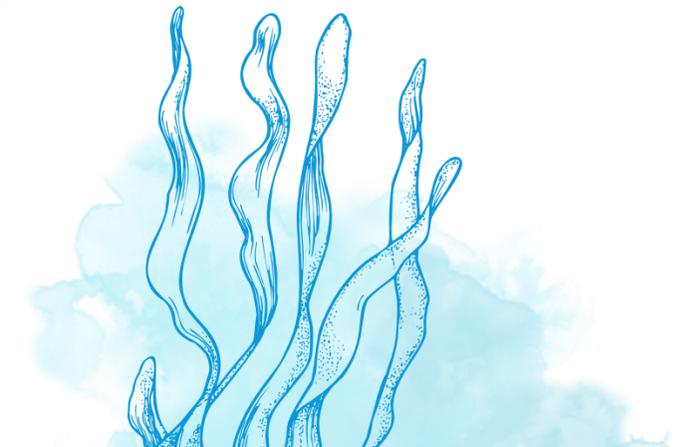
Establishing a common understanding of the blue economy is one of the greatest challenges policymakers face. This is because there are different existing perceptions worldwide of what constitutes the blue economy. Above all, the economic partners and stakeholders must understand and be convinced of the benefits of

adopting and aligning existing national development plans with the policy framework and goals. Their contributions can be summarised into two parts:

- The sharing of their knowledge and experience, including traditional knowledge, about the economic sectors they are involved with
- The support they can provide towards identifying potential existing gaps in the development plans

Partner and stakeholder buy-in will also be essential; otherwise, it will be difficult to obtain their support during implementation.

Governments need to ensure there is an inclusive programme in place to share information with the key development partners and stakeholders to ensure there is a common understanding of the blue economy and its goals. Misunderstanding and confusion may derail the process and cause difficulties during the planning, implementation, monitoring and evaluation stage.



Establish the cross cutting and multi-sectoral nature of the blue economy

Investors, professionals and workers involved in the ocean related economic sectors, must through awareness raising and capacity building be assisted to develop and have a common and shared understanding of what constitutes the blue economy. A common understanding is a basic requirement for fostering and encouraging synergy and long-term partnerships amongst the various sectors. Such information must not only be shared at a certain level within the hierarchy of government structures but throughout the partner organizations.

This shared understanding is a prerequisite for galvanising partners' support and agreement for the new development trajectory. It may also be a catalyst for them to review and align their business strategic plans and actions with the blue economy policy and goals. Otherwise, the necessary amendments will only be limited to government policies, regulatory frameworks, and strategic plans, and will not extend to the strategic plans of private and civil society organizations. This is key in SIDS, where unlocking private sector investments is needed to compensate for the limited

public financial resources, especially in a post COVID-19 scenario.

Engaging key partners and stakeholders

Apart from sharing information and raising awareness, the government must have a clear plan for engaging partners and stakeholders in the process of determining the best approach and method of aligning blue economy policies and goals with development plans. A well-articulated consultative and participatory process is key to fostering inclusivity and partnerships.

It is important for the key partners and stakeholders to be brought on board at a very early stage to gain their support and not at the end of the process, when there are very limited opportunities for them to meaningfully contribute to the process. Such a situation may cause resentment because the key partners and stakeholders may feel that their contributions are not wanted and that they are simply being used to rubber stamp a *fait accompli*.

It is also fundamental to ensure non-traditional stakeholders such as women's organizations and cooperatives, as well as youth networks, are included in

consultations as actors vastly engaged in the blue economy but often underrepresented in policy and decision-making processes.

Drafting a national policy framework for aligning the blue economy with development plans

A clearly articulated blue economy policy framework and road map will serve as a basis to map out potential misalignment within the various sectors and also assist in supporting the harmonization and alignment needed to address potential conflicting issues and gaps. They will also act as reference materials for public and private sector, civil society personnel, and potential investors.

Developing a national policy framework to promote alignment requires:

- A request from the highest decision-making body of the country to draft the policy and its endorsement
- The appointment of a designated agency to lead and coordinate the process
- The appointment of a drafting team and a coordination body which is balanced and inclusive

It must include a consultative and participatory process aimed at engaging key partners and stakeholders, including women, youth and vulnerable groups representatives. The main difference in this case is that there is a need to build into the policy a component that focuses primarily on the harmonization and alignment of blue economy policies and priorities in the existing national plans.

Developing a national policy framework to promote alignment requires:



A request from the highest decision-making body of the country to draft the policy and its endorsement



The appointment of a designated agency to lead and coordinate the process

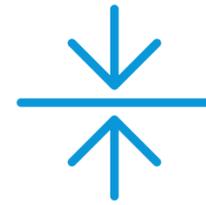


The appointment of a drafting team and a coordination body which is balanced and inclusive

Drafting a national policy framework for aligning the blue economy with development plans (cont'd)

There are other factors that have to be considered in developing a policy framework that can contribute towards addressing misalignments in national development plans with policy and goals. Examples are on the right.

There is no existing universal solution to identify policy misalignment that can be applied across all countries. Each SIDS has its own policy framework, development level and priorities, capacities, resource base and level of application of technology and innovation. These differences make it difficult to have a one-size-fits-all approach. The drafting of a blue economy policy framework must be country-driven and based on national circumstances and development ambitions.



The need to align existing sectoral strategic plans and actions including those in national plans must be clearly articulated in the policy.

It should not be included as an afterthought but it should form an integral part.



It should highlight the importance of identifying areas where the country has clear competitive advantage

with the greatest potential of socio-economic impact for all, while exploring realistic development priorities within the marine related sectors.



It should promote the identification, mapping and analysis of existing misaligned policies and strategic actions

and the application of corrective measures ranging from the harmonization, alignment and the reforming of existing development policies and strategic actions.



Inclusivity is key to the alignment process. The blue economy policy has to encourage stakeholder dialogue

with representatives of key partners and stakeholders working in public and private sectors and also civil society, especially during the initial stage of gathering and analysing essential information. Women, youth and vulnerable groups should be included and consulted at the initial steps of the process to ensure no one is left behind.



The private sector is a key driver of the blue economy

programmes and actions. Garnering their support and approval is of vital importance.

How to conduct a strategic alignment exercise and stakeholder dialogue

Aligning strategic actions of the different key sectors with blue economy principles and goals is a critical exercise that needs to be done properly to ensure the information gathered are the correct ones. Therefore, there are several steps used to collect, verify and analyse the information on strategic actions of the different key sectors. These include the following:

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1. Map out priority sectors, blue economy-related programmes and strategic actions

The first step of aligning the policy framework involves the mapping of existing national policy frameworks of key socio-economic sectors with direct or indirect links to the marine and ocean environment and resources and those with a direct bearing on the health of marine environment. The most important economic sectors include:

- Fisheries and aquaculture
- Marine and coastal tourism
- Marine transportation and port infrastructure
- Marine-based renewable energy
- Desalination
- Mining

Considerations should also be given to regional and international economic sector agreements e.g. those of the regional fisheries management organizations and, in addition, environmental multilateral

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ones, such as those of the UNCBD, UNFCCC and UNEP Regional Seas Conventions.

This activity is followed by analysing the information gathered to identify potential misalignment and conflicting issues and any existing gaps in the policy framework. The information gathered is then compared with the blue economy policy to determine which policies will require policy review, adjustment, and if deemed necessary, reforms.

In view that most regulatory frameworks are drafted based on existing policies, there is the need to conduct a similar mapping exercise to identify potential misalignment. Such an exercise should cover all the most important sectors, including existing legal trade agreements which may have an impact on local production systems; in particular, the promotion of unsustainable ones.

Considering the legal implications of not abiding by existing legal instruments, governments may decide to review and amend such trade instruments to align them with the blue economy policies. However, this may have to be done gradually because it may involve negotiations with other parties.

Similarly, regulatory frameworks that create non-conducive conditions for investors and financiers to invest in blue economy activities, or do not take into account the specific needs of women, youth and vulnerable groups, must also be reviewed and replaced with those that create an enabling environment for investment in blue economy-related sectors and activities and empowerment opportunities for inclusive development. Those that support and encourage the implementation of activities outside the principles and goals of the blue economy can have unintended negative consequences.



The most important economic sectors include:

- **Fisheries and aquaculture**
- **Marine and coastal tourism**
- **Marine transportation and port infrastructure**
- **Marine-based renewable energy**
- **Desalination**
- **Mining**

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2. Conduct:

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Strategic actions analysis

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Interaction dialogue

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3. Carry out:

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Gap analysis

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Gender analysis

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Additionally, information has to be gathered from a wide range of sources, including through interaction dialogues with representatives of key organizations, with the aim of establishing a baseline for harmonizing, aligning and prioritizing blue economy strategic actions.

Of particular importance are the

information included within the priority sectors' strategic and action plans and the national development plan. These are the strategic activities that the designated organizations will be channeling resources to and encouraging investors to participate in, and therefore special attention must be paid to them.

Upon completion of the mapping exercise and analysis of existing information in the strategic documents, the next step is to identify potential gaps in the existing strategic framework and actions, including a gender analysis to address gender inequalities and meet the different needs of women, men and vulnerable groups. A comprehensive strategic plan must include all the key strategic actions, otherwise the whole plan and results may be skewed and may fail to address key issues.

The exclusion of important strategic actions may have negative impacts on other activities, which depend on the results of these specific activities for their effective implementation. For example, if investments in strategic port infrastructure are not done within a specific timeline or not implemented at all, it will negatively impact investments in fisheries, marine transportation and other activities requiring a solid port facility. Further, if gender specific needs are not analysed and taken into account at this stage, proposed activities might not create opportunities for all.



Information has to be gathered from a wide range of sources, including through interaction dialogues with representatives of key organizations.



If investments in strategic port infrastructure are not done within a specific timeline or not implemented at all, it will negatively impact investments in fisheries, marine transportation and other activities requiring a solid port facility.

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4. Align financing policies and investment plans

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Implementation of a blue economy strategic plan will mean the mobilization of additional and new funds, and also the finding of solutions for existing major investments challenges. These require the scaling up of the short-, medium- and long-term financing of relevant blue economy infrastructure and the shifting of investments from non-relevant programmes to blue economy strategic priorities.

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Therefore, all existing investment programmes will have to be aligned with strategic priorities to make full

use of available financial resources, reduce wastage and improve efficiency. In particular, investments in infrastructure, capacity-building, technology and innovation will have to be aligned with strategic priorities.

Financing is one of the main enablers and a powerful catalyst for the implementation of any national development programme. For any such programme to succeed, funds must be available in an adequate and timely manner.

Financing is one of the main enablers and a powerful catalyst for the implementation of any national development programme.

There are two main sources of local financing:

- The national annual budget: To facilitate financing and implementation of blue economy priorities, public spending policies and in particular the national annual budgets will need to be aligned. This should happen naturally when the national development plans have been harmonized with blue economy priorities and strategic actions
- Local investors: New incentives and financing opportunities may have to be designed to create a conducive environment to enable new entrants to compete fairly and effectively against established businesses

Special attention should also be given to tax provisions and existing financial perverse incentives that may negatively impact investment in blue economy priorities. Existing tax regimes and incentives policies may need to be

reviewed and aligned. In addition, new incentives could be required to strengthen sustainable ocean use and management.



There are two main sources of local financing:

- **The national annual budget: Public spending policies and in particular the national annual budgets will need to be aligned**
- **Local investors: New incentives and financing opportunities may have to be designed**



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5. Align research and innovation policies

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Investment in research and innovation have been identified as critical components of the blue economy. Innovative delivery mechanisms should also form an integral component of its implementation. This is in line with one of the blue economy's objectives of achieving a paradigm shift. It is essential to introduce radical changes to any existing unsustainable harvesting, use and production systems in related economic sectors.

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Such changes can only occur if new and innovative methodologies, processes and

where available, technologies are applied. To support such changes, national public policies and expenditure in research and development will have to be adjusted and harmonized with blue economy priorities.

Digital transformation is a powerful tool which can accelerate the transition to the blue economy. This is particularly relevant for SIDS where such tools can make geographic distance irrelevant. For example, in

It is essential to introduce radical changes to any existing unsustainable harvesting, use and production systems in related economic sectors.

fisheries, they are being used to tackle illegal, unreported, and unregulated fishing by:

- Improving surveillance, especially in remote areas
- Supporting sustainability labels schemes

Digital technologies in fisheries, shipping, renewable energy and marine conservation are rapidly changing these industries and activities. These are today being applied at the planning, implementation and evaluation phases and the technologies are getting more sophisticated and effective.

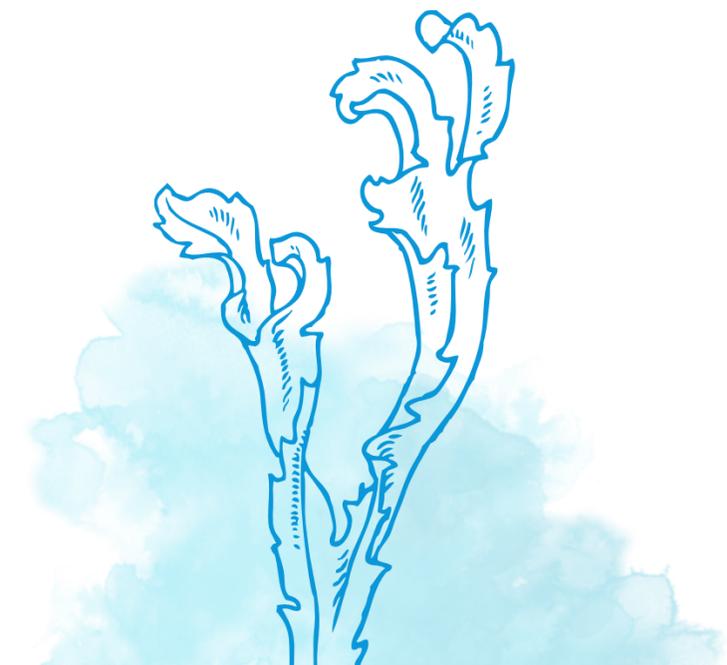
Digitalization can also directly support several key principles of the blue economy through the strengthening of ocean and marine protection and conservation, the sustainable use of marine resources, and the mitigation of climate change via the use of low carbon technologies. The internalization of digitalization and low-carbon technologies will contribute

immensely towards climate change mitigation and adaptation at the national, regional and global level.



In fisheries, digital tools are being used to tackle illegal, unreported, and unregulated fishing by:

- **Improving surveillance, especially in remote areas**
- **Supporting sustainability labels schemes**



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6. Create plans to develop education and build capacity

To support the adoption and facilitate the use of new innovative methodologies, processes and technologies, the government will have to review current education and capacity building policies and align them with blue economy priorities. Capacity constraints, including retaining local capacity, are major obstacles that most countries, especially SIDS, will face. It is key to carry out an assessment of the availability of the necessary knowledge and skill sets within the workforce.

In addition, a gap analysis should be conducted to determine the skill gaps, the result of which should feed into the strategic capacity development plan. It is only when there is an adequate number of well-trained professionals and technicians with the right mindset, skills and knowledge, that a real paradigm shift can occur. These changes will have a direct impact on national labour markets, tertiary education and professional development plans.



It is only when there is an adequate number of well-trained professionals and technicians with the right mindset, skills and knowledge, that a real paradigm shift can occur.

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7. Align international trade and leverage on development cooperation

International trade can have an impact on the harvesting, use and processing of ocean and marine natural resources. These can be the main root causes of misalignment within national policies and development plans, especially within the marine-related economic sectors.

As part of the alignment exercise, these will have to be taken into consideration and the necessary adjustments made, if not at once then gradually.

Development cooperation is another important contributor that can strongly influence the framing of national development plans. They may impose cumbersome procedures and certain adverse conditions to access a particular source of funding that may divert attention from the blue economy priorities and strategic actions. Governments will have to consider these carefully to ensure they do contribute towards these priorities.



International trade can have an impact on the harvesting, use and processing of ocean and marine natural resources.

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8. Conduct an inclusive stakeholder dialogue

The key stakeholders usually consist of representatives from the public, private sectors and civil society, who are directly involved in socio-economic and environmental sectors related to the blue economy.

The objective of the stakeholder dialogue is to:

- Obtain the input of the key stakeholders and mutually agree on the alignment of the strategic actions and determine their key implementers
- Jointly analyze, prioritize and adjust key actions
- Gather the necessary information for the elaboration of the strategic operational plan

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- Identify and establish the baselines (both gender-sensitive and inclusive), and set time frames and disaggregated targets for the implementation of key strategic actions

The initial step of conducting a stakeholder dialogue involves a stakeholders mapping exercise to determine specific roles and actual functions of the stakeholders within the alignment exercise. The stakeholder's involvement and contributions are critical for ensuring the success of the exercise.

To enable them to contribute meaningfully, they need to be sensitized to the blue economy policies and the national agenda. Their roles and responsibilities have to be clarified and agreed with them.

It is important to ensure inclusion of women's organizations, youth networks and vulnerable groups in mapping and consultations as active actors in the blue economy but often marginalized, and recognize them as agents rather than passive recipients of such initiatives.



The objective of the stakeholder dialogue is to:



Obtain the input of the key stakeholders and mutually agree on the alignment of the strategic actions and determine their key implementers



Jointly analyze, prioritize and adjust key actions



Gather the necessary information for the elaboration of the strategic operational plan

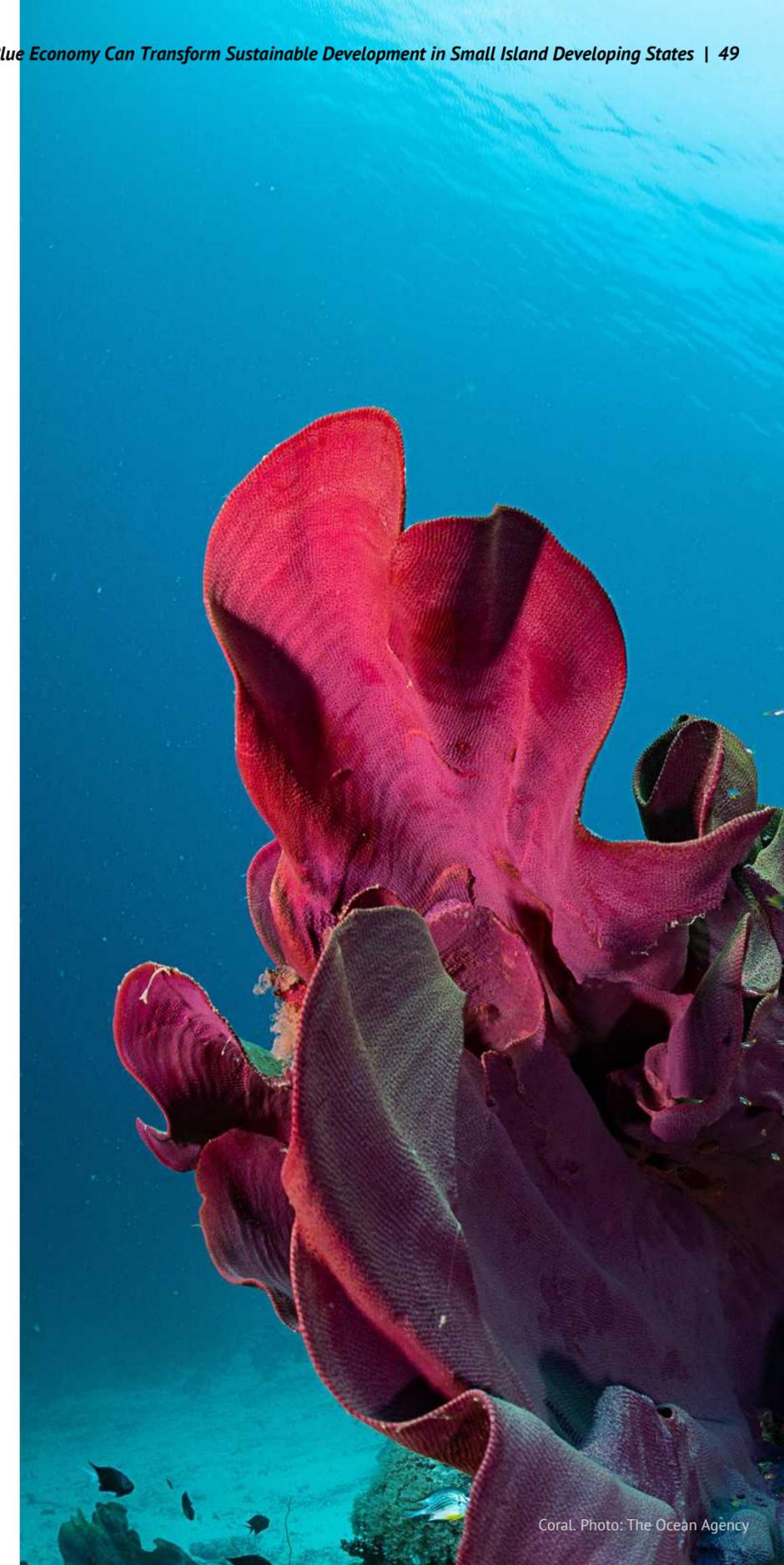
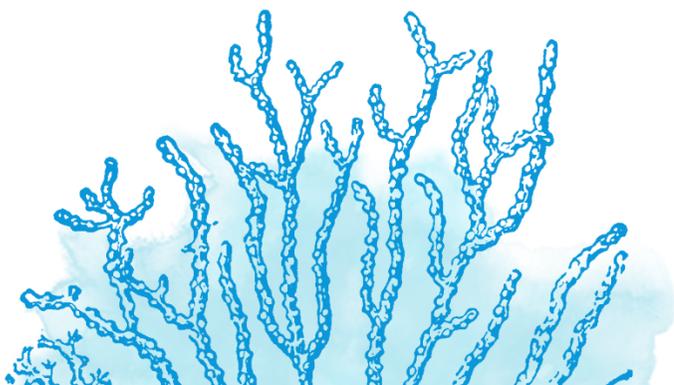


Identify and establish the baselines (gender-sensitive and inclusive), and set time frames and disaggregated targets for the implementation of key strategic actions

How to draft a strategic alignment operational plan with monitoring and evaluation arrangements

The drafting of a strategic operational plan includes the stakeholder dialogue and strategic alignment exercise as an initial phase. This phase, as explained previously, focuses on the harmonizing, aligning and prioritizing of the key blue economy actions. It involves the gathering of strategic information through desktop studies and reviews, sectoral policy analysis, and consultations with key partners and stakeholders. It also includes the following steps:

- 1 Appoint gender-sensitive, balanced drafting team and mobilize resources to finance the drafting activities
- 2 Establish a balanced and inclusive coordination committee
- 3 Identify and categorize key sectoral strategic actions
- 4 Map key implementers and responsible agencies based on existing strategic sectoral plans
- 5 Establish gender-sensitive and inclusive baselines, and set sex-disaggregated targets and timelines for implementation of the plan
- 6 Allocate responsibilities to key agencies to lead the implementation of the strategic actions
- 7 Include monitoring, evaluation, reporting and measures of performance in the strategic operational plan





Part 4 summary

Harmonization and alignment of development plans with blue economy priorities is vital to create synergy and create a unified approach towards implementing blue economy strategic actions.

It is a process that starts with the elaboration of a very clear policy providing guidance on the government's vision, ideas and course of action. A key component of the policy is the one outlining the government's desire to have all existing development plans and their strategic actions harmonized or aligned with the policies and strategic priorities.

The blue economy is complex and it cuts across a wide range of socio-economic sectors, many of which are interdependent. The alignment

exercise must be comprehensive and it must cover all the key sectors directly and indirectly related to marine and oceanic space and resources.

Eliminating misalignment across the key sectors is critical because many of the strategic actions are interconnected, and misalignment in a specific priority sector may cause disruption in others. It may be easier to address most misalignment in the short and medium term but some, especially those linked to trade and development cooperation, may need more time.

Innovation, digitalization and capacity development are strategic areas requiring major investments and support. The blue economy is about a paradigm change and these are important tools that have the potential to support countries in their quest to implement it. Special attention should be given to women to participate in policy-making processes and to the young segment of the population for

skills development to enable them to take advantage of the opportunities created by the blue economy.

Finally, it is not only important to integrate the blue economy into developing plans but also into investment plans and national budgeting. Leveraging financing at scale is necessary to realize the government's vision.

The blue economy is complex and it cuts across a wide range of socio-economic sectors, many of which are interdependent.



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