



How Blue Economy can help Small Developing Island States

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EBP 2002 Project Sustainability

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Threats facing the Ocean

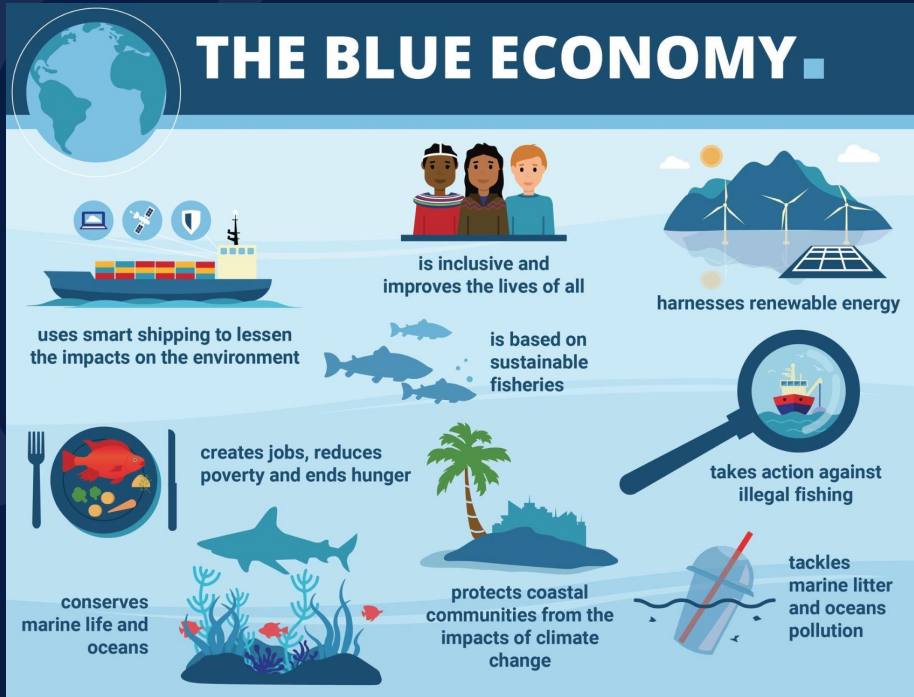
- Increasing dead zones
- Marine pollution
- IUU fisheries
- Ocean acidification
- Ocean noise
- Habitat destruction
- Rise in ocean mean temperature

Threats facing Small Island Developing States (SIDS)

- Disproportionate impact of climate change and sea level rise
- Intensification of extreme events and vulnerability
- Biodiversity loss
- Decline of agrobiodiversity and ecosystem functions
- Overfishing and potential collapse of marine ecosystems



The Blue Economy



- An emerging concept encouraging better stewardship of our ocean or „blue“ resources
- SIDS have vast ocean resources at their disposal thus presenting a huge opportunity for boosting their economic growth consequently tackling:
 - Unemployment
 - Food security
 - Poverty





*How can the sustainable use of
marine resources help benefit SIDS
to establish a secure economy?*



03

Case Study: Seychelles



Relevance of the Seychelles Case Study



- Classified SIDS in the Western Indian Ocean
 - 200-nautical-mile exclusive economic zone of about 400.000 square nautical miles whilst the land area is only 175 square miles
- Pioneering the blue economy
 - blue bonds
 - marine spatial planning
- Economy mainly relying on ocean based sector such as fishing and marine tourism
- Either party to or create of novel ocean governance policy in line with international law and (supra-)regional commitments



3.1

Legal Considerations

UN Convention on the Law of the Sea (1982)



*international legal
framework*

specifically for oceans,
basis for the legal
research at macro level



*governs access to marine
resources for all
territorial areas (Part II),
Economic Exclusive Zones
(Part V), the High Seas
(Part VII), **and** landlocked
countries (Part X)*



*limited
implementation*
only two implementation
agreements and on
currently ongoing
conference created



Seychelles Legal Framework



internationally

- Ratified UNCLOS (1994)
- Nairobi Convention (1985)
- UN Convention on Biological Diversity (1992)
- Member of the International Maritime Organization
- Committed to SDGs



nationally

- Seychelles Constitution, Article 38
- Fisheries Act (2014)
- Environmental Protection Act
- Protected Areas Policy (2013)
- Blue Economy Roadmap (2018)



Nairobi Convention (1985)

- Partnership between government, civilians and the private sector for a “prosperous Western Indian Ocean Region”
- Regional legal framework coordinating the efforts of MS to plan and develop programmes to protect, manage and develop their coastal and marine environment
- Forum for intern-governmental discussions, encourages data sharing within the WIO region and globally on how to better understand environmental issues and how to address them

Seychelles Blue Economy Roadmap



- Implementation of BE/ocean governance ensuring an “integrated strategic and cross-sectoral oversight of development and protection of the ocean environment”
- Development of a monitoring and evaluation framework using global and SDG indicators and using midterm review as an adaptive policy measure





3.2

Blue Finance

only 1/6th

of financial commitments for SDG 14 have been made



Action is needed on two fronts:

01

Capital allocation

SFDR

EU Taxonomy

02

Investment gap

blue bonds

Blue bonds case study: Seychelles Government



- World Bank Treasury put in place the first blue bond in 2016.
- \$8 million in interest charges were saved.
- Proceeds helped pay for marine protection and fishery management.

Impacts of blue bond issuance in the Seychelles



\$430,000

generated per year for marine conservation and climate change adaptation.



86 million acres

Of ocean have been protected by the Seychelles government.



40x

Multiplier effect of initial investment.



Blue Bonds Framework

01

*Conservation
commitments*

02

*Marine Spatial
Planning*

03

*Unlocking
sustainable
finance*

Potential impact for SIDS

15%

Of the oceans can
be preserved in 5
years

2.4 billion

Ultimately benefit
living in coastal
regions through
more sustainable
economies



3.3

Marine Spatial Planning

“Marine spatial planning (MSP) is a public, planning process and an element of ecosystem-based sea use management”

-Kirkfeldt & Santos, (2021)

Ecosystem Protection



Economic Development

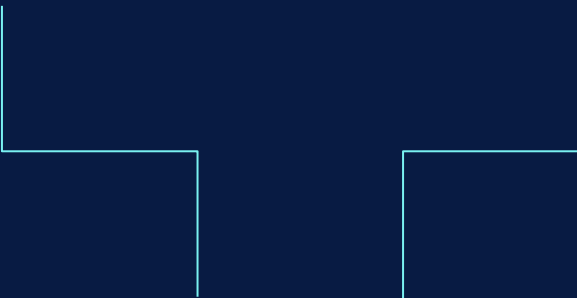


Why chose this case?



Seychelles as an important "global biodiversity hotspot"

Seychelles as an economy heavily relying on fishing and tourism



Seychelles Marine Spatial Planning (SMSP) project must be implemented in 2014 in alignment with SDGs to protect the ecosystem





How can MSP add value to the Blue Economy (BE) and the sustainable use of marine resources?.



MSP Supporting a BE

Stakeholders

Considers and unifies objectives of multiple stakeholders e.g. fisheries, renewable energy, sports



Ecological benefits

Allocates space and resources to specific sectors in an ecosystem-based approach
→ ties to SDG 14

Data sharing

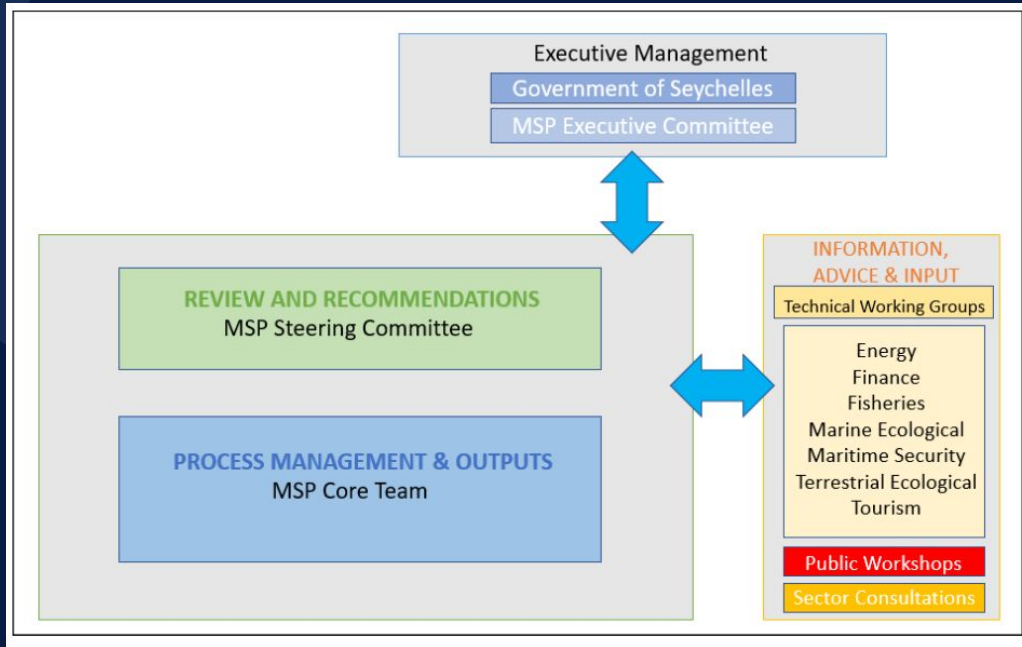
Increases communication, incentive alignment and joint investments among different stakeholders
→ ties to SDG 17



Open innovation

MSP tool supports transdisciplinary technological innovations e.g. geological, economic, social actors

How can SMSP add value to the BE in Seychelles?



01 Improved Management

Enhanced dialogue and collaborative effort among scientists, government, stakeholders resulted in 30% of Seychelles water to be protected area for marine species

02 Unique Governance Framework

SMSP implemented clear decision processes for a steady business environment for regional private sector

Both these benefits of SMSP are crucial qualitative impacts for local BE!



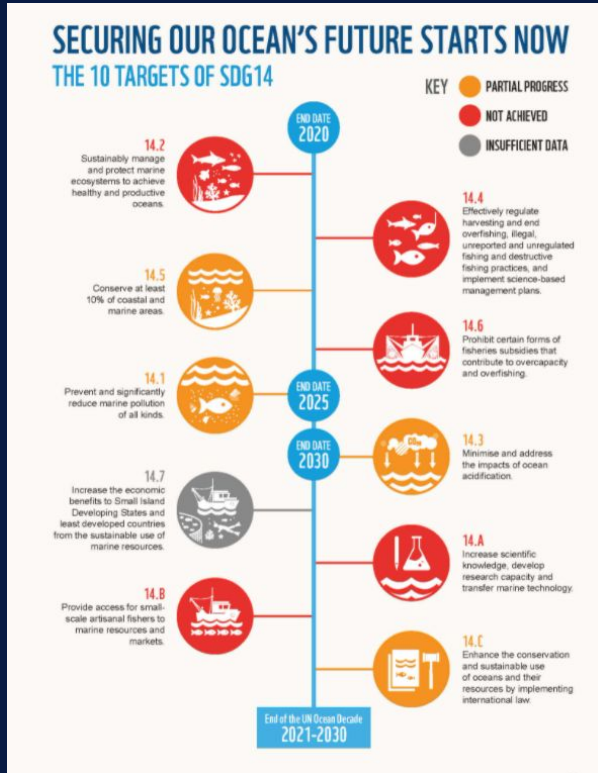
*Is there compliance of the
SMSP objectives with
SDG 14 & 17?*



4

Assessment Criteria

Importance of SDG 14: Life Below Water



MSP Challenge of dual scope

Ecosystem Protection



Economic Development



“this ambiguity has resulted in MSP cases predominantly focused on achieving economic objectives before planning for environmental objectives.” (Kirkfeldt & Santos, 2021)



Streamline of SMSP objectives with SDG 14 is essential

Importance of SDG 17: Partnerships for the Goals



Includes forming partnerships and collaborations to achieve the other SDG goals



Complex management tool like SMSP requires inclusion of multiple stakeholders and interest groups

Plan of Assessment

01

SDG target

02

Measurement of
Target using
Target-indicator

03

SMSP support
of the indicator

04

Implementation
supported by
financial or legal
background



5.1

Analysis & Findings

Application of *SDG 14*

01

*SDG Target
14.4*

*“Effectively regulate
and end
overfishing”*

02

Measurement

- a) Target 14.4.1
indicator:
*Proportion of fish
stocks within
biologically
sustainable levels*

03

SMSP Support

By 2020 15% of EEZ
were identified as
medium biodiversity
and sustainable use
zones

04

*Implementation
supported by
blue bonds*

Protected EEZ are
pre-requirement
for blue bonds

SDG 14 Application



SDG Target	Assessment of Target 14.1	Implementation of indicator 14.4.1 in SMSP		
Target 14.1: “Effectively Regulate Harvesting and End Overfishing, Illegal, Unreported and Unregulated Fishing, and Destructive Fishing Practices”	Target 14.4.1 indicator: “Proportion of fish stocks within biologically sustainable levels”	Commitment	Implementation	Financing
		1.Ecosystem approach to fisheries (EAF) 2.Reduction of fisheries by-catch and product waste/losses	By 2020, Seychelles will identify 15% of the exclusive zone (~200,000 km ²) for medium biodiversity and sustainable use zones, improving fisheries management	Exclusive zones as pre-requirement conditions for blue bonds

Sources table 1: (“The Ocean Conference | Develop a marine spatial plan for Seychelles’ Exclusive Economic Zone”, 2022), (Kirkfeldt & Frazão Santos, 2021)

01

SMSP initiative was a regional effort to achieve SDG 14 targets in their BE

02

SMSP achieved the protection and biodiversity of fish stocks in implementing exclusive zones

03

Sustainable financing was established in SMSP project using the blue bonds

Application of *SDG 17*

01

SDG Target 17.17

“Encourage and promote effective public, public-private and civil society partnerships”

02

Measurement

- a) Target 17.17.1 indicator:
Amount of US dollars committed to public-private partnerships

03

SMSP Support

Unique Governance Framework: Including scientists, government, stakeholders in decision making

04

Implementation supported by legal considerations

Seychelles subjected themselves to the Nairobi Convention

SDG 17 Application



SDG Target	Assessment of Target 17.17	Implementation of indicator 17.17.1 in SMSP		
		Commitment	Implementation	Legal Consideration
Target 17.17: “Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships”	Target 17.17.1 Indicator: “Amount of US dollars committed to public-private partnerships for infrastructure”	The SMSP takes and integrated, science-based, multi-sector approach with robust stakeholder engagement.	Governance Framework: Including government, scientists, environmental organisations, and private sector representatives.	The Blue Economy Roadmap (including MSP projects) uses national policies e.g. Nairobi Convention, to ensure a legal framework that includes participation of all stakeholders.

Sources table 2: (Division, 2022), (Smith, Sims & Cosgrove, 2019), (Governance Framework, 2021)

01

SMSP initiative committed to take an “integrated, science-based, multi-sector approach with robust stakeholder engagement

02

No information about amount of US dollars spend on building partnerships BUT “participatory process” ensured

03

Critics: not to measure participation with monetary values but rather create legal obligations to help with compliance



5.2

Policy Recommendations

based on our findings

Policy Recommendation: Legal

All recommendations are specifically for the BBNJ in order to create a viable international legally binding framework to ensure that especially SIDS can make sustainable use of the resources accessible to them

- Encourage the adoption of Blue Economy Action Plans modeled after the Seychelles established working legislation, especially for SIDS in line with SDG 14.7, SDG 14.c and SDG 17.17
 - Blue Bonds: include a mandatory definition of the sectors in line with SDG 6 & 14 for sustainable activities and businesses to prevent greenwashing
 - Require the inclusion of all possible stakeholders as in the SMSP project

Policy Recommendation: Blue Finance

- Create a Global Data Platform where firms can upload their sustainability data upon common metrics which under the United Nations Environmental Programme Finance Initiative ;
 - Increases comparability and accessibility, especially for SIDS
- Further increase the SFDR to include additional disclosures
- Specifically define sustainable activities, expanding the EU Taxonomy
- This will also translate into increasing activities for blue bonds, increasing its attractiveness

Policy Recommendations: MSP Strategy

- The implementation of MSP projects as a strategy to support regional BE development
 - Especially important for SIDS whose economy rely heavily on marine resources
- Implementation of MSP in alignment with SDG 14 objectives
 - Crucial to balance MSP dual scope of economic vs. ecological objectives
- Implementing a complex management tool like MSP requires the inclusion of stakeholders and interest groups in line with SDG 17
 - Implement in compliance with legal conventions: E.g. Nairobi Convention



6

*Research Challenges
& Future Research*



Research Challenges

Given the constraints of this research, we are not be able to take any sectors in depth into account, including but not limited to: Marine and Coastal Tourism, Shipping/Ports, Marine Transport, Seabed Mining, Marine Biotechnology

Future Research



Feasibility: Legal

remains to be seen how much focus will be set on SIDS and consequently affect how many policy recommendations will be implemented into BBNJ



MSP Strategy

Research about the suitability of MSP to serve as a strategy to implement regional BE.



Blue bonds impact

Further research should be devoted as to how blue bonds can effectively grow by increasing comparability of sustainability data and sustainable finance disclosure regulations.



*Thank you.
Any questions?*