

Supporting Sustainable Inclusive Blue Economy Transformation in AIO SIDS

Part I: Project Information

GEF ID

10865

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Supporting Sustainable Inclusive Blue Economy Transformation in AIO SIDS

Countries

Regional, Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, Sao Tome and Principe, Seychelles

Agency(ies)

UNDP

Other Executing Partner(s)

UNOPS

Executing Partner Type

Others

GEF Focal Area

Multi Focal Area

Taxonomy

Biomes, Biodiversity, Focal Areas, Coral Reefs, Mangroves, Sea Grasses, International Waters, Coastal, Pollution, Nutrient pollution from all sectors except wastewater, Large Marine Ecosystems, Marine Protected Area, Seagrasses, Mangrove, SIDS : Small Island Dev States, Acquaculture, Fisheries, Chemicals and Waste, Land Degradation, Sustainable Land Management, Integrated and Cross-sectoral approach, Income Generating Activities, Land Degradation Neutrality, Land Productivity, Transform policy and regulatory environments, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Demonstrate innovative approach, Local Communities, Stakeholders, Private Sector, Individuals/Entrepreneurs, SMEs, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Partnership, Consultation, Information Dissemination, Participation, Gender Mainstreaming, Gender Equality, Sex-disaggregated indicators, Gender results areas, Awareness Raising, Capacity Development, Knowledge Generation and Exchange, Participation and leadership, Knowledge Exchange, Capacity, Knowledge and Research, Innovation, Learning, Knowledge Generation, Enabling Activities

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Duration

42 In Months

Agency Fee(\$)

855,365.00

Submission Date

9/15/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-1-1	GET	3,045,401.00	24,077,019.00
IW-1-2	GET	2,537,834.00	23,250,016.00
IW-1-3	GET	1,522,701.00	11,850,009.00
LD-1-1	GET	1,520,400.00	3,300,000.00
LD-2-5	GET	377,511.00	798,000.00
Total Project Cost (\$)		9,003,847.00	63,275,044.00

B. Indicative Project description summary

Project Objective

To support the development and realization of sustainable blue economies in Atlantic and Indian Ocean SIDS through improved governance, national Blue Economy demonstrations, and knowledge management.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Sustainable Blue Economy and Land Degradation Neutrality enabling conditions-improved governance frameworks	Technical Assistance	<p>Outcome 1:</p> <p>Evidence-based, strategies, plans, and financing mechanisms that support Land Degradation Neutrality and sustainable Blue Economy adopted and integrated into national development plans and budgets.</p>	<p>Output 1.1:</p> <p>National Blue Economy assessments (status, trends in marine sectors, opportunities, marine resource valuation, education and research needs) to inform evidence-based policy and strategy formulation developed for seven (07) participating SIDS.</p> <p>Output 1.2:</p> <p>National Blue Economy strategies/policies/plans (building upon existing and underway efforts depending on country context) developed for seven (07) participating SIDS</p> <p>Output 1.3: Frameworks conducive to innovative Blue Economy financing mechanisms and Land</p>	GET	1,777,000.00	12,412,697.00

Degradation Neutrality target implementation fostering private sector investment developed for at least three (03) participating AIO SIDS.

Output 1.4:

Capacity developed, and awareness raised in seven (07) participating SIDS in topics including: Blue Economy assessments, planning, innovative finance, private sector engagement, functional landscapes maintenance and restoration, investment - ready bankable projects, governance reform, and stakeholder engagement

Indicators:

New sustainable Blue Economy policies and innovative finance mechanism developed for adoption in all seven (07) participating SIDS.

Additional indicators will be identified during the PPG phase

Component 2: On-the-	Technical	Outcome 2:	Output 2.1:	GET	5,798,092.00	40,864,052.00
----------------------	-----------	-------------------	--------------------	-----	--------------	---------------

ground national demonstrations of Sustainable investments addressing 1) unsustainable ocean/coastal use and/or 'new and additional' sustainable Blue Economy opportunities, and 2) Integrated land management and restoration of degraded production landscapes with positive impacts on Blue Economy assets

Assistance

Sustainable BE, in all the participating countries, and SLM in São Tomé e Príncipe, best practices and diversification models with strong social, economic and sustainability elements developed, tested, and ready for upscaling among Atlantic and Indian Ocean SIDS

Seven (07) sustainable Blue Economy and one (01) Sustainable Land Management pilots developed and implemented to develop best practices and foster diversification in the following indicative areas:

In Cabo Verde, Marine Protected Area management improved in one (01) natural park through the implementation of one (01) co-management approach, promoting sustainable artisanal fishing activities, nature tourism activities, capacity building and entrepreneurship in the Natural Park of Baía do Inferno and Monte Angra (17,470 ha).

In Guinea-Bissau, MPA efficiency enhanced in one (01) national park through improved capacity of Monitoring Control and Surveillance of fishing activities and awareness raising of local communities in the Cacheu River area (54,400 ha)

In Comoros, marine ecosystem health enhanced and food security improved in at least one (01) National Park through engagement of local users of the fishery and the introduction of sustainable aquaculture for livelihood diversification (2,314 ha) with a third party certification scheme

-

In São Tomé e Príncipe, one (01) coastal degraded habitat (at least 200 ha) management enhanced, through the promotion of sustainable fisheries practices among the coastal communities of in provinces of Lobata, Agua Grande, Me - Zoxi and part of Cantagalo to locally reduce pollution in the Guinea Current Large Marine Ecosystem

In São Tomé e Príncipe, land management in production systems is improved and degraded land is restored (total 400 ha) in one (01) district through 1) the Promotion of sustainable use of fertilizers, pesticides, and other phytochemicals in the vegetables sector in Mezochi district and smaller urban areas and 2) the

development of a value chain and one (01) network for organic vegetables farming

Blue Economy pilots/demos implemented in at least three (03) remaining countries, integrating economic, social, and environmental sustainability pillars (e.g., LMMA, MSP, marine genetic resources and renewable ocean-based energy, etc.)

Indicators:

7 IW and 1 LD demonstrations projects

-

Details on the BE pilots in the participating SIDS will be identified and developed during PPG.

Component 3: Monitoring and Evaluation, knowledge management and upscaling	Technical Assistance	<p>Outcome 3:</p> <p>Effective Monitoring and Evaluation of project outcomes and outputs, Innovative solutions and best practices supporting the</p>	<p>Output 3.1:</p> <p>knowledge products (project results, innovative solutions, best practices and lessons learned) from seven (07) sustainable Blue Economy, and one (1) Sustainable Land Management demonstrations developed and disseminated at national</p>	GET	1,000,000.00	6,985,198.00
--	----------------------	---	---	-----	--------------	--------------

sustainable Blue Economy transformation and SLM, documented, shared and upscaled across Atlantic and Indian Ocean SIDS and beyond

and regional level. Full project participation in GEF IW:LEARN portfolio learning activities (At least 1 % of GEF IW financing).

Output 3.2:

Innovative solutions and best practices from other projects and other SIDS, including UNDP's Accelerator Labs, Ocean Innovation Challenge and GEF SGP identified and disseminated at national and regional level,

Output 3.3:

One (01) information exchange network created for AIO SIDS

Output 3.4:

Timely Project Monitoring and Evaluation (M&E) to inform adaptive management for successful delivery of project results.

Indicators:

One information exchange network established and operational.

*Knowledge products
developed and
disseminated.*

*More specific indicators will
be identified during the PPG
phase.*

Sub Total (\$)	8,575,092.00	60,261,947.00
-----------------------	---------------------	----------------------

Project Management Cost (PMC)

GET	428,755.00	3,013,097.00
-----	------------	--------------

Sub Total(\$)	428,755.00	3,013,097.00
----------------------	-------------------	---------------------

Total Project Cost(\$)	9,003,847.00	63,275,044.00
-------------------------------	---------------------	----------------------

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Donor Agency	Adaptation Fund	Grant	Investment mobilized	750,000.00
Donor Agency	AfDB	Grant	Investment mobilized	1,050,000.00
Donor Agency	EU	Grant	Investment mobilized	15,400,000.00
Donor Agency	FAO	Grant	Investment mobilized	1,745,000.00
Recipient Country Government	Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé e Príncipe, and Seychelles	Public Investment	Investment mobilized	1,867,044.00
Recipient Country Government	Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé e Príncipe, and Seychelles	In-kind	Recurrent expenditures	3,000,000.00
Donor Agency	AECID	Grant	Investment mobilized	400,000.00
Civil Society Organization	Ocean 5	Grant	Investment mobilized	1,000,000.00
Civil Society Organization	BAF	Grant	Investment mobilized	4,860,000.00
Private Sector	Union Sanduk, Union Meck, Banque pour l'industrie et le commerce des Comores	Loans	Investment mobilized	1,587,000.00
Private Sector	Bank of Maldives Various sponsors of the ocean race Cabo verde	Grant	Investment mobilized	760,000.00

GEF Agency	UNDP	Grant	Investment mobilized	1,636,000.00
Donor Agency	WB	Grant	Investment mobilized	26,450,000.00
Other	WTO	Grant	Investment mobilized	1,500,000.00
Donor Agency	JICA	Grant	Investment mobilized	550,000.00
Donor Agency	French Embassy in Comoros	Grant	Investment mobilized	570,000.00
Beneficiaries	MSMEs in São Tomé e Príncipe	Other	Investment mobilized	150,000.00
Total Project Cost(\$)				63,275,044.00

Describe how any "Investment Mobilized" was identified

In Cabo Verde, a USD 400,000 funding from AECID will support the development of national capacities in the field of Innovation and research to Promote the Blue Economy. In addition, the government will provide an investment of USD 2,250,000, while private sponsors, will provide USD 750,000 in support of The Ocean Race 2022-23 (previously known as the Volvo Ocean Race). In fact, in the context of COVID-19 economic recovery, the Government of Cabo Verde intends to use this event as a promotion platform for the country's Blue Economy key economic sectors including sustainable tourism through the organization of marine educational programs, an ocean summit. and cultural events. Finally, the government of Cabo Verde will provide an additional in-kind institutional support to Blue Economy for a value of USD 47,044. In Comoros, the AfDB is providing a financing of USD 1,050,000 through a project aiming at supporting the financial empowerment of women in the fisheries value chain. The WTO, is supporting the integration of the Union of Comoros into the global trading system in order to contribute to poverty reduction and sustainable development with a USD 1,500,000 project. FAO, is enhancing the fishermen communities resilience through the operationalization of the aquaculture development with a USD 245,000 TCP. Ocean 5 is building socio-ecological resilience through good ocean governance and baseline studies in the Comoros archipelago with a budget of USD 1,000,000. Two unions and one private bank will together provide USD 1,587,000 as loans in support of potential investors in the new aquaculture sector to be introduced by this GEF project. JICA will support the national research institute for agriculture, fisheries and the environment with a USD 550,000 grant to build a seafood quality analysis laboratory and to train fishermen to aquaculture. The WB (USD 500,000) and the French Embassy in Comoros (USD 570,000) will support the development and strengthening of the national legal and institutional aquaculture frameworks. Finally, the government, through its development bank, will provide USD 370,000 in additional loans in support of MSMEs to replicate small-scale aquaculture projects. In Guinea-Bissau, UNDP is implementing a Rapid Response Facility project, with a budget of USD 1,500,000, which mainly aims at developing a Blue Economy strategy for the country. In addition, the UNDP country office will commit USD 100,000 to support the current project activities on the

ground. In Maldives, local banks are supporting SME development in the field of Blue Economy with a budget of USD 10,000. In addition, UNDP has committed USD 36,000 for sustainable water management. Finally, the WB is supporting the Maldives Marine Research Institute for the improvement of fisheries management and the establishment of mariculture in targeted atolls in the Maldives through a USD 18,000,000 project. In Mauritius, the Ministry of Blue Economy will provide USD 2,000,000 in recurring expenditures and public investments in the Blue Economy sector. In addition, the Adaptation Fund has provided USD 750,000 for a coral reef restoration project. In São Tomé e Príncipe, FAO, the European Union, the WB and BAF are all supporting Blue Economy and land management on-the-ground activities for a total amount of USD 29,710,000. The government is committing an in-kind contribution of USD 200,000 while various MSMEs will contribute with USD 150,000 in pilot activities. Additional co-financing will be identified during the PPG phase.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Regional	International Waters	International Waters	7,105,936	675,064	7,781,000.00
UNDP	GET	Sao Tome and Principe	Land Degradation	LD STAR Allocation	1,897,911	180,301	2,078,212.00
Total GEF Resources(\$)					9,003,847.00	855,365.00	9,859,212.00

E. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

200,000

PPG Agency Fee (\$)

19,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)	
UNDP	GET	Regional	International Waters	NA	200,000	19,000	219,000.00	
					Total Project Costs(\$)	200,000.00	19,000.00	219,000.00

Core Indicators

Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
74,384.00	0.00	0.00	0.00

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
----------------------------	---------	---------------	----------------------------	--	----------------------------	---------------------------

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
74,384.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Cacheu Natural Mangrove Park (Guinea-Bissau)	33046		54,400.00						
Natural Park of Baía do Inferno and Monte Angra (Cabo Verde)			17,470.00						

Parc national Mitsamihouli-Ndroudé (Comoros)	555697862	2,314.00	
São Tomé e Príncipe (tbd)		200.00	

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
200.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
200.00			

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

--	--	--	--

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

--	--	--	--

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

--	--	--	--

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
200.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

200.00			
--------	--	--	--

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

--	--	--	--

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
-------	-----------

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
----------------------	----------------------------------	----------------------	---------------------

--	--	--	--

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
1			

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF

LME at CEO Endorsement

LME at MTR

LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)

Metric Tons (expected at CEO Endorsement)

Metric Tons (Achieved at MTR)

Metric Tons (Achieved at TE)

--	--	--	--	--

Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

Number (Expected at PIF)

Number (Expected at CEO Endorsement)

Number (Achieved at MTR)

Number (Achieved at TE)

Shared water Ecosystem	Agulhas Current, Canary Current			
Count	2	0	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem

Rating (Expected at PIF)

Rating (Expected at CEO Endorsement)

Rating (Achieved at MTR)

Rating (Achieved at TE)

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem

Rating (Expected at PIF)

Rating (Expected at CEO Endorsement)

Rating (Achieved at MTR)

Rating (Achieved at TE)

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)	
Agulhas Current	1				
Canary Current	1				

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)	
Agulhas Current	1				
Canary Current	1				

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Fishery Details

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	9,393			
Male	13,785			
Total	23178	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

1a. *Project Description*

1) global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Global environmental and/or adaptation problems

Oceans play a crucial role in the sustainability of life on earth by providing ecosystem services including provisioning services, regulating services, supporting services, and cultural services. For instance, the oceans absorbed 30 per cent of industrial CO₂ emissions until the mid-1990s as well as more than 90 per cent of the excess heat of the planet between 1971 and 2010. In addition, the oceans provided 96.4 million tons of seafood in 2018.

The global economic output of the world's oceans, excluding intangible (non-market) benefits, is worth some US\$2.4-2.6 trillion per year.

However, the cumulative impacts of anthropogenic activities are increasingly affecting the oceans and the services they provide, with annual socio-economic costs of unsustainable ocean use now approaching \$1 trillion per year (UNDP estimate). As growing demand and technological advances allow the exploitation of even more - and new - marine resources, oceans are being recognized as a new frontier for economic development. The rush of public and private sectors to harness this potential exacerbates the risks on marine ecosystems, on economies, and on people who depend upon them.

Threats on marine ecosystems

The main pressures impacting ocean ecosystems at the global level include:

- **Climate change** with warming of sea temperatures, acidification, deoxygenation, sea-level rise, erosion, and more intense and frequent weather events threatening marine ecosystems by causing coral bleaching, habitat and biodiversity loss, species migrations, and changes in ocean productivity.

- **Overexploitation** with global wild fish catch stagnant at about 85 million tons per year for the last thirty years and 34 per cent of the world's marine fish stocks considered overexploited in 2017. Overfishing is exacerbated by Illegal, Unreported and Unregulated (IUU) fishing as well as billions in harmful fisheries subsidies. In addition, unsustainable fishing is impacting entire ecosystems and causing biodiversity loss through unintended bycatch of species like sea turtles, marine mammals, sharks, and seabirds that play key ecological roles.

- Land-based and ocean-based **pollution** from various sources including agriculture run-off, wastewater, offshore industries, shipping, and urban areas can disrupt entire ecosystems. While plastic pollution alone is a global threat, the expansion of commercial agriculture, logging, and coastal development are also extremely harmful to seagrass and coral reefs habitats. In fact, about 80 per cent of collected wastewater is discharged untreated globally, resulting in eutrophication and hypoxia events impacting the health of freshwater and coastal ecosystems and affecting human health. These problems are exacerbated by unsustainable **land-use practices** and commercial agricultural run-off causing pesticides and nutrients to reach the ocean resulting in a decreased resilience of coastal habitats and increased frequency of algal blooms. During the past 30 years, wastewater and sewage run-off led to economic losses estimated to USD 200 billion - USD 800 billion per year.

- With 40 per cent of the world's population living within 100 km of the coast, **land-use change** is considered one of the greatest human threats to marine ecosystems. In fact, apart from commercial agriculture and wastewater impacts, **land-based anthropogenic activities**, like urbanization and logging are also detrimental to coral reefs, mangroves, and seagrass habitats and associated fisheries. For instance, clearing on land not only affects terrestrial ecosystems but also freshwater and coastal marine ecosystems due to increased erosion and sedimentation. In fact, scientific evidence exists that

reductions in live coral cover and increases in turf algae are linked to exposure to sediment run-off from catchments and log ponds^[13]. Additionally, significant urbanization pressures, especially **unplanned and unregulated coastal development**, amplify the impacts of pollution and climate change on biodiversity and cause habitats loss and degradation. Globally, some 20 per cent of coral reefs, 19 per cent of mangroves, and 29 per cent of seagrass habitat have been lost over about the last century.

Invasive species that can pose severe biosecurity and biodiversity hazards affecting entire ecosystems and related economies are another threat to the marine environments. Biological invasions are expected to increase with increased trade and climate change^[14]; at the same time, important progress has been made in regulating a key vector, ballast water in shipping, via the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species and the coming into force of the 2017 International Convention for the Control and Management of Ships' Ballast Water and Sediments.

Impacts on key ocean economic sectors

By impacting the health of ecosystems and eroding biodiversity, the above pressures are compromising the quality of ecosystem services that support key economic activities of coastal countries and Small Island Developing States (SIDS), jeopardizing the livelihoods of the entire populations. This calls for a paradigm shift in our ocean economies towards a more sustainable model.

During the Rio+20 conference held in 2012, coastal countries and SIDS first coined the term Blue Economy. Derived from the Green Economy concept, the Blue Economy aims to promote the sustainable use of ocean resources for economic growth, job creation, and inclusion, with a focus on the preservation and restoration of the health of ocean ecosystems^[15].

Since then, there has been a worldwide growing interest in the Blue Economy concept with an increasing appreciation of the role of healthy ocean ecosystems for the sustainability of economic activities. This has been reflected in target 14.7 of the Sustainable Development Goals (SDGs): *“By 2030, 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, aquaculture and tourism.”*

UNDP defines Blue Economy as the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, while preserving and restoring the health of ocean ecosystems. Blue Economy can cover a broad spectrum of activities including established sectors (e.g., shipping, fisheries, coastal tourism), emerging sectors (e.g., marine renewable energies, marine biotechnologies, aquaculture), and crosscutting enabling sectors (e.g., marine conservation, research and education, financial tools for marine activities, etc.).

Unlocking the full potential of the sustainable Blue Economy can assist countries in achieving SDG 14 and having ripple effects on other goals, including SDGs 1 (poverty), 5 (gender), 8 (growth/work), 13 (Climate), and 15 (life on land). In addition, sustainable Blue Economy can help countries recover from the impacts of the COVID-19 crisis. This is particularly true for SIDS. In fact, SIDS who mostly rely on the ocean for their economic development, have jurisdiction on more than 19 per cent of the world's Exclusive Economic Zones (EEZ) which represents a combined ocean area 20 times larger than that of their combined land territory. This huge difference between the size of their territory in the ocean and on land, underscores their potential to realize greater socio-economic benefits from sustainable blue economies.

The Atlantic and Indian Ocean (AIO) SIDS may differ in some geographic and development aspects (Table 1). Yet, they face common social, environmental, and economic vulnerabilities. With small land areas, they tend to rely heavily on imports for food and energy. Their economic activity often centers on just a few marine sectors, such as fisheries and tourism, leaving little flexibility to adapt to climatic, economic, or sanitary crises.

AIO SIDS participating in this project have EEZs covering a total of more than 4,7 million km². In addition, they are located among the richest marine ecosystems in the world and are home to ecosystems of global importance including coral reefs, mangrove systems, seagrass meadows, and estuaries providing critical habitat for a variety of coastal species, including marine mammals, sea turtles, and birds. For example, the mangroves of Guinea-Bissau cover an area of about 3000 km², and the coral reefs of The Maldives cover about 4,500 km², which represents 3 per cent of the world's total coral reef area. This huge and rich oceanic and coastal areas reflects the potential for AIO SIDS to realize huge socio-economic benefits and to recover from the impacts of the COVID-19 pandemic by harnessing their full sustainable Blue Economy potential.

Table 1. Selected geographic and development statistics for Atlantic and Indian Ocean SIDS

Country	Human Development Index	Land Area (Km ²)	Exclusive Economic Zone Area (Km ²) [16]
Cabo Verde	0.665	4030	796555
Comoros	0.554	1861	164643
Guinea-Bissau	0.48	28120	105839
Maldives	0.74	300	916011
Mauritius	0.804	2030	1272765
São Tomé e Príncipe	0.625	960	165345
Seychelles	0.796	460	1331964
Total		37761	4753122

Root causes and barriers that need to be addressed (systems description)

Threats on marine and coastal assets

The challenges described for the global context materialize in Atlantic and Indian Ocean SIDS as follows:

Climate change

Atlantic and Indian Ocean SIDS are only responsible for a tiny fraction of global greenhouse gas emissions. Nevertheless, as revealed in their National Adaptation Programmes of Actions on Climate Change (NAPAs) AIO SIDS are at a risk of climate impacts like increasing temperatures, sea level rise, coastal erosion, salt-water intrusion, and increased frequency of extreme weather events [17]. These impacts are exacerbated by their low-lying geographies, limited land area [18] and high dependence on ocean resources. In particular, sea level rise is predicted to result in coastal inundation, habitat loss, and coastal flooding [18] jeopardizing livelihoods of coastal communities.

The root cause of climate change is the dependency of our global economies on fossil fuels and our inability to fully internalize the externalities associated with climate change. Barriers to decreasing carbon emissions include increasing demand for energy, insufficient investments in renewable energies, insufficient market signals to transition away from fossil fuels, and incomplete knowledge and appreciation of coastal and marine habitats' ability to mitigate and adapt to climate change impacts.

Overfishing and Illegal, Unreported and Unregulated fishing

Atlantic and Indian Ocean SIDS have among the most diverse and productive fisheries in the world and fisheries are the most important renewable resource of food security, employment, and foreign currencies in the region [19]. However, the sustainability of these fisheries is threatened by Illegal, Unreported and Unregulated (IUU) fishing, overexploitation, and destructive fishing methods. In AIO SIDS, about 50% of fisheries were either collapsed or over-exploited in 2016 [20] (Table 2).

According to the FAO, large EEZs, representing more than 125 times their land area in the case of AIO SIDS, is challenging the full implementation of instruments to combat IUU fishing in SIDS [21]. The conflicts between Small-Scale Fisheries (SSF), industrial fisheries and other ocean users, the lack of alternative livelihoods for coastal communities, the incomplete understanding of the socio-economic values of fisheries, the little value added to SSF products, and the lack of capacity to implement Ecosystem-Based Approach to fisheries management are all barriers to addressing fisheries unsustainability.

Table 2. Fishery stock status in the waters of Atlantic and Indian Ocean SIDS (2016) [22]

Country	Number of stocks analyzed	Collapsed (%)	Over-exploited (%)	Fully exploited (%)
Cabo Verde	34	0	34.5	58.6
Comoros	16	26.7	0	26.7
Guinea-Bissau	130	29.6	6.1	36.5
Maldives	63	21.7	60.9	8.7
Mauritius	46	33.3	28.2	23.1
São Tomé e Príncipe	55	11.6	48.8	23.3
Seychelles	52	27.4	23.5	19.6
Average		21.4	28.8	28.1

Marine pollution

Land-based anthropogenic pollution sources in marine ecosystems include wastewater, agricultural run-off, hazardous substances, and solid waste with marine litter as major contributor. In addition, the average wastewater treatment Environmental Performance Index, measuring the proportion of treated wastewater multiplied by the proportion of the population connected to a wastewater collection system, is only 5 per cent in AIO SIDS [23], which increases the risks of eutrophication and hypoxia in coastal areas. In the Western Indian Ocean, microbial contamination is regularly reported with significant risks of serious socio-economic impacts [24].

Marine ecosystems in SIDS also face a high risk of pollution from the shipping and Oil and Gas activities [25], as the devastating oil spill that occurred off the coast of Mauritius in 2020. All these pollutants have adverse impacts on the tourism and fishing revenues [25]. AIO SIDS whose economies depend on these sectors are more vulnerable to these impacts as they are also limited in capacity to tackle the problem.

Land degradation

São Tomé e Príncipe is the second smallest country in Africa after Seychelles with a total area of 960 km². It consists of two archipelagos around the two main islands of São Tomé and Príncipe, about 140 km apart with a population of 201,800 (2018 official estimate). About 193,380 people live on São Tomé and 8,420 on Príncipe. These two islands have volcanic soils and a good hydrology network of streams that flow down the mountains through forests and croplands to the sea. The climate is tropical with the rainy season from October to May. This country faces typical handicaps of SIDS including high vulnerability to external shocks, the inability to pursue economies of scale, lack of basic infrastructure and services, low human capacity, and a weak private sector. Also, the increasing competing demands for food, energy and space are accelerating the degradation of natural resources and ecosystems, which reduces the country's resilience to climate change.

Land degradation in São Tomé e Príncipe is mainly caused by commercial logging, unsustainable agriculture and rapid human population growth. Steep mountain slopes have been deforested over time to expand crop production with approximately one-third of natural forests converted into shade plantations and agro-forestry systems. Also, fuelwood consumption is very high, and wood is still used as main commodity in the local construction sector. Most of the remaining forested areas are found in inaccessible mountains and remote valleys covering 28 per cent of the country with 44 per cent of them classified as primary forests.

Apart from agriculture, other main economic activities in São Tomé e Príncipe are fishing, and a small industrial sector engaged in processing local agricultural products and producing a few basic consumer goods. The tourism sector is also expanding with the increase of foreign investment and the country developing the petroleum sector currently focusing on waters of the joint development zone with Nigeria in the Niger Delta.

The main exported crops in São Tomé e Príncipe are cocoa, coffee, copra, palm kernels, pepper, oils and nuts. Food security relies on fishery, small scale agriculture, with a particular importance of vegetable production, plantain and root vegetables, and mainly imports, including food aid and processed food, given that agri-food industry is still a very limited sector in terms of revenues and production volumes. Livestock farming is limited by recurring swine fever and the need to import animal feed. Nevertheless, food imports were reduced to 30.94 per cent in 2019 from 90 per cent in the 1990s. This was a result of crop production expansion and intensification in recent years with increased use of nitrogen-based fertilizers and pesticides. Importantly, a recent study of the Government of São Tomé e Príncipe and the WFP (2021) revealed notable technical limitations in horticultural production. The decision of producers to

preserve cocoa or coffee plantations, despite their low productivity, leads them to grow vegetables on sloping land, which was neglected in the planting of export products before the distribution of land in the 1990s. Thus, they expose these lands to accelerated erosion. In addition, horticultural production is very demanding in terms of nutrients, has shorter production cycles and is dramatically affected by pests, particularly exacerbated by the impact of climate change, hence significant agricultural inputs (agrochemicals such as nitrogen-based fertilizers and strong pesticides) are required. Additionally, it has been proven that agrochemicals enter the country without the proper sanitary controls and are administered by poorly trained farmers, provoking long term unknown effects on human health and on the environment.

This approach is causing, among others, enhanced rates of land-based waste which end up in surface waterways, groundwater layers and finally in the sea. Other than agricultural run-offs, the rivers and waterlines bear with other kind of anthropogenic pollutants such as soaps, engine oils, human and animal feces, etc. Unfortunately, in São Tomé e Príncipe, as typically in SIDS due to the limited available surface and resources in combination with fragile equilibria, land and waterways contamination is indeed directly linked to the degradation of marine ecosystem and decline of halieutic resources, hence negatively affecting Blue Economy resource base. Additionally, the contamination of water supply sources has negative implications in the resurgence of cases of water-borne diseases, food and nutrition insecurity. Vulnerable families living in rural and coastal areas are the most affected due to the consequent reduction of the productivity and capacity of their farms and also the profitability of fishing activities.

Finally, climate change effects manifesting inter alia with increasing ocean acidification, surges and coastal floods in storm events contribute to coastal and marine degradation. Factors such as illegal extraction of beach sand, inadequate sanitation, unsustainable agricultural practices and limited waste management and waste treatment infrastructure exacerbate this worrisome situation.

To address increasing food demand caused by the steeply increasing demographic growth and consumption pressure on a limited territory of São Tomé e Príncipe requires an increase of local and sustainable agricultural production. This must be embedded in a sustainable land and soil management, with sustainable agricultural intensification, promotion of sustainable horticulture and an integrated urban planning to ensure long-term sustainability. An essential precondition is that soils are not contaminated and not degraded in their composition and structure, ensuring organic matter and nutrients content.

São Tomé e Príncipe Land Degradation Neutrality (LDN) measures include manage and restore degraded forests, sustainable agriculture/restoration/ good agricultural practices, manage urbanization and integrate spatial land-use planning, mainstream LDN in institutions and sectoral plans, raise LDN awareness and sensitization campaign at all levels, build knowledge management platform, improve capacity in monitoring and evaluation system and mobilize innovative financing and build public-private partnerships. One of 5 national voluntary LDN targets in São Tomé and Príncipe is to reduce by 25 per cent the use of pesticides and chemical fertilizers and increase the use of organic products by 25 per cent by year 2030. This target is also one of key priority areas of the updated NDC. The LDN component of this project will contribute to achievement of this target.

Loss of habitats

Habitat loss is a major threat to Atlantic and Indian Ocean SIDS coastal and marine assets. For instance, 20 meters of coastlines have been lost from 1958 to 2010 in São Tomé e Príncipe [28] and the Comoros lost about 8 per cent of their mangrove areas from 1980 to 2005 [29]. Coral bleaching events, with varying degrees of recovery, have also been reported in the Western Indian Ocean SIDS [28][29] and Maldives in the South Asia region [30].

In addition to overfishing and climate change, the root immediate causes of coastal habitat loss in the AIO SIDS are ill-planned coastal developments, land-use change, land-based pollution, overharvesting of mangroves and extraction of sand, gravel, and corals. The main root causes and barriers to addressing these root causes include poor monitoring of these habitats [31][32], lack of coordination and planification across sectors, and growing demand for space and resources due to growing coastal population densities (more than 1,100 people per km² in Maldives).

Impact on economic sectors

The impact of environmental degradation on the economic development, observed at the global scale, disproportionately affects the development in Atlantic and Indian Ocean SIDS that largely rely on the oceans economy. This impact materializes as described below:

Tourism

Coastal and marine tourism is the main economic sector for many SIDS and it accounts on average for almost 30 per cent of their GDP. As a matter of fact, many AIO SIDS have concentrated their activities around the tourism industry as a strategic driver for economic development (Table 3). But while this industry is highly dependent on the quality of the SIDS natural assets, it also strongly contributes to their degradation, thus putting at risk its own sustainability. In fact,

poorly managed tourism contributes to ecosystems degradation through overexploitation of natural resources and land-use change and generates conflicts on natural resources.

Finally, sea level rise is the biggest long-term threat facing the tourism industry in SIDS, where most tourism infrastructure lies just above sea level. This makes the sustainability of tourism in SIDS even more precarious, emphasizing the challenges of sustainability.

Fisheries and aquaculture

Marine fisheries are of paramount importance for income generation, livelihoods, and food security in many SIDS where fish exports represented 1.7 per cent of their total GDP. A common feature of inshore fisheries in SIDS is the deterioration of conservation and management practices as commercial fisheries have developed and population pressure has increased. In AIO SIDS, 21.4 per cent of fish stocks are collapsed and 28.1 per cent are overexploited on average (Table 2). These socio-economic benefits provided by fisheries are unlikely to be maintained indefinitely if stocks are not sustainably managed. Sustainable fishing and aquaculture represent the main approaches to reduce overfishing and restore marine ecosystems. Adopting sustainable fishing requires addressing the underlying causes of resource depletion, including illegal, unreported and unregulated (IUU) fishing and marine pollution.

Marine bioresources

Oceans and seas are the source of a living bioresources with a huge potential for developing new food, biochemical, pharmaceutical, cosmetics and bioenergy applications. In SIDS, where EEZs are very large, this sector has huge potential. However, pollution, habitat destruction, and deep-sea mining could destroy the marine bioresources development potential before it has been identified or exploited by AIO SIDS.

Maritime transport

Maritime transport is very important for SIDS as their development largely depend on their ability to connect to the rest of the world and access international markets. However, maritime transportation systems in SIDS are particularly vulnerable to features like climate change impacts and dependence on imported fossil fuels. In addition, the strong interdependence between maritime transport and key economic sectors (i.e., fisheries and tourism) amplifies the challenge, as negative impacts on any of these sectors could cause cascading negative impacts on the others. Therefore, achieving greater sustainability and resilience in the maritime transport sector is of paramount importance.

Table 3. Contribution of tourism and fisheries to the GDP of participating countries.

Country	Inbound tourism expenditure (% GDP)	Fisheries (% GDP)
Cabo Verde	28.6	3.7
Comoros	6.1 ^[34]	5.4 ^[33]
Guinea-Bissau	5.2	3.3
Maldives	55.3	6
Mauritius	14.3	1
São Tomé e Príncipe	10.4	6
Seychelles	36.4	4.1
Average	22.32	4.21

The socio-economic downturn triggered by the COVID-19 pandemic has intensified the vulnerabilities faced by SIDS. While virus incidence has been relatively moderate, the pandemic has laid bare their fragility, with social and economic impacts that will persist beyond the health crisis. SIDS experience economic impacts through the reduction of remittance flows, disappearing tourism demand, reduced fishing, and limited borrowing options for foreign currency. The shock to international tourism caused by global travel restrictions is having devastating impacts on economies as a whole, and particularly on communities and livelihoods dependent on this sector. But while SIDS struggle with these development constraints, they possess real potential for innovation to turn their challenges into opportunities for recovery that will allow them to build back better. In fact, many AIO SIDS are well placed to become innovation incubators for or nature-based solutions and new sustainable Blue Economy sectors that may be replicated and scaled up.

Gaps for achieving a sustainable Blue Economy

The potential of a country to develop a sustainable Blue Economy relies not only on healthy natural marine and coastal assets, but also on a number of conditions including: 1) a robust enabling environment with an improved integrated governance based regulatory and institutional frameworks anchored in national development plans and budgets; 2) investments in sustainable Blue Economy sectors and ecosystem protection as to restore lost economic opportunities, and 3) an engaged national and international stakeholders, especially the private sector.

Currently, Atlantic and Indian Ocean SIDS are at different stages of addressing these fundamental building blocks of Blue Economy enabling conditions. This reveals different barriers at strategic and technical levels listed below [35],[36],[37],[38],[39],[40].

- Institutional and sectoral fragmentation and insufficient intersectoral coordination;
- Lack of technical capacity to perform national Blue Economy stocktake assessments (status, trends, marine resource valuation, etc.) needed to inform policy formulation and to develop and implement integrated strategies;
- Limited access to financing coupled with insufficient financial mechanisms, namely innovative/blended financing tools such as debt and equity instruments, to support the implementations of Blue Economy-related policies (e.g., policies to encourage renewable marine energies, marine conservation, consumption patterns, fisheries Monitoring, Control, and Surveillance);
- Limited capacity to develop projects for financing, and limited domestic private sector capacity to attract investment into blue sectors;
- Weak international and regional coordination to enable the implementation of regional policies and to facilitate advocacy within the regional and international arena which results in, *inter alia*, greater uncertainty and an increased risk for private investors;
- Limited access to, and exchange of, ocean knowledge and innovative technologies and associated ocean-based economic opportunities.

The project aims to address the root causes and barriers to accelerate a sustainable and inclusive Blue Economy transformation in AIO SIDS as to turn their most pressing challenges (e.g., climate change impacts, limited energy sources, overfishing) into development opportunities. This requires improving existing Blue Economy sectors, identifying and pilot-testing new activities that can foster diversification while consolidating the Blue Economy enabling environment.

2) baseline scenario and any associated baseline projects

General Baseline

A series of GEF and non-GEF programmes, addressing major environmental threats as well as governance and institutional challenges identified in the previous sections, have been implemented in the Agulhas Current, Canary current, and Guinea Current, and Bay of Bengal Large Marine Ecosystems surrounding the 7 participating SIDS (Table 4). These investments have allowed the preparation of several Transboundary Diagnostic Analyses that permitted the identification of shared pressures on these ecosystems and the development of Strategic Action Programmes of which, some are already under implementation. Finally, these projects allowed to address some root causes and barriers of environmental and adaptation problems, identified in the previous section, including improved ocean management frameworks, improving fisheries management and pollution reduction.

In addition, several programmes addressing impacts on Blue Economy assets are currently under implementation in the participating SIDS (Table 4). These projects will address climate change, pollution reduction, and good governance, climate, sustainable management of marine resources, protection of biodiversity and marine and coastal ecosystems.

Table 4: Main relevant on-going regional and selected national GEF and other projects in Atlantic and Indian Ocean SIDS

Project Title	Impl eme ntin g Ag enci	Participating C ountries	Objectives
---------------	-------------------------------------	-----------------------------	------------

GEF Regional Projects			
Protection of the Canary Current Large Marine Ecosystem (LME)	FAO/UNEP	Cabo Verde, Guinea, Guinea-Bissau, Morocco, Mauritania, Senegal	To enable the countries of the Canary Current Large Marine Ecosystem to address priority transboundary concerns on declining fisheries, associated biodiversity and water quality through governance reforms, investments and management programs.
First South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish)	WB	Comoros, Mozambique, Tanzania	to improve the management effectiveness of selected priority fisheries at regional, national and community levels.
Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonization and Institutional Reforms (SAPPHIRE)	UNDP	Kenya, Comoros, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania, South Africa	To Achieve Effective Long-Term Ecosystem Management in the Western Indian Ocean LMEs in Line with the Strategic Action Programme as Endorsed By the Participating Countries
Implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-based Sources and Activities (WIO-SAP)	UNEP	Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania, South Africa	To reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels
Delivering Sustainable Environmental, Social and Economic Benefits in West Africa through Good Governance, Correct Incentives and Innovation	FAO	Cabo Verde, Cote d'Ivoire, Senegal	Strengthen fisheries governance, management and value chains, through the implementation of an ecosystem approach to fisheries, of relevant international instruments and of innovative governance partnerships in three countries in West Africa
West Africa Coastal Areas Resilience Investment Project	WB	Benin, São Tomé e Príncipe, Togo	To improve management of shared natural and man-made risks, including climate change, affecting targeted coastal communities and areas in the West Africa region
Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation	FAO	Cabo Verde, Guinea, Guinea-Bissau, Morocco, Senegal	To create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP)
Implementing Sustainable and Low Income Non-Chemicals Development in Atlantic SIDS (ISLANDS addendum)	UNEP	Cabo Verde, Guinea Bissau, São Tomé e Príncipe	To prevent the build-up in the environment of material and chemicals that contain POPs and mercury and other harmful chemicals and to manage and dispose of existing harmful chemicals stocks in SIDS.
Demonstrating Innovative Ocean Governance Mechanisms and Delivering Best Practices and Lessons for Extended Continental Shelf Management Within the Western Indian Ocean Large Marine Ecosystem.	UNDP	Mauritius, Seychelles	To undertake an environmental baseline assessment of the Agulhas and Somali Current Large Marine Ecosystems, to fill information gaps needed to improve management decision-making and to ascertain the role of external forcing functions.
Implementing Sustainable Low and	UNDP	Comoros, Mal	To prevent the future build-up of materials and chemicals entering SIDS that contain POPs an

Non-Chemicals Development in SIDS (ISLANDS)	P	Mauritius, Mauritius and Seychelles	to mercury and other harmful chemicals; to safely manage and dispose of existing harmful chemicals, products and materials currently present in those SIDS; and to ensure the safe management of products continuing to enter SIDS by closing materials and product loops. The ultimate objective of the project is to protect human health and the environment from the harmful effects of hazardous chemicals and wastes.
Non-GEF Regional projects			
Sustainable development of fisheries and aquaculture value chains in ACP countries	Euro pean Un ion	Regional ACP 10 countries	To increase the contribution of sustainable fisheries and aquaculture value chains to economic growth, job creation and food security.
Sustainable and Resilient Tourism in Small Islands and Coastal Destinations	World Bank	São Tomé e Príncipe, Gambia, and Cabo Verde	To promote Blue Economy, improving the knowledge of how small developing coastal and island states can increase their competitiveness, in the midst of COVID-19
Restoring Marine Ecosystem Services by Rehabilitating Coral Reefs to Meet a Changing Climate Future	Adaptation Fund	Mauritius and Seychelles	To reduce the impact of climate change on local communities and coral reef-dependent economic sectors in the Republic of Mauritius and the Republic of Seychelles by implementing coral reef restoration with thermal tolerant corals as adaptation to climate change.
GEF National Projects			
Managing multiple sector threats on marine ecosystems to achieve sustainable blue growth	UNDP	Cabo Verde	To strengthen the systemic and institutional capacity for reducing multiple threats to globally significant marine ecosystems and achieve sustainable blue growth in Cabo Verde.
Enhancing Biodiversity Conservation and Sustainable Land and Natural Resource Management	UNDP	São Tomé e Príncipe	To safeguard globally significant terrestrial biodiversity and ecosystems services by strengthening national capacities and frameworks for biodiversity and natural resource management, integrated land use planning and environmental law enforcement as well as enhancing protected area management and the sustainability of charcoal production
COMPRAN - Marketing, Productivity and Nutrition Project	IFAD	São Tomé e Príncipe	To support agricultural productivity and production, development of value chains, transformation and marketing of agricultural products, and strengthening of the innovation capacity of stakeholders
Landscape Restoration for Ecosystem Functionality and Climate Change Mitigation in the Republic of São Tomé e Príncipe	FAO	São Tomé e Príncipe	To promote the restoration and sustainable management of the forest ecosystems of São Tomé e Príncipe to reduce carbon emissions from deforestation, and stop and reverse forest and soil degradation.
Promotion of environmentally sustainable and climate-resilient grid/isolated grid-based hydroelectric electricity through an integrated approach in São Tomé e Príncipe	UNDP	São Tomé e Príncipe	To introduce an integrated energy and ecosystems-based approach to grid/isolated-grid-based mini/small hydro-electricity generation
Conservation of terrestrial and marine biodiversity, co-managed with local communities	UNDP	Comoros	To conserve the globally important marine and terrestrial biodiversity of the Union of the Comoros by establishing a larger and more functional system of protected areas, representative of the country's rich biodiversity and offering prospects for a sustainable future
Small Grant Programme	UNOPS/ UNDP	Comoros	To consolidate community initiatives and actions contributing to the creation of global environmental benefits and the safeguarding of the global environment through community and local solutions. that complement and add value to national action
Capacity-building for multisectoral, coordinated and decentralized environmental management to achieve	UNDP	Comoros	To strengthen the capacities of multisectoral, coordinated and decentralized management of the environment to achieve the objectives of the Rio Conventions

ieve the objectives of the Rio conventions in the Union of the Comoros			
Mainstreaming biodiversity into the management of the coastal zone in the Republic of Mauritius	UNDP	Mauritius	To mainstream the conservation and sustainable use of biodiversity and ecosystem services into coastal zone management and into the operations and policies of the tourism and physical development sectors in the Republic of Mauritius through a 'land- and seascape wide' integrated management approach based on the Environmental Sensitive Areas' (ESAs) inventory and assessment.
GEF Small Grants Programme	UNDP/UNOPS	Maldives	To create an enabling environment to pilot various projects to conserve and protect nature through: <ul style="list-style-type: none"> · Coral rehabilitation · Reef protection · Sustainable fisheries · Waste management · Research on marine waste and Ecosystems
Elimination of POPs through sound management of chemicals	Ministry of Environment/UNDP	Maldives	To reduce the risks of POPs on human health and the environment through strengthening of the institutional capacity, and the policy and regulatory framework for the environmentally sound management (ESM) of hazardous chemicals with focus on POPs. Technically, the project will develop sustainable systems for the sound collection, labeling, storage, and disposal of hazardous POPs chemicals and waste.
Protected Area Finance	UNDP	Seychelles	To secure the financing for Protected Areas more sustainably by strengthening the financial management capacities of the national PA managing entities, supporting the building and renovating infrastructures, introducing new cost-effective practices, systems and schemes, aimed at making sites more attractive and increasing their own revenue generation capacity.
Ridge to Reef approach for the Integrated Management of Marine Coastal and Terrestrial Ecosystems in Seychelles	UNDP	Seychelles	To reduce threats to globally significant biodiversity by strengthening the country's system of marine protected areas and reducing negative land-based impacts on those ecosystems; reverse land degradation in areas in productive land through the promotion of SLM/SFM practices and agroforestry, leading to the restoration and sustainable flows of forest ecosystem services; and strengthen capacity and partnerships to promote integrated ecosystem management based on the R2R approach in the Seychelles and the Indian Ocean region.
Prioritising Biodiversity Conservation and Nature-based Solutions as Pillars of Seychelles' Blue Economy	UNDP	Seychelles	To conserve Seychelles' globally significant biodiversity through effective management of Seychelles' expanded Marine Protected Areas system and promotion of nature-based solutions as pillars of the Blue Economy
Non GEF National Projects			
TATÔ PROGRAMME– Conservation of Sea Turtles and Marine and Coastal Ecosystems	CSO: Programa Tatô, MARAPΔ	São Tomé e Príncipe	To conserve sea turtle populations on the island of São Tomé through the protection of the main nesting and feeding sites, reduction of the main anthropogenic threats and strengthening the capacities, involvement and awareness of local communities

Participatory management of the Malanza and Praia das Conchas mangroves in São Tomé	CEP/OKOS	São Tomé e Príncipe	To support participatory management and conservation measures for PA mangroves, increase scientific knowledge, capacity building for mangrove community management
Establishment of a network of marine protected areas in São Tomé e Príncipe through a co-management approach	Blue Action Fund/ FFI/OKOS/MARA PA	São Tomé e Príncipe	To support the designation of marine protected areas (MPAs) helping to create effective marine protection through a network of participatory fisheries management and conservation zones, and to improve local livelihoods
Seabirds of Príncipe	FFI/BAF	São Tomé e Príncipe	To support research and monitoring of Seabirds – particularly at the Tinhosas Islands - to ensure that important sites are identified and appropriately protected
Support for the preparation of a National Investment Plan, the strengthening of governance and the development of a multi-year transition program for the Blue Economy in STP	FAO	São Tomé e Príncipe	To operationalisation of the Blue Economy Strategy
Women's financial empowerment	UNDP/AfDB	Comoros	To promote socio-economic inclusion and entrepreneurship of women in the region of Sima-Moya (Anjouan) and Moroni, Chindini and Banguoi (Grande Comore) through the rehabilitation and equipping of production, processing and conservation infrastructures to the benefit of women's groups in target areas, in addition to management of associative activities capacity building .
Establishment of the PET recovery and buy-back center in Moheli	UNDP	Comoros	To identify adaptable and sustainable financial mechanisms for the implementation of a recovery and buy-back system for plastics (especially PET bottles) and aluminium cans, in order to reduce the volumes of waste that end up in the sea, polluting the oceans and areas of ecological interest, while creating sustainable economic activities through the valorization of waste for the benefit of the communities of the Moheli Biosphere Reserve.
Integrated Development and Competitiveness Project	WB	Comoros	To promote the creation and growth of micro, small and medium enterprises (MSMEs) and relevant value chain actors in the agriculture, tourism, and related sectors in Comoros.
Enhanced Integrated Framework	EIF	Comoros	To integrate the Union of Comoros into the global trading system in order to contribute to poverty reduction and sustainable development. It aims at strengthening institutional capacities within the Government to integrate trade into national development policies.
Resilience of coastal fishermen communities	FAO	Comoros	To improve coral reef fisheries production for food security by restoring fragile ecosystems and helping fishing communities to better manage their coral resources
Assessment of Blue Carbon ecosystem (Seagrass) around the island of Mauritius: Relevance for Marine Spatial Planning	UNEP	Mauritius	To assess the Blue Carbon ecosystems around the island of Mauritius
Sustainable Fisheries Resources Development Project	WB	Maldives	To improve management of fisheries at regional and national levels including support to establish mariculture in targeted atolls in the Maldives.
Ecosystem Based Adaptation to climate change	UNDP	Seychelles	To incorporate ecosystem-based adaptation into the country's climate change risk management system to safeguard water supplies, threatened by climate change induced changes in rainfall and to buffer expected enhanced erosion and coastal flooding risks arising as a result of

Change in Coastal Areas	UND P	Seychelles	higher sea levels and increased storm surge
			To contribute to the implementation of the Seychelles Climate Change Strategy (SCCS) through: <ul style="list-style-type: none"> · Strengthening the climate change sector policy framework (Component A) · Supporting adaptation to climate change in coastal areas (Component B).

While both past and current initiatives create a solid foundation and deliver some important building blocks for a Blue Economy transformation, these actions risk to remain uncoordinated and siloed with no overarching vision to jointly contribute to sustainable Blue Economy transformation as a whole.

Regional Baseline

Various international and regional institutional frameworks and agreements provide the regional Ocean Governance and Blue Economy baseline scenario for this project. First, the SIDS Accelerated Modalities of Action Pathway (SAMOA Pathway), an internationally agreed programme of action for SIDS for the 2014 – 2024 period, has identified Ocean and seas, Climate Change, Sustainable tourism, Sustainable transportation, Sustainable consumption and production as priority areas for all SIDS at the global level. Three Regional Fisheries Bodies (SWIOFC, SIOFA, and CSRP/SRFC) and three regional Seas Programmes: the South Asian Sea Programme (Maldives), the Nairobi Convention (Comoros, Mauritius and Seychelles), and the Abidjan Convention (Cabo Verde, Guinea-Bissau, and São Tomé e Príncipe) provide ocean governance coherence at the regional level. For instance, the parties to the Nairobi convention have agreed on the text of the Protocol on Integrated Coastal Zone Management in the Western Indian Ocean, where as the parties to the Abidjan convention have adopted an ICZM protocol, a Protocol on Sustainable Mangrove Management, a Protocol on Pollution from Land-Based Sources and Activities, and a protocol on Norms and Environmental Standards for offshore Oil and Gas activities. In 2021, the Indian Ocean Commission has developed a regional Action Plan for the Blue Economy aiming at strengthening the implementation of Blue Economy cooperation and integration in the sub-region. At the African level, the African Union, where 6 out of the 7 participating SIDS are represented, identified Blue Economy as a major contributor to achieve its Agenda 2063, developed a Blue Economy Strategy in 2019 followed in 2020 by the Africa Blue Economy Strategy Implementation Plan (2021-2025). This plan supports the setting up Blue Economy governance mechanisms to ensure planning and coordination at continental, regional and national levels. Finally, regional knowledge and scientific institutions including the Western Indian Ocean Marine Science Association (WIOMSA), the Coastal Oceans Research and Development in the Indian Ocean (CORDIO), and the West Africa Coast Areas (WACA) Platform complete this baseline scenario.

All of the agreements and institutional frameworks listed above apply either globally (i.e., SAMOA pathway) or to only a subset of AIO SIDS resulting in a limited integration at regional fora and lack of regional economic agreements in spite of common challenges and opportunities. In absence of a GEF investment, and under this current baseline scenario, this would materialize in missed sustainable Blue Economy replication and up-scaling opportunities and would result in a lack of regional coherence on topics such as food security, climate action, and ecosystem-based management adapted for the specific challenges and opportunities of AIO SIDS.

National baseline

At the national level, most Atlantic and Indian Ocean SIDS have taken initial, or in some cases, more advanced steps in operationalizing their blue economies.

The Cabo Verde archipelago is located 570 km west of the Senegal in West Africa. It consists of ten volcanic islands in of which nine are inhabited. Cabo Verde's economy is driven by tourism and the government has placed Blue Economy at the core of the country's development by adopting a Charter on Blue Growth with support from FAO. In addition, Blue Economy has been identified as an SDG accelerator by the long-term national development strategy "Ambition 2030", elaborated within a whole-of-society approach with wide private sector and civil society engagement.

The Comoros islands are an archipelago of volcanic islands in East Africa. This SIDS consists of three main islands surrounded by coral reefs. The main sources of employment in the country are subsistence farming and fishing. Comoros has adopted a strategic framework for a national Blue Economy policy to sustainably revitalize its economy in 2018. The national development strategy adopted by the Government of Comoros in 2019 (Plan Comores Emergent - PCE) marks a turning point in terms of implementing a concrete Blue Economy strategy. Unlocking the potential of Blue Economy is one of the key priorities of the government. The national strategic objectives of the sector are to 1) strengthen national safety and security, 2) promote the development of key sectors of the Blue Economy, with training and job creation for young people, 3) develop sustainable management of fishery resources, protecting coastal, aquatic and marine ecosystems and managing waste, and 4) adapt the institutional framework and integrate the Blue Economy into economic cooperation and agreements. The ministries in charge are the Ministry of Agriculture, Fisheries, Environment, Territory Planning and Urban, and the Ministry of Transportation, Post, Telecommunications, Communication & Tourism. Poor fisheries governance and inconsistent policies across sectors and within the sector.

Guinea-Bissau is a SIDS in Western Africa, bordered by the Atlantic Ocean, Senegal, and Guinea-Conakry. Its economy is based on agriculture that also accounts for 68 per cent of employment. Unlike most other SIDS, tourism expenditure's share of GDP in Guinea-Bissau has been consistently low at about 1.5 per cent during the past few years. In Guinea Bissau, though no Blue Economy framework has been developed yet, several initiatives pertaining to the development of different sectors of the Blue Economy are ongoing. In addition, a UNDP project is aiming at developing a Blue Economy strategy for Guinea Bissau.

Maldives consists of more than 1000 islands in the middle of the Indian Ocean along the Equator. It is the world's lowest-lying country. The economy is driven by tourism with inbound tourism expenditure at 55 per cent of GDP. Fisheries, boat building are also important employment sectors. Maldives outlined its Blue Economy priorities and an action plan as part of its current Strategic Action Plan with the Ministry of Fisheries, Marine Resources and Agriculture as an implementing agency. Noo Raajje, a collaboration between the Government of Maldives and the Blue Prosperity Coalition aims to study coral reef health, fish and benthic populations, and water quality across the atolls of the Maldives. Such data will inform Marine Spatial Planning in the Maldives. However, there still is a lack of financing opportunities, especially for the private sector to drive the awaited change.

Mauritius lies in the Western Indian Ocean at about 2000 km off the southeast coast of Africa. Mauritius has developed a diversified economy that still heavily relies on tourism with an inbound tourism expenditure at 14 per cent of GDP in 2019. The government of Mauritius has committed to developing the ocean sector into a major pillar of the economy in 2015. It created the Ministry of Blue Economy, Marine Resources, Fisheries and Shipping by regrouping various departments and divisions under a single entity to coordinate the ocean-related activities. The government also launched an Ocean Economy roadmap to sustainably manage and coordinate ocean related activities and is preparing a Marine Spatial Plan for its EEZ. Nevertheless, some important sectors relevant to the development of Blue Economy such as Marine Spatial Planning, tourism, marine renewable energy, and climate change remain scattered among other ministries and effective coordination is difficult.

São Tomé e Príncipe lies in the West coast of Africa in the Gulf of Guinea. Agriculture, fishing and processing of local agricultural products are the main economic activities. São Tomé e Príncipe approved in late 2019 a Blue Economy Transition Strategy that defines objectives and priority areas of intervention. The country is also preparing a national investment plan, strengthening the Blue Economy governance and elaborating a multi-year program for transition to the Blue Economy. Also, the country has clearly committed to substantially reduce agrochemicals by 2030 in its updated NDC and Voluntary Land Degradation Neutrality targets.

Seychelles is an archipelago of 115 islands in the Western Indian Ocean, located at about 1600 km east of Kenya. The main exports of this SIDS are tuna, skipjack and bonito, motorboats and petroleum oil. Seychelles, a globally Blue Economy forerunner, has developed a national Blue Economy strategic policy framework and roadmap, launched the world's first sovereign blue bond, and is developing an EEZ-wide MSP. The Blue Economy strategy is implemented through the office of the Vice President. The Ministry of Finance has a department dedicated to Blue Economy. It is important to note that Seychelles has already reached more than 30% of EEZ protection in 2020.

Under the current national level baseline scenario, it is apparent that all AIO SIDS have taken steps, including different levels of strategic planning, towards a Blue Economy transition. However, and despite these efforts, several major challenges remain and will hamper the effective Sustainable Blue Economy transformation in AIO SIDS. The challenges include:

- **Sectoral fragmentation and inadequate institutional arrangements.** For some countries, the Blue Economy is designed from a sectoral perspective with little opportunities for integrated multi-sectoral initiatives. Despite the progress made to date by AIO SIDS, major institutional organization problems and a lack of integrated overarching policy framework remain, limiting their ability to formulate and effectively implement Blue Economy policies. This is particularly evident when synergies between Land Degradation and sustainable Blue Economies frameworks must be sought.
- **Deficiency in Blue Economy valuations.** Although traditional sectors are the subject of significant research, the potential of emerging sectors like marine renewable energies and marine biotechnologies remain unknown. Such knowledge is of paramount importance for the provision of decision-makers with appropriate data to develop science-based Blue Economy policies and strategies and for the stimulation of private investments.
- **A lack of awareness and of qualified human resources** to develop and implement Blue Economy transformation.

· **A shortage of financing opportunities for Blue Economy projects in the wake of COVID-19.** SIDS are among the most severely impacted economies by the COVID-19 pandemic. This is due to the contraction of the tourism and fisheries industries, two key sectors for many AIO SIDS. In fact, the COVID-19 pandemic has amplified the structural vulnerabilities of SIDS, such as their reliance on few economic sectors and their debt burden, with socio-economic shocks expected to persist beyond the health crisis. As a result, and while their marine ecosystems are in dire need of conservation interventions, environmental-related investments were delayed in favor of health, social, and economic necessities. Limited public resources and insufficient financial mechanisms to foster private investment, risk to constrain the development and implementation of actions in favor of ecosystem conservation.

· **A lack of business models that work for both public and private sector.** This leads to inefficient streamlining of climate, environmental and Blue Economy priorities and related safeguards into economic and development plans. In addition, it deters the private sector investments.

Under the current baseline scenario, and if these challenges are not addressed, AIO SIDS are unlikely to fully embrace a sustainable, inclusive Blue Economy transformation with strong restoration and marine conservation elements required for their sustainable development.

3) proposed alternative scenario with a brief description of expected outcomes and components of the project

Atlantic and Indian Ocean SIDS are home to marine and coastal ecosystems of global importance including extensive coral reefs, mangrove systems, and seagrass meadows. The economies of most of these SIDS are based on marine economic sectors, like fisheries and tourism, strongly dependent on healthy ecosystems. A multitude of anthropogenic threats are impacting these ecosystems and their productivity, leading to overexploitation in an unsustainable attempt to protect livelihoods. The COVID-19 crisis has exacerbated these challenges causing an even higher overexploitation and degradation rate amplifying this vicious circle. While unlocking their sustainable Blue Economy model represents a sustainable development pathway for SIDS, governance, finance, and access to knowledge and capacity shortcomings are preventing them from sustainably harnessing the opportunities offered by their marine and ocean resources. The objective of this regional project is to support AIO SIDS in addressing the root causes and barriers, listed previously to preserve and restore the health of marine and ocean ecosystems in order to sustain inclusive and sustainable development models. The interventions proposed to be financed by GEF will cover the incremental costs of the actions required to achieve this goal through 1) improving of the enabling conditions for a Blue Economy transformation, 2) investing in the development and implementation of national sustainable Blue Economy demonstrations specifically tailored for each country, and 3) disseminating of learning experiences from the planning work and national demonstrations for replication and up-scale at both the national and regional scales.

Under this GEF intervention scenario, Atlantic and Indian Ocean SIDS will have the necessary tools, skills, and replicable models to ensure their Blue Economy transformation with innovative finance as a key enabler.

The proposed intervention theory of change is presented in Figure 1 and the different components of the project are detailed below.

[1] Gruber, Nicolas, et al. 2019. The oceanic sink for anthropogenic CO₂ from 1994 to 2007. *Science*, vol. 363, No. 6432, pp. 1193–1199.

[2] Levitus S, et al. 2012. World ocean heat content and thermosteric sea level change (0–2000 m), 1955–2010. *Geophys Res Lett* 39:L10603

[3] FAO. 2020. *The State of World Fisheries and Aquaculture 2020. Sustainability in action*. Rome

[4] Hoegh-Guldberg, O. et al. 2015. *Reviving the Ocean Economy: the case for action - 2015*. WWF International, Gland, Switzerland., Geneva, 60 pp

[5] Lieberknecht, L.M. 2020. *Ecosystem-Based Integrated Ocean Management: A Framework for Sustainable Ocean Economy Development*. A report for WWF-Norway by GRID-Arendal

[6] UN. 2021. *The second World Ocean Assessment*. United Nations Publication, New York.

[7] Bennett, N. J. et al. 2019. Towards a sustainable and equitable Blue Economy. *Nat. Sustain.* 2, 991–993

- [8] Haddaway, N. and Leclère, D. 2020. WWF Living Planet Report.
- [9] FAO, 2020
- [10] Lubchenco, J., P. M. Haugan and M. E. Pangestu. 2020. Five priorities for a sustainable ocean economy. *Nature* 588, 30-32
- [11]. Delevaux J. M. S. and K. A. Stamoulis. 2021. Prioritizing forest management actions to benefit marine habitats in data-poor regions. *Conservation Biology*, [<https://doi.org/10.1111/cobi.13792>]
- [12] J.G. Álvarez-Romero et al. 2011. Integrated land-sea conservation planning: the missing links *Annu. Rev. Ecol. Evol. Syst.*, 42. pp. 381-409
- [13] Wenger, A. S. et al. 2020. Best-practice forestry management delivers diminishing returns for coral reefs with increased land-clearing. *Journal of Applied Ecology*. 57, 2381–2392.
- [14] UN. 2021. WOAI
- [15] Roberts J. and A. Ali. 2016. *The Blue Economy in Small States*, Small States Digest, No. 2016/01, Commonwealth Secretariat, London
- [16] UNCTAD, 2021
- [17] ASCLME/SWIOFP 2012. *Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 1: Baseline*
- [18] UNECA. 2014. *Unlocking the full potential of the Blue Economy: Are African Small Island Developing States ready to embrace the opportunities?* Addis Ababa, Ethiopia
- [19] UNECA. 2014. *Unlocking the full potential of the Blue Economy: Are African Small Island Developing States ready to embrace the opportunities?* Publications Economic Commission for Africa. Addis Ababa, Ethiopia
- [20] Pauly D., Zeller D., Palomares M.L.D. (Editors), 2020. *Sea Around Us Concepts, Design and Data* (seararoundus.org)
- [21] FAO, 2020
- [22] Ibid.
- [23] <https://epi.yale.edu/epi-results/2020/component/wwt>
- [24] ASCLME/SWIOFP 2012. *Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 2: Diagnostic Analysis*
- [25] Lachmann, F. et al. 2017. Marine plastic litter on Small Island Developing States (SIDS): Impacts and measures. 10.13140/RG.2.2.16168.37121.
- [26] <https://www.cbd.int/>
- [27] FAO. 2007. *The world's mangroves 1980-2005. A thematic study prepared in the framework of the Global Forest Resources Assessment 2005* FAO. Rome

- [28] Gudka et al. 2018. Impact of the 3rd Global Coral Bleaching Event on the Western Indian Ocean in 2016. Global Coral Reef Monitoring Network (GCRMN)/Indian Ocean Commission. pp. 67
- [29] Obura D, et al. 2020. Status and trends of coral reefs of the Western Indian Ocean region. Status of Coral Reefs of the World: 2020. GCRMN. 14 pp.
- [30] Chandra et al. 2020. Status and trends of coral reefs of the South Asia region. Status of Coral Reefs of the World: 2020. GCRMN. 12 pp.
- [31] Failler, P. et al. 2020. Perception of natural habitat changes of West African marine protected areas. Ocean & Coastal Management. 187. 1-12. 10.1016/j.ocecoaman.2020.105120.
- [32] Obura et al. 2017. Coral reef status report for the Western Indian Ocean. Global Coral Reef Monitoring Network (GCRMN)/International Coral Reef Initiative (ICRI). pp 144.
- [33] <https://www.nairobiconvention.org/comoros-country-profile/comoros-ocean-economy/#:~:text=As%20a%20small%20island%20state,30%25%20to%20the%20ocean%20economy.>
- [34] 2018 data
- [35] Anonymous. 2019. Strategic Action Plan 2019-2023. The republic of Maldives.
- [36] UNECA. 2016. Africa's Blue Economy: A policy handbook. Addis Ababa, Ethiopia.
- [37] AU-IBAR, 2020. Africa Blue Economy Strategy Implementation Plan, 2021-2025. Nairobi, Kenya.
- [38] Rustomjee, C. 2018. Green Shoots for the African Blue Economy? Centre for International Governance Innovation. Policy Brief No. 132
- [39] Bolaky, B, 2020. Operationalising Blue Economy in Africa: The Case of South West Indian Ocean. Observer Research Foundation, Issue Brief No. 398.
- [40] UNDESA. 2019. Partnerships for small island developing states. United Nations.
- [41] Mercer, J., et al. 2014. Ecosystem-based adaptation for food security in the AIMS SIDS: integrating external and local knowledge. Sustainability, 6(9): 5566-5597

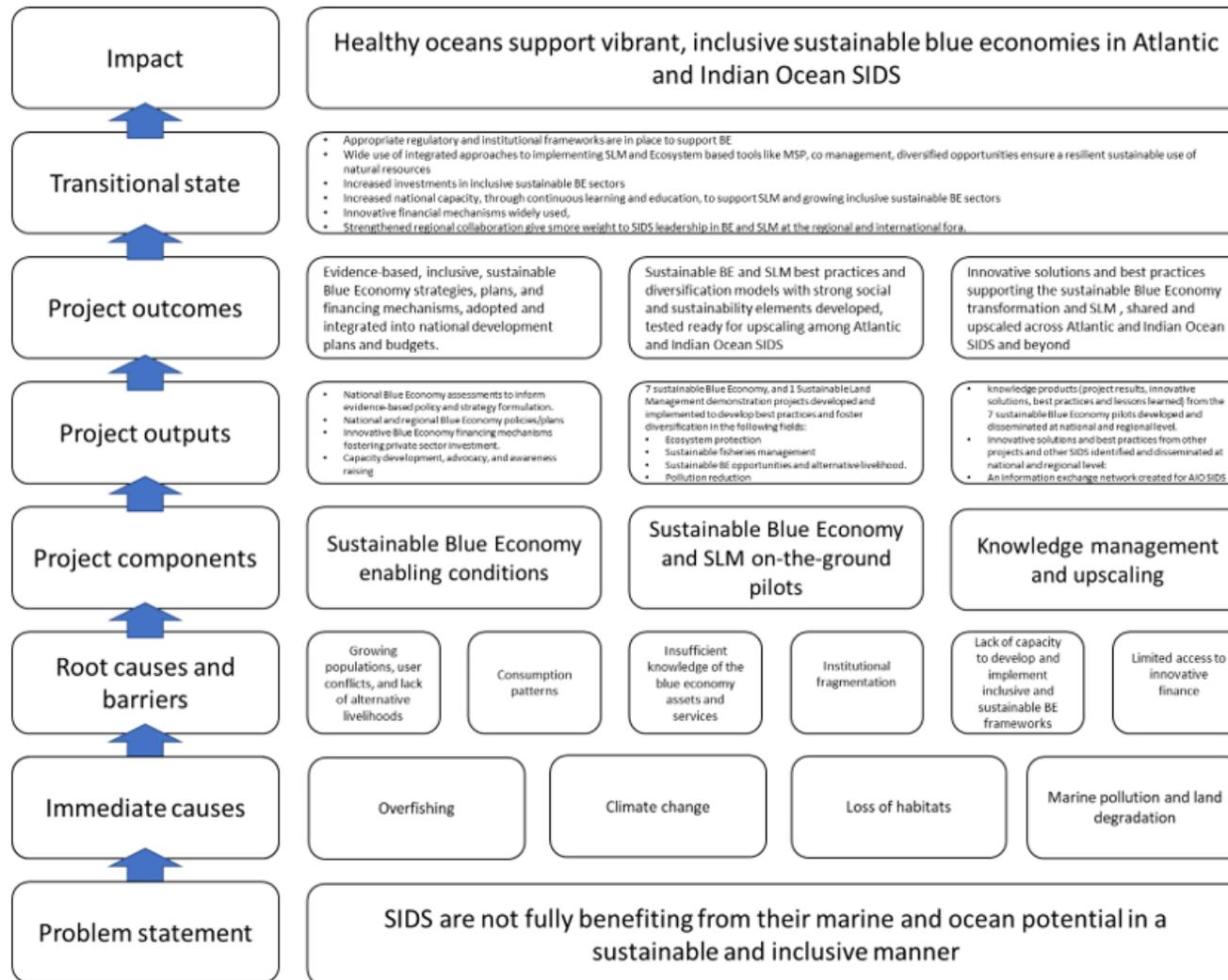


Figure 1. Theory of change of the project

Component 1: Sustainable Blue Economy and Land Degradation Neutrality enabling conditions-improved governance frameworks.

Outcome 1: Evidence-based, strategies, plans, and financing mechanisms that support Land Degradation Neutrality and sustainable Blue Economy adopted and integrated into national development plans and budgets

Component 1 of the project will strengthen the enabling environment for the sustainable Blue Economy transformation in all the participating SIDS. More specifically, this component will focus on data collection and Blue Economy assessments at the national level to guide the development of integrated policies, plans, and regulatory and institutional reforms aimed at accelerating the Blue Economy transformation and stimulating private investment. This component will also focus on raising awareness and developing national capacity, namely in financial planning. The Outputs of Outcome 1 are:

· Output 1: Blue Economy assessments. These assessments will focus on trends in marine sectors, ecosystem services valuation, including carbon sink potential of marine habitats, new and emerging Blue Economy opportunities and their contribution to the GDP and exports, employment, climate resilience, and environmental sustainability. One assessment per country will be undertaken. This outcome will also identify constraints to the implementation of the Blue Economy approach. This information will be instrumental to formulate evidence-based policies and plans. The activities that will inform the assessments include:

- 1) Engagement and consultations of stakeholders to identify linkages between key stakeholders both at the national and regional level;
- 2) Assessments of ecosystem services and current Blue Economy sectors;
- 3) Analysis of potential 'new' areas for blue investment with a high likelihood of success;
- 4) Analysis of existing enabling environment including governance arrangements.

· Output 2: National Blue Economy and LDN policies, strategies, and implementation plans will be developed in each participating SIDS with a minimum of 7 policies/plans. Participatory processes at the national level will guide the development of the national Blue Economy frameworks and/or plans based on the data collected in the previous output. It is anticipated that an inter-ministerial committee will coordinate this Blue Economy planning process in each country. A typical national Blue Economy planning process will follow the steps described below (see Figure 2.):

- 1) The adoption of the concept of the Blue Economy by the government and by stakeholders;
- 2) The participatory elaboration of policies (i.e., set of ideas and proposals for action culminating in a government decision);
- 3) The endorsement of the policies (by the cabinet, council of ministers, etc.);
- 4) The participatory and inclusive development of the strategy and action plan development. This will include the Blue Economy vision, objectives and strategies (i.e., actions to be taken to achieve the objectives) of the country. This phase will also validate the required investments as well as the regulatory and institutional reforms needed to promote an inclusive and sustainable Blue Economy transformation. Ideally accompanied by an investment plan. The strategic planning process must be consultative and participatory. It is also crucial that this step follows a coordinated and integrated approach that covers all sectors as identified the assessments phase (output 1) and through consultations. The strategic planning will be accompanied by the identification and prioritization of the country's Blue Economy sectors based each SIDS strategic advantages.
- 5) The last phase of the planning process is the implementation and evaluation. Although this step is outside the scope of this project, it will be fully imbedded into the monitoring processes of the developed plans.

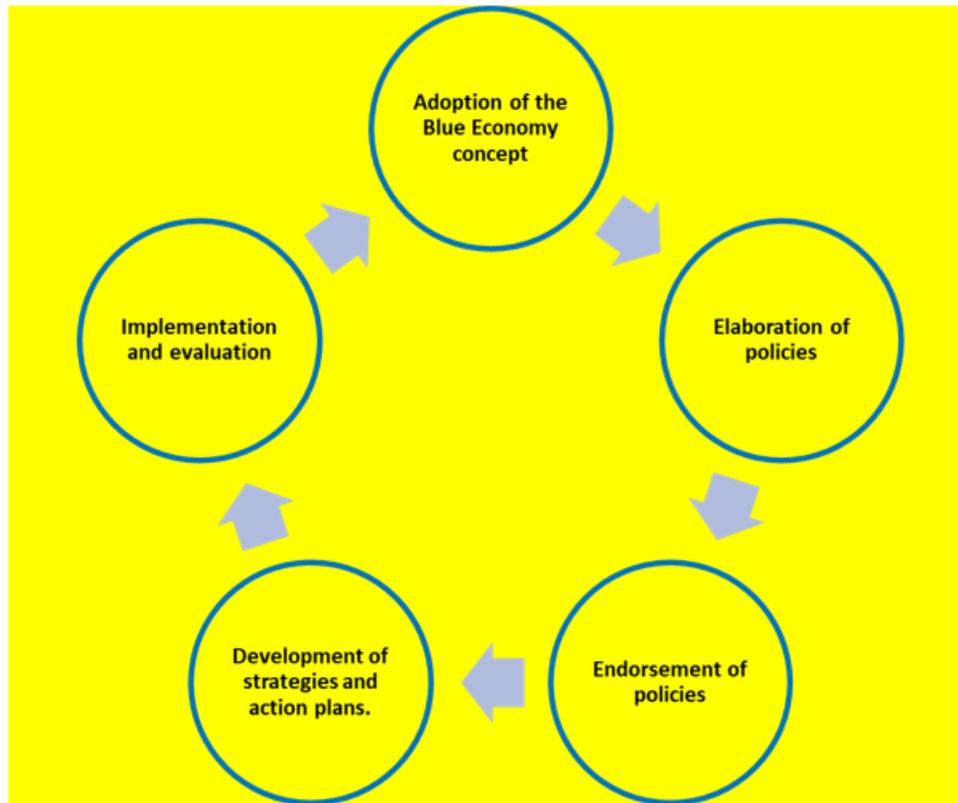


Figure 2. Steps towards formulating and formalizing the Blue Economy Plans (Implementation and evaluation step are beyond the scope of this project).

In São Tomé e Príncipe, Degradation Neutrality (LDN) measures will additionally focus on improving institutional governance, policy, principles, regulation, and control measures for sustainable and healthy vegetables sector; establishing a national certification system for the production of organic products, with concrete applications to the vegetable sector and; establishing a regulatory framework and national action plan for the proper management of pollutants in storm and marine waters.

- Output 3. When lacking, frameworks intended to foster private sector engagement in innovative financing of Blue Economy and Land Degradation Neutrality target implementation will be introduced. Such mechanisms could include insurance and blended finance partnerships, financing for conservation, debt swaps, and blue bonds. Such mechanisms will be developed and introduced in at least 3 participating SIDS.

- Output 4. Capacity development, advocacy, and awareness raising. In order to ensure that stakeholders are committed to and have the technical capacity to support the Blue Economy transformation, capacity development, advocacy, and awareness raising activities in Blue Economy assessments, planning, innovative finance, private sector engagement, governance reform, and stakeholder engagement will be implemented in all of the 7 participating countries. Trainings will include thematic areas such as Blue Economy assessment and planning, innovative finance, private sector engagement, natural capital accounting, governance reform, and stakeholder engagement. In the case of São Tomé e Príncipe, the capacity development, advocacy, and awareness raising for restoration and maintenance of functional landscapes will also be addressed with focus on strengthening public and private sector capacities on the use

of agrochemicals, including Customs' capacities in registering and verifying fertilizer and pesticide imports; strengthening private sector capacities to elaborate bio-fertilizers and bio-pesticides and; raising awareness of communities adjacent to rivers and vulnerable coasts on the impact of land and water pollution and supporting them to mainstream sustainable practices in their income generating activities.

Depending on the initial baseline and level of progress toward Blue Economy in each SIDS, different combinations of outputs from the above will be sought. The specific outcomes and the relevant targets will be selected during the PPG phase and refined and validated during the project inception through consultations with stakeholders including public and private sectors as well as local communities and civil society organizations.

Component 2: On-the-ground national demonstrations of Sustainable investments addressing 1) unsustainable ocean/coastal use and/or 'new and additional' sustainable Blue Economy opportunities, and 2) Integrated land management and restoration of degraded production landscapes with positive impacts on Blue Economy assets

Outcome 2: Sustainable Blue Economy and Sustainable Land Management best practices and diversification models with strong social, economic and sustainability elements developed, tested, and ready for upscaling among Atlantic and Indian Ocean SIDS

The component 2 of the project will aim at developing and implementing seven (07) inclusive sustainable Blue Economy and one (01) Sustainable Land Management demonstrations, to deliver on-the-ground solutions to Blue Economy and Land Degradation challenges. Results will then be used to develop best practices for replication and upscale. Demonstration projects will be developed around the following areas:

- Ecosystem protection by 1) improving marine habitat management by supporting spatial planning using tools like Integrated Coastal Zone Management (ICZM) and Marine Spatial Planning (MSP), 2) promoting area-based conservation measures like Marine Protected Areas (MPAs), Locally Managed Marine Areas (LMMAs) and Other effective area-based conservation measures (OECMs), and 3) supporting the restoration of degraded habitats;
- Sustainable fisheries management through actions like the implementation of the FAO Voluntary Small-Scale Fisheries Guidelines, the promotion of fisheries co-management approaches, the fighting of IUU (namely by using digital tools) and the improvement of seafood value chains;
- New and additional sustainable Blue Economy opportunities and alternative livelihoods. This could include support to sustainable tourism, ocean-based renewable energy, marine biotechnology, sustainable aquaculture, green shipping, and blue carbon opportunities;
- Reduction of land-based pollution through investments in innovative approaches to address nutrient pollution resulting from agricultural run-offs;
- Blue economy innovative financing schemes. This can include creation of a Blue Economy Investment Facility or other innovative investment structures that use blended finance approach to reduce risk and attract a mix of public and private investment;
- Sustainable solutions for integrated Sustainable Land Management and restoration of degraded production landscapes.

While detailed demonstrations projects will be identified and validated during the PPG phase to ensure consensus and alignment with up-to-date country needs, the following demonstrations have been identified in several of the participating countries:

Cabo Verde

In 2021, the Natural Park of Baía do Inferno and Monte Angra (PNBIMA), located on the island of Santiago, has been promulgated. PNBIMA has a total area of 21,096 hectares, with 3,626 hectares of land and 17,470 hectares of marine part. In addition to the geological and scenic value, this zone is particularly important for Biodiversity. Five of the eight species of seabirds that nest in Cabo Verde are present in Baía do Inferno and the populations of two of those species, *Sula leucogaster* and *Phaethon aethereus*, are particularly numerous and relevant, both at national and regional level. This zone is both classified as an Important Bird Area (IBA) and a Key Biodiversity Area (KBA). The marine part is equally rich in Biodiversity with cetaceans, sea turtles, and a significant diversity of invertebrates and plants. A large proportion of the population living in PNBIMA relies on artisanal fishing and family livestock and remain in extreme poverty. This project will improve the integrated management in the PNBIMA, through the development and implementation of a co-management approach, promoting sustainable artisanal fishing activities, nature tourism activities, capacity building and entrepreneurship, identifying and promoting sustainable economic activities associated with the blue and green economy, which will largely benefit and contribute to the development of the local populations.

Comoros

Fisheries in Comoros are primarily small-scale in nature with an estimated annual production of about 10 000 tons. Before the denunciation of partnership agreement with EU in 2019, after the country was identified “as a non-cooperating third country in fighting IUU fishing”, Comoros was earning USD 1.3 million every year from foreign fisheries access licenses. Inland fishing is extremely limited and aquaculture is nonexistent. Although fishing plays an important role in the country’s food security, with an estimated consumption per capita of 25.2 kg in 2011, unsustainable, destructive fishing practices in Comoros compromise the sustainability of fishery resources, leading to food insecurity to the detriment of vulnerable groups, notably the majority of fishermen.

The national development strategy adopted by the Government of Comoros in 2019 (Plan Comores Emergent - PCE) puts an emphasis on several sectors including the development of aquaculture, which would not only reduce pressure on marine resources but also provide products for export. The development of aquaculture would enable communities to benefit sustainably from the enormous potential of the country's ocean's resources, stimulate investments from the private sector, ensure regular income and food security for the most vulnerable groups while respecting the rules of sustainable fishing.

In Comoros, the demonstration project will aim at demonstrating the environmental, social and economic benefits of developing sustainable integrated multi-trophic aquaculture to enhance the marine ecosystem health and improve food security for the benefit of coastal communities of at least one MPA (the National Park of Mitsamihouli-Ndroudé) with the possibility to replicate in 3 additional MPAs. The project builds both the resilience of the ecosystem and the resilience of coastal communities that are highly vulnerable to climate change and affected by the restrictions of the newly created marine protected areas legislation, through the development of Blue Economy potential within the framework of marine spatial plans within the exclusive economic zones. The demonstration would incorporate several dimensions, including:

- Introduction of in situ and ex situ sustainable aquaculture for the benefit of local communities of the National Park of coelacanth, the National Park of Mitsamihouli-Ndroudé, the National Park of Shissiwani, and the National Park of Mohéli. A third party certification that incorporates biodiversity considerations will be sought.
- Experimentation of a value chain approach in the fisheries sector;
- Creation of decent jobs and sustainable income, especially for coastal communities that are highly vulnerable to climate change;
- Contribution to the country's demand in terms of animal proteins, thus contributing to fighting against malnutrition, especially for the most vulnerable;
- Introduction of new socially and environmentally responsible technologies, including marketing techniques based on digital technologies;
- Reduction of the pressure of communities on coastal and marine resources;
- Opening a sector traditionally exploited by men to women.

Guinea-Bissau

The government of Guinea-Bissau is working on the creation of Biosphere Reserve in the area of Cacheu River which would expand the extent of the Natural park of Tarrafes of Rio Cacheu to include the islands of Jeta and Pecixe and the surrounding marine environment. The demonstration project would focus at enhancing the efficiency of the protected areas of Cacheu River through the implementation of an integrated approach targeting Illegal Unreported, Unregulated (IUU) fisheries in the marine area. The intervention would include the following actions:

- Supporting the rehabilitation of the ecosystems of Jeta, Pecixe and Cacheu;
- Training the park guards and raise awareness of the local communities including fishermen to the regulations;
- Strengthening Monitoring, Control and Surveillance capacities of the government including through the use of better navigation and communication equipment, night surveillance equipment and drones.

Maldives

Fishing in Maldives is a key economic activity, the largest source of employment, and the main exporter of physical products. The pilot in Maldives is not finalized yet but will pertain to strengthening diversification in the fisheries through the development of SMEs, mentoring, and upscaling. Namely, through a facilitated access to finance and markets and capacity building of new and young entrepreneurs.

São Tomé e Príncipe

The São Tomé e Príncipe demonstration project to be funded by this regional initiative will focus on the following activities, which will be further detailed with targets and cost assessments during the PPG phase.

Land Degradation: Promotion of sustainable use of fertilizers, pesticides, and other phytochemicals in the vegetables sector in the district of Mezochi and smaller urban areas. The focus will be put on supporting small holder producers to increase the area of organic vegetable production by developing the value chain of organic vegetables including ensuring farmers’ access to pest resistant varieties, access to organic fertilizers, establishing a network of organic

vegetable producers and involving the private sector to improve commercialization of organic products in the domestic market. This will locally reduce agriculture origin pollution in the Guinea Current Large Marine Ecosystem.

International Waters: Sustainable fisheries of coastal communities in provinces of Lobata, Agua Grande, Me -Zoxi and part of Cantagalo downstream of where the demonstration project on land degradation will be implemented.

Seychelles

The pilot for Seychelles is not yet defined. However, there are currently no facilities for marine extraction and R&D related to bioresources. One of the priorities of Seychelles' Blue Economy department is to develop and establish a Marine Biotechnology Industry. This would involve the assessment of the potential of marine biotechnology and supporting the creation of MSMEs and help them turn marine bioresources into marketable products.

Component 3: Monitoring and Evaluation, knowledge management and upscaling

Outcome 3: Innovative solutions and best practices supporting the sustainable Blue Economy transformation and Sustainable Land Management, documented, shared and upscaled across Atlantic and Indian Ocean SIDS and beyond

This component will first ensure the timely Monitoring and Evaluation (M&E) of the project to inform adaptive management for successful delivery of the results. This would include a MTR and TE with a M&E system in place by Month 3 (a maximum of 3% of the GEF financing will be dedicated to M&E).

SIDS share similar development and environmental challenges and opportunities. Exchanging knowledge can help them learn lessons and scale-up successful templates. As a matter of fact, sharing of Blue Economy initiatives at the regional level among SIDS has been encouraged in the declaration of the Conference of Foreign Affairs Ministers of the African Small Island Developing States and Madagascar held in Praia, Cabo Verde in 2016. The outcome 3 will support national stakeholder consultations and the development and dissemination of knowledge products (project results, innovative solutions, best practices, and lessons learned from the 7 sustainable Blue Economy and 1 SLM demonstrations) at national, regional and global levels including project participation in IW:LEARN portfolio of learning activities and events related to the United Nations Decade of Ocean Science for Sustainable Development. More specifically, the project will be allocating 1% of GEF IW grant financing to support the project's participation in IWLEARN events, both regional and global, production of learning and experience notes (at least one of each on an annual basis), hosting and ensuring updating a project website, that links to IWLEARNs site and finally, financing PCU and government representatives' participation in the IWC when it is hosted throughout the project's implementation. In addition, existing global networks will be used for the identification and dissemination of innovative solutions and best practices from a global to a local level including UNDP's Accelerator Labs, Ocean Innovation Challenge and GEF SGP. Finally, an information exchange network for AIO SIDS will be created to facilitate knowledge exchange and promote policy coherence. To support this process, a knowledge management strategy will be developed during the inception phase of the project.

In São Tomé e Príncipe, the project will partner with International Centre for Tropical Agriculture (CIAT) to improve research and data generation on the use of chemicals in vegetables production, including impact on human health and the ecosystem; integrate lessons learnt and results achieved into a revised and enhanced LDN targets document, which will also include a specific workplan and list of tasks and corresponding responsible institutions; improve the availability of data on water quality and on the impact of pollution in waterways and sea due to the use of agrochemicals and other anthropogenic pollutants; increase and deepen analysis on the impact of use of agrochemicals on biodiversity in waterways and sea as well as on human health of vulnerable communities.

1) alignment with GEF focal area and/or Impact Program strategies

This project will tackle the root causes and barriers to inclusive and sustainable Blue Economy transformation and integrated Sustainable Land Management and restoration of degraded production landscapes in Atlantic and Indian Ocean SIDS. It is aligned with the GEF-7 International Waters focal area key objective 1 strengthening national Blue Economy opportunities to reduce threats to marine and coastal waters as well as the Land Degradation focal area key objective 1 support on the ground implementation of SLM to achieve LDN and key objective 2 creating an enabling environment to support voluntary LDN target implementation. The first component of the project will strengthen the enabling conditions by developing and implementing sustainable Blue Economy and LDN policies and plans, stimulating private sector engagement through innovative financing mechanisms, and developing capacity at the national level. The second component of the project will develop and implement demonstration replicable models aimed at: sustaining healthy oceans, restoring degraded

agricultural landscapes, supporting fisheries management, addressing marine pollution (e.g., agricultural run-offs), and fostering new and innovative Blue Economy opportunities (e.g., sustainable aquaculture). The last component of the project will ensure that best practices and innovative solutions are shared and replicated at national and regional level through a strengthened stakeholder collaboration and through IW:LEARN.

2) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Previous baseline investments from participating countries, GEF, and other donors have been instrumental in understanding pressures on marine ecosystems in Atlantic Indian Ocean SIDS and the corresponding LMEs, namely through the preparation of several Transboundary Diagnostic Analyses.

These investments have also allowed the development and implementation of Strategic Action Programmes to address these pressures and other priority root causes to environmental degradation including poor ocean management, climate change, pollution reduction, and overexploitation of marine resources.

In addition, as the Blue Economy agenda is gaining momentum globally and among the SIDS, nearly all participating countries have developed some level of Blue Economy frameworks. At the national level, there is a considerable number of planned or ongoing interventions and the indicative co-financing identified at this PIF stage is USD 63,275,044 including contributions from UNDP, SIDS governments, bilaterals, multi-laterals, NGOs, the private sector, and other stakeholders. The planned interventions include raising awareness and building national capacity, strengthening governance approaches, restoring marine ecosystems and the services they provide, diversifying economic activities, developing spatial planning frameworks, and for some SIDS, introducing innovative financing mechanisms to support the implementation of these plans (e.g., Cabo Verde).

However, even with these interventions, a number of constraints will still limit the full transition to an inclusive sustainable Blue Economy in AIO SIDS. Namely, institutional fragmentation and uncoordinated approaches at both the national and regional levels, lack of appropriate data for integrated evidence-based planning, and lack of innovative business opportunities. In addition, the COVID-19 crisis, particularly impactful in AIO SIDS, is making financial resources, namely public, less available to address pressing threats and challenges.

In absence of this GEF intervention, the baseline scenario will prevail, with patchy interventions and a sectoral and geographical siloed approaches. The Blue Economy transformation would be slower and less cost effective, limiting SIDS abilities to take full advantage of their Blue Economy potential which in turn, will exacerbate the unsustainable use of natural marine resources and hinder socio-economic development. With increasing impacts of climate change and anthropogenic impacts, this situation would result in increased risks on the environment.

Building upon the crucial processes that are taking place at the national and sub-regional levels and upon the baseline investments from the SIDS and other donors, the alternative scenario with the requested GEF financing is expected to accelerate the Blue Economy transformation in AIO SIDS to protect marine resources while supporting inclusive and sustainable economic growth, employment, and food security.

The GEF intervention will be focused on consolidating the Blue Economy transformation “building blocks” available in the different SIDS through a combination of national and regional interventions. Having a regional project, rather than multiple national interventions for AIO SIDS, that face similar challenges and opportunities, will encourage integration, more effective experience sharing, and economies of scale.

More specifically, and at the national level, the GEF investment will strengthen the institutional, regulatory, and capacity frameworks to create proper Blue Economy and LDN enabling environment. Targeted national investments will test new and innovative models to advance protection and restoration of coastal, marine, and agricultural ecosystems while diversifying and sustaining economies. This GEF project will also contribute to developing sustainable innovative finance mechanisms to catalyze public and private investments in sustainable and inclusive Blue Economy.

At the regional level, The GEF intervention will bolster an effective knowledge sharing and learning among the participating SIDS. The experience sharing of lessons learned for the demonstrations in each county will provide a holistic view on of sustainable Blue Economy interventions under different contexts and will make available several successful templates for replication and up-scaling. Finally, the intervention will encourage collaboration among governments and regional and national stakeholders to accelerate the transition to an inclusive sustainable Blue Economy.

3) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The regional AIO BE project will contribute to the delivery of improved natural resource management frameworks through inclusive and sustainable Blue Economy transformation which will result in improved provision of agro-ecosystem goods and services, reduced nutrient and pesticide pollution of international waters, restored and sustained coastal, and marine ecosystems goods and services, as well as maintained capacity of natural systems to sequester carbon. Ultimately, the project will contribute to SIDS' sustainable development.

More specifically, and at the national level, the project will contribute to the following Global Environmental Benefits as quantified via the GEF Core Indicators::

Core indicator 2 (Marine protected areas created or under improved management for conservation and sustainable use), sub-indicator 2.2 (Marine protected areas under improved management effectiveness specifically) through support to management effectiveness of MPAs in Guinea-Bissau, Cabo Verde and Comoros, where co-management approaches and new sustainable revenue generation opportunities (e.g., aquaculture) will be introduced in favor of local populations. Alignment of the ICZM protocols of both Nairobi and Abidjan conventions will be ensured at the national level policy work of outcome 1;

Core indicator 3 (Area of land restored), sub-indicator 3.1 (Area of degraded agricultural land restored) and Core indicator 4 (Area of landscapes under improved practices excluding protected areas) will be mainly addressed through the demonstration project in São Tomé e Príncipe which will focus on the promotion of sustainable use of fertilizers, pesticides, and other phytochemicals in the small-scale agriculture sector.

Core Indicator 5 (Marine habitat under improved practices), sub-indicator 5.1 (Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations) will be addressed through the introduction of sustainable aquaculture in Comoros and sub-indicator 5.2 through addressing agricultural run-offs in São Tomé e Príncipe.

All the participating countries will set-up a National Inter-Ministerial Steering Committees that will ensure the delivery on Core indicator 7 (cooperative management), sub-indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministerial Committees. In addition, the regional component of this project will ensure engagement in IWLEARN through a participation in training events, both at the regional and global levels, production of experience notes annually and provision of data, and participation and engagement in the GEF biennial International Waters conferences (sub-indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products).

A number of demonstrations will address fisheries sustainability and will deliver on Core Indicator 8 (Globally over-exploited fisheries Moved to more sustainable levels);

Finally, an estimated 23,178 beneficiaries will represent the delivery toward the Core Indicator 11 (Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment);

In addition to Core indicators, this regional project will directly address SDG 13 (Climate Change), targets 13.1, 13.2, 13.3, and 13.b; as well as SDG 14 (Life Below Water), targets 14.1, 14.2, 14.3, 14.5, 14.7, and 14.b. The project will also indirectly contribute to SDGs 1 (poverty), SDG 7 (Affordable and Clean Energy), SDG 8 (growth/work), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals).

4) innovation, sustainability and potential for scaling up.

Innovation

The three components of this project will introduce, and foster innovation as follows:

The Component 1 (Sustainable Blue Economy and Land Degradation Neutrality enabling conditions): will assist~~ing~~ countries in introducing novel regulatory and institutional frameworks intended to preserve and restore the health of the oceans and agricultural landscapes identify new sustainable economic sectors, and thus foster Blue Economy transformation. In addition, this component will aim at identifying and implementing innovative financial mechanisms, like blended finance, to attract private funding into inclusive sustainable Blue Economy sectors like aquaculture, marine biotechnologies, sustainable land management and marine conservation.

The Component 2 (On-the-ground national demonstrations of Sustainable investments) will identify, design, and test on-the-ground novel approaches and technologies for addressing unsustainable use of ocean, coastal, and land and/or 'new and additional' sustainable Blue Economy opportunities in the areas of sustainable fisheries, marine aquaculture, biotechnology, pollution reduction and the integrated Sustainable Land Management. More specifically, the project will introduce aquaculture in Comoros, support the restoration of degraded production landscapes through the development of a value chain for reduction of agrochemicals and valorization of organic production in São Tomé e Príncipe, support monitoring, compliance and surveillance with particular focus on combatting Illegal Unreported, Unregulated (IUU) fisheries in Guinea-Bissau, and supporting artisanal fisheries around MPAs through reinforced entrepreneurship in Cabo Verde.

Finally, the Component 3 (Monitoring and Evaluation, knowledge management and upscaling) will ensure the promotion of best practice exchange among Atlantic and Indian Ocean SIDS and beyond through an information exchange network aiming at the improvement of knowledge and management of available information. In São Tomé e Príncipe, information on the impact of agrochemicals on human health and land and marine ecosystems will be produced and used to update the country LDN targets and sustainable Blue Economy plans.

Sustainability

The integration of the project components into national plans and the participatory approach (local communities, SCOs, private sector, development institutions, donors) will ensure both ownership and sustainability of the project outcomes. In addition, capacity building and its incorporation into the Blue Economy strategies/plans will ensure local/national capacity is in place to ensure continuation. Best practice exchange will be supported through existing platforms and a new AIO network. Finally, the financial sustainability of the project outcomes will be ensured through the identification and development of new financial tools that would foster private investment.

In order to monitor and ensure the sustainability of the outcomes sought in the project, indicators will be identified, and adaptive management mechanisms will be put in place at the national and regional project governance levels. National governmental stakeholders will be encouraged to adopt these mechanisms into their national Blue Economy plans.

Scaling up

The component 3 of the project is designed to document, disseminate and upscale best practices and successful approaches and technologies within and across Atlantic and Indian Ocean SIDS. This will be facilitated through outreach, advocacy and awareness raising events namely through the IW:LEARN which will ensure experience sharing with other geographies to allow upscaling of successful models. Finally, private sector engagement will allow the upscale of successful investment-ready initiatives. In Comoros, two financial services providers including one commercial bank (Bank for Industry and Commerce) will financially support fishermen wishing to replicate the initiative. In São Tomé e Príncipe, private sector will be involved in commercialization of the organic vegetables.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

The project will take place in the following countries: Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé e Príncipe, and Seychelles (Annex A). Specific geo-referenced locations of demonstration projects will be determined during the PPG phase.



Geo-referenced map of participating Atlantic and Indian Ocean SIDS

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

During the PIF preparation, consultations were held with government stakeholders to ensure alignment with national priorities as well as regional and international commitments. In São Tome e Príncipe and Comoros, UNDP consulted the Government (different units and ministries involved) and Civil Society Organisations by organising meetings in which this initiative was presented. Stakeholders had the opportunity to manifest their approval and agreement to the proposed areas of intervention, and expressed their interest in participating at the PPG phase to finetune the activities that will be part of the final project to be submitted to GEF Secretariat for approval.

For other SIDS, CSO and Indigenous people were not directly consulted mostly because of the movement restrictions and precaution measures (government measures and UNDP measures) imposed by the COVID-19 pandemic. Instead, the project team relied on information collected during previous consultations done under other frameworks. In Cabo Verde numerous consultations were undertaken by UNDP and its partners for the development of a joint ocean-related SDG fund proposal. In Guinea-Bissau, information and priorities collected for the development of an Rapid Financing Facility project aiming at the development of a National Blue Economy strategy has been used. In Seychelles, as a PPG phase of a national Blue Economy project was ongoing, consultations for this specific project were delayed as to provide a most up to date information at the PPG phase. This information has helped shape the PIF in its current format. In Mauritius and Maldives, we relied on expert knowledge of our staff in the ground based on consultations of their on-going projects.

A stakeholder mapping will be developed during the PPG to identify relevant stakeholders, including local communities, CSOs, and private sector entities, to define their roles, level of influence, level of interest, and means of engagement. This mapping will be further refined during the inception phase of the project when a stakeholder engagement strategy will be developed.

During the implementation, and in each participating country, a National Inter-Ministerial Steering Committee (NSC) will be put in place to provide oversight and direction to the project activities at the national level. In addition, a National Management Unit (NMU), will be responsible for the day-to-day project implementation and during the implementation phase through the NSC and NMU.

Information on stakeholders that have already been consulted in Comores and São Tome e Príncipe is presented in Table 5.

Table 5. Indigenous peoples and local communities, Civil Society Organizations, and private sector entities consulted during the identification of the project intervention in Comoros and São Tome e Príncipe.

Country	Indigenous peoples and local communities	Civil Society Organizations	Private Sector Entities
Comoros	Fishermen/women and women involved in the seafood value chain in the Mitsamiouli – Ndroudé area Marine Park	Ulanga Tech (fish farming) and other local environmental NGOs	Union of Chambers of Commerce, Industry and Agriculture; Supermarkets (Sawa prix and Sara Market)
São Tome e Príncipe	-	National CSOs	-

The project is committed to, effective and informed stakeholder engagement in the identification and implementation of its interventions. All relevant stakeholders at all levels of society will be consulted during the PPG, especially for 1) Blue Economy assessments and planning activities in Component 1, 2) the identification and the design of the demonstration pilots of Component 2, and 3) the knowledge sharing that will target all stakeholder groups through means that will be identified in the stakeholder engagement strategy.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

The average labor force participation rate in AIO SIDS was 47 per cent for females versus 70 per cent for males in 2019. AIO SIDS ranked from 78th (Mauritius) to 133rd (São Tomé e Príncipe) globally according to their Gender Inequality Index^[1]. These statistics highlight the need to promote gender equality and women empowerment when implementing all of the policy, demonstration, and knowledge management components of this project. Studies show that most of SIDS remain poor and show high unemployment rate due to their particular remote geographical location, strong rooted traditions, and frequent natural disasters. Women are the most affected by these issues as in many instances they lack access to land and property ownership, get lower wages and lack job opportunities. Also, as in many other societies, women's involvement in certain livelihoods in SIDS is known to be limited by gender stereotypes and relations which limit them to take up certain livelihood options. For instance, in fisheries sector, women constitute about half the workforce. However, they do low-skilled, low-paid, seasonal jobs mainly fish processing for household consumption and market. Men are more frequently involved in high value fish and aquaculture harvesting. Also, studies show that women earn lower wages than men when carrying out the same work in aquaculture.

Whilst women often depend on the sustainability of local resources, as men do, they frequently have a minimal voice in the governance of those resources. For instance, in São Tomé e Príncipe, women are the most involved in the production of vegetables. However, while this sector, has a significant importance for small scale, family-led agriculture and for rural livelihood, women do not benefit from this work as they are less involved in the value chain and decision making. Women also face significant barriers to access bank credit, financial resources, technology, market information and entrepreneurial support. This gender inequality delays innovation, reduces productivity, and limits the potential for women to contribute in solving challenges facing vegetables value chain in the country.

A recent study of FAO revealed that when women are given rights, seeds, technical training, and access to markets, food productivity can rise by more than 20 per cent. Thus, it is imperative for this project to ensure that women are empowered to play more role in sustainable Blue Economy and sustainable land use management and that gender considerations are embedded in all project components. Gender dimensions relative to this project objectives include equal access to benefits from participating in policy reforms and capacity building on sustainable Blue Economy and sustainable land management; protection and restoration of marine protected areas and mangroves; development of ocean-based renewable energy; marine biotechnology; development of agricultural value chains, reduction of land-based and sea-based marine pollution; and creation of sustainable livelihoods opportunities such as eco-tourism, improvement of seafood value chains, sustainable aquaculture, green shipping, and Blue Economy innovative financing.

Gender and social inclusion will be considered in the project as a cross-cutting issues. Gender mainstreaming and women empowerment under this project will follow UNDP and UNOPS tools including a gender analysis that will be undertaken at the PPG phase to inform the development of gender-sensitive indicators in the project's logical framework. Apart from addressing issues of gender and women empowerment, the project will ensure youth and marginal groups are involved in all activities to achieve sustainable Blue Economy and sustainable land management. Based on the results of the gender analysis, the project will address gender-specific vulnerabilities across all components. For instance, it will ensure that women and men get equal access to finance, trainings, and awareness for socio-economic activities and will empower women to achieve equal socio-economic development and livelihoods opportunities from land, coastal and marine natural capita. Also, equal participation of men and women in decision-making forums and in capacity building activities will be encouraged. The project will ensure that at least women and men participate on equal basis by using training materials tailed to women needs and interests and by organizing trainings and meetings in venues accessible to women and at times that work for them. In addition, the project will work closely with women's groups at the project sites and qualified women will be encouraged to apply for positions under the project as per UNDP and UNOPS rules and regulations.

The gender action plan that will be developed at the PPG phase will provide guidance on tracking the involvement and contribution of women in sustainable Blue Economy and sustainable land management as part of the project Monitoring and Evaluation. Gender disaggregated data such as number of beneficiaries in pilot projects, number of participants in trainings, etc. will be produced annually by the Project Management Unit and included in the annual Project Implementation Report. The project impact on gender and women empowerment will be shared in lessons learned under national and regional networks and IW:LEARN and good practices will be scaled up in AIO SIDS and beyond. The project gender benefits, and women empowerment related activities will be detailed further at the PPG phase.

[1] No data for Seychelles, Comoros, and Guinea-Bissau

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

Sustainable Blue Economy planning should be an inclusive and transparent process relying on innovative financing mechanisms and private sector engagement. Several Blue Economy sectors like tourism, fisheries, shipping, and finance, are largely dominated by private stakeholders. As such, these stakeholders should be ~~addressed~~ consulted during for the development and implementation of policies (component 1), the design and implementation of pilot projects (component 2), and the knowledge management (component 3) components of the project.

The involvement of the private sector in the planning and implementation processes not only ensures their buy-in, but also grounds such work in the realities of commercial constraints guiding the private sector decisions. Private sector entities could provide a commercial insight into current barriers and opportunities to the development of commercially viable sectors during planning processes. In addition, they can support innovation through blended finance mechanisms. Finally, national demonstration projects will offer new business opportunities that can be replicated and up-scaled by private partners.

For example, the intervention in Comoros will involve consultations with the Union of Chambers of Commerce Industry and Agriculture, two supermarkets (Sawa prix and Sara Market), and financial service providers for identifying current barriers and opportunities linked to the development of the aquaculture sector. In addition, two financial services unions (Meck Union and Sanduk Union), and the Bank for Industry and Commerce will financially support fishermen wishing to replicate the initiative. In Cabo Verde, UNDP's Blu-X sustainable finance platform, will ensure the attraction of private sector funds to support the Blue Economy and economic diversification the Blue Economy.

A stakeholder mapping and engagement strategy will be developed during the PPG and further refined during the inception phase of the project. Private sector entities will be mapped and engaged accordingly during the project preparation phase.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Table 6. risk

Potential Risk	Risk rating (low, medium, substantial, high)	Mitigation Measure
Loss of governmental commitment	Low	<p>The project outcomes are integrated into national frameworks.</p> <p>The PIF has been prepared in consultation with respective governments and political ownership is secured. The PPG phase will be an opportunity to further engage government stakeholders and validate their commitment.</p>
Weak stakeholders buy-in and insufficient community mobilization and involvement in the project implementation	Low	<p>Stakeholders were consulted for the preparation of this PIF.</p> <p>A comprehensive stakeholder mapping will be developed during to identify relevant stakeholders, including local communities, CSOs, and private sector entities, to define their roles, level of influence, level of interest, and means of engagement. Community groups including women, youth, elders, indigenous people, people with disabilities and marginalized communities, will be contacted early in the PPG process to elicit their interest to participate in demonstration projects, policy processes and trainings.</p> <p>The mapping will be further refined during the inception phase of the project when a stakeholder engagement strategy will be developed.</p> <p>Relevant stakeholders will be part of the National Inter-Ministerial Steering Committee (NSC) to buy-in.</p>
Impacted livelihoods: the harnessing of Blue Economies will unintentionally exclude some groups affecting their livelihoods	Low	<p>Realizing sustainable and inclusive Blue Economies is the overarching objective of the proposed regional project. Special attention will be paid to the potential impacts of the proposed project interventions on the livelihoods of participating countries. Social and Environmental Safeguard Procedures will be applied during the project development phase, details of this risk will be identified, and appropriate risk mitigation measures developed and incorporated into the project design.</p>
Political instability	Medium	<p>The executing agency will monitor the political and socio-economic conditions to rapidly respond in case of risk.</p> <p>A diversified partnership would mitigate the risk of political instability.</p>
Impacts of Climate change: National Adaptation Programmes of Actions	Substantial	<p>Climate impacts are exacerbated by AIO SIDS low-lying geographies, limited land area, and high dependence on ocean resources. In particular, sea level rise is predicted to result in coastal inundation, habitat loss, and coastal flooding jeopardizing livelihoods of coastal communities. Climate change considerations will be integrated during the implementation of all projects components and a</p>

<p>on Climate Change (NAPAs) show that AIO SIDS are at a risk of climate impacts such as increasing temperatures, sea level rise, coastal erosion, salt-water intrusion, and increased frequency of extreme weather events.</p>		<p>will be integrated during the implementation of all projects components and specific activities to adapt to climate change will be developed. Potential site-specific climate risks will be screened during the identification of demonstration projects to ensure activities that may exacerbate these risks are avoided. Where it will be deemed necessary to keep such activities for the objectives of the project, site-specific mitigation measures will be put in place prior to the implementation of the demonstration project. Protection and restoration of marine protected areas and mangroves, land restoration and creation of sustainable livelihoods opportunities will enhance resilience of marine and agricultural landscapes to the impacts of climate change.</p> <p>-</p>
<p>Low institutional capacity of stakeholders to implement project activities</p>	<p>Medium</p>	<p>A gap assessment and appropriate capacity development programmes will be implemented at the regional and national levels to inform proper capacity development.</p> <p>The knowledge management component of the project will provide access to training and information sharing between experts and stakeholders involved in the project</p>
<p>Public health: 1) Lockdowns and travel restrictions at regional and national level and at project demonstration sites imposed by the COVID-19 pandemic 2) The impact of COVID-19 on AIO SIDS economy may cause the governments shift in priorities leading to reduced investment in Blue Economy and sustainable land management. See Annex E for detailed short and long term risks and opportunities presented by COVID-19</p>	<p>Substantial</p>	<p>1) Unless the pandemic will be eliminated by the time the project start, during the inception phase of the project, the Project Management Unit will develop strategies for mitigating COVID-19 impact on the project implementation. Where there will be travel restrictions, local NGOs, companies or individual consultants will be recruited to implement planned activities at national/local level. Trainings of project beneficiaries and other stakeholders will be organized virtually with training modules produced and shared with trainees ahead of time. Where on ground monitoring work will take place such as water quality measurements, data collection protocols will be developed, and virtual trainings of field teams will be organized. Also, online portals will be created for data entry and analysis. Furthermore, regional consultations will be organized virtually. To ensure good participation, an assessment on the capacity of key stakeholders to undertake virtual meetings and trainings will be conducted and where necessary the project will support them to get access to internet and other equipment and tools for online communication (this may include internet modems and computers). Where physical meetings will be inevitable, the project will ensure that participants get COVID-19 tests and/or vaccines.</p> <p>2) The project demonstrates the importance of sustainable Blue Economy and sustainable land management to economic recovery of AIO SIDS for long term.</p>
<p>Natural environment degraded: The pursue of Blue Economy diversi</p>	<p>Low</p>	<p>The objective of this project is to support inclusive and sustainable Blue Economy transformation in Atlantic and Indian Ocean SIDS. As several ocean economic activities can have negative impacts on the environment, due consideration will be paid to the proposed demonstration projects and proposed policies</p>

<p>fication and economic growth will lead to increased environmental degradation</p>		<p>on their environmental impacts: 1) appropriate awareness raising will first inform stakeholders and decision makers on the importance of the sustainability of the chosen Blue Economy sectors. 2) Social and Environmental Safeguard Procedures will be applied during the project development phase, details of this risk will be identified, and appropriate risk mitigation measures developed and incorporated into the project design.</p>
<p>Institutional conflicts over land use decisions constrain implementation of sustainable land use management activities in Sao Tome e Principe</p>	<p>Low</p>	<p>The project will ensure participation of all institutions involved in land use decision making including an intersectoral project boards during the PPG and implementation.</p>

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

UNDP will be the GEF Implementing Agency (GEF IA) and UNOPS the Executing Agency (GEF EA) of this project.

In each of the 7 participating SIDS, a **National Management Unit (NMU)**, headed by a national Project Manager, will be responsible for the timely implementation of work plans and for the day-to-day activities of the project at the national level and will have its own monitoring and evaluation system (Figure 2).

A **National Inter-Ministerial Steering Committee (NSC)** will provide oversight and direction to the project activities at the national level. The NSC will approve the project's work plan and budget, provide strategic guidance and decisions to the National Project Manager and ensure that the project is well coordinated with other regional and national initiatives and other co-financing activities to maximize the potential synergies. In each SIDS, relevant GEF financed projects/programs listed in Table 3, other bilateral/multilateral initiatives listed in Part I, table C, will be part of the NSC to ensure coherence (see below for a description of potential coordination with other initiatives). The composition of each NSC will be defined during PPG phase and refined during the project inception in consultation with relevant stakeholders. A specific attention will be given to ensure the participation of the private sector and CSOs in the NSC.

At the regional level, a **Regional Coordination Unit (RCU)** will coordinate the delivery of regional-level outcomes and assist the PMU in ensuring consistency and identifying regional synergies.

The RCU will be guided by a **Regional Steering Committee (RSC)** which will play a strategic, advisory, and monitoring role to ensure the successful implementation of the project at the regional level. The RSC will consist of the participating Governments, UNDP, UNOPS, and any other relevant partner. The membership and functioning of the RSC will be defined during the project preparation phase. The RCU will play the secretariat role to RSC.



Figure 3. Organizational structure of the project. Shaded components indicate the institutional level where coordination mechanism with relevant GEF financed projects/programs and other bilateral/multilateral initiatives are introduced.

Potential coordination with other relevant GEF financed projects/programs and other bilateral/multilateral initiatives

In Cabo Verde, the project is expected to work closely, and learn from the experience, of the following GEF-financed projects and programmes: Protection of the CC LME, Delivering Sustainable Environmental, Social and Economic Benefits in West Africa through Good Governance, Correct Incentives and Innovation, Towards Sustainable Management of the CC LME – Initial Support to SAP Implementation, and ISLANDS through the participation of FAO and UNEP in the NSC, which should reinforce the ambition of this project to support entrepreneurship in artisanal fishing and MPA. In addition, AECID, which will support the development of national capacities in the field of Innovation and research to promote Blue Economy will also be invited to the NSC to ensure synergies.

In Comoros, coordination with the following GEF projects will be sought through involvement of FAO and the WB in the NSC: SWIOFish, SAPPHIRE, Conservation of terrestrial and marine biodiversity, co-managed with local communities, Capacity-building for multisectoral, coordinated and decentralized environmental management to achieve the objectives of the Rio conventions in the Union of the Comoros, and ISLANDS. Other partners, with on-going activities, that should be engaged include the AfDB and WTO both currently supporting seafood value chains and trade, respectively, as well as Ocean 5 which is supporting socio-ecological resilience through ocean protection. All these activities are well aligned with the intended demonstration project aiming at the introduction of sustainable aquaculture to support coastal livelihoods.

In Guinea-Bissau, the participation of FAO and UNEP in the NSC will ensure proper coordination with various GEF-funded projects including: Towards Sustainable Management of the CCLME – Initial Support to SAP Implementation and ISLANDS.

In Maldives, the WB would be engaged in the NSC as it is currently supporting the improvement of fisheries management and the establishment of mariculture.

In Mauritius and Seychelles, UNDP is implementing a series of GEF-financed projects and national project coordinators will ensure proper information flow and exchanges as to encourage synergies. More specifically, close coordination will be ensured with the GEF-financed Blue Economy project in Seychelles (GEF-7 PIMS 6316 Seychelles Blue Economy).

In São Tomé e Príncipe, FAO, the European Union, the WB, UNEP and IFAD are all implementing GEF and non-GEF projects and will be directly involved in the project through participation in the National Inter-Ministerial Steering Committee.

For each participating SIDS, the specific scope of collaboration and extent of lessons sharing from each GEF-funded project and other multilateral and bilateral donors will be determined during the project preparation phase.

UNDP brings extensive experience in Blue Economy related projects, longstanding experience with participating SIDS (including the recent launch of UNDP's renewed SIDS Offer, "Rising up for SIDS"), and field presence both at the national and regional levels including in the framework of GEF-financed projects. This will facilitate coordination with GEF and non-GEF projects as well as with other donors, the private sectors and civil society.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The project has been designed in consultation with government stakeholders and will adhere to their national priorities and commitments to international conventions including: CBD National Biodiversity Strategies and Action Plans (NBSAP) and National Reports, UNFCCC National Communications, Nationally Determined Contributions (NDC) and National Action Programmes of Action (NAPA), UNCCD, and regional seas conventions (South Asian Seas Programme, Nairobi convention, and Abidjan convention). The table 6 indicates the dates of submissions and reporting under relevant international conventions.

Table 6. Dates of submissions and reporting under relevant international conventions

	CBD National Biodiversity Strategy and Action Plan (NBSAP)	CBD National Report	UNFCCC National Communications (NC)	UNFCCC National Determined Contribution	National Adaptation Programme of Action
Cabo Verde	2014	2015	2018	2021	2007
Comoros	1994	2016	2021	2021	2006
Guinea-Bissau	2015	2019	2011	2018	2006
Maldives	2016	2015	2018	2020	2008
Mauritius	2017	2021	2016		
São Tomé e Príncipe	2016	2014	2019	2021	2006
Seychelles	2015	2020	2021	2021	

In addition, the proposed project activities are anchored into national policies and plans of the participating SIDS as follows:

Cabo Verde:

Cabo Verde's National Sustainable Development Plan (PEDS 2017-2022) sets four structuring objectives:

- Make Cabo Verde a front runner in the Blue Economy transition in the Middle Atlantic;
- Ensure economic social and environmental sustainability;
- Ensure social inclusion and reduction of inequalities and social and regional asymmetries;
- Strengthen sovereignty, valuing democracy and directing diplomacy to the challenges of the country's development.

In addition, the project supports the Unified Strategic Framework for the Blue Economy (CASUEB), the National Investment Plan for the Blue Economy (PNIEA), the Blue Economy Promotion Program, and the Blue Economy Policy Charter (2020), which further set the following specific objectives:

- Promote female entrepreneurship, promote labor mobility in private and public sector and promote training in the business area.
- Support entrepreneurship and adoption of innovation and investment through new financing in new products, new markets and - chain values chains, and promote new decent jobs;
- Reduce environmental impacts and improve living conditions and livelihoods of the blue communities;
- Training for young people and women in employment and self-employment;
- Skills and employability through entrepreneurship development.

The proposed intervention consisting in a co-management approach promoting sustainable artisanal fishing activities, economic diversification, and capacity building and entrepreneurship in the newly created Natural Park of Baía do Inferno and Monte Angra will support the above national objectives.

Comoros

Comoros has adopted a strategic framework for a national Blue Economy policy to sustainably in 2018. In addition, the national development strategy adopted by in 2019 (Plan Comores Emergent - PCE) has defined the Blue Economy as one of the key priorities of the government. Among the challenges identified, the PCE puts an emphasis on the promotion of responsible fishing, the promotion of efficient value chains and the development of industrial processing, the setting up fishing centers in decentralized communities, including fishing equipment refrigerators, boats and other equipment for SMEs, cooperatives and fishermen and the development of aquaculture, which would not only reduce pressure on marine resources but provide products for export.

This project with the demonstration of the benefits of sustainable aquaculture is fully nested into the country's national plans.

Guinea-Bissau

Guinea-Bissau's national development plan does not directly feature green or Blue Economy, resulting in several missed opportunities. However, the development of the green/blue economies stands at the center of Guinea Bissau's integrated socio-economic response plan (SERP) to COVID-19. The proposed project to fight IUU around the Rio Cacheu area is aligned with the SERP as it will contribute to the sustainable use of natural resources for the socio-economic benefit of local communities. In addition, the project will contribute to the government efforts in extending the limits of the extent of the Natural park of Tarrafes of Rio Cacheu through the creation of a new Biosphere reserve in the same area.

Maldives

The Strategic Action Plan 2019-2023 (SAP) of the Government of Maldives is the main policy and planning framework. It consolidates the current Government's sectoral priorities and serves as the main implementation and monitoring tool to track the progress of the delivery of the Government's policies and development priorities. The SAP has identified Blue Economy as a national priority with Fisheries and Marine Resources, Aquaculture, Tourism, SMEs, Labor, Employment & Migration, and Economic Diversification as its key subsectors.

In Maldives, this project will support the sustainability of fisheries through the diversification and development of SMEs in line with the SAP.

Mauritius

The government of Mauritius has committed to developing the "Blue Economy" as pillar of its economic development strategy, with an objective to double the contribution of the Blue Economy to GDP by 2025. It has also developed an Ocean Economy roadmap to sustainably manage and coordinate ocean related activities.

The general objective of this project is in line with the government's priorities and the corresponding Blue Economy roadmap. The specific activities in Mauritius will be developed in a participatory fashion during the PPG phase but will remain anchored into the priorities defined in the national plans.

São Tomé e Príncipe

This project is directly linked to the national goal of reducing the use of chemical fertilizers is equally clearly established in two key national documents:

- STP's updated NDC mentions as a priority measure the reduced use of nitrogen-based fertilizers.
- STP's Land Degradation Neutrality targets include: by 2030, reduce by 25% the use of pesticides and chemical fertilizers, increasing the use of organic products by 25%.

Finally, addressing land based pollution sources like agricultural run-off, is aligned with São Tomé e Príncipe Blue Economy Transition Strategy approved in late 2019.

Seychelles

Seychelles has adopted a national Blue Economy Strategic Policy Framework and Roadmap (2018-2030) that is implemented through the office of the Vice President. The document is intended to facilitate the articulation of more detailed proposals for activities in key focus areas. The Blue Economy is also aligned with the National Development Strategy (2019-2023). Current Blue Economy strategic priorities include the development and establishment a Marine Biotechnology Industry, the exploration of a circular Economy industry, and the establishment of regional ocean research cooperation to maximize economic opportunities to Seychelles.

The specific intervention of this project related to the assessment of marine biotechnology and supporting the creation of biotechnology SMEs is in line with both the national Blue Economy Strategic Policy Framework and Roadmap (2018-2030) and the National Development Strategy (2019-2023).

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The outcome 3 of the proposed project is focused on Knowledge Management and will be based on a strategy to be developed during the PPG phase. The approach is to ensure that project results, innovative solutions, best practices, and lessons learned from the 7 sustainable Blue Economy, and 1 Sustainable Land Management demonstrations, as well as from best practices from other projects in SIDS, including UNDP's Accelerator Labs, Ocean Innovation Challenge and GEF SGP are disseminated at national and regional level for potential replication and upscaling. This will secure the sustainability of the project outcomes through strengthening the science-policy interface. An information exchange network will be specifically created for AIO SIDS to support information and experience sharing.

In addition, the project will be allocating 1% of GEF IW grant financing to support the project's engagement in International Waters Learning Exchange and Resource Network (IW:LEARN) with 1) the development of an active website in line with IW:LEARN guidance, 2) a strong participation in training/twinning events, both at the regional and global levels, and production of at least one experience note annually, and 3) the financing PCU and government representatives participation and engagement in the GEF biennial International Waters conferences and the provision of spatial data and other data points via project website. This would substantially contribute to the SIDS oriented Blue Economy knowledge within the IW:LEARN network.

Finally, an information exchange network for AIO SIDS will be created to facilitate knowledge exchange and promote policy coherence. To support this process, a knowledge management strategy will be developed during the inception phase of the project.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF

CEO Endorsement/Approval MTR

TE

High or Substantial

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Project Information

<i>Project Information</i>	
1. Project Title	Supporting sustainable inclusive Blue Economy Transformation in AIO SIDS
2. Project Number (i.e. Atlas project ID, PI MS+)	6528
3. Location (Global/Region/Country)	Atlantic and Indian Ocean SIDS (Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé and Príncipe, and Seychelles)
4. Project stage (Design or Implementation)	Design (PIF)
5. Date	21 August 2021

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?
<i>Briefly describe in the space below how the project mainstreams the human rights-based approach</i>
<p>For any economy to prevail, it should be inclusive and sustainable. However, although most of the SIDS participating in this project have developed Blue Economy frameworks, they still face inclusion challenges caused by institutional fragmentation and uncoordinated approaches. This limits their full transition to sustainable Blue Economies. The Covid-19 crisis has exacerbated the situation by making financial resources less available to address these constraints. This project aims at promoting inclusive and sustainable Blue Economy transformation in Atlantic and Indian Ocean SIDS with focus on improving existing Blue Economy sectors, identifying and pilot-testing new Blue Economy initiatives and consolidating the enabling environment. Therefore, it will ensure that no one is left behind in the design and implementation of interventions. This will enable the beneficiary SIDS to take full advantage of their Sustainable Blue Economy potential that will result in sustainable use of natural marine resources and increase their potential for socioeconomic development and reduction of poverty and inequity.</p>

Stakeholder engagement will be done by involving the project direct beneficiaries (including communities and indigenous people), Private Sector, Civil Society, Academia, government institutions in review and formulation of evidence-based policies, strategies, and implementation plans; development, testing and upscaling of sustainable Blue Economy best practices; and in documenting, sharing and upscaling innovative solutions and best practices supporting the sustainable Blue Economy transformation across Atlantic and Indian Ocean SIDS and beyond. To ensure that stakeholders have the technical capacity to support the Inclusive Blue Economy transformation, capacity development, advocacy, and awareness raising activities will be organized. Trainings will include thematic areas such as Blue Economy assessment and planning, innovative finance, private sector engagement, natural capital accounting, governance reform, and stakeholder engagement. National capacity development needs and target groups will be identified during the preparation and inception phases and trainings will be organized during the project implementation phase.

For instance, in the participating SIDS, several Blue Economy sectors like tourism, fisheries, shipping, finance, and marine biotechnology are largely dominated by private stakeholders. As such, this project will ensure that these stakeholders are engaged in the development and implementation of policies (component 1), the design and implementation of pilot projects (component 2), and the knowledge management component of the project. Private engagement opportunities, namely target groups, will be sought during the preparation phase.

Stakeholder, Gender Equality and Social Inclusion Analyses will be undertaken during the preparation phase of the project. The resulting Stakeholder Engagement Plan and Gender Action Plan will detail some of the structural challenges that indigenous people and vulnerable groups including women, youth, the elderly and people with disabilities face in the participating SIDS. Also, these plans will provide recommendations to ensure that the project will generate socio-economic benefits to these community groups and will empower them to participate in decision-making in the Atlantic and Indian Ocean SIDS.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

In many societies, women's involvement in certain livelihoods is known to be limited by gender stereotypes and relations which limit them to take up certain livelihood options. The average labor force participation rate in AIO SIDS, was 47% for females versus 70% for males in 2019. AIO SIDS ranked from 78th (Mauritius) to 133rd (Sao Tome and Principe) globally according to their Gender Inequality Index. These statistics justify the need to promote gender equality and women empowerment when implementing all of the policy, demonstration, and knowledge management components of this project.

A gender analysis will be conducted during the project preparation phase and based on the findings; a gender action plan will be developed. The action plan will provide a high-level framework for ensuring that the inclusive sustainable blue economy interventions are fully gender responsive. It will enumerate key gender actions that will be mainstreamed under each project output and recommendations that will help to address issues affecting women in the beneficiary SIDS. With this, output indicators in the project document will be gender disaggregated to the greatest extent possible.

The gender action plan will be refined during the first six months of project implementation and operationalized to ensure that women, men, youth and any other vulnerable groups benefit equitably from the project outputs. When the demonstration projects will be identified, and specific activities defined for implementation at specific sites, clear activity-level targets will be set for representation of women, indigenous people, and other vulnerable groups such as the youth (with adequate consideration given to both young women and men), the elderly, people with disability. The project will therefore ensure that gender m

mainstreaming and SESP requirements are met as an integral part of the project implementation, monitoring and evaluation and a corresponding budget will be allocated.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The objective of this project is to support the development and realization of sustainable blue economies in Atlantic and Indian Ocean SIDS through improved governance, national blue economy demonstrations, and knowledge management. This objective focuses on sustainability and resilience. Also, all project components mainstream sustainability and resilience through:

i) Strengthening the enabling environment for the sustainable Blue Economy transformation at the national and regional levels. Under this component, the project will support the recipient SIDS to develop and adopt strategies/plans, policy and institutional reforms. Where lacking, innovative financing frameworks intended to foster private sector engagement will be introduced. Activities related to capacity building, awareness raising and advocacy will also be implemented to ensure that stakeholders are committed to and have the technical capacity to support the Blue Economy transformation.

ii) Implementing inclusive sustainable Blue Economy pilots one in each recipient SID to deliver on-the-ground solutions to Blue Economy challenges. These demonstration interventions will be developed around Ecosystem protection by improving marine habitat management; area-based conservation measures and supporting the restoration of degraded habitats; sustainable fisheries management; new and additional sustainable Blue Economy opportunities and alternative livelihoods; reduction of land-based and sea-based marine pollution and blue economy innovative financing schemes.

iii) Documenting, sharing and upscaling innovative solutions and best practices that support the sustainable Blue Economy transformation across Atlantic and Indian Ocean SIDS and beyond. The project will support national stakeholder consultations and the development and dissemination of knowledge products (project results, innovative solutions, best practices, and lessons learned from the 7 sustainable Blue Economy pilots) at national, regional and global levels. This includes project participation in IW: LEARN platform; using other existing networks such as UNDP's Accelerator Labs, Ocean Innovation Challenge and GEF SGP to disseminate innovative solutions and best practices; and creating an information exchange network for the recipient SIDS to facilitate knowledge exchange and promote policy coherence.

As described above, the project supports for development of mechanisms and tools that will enable the recipient governments to identify key barriers to achieving inclusive sustainable blue economy and necessary frameworks and actions that would help to better manage shocks. Also, it will help to address site-specific challenges linked to sustainable use and management of natural resources. Thus, improved resilience of the site-specific communities to potential shocks that result from disruption of ecosystem services provisioning. Furthermore, documenting and sharing good practices will help for replication and scale-up of the project achievements.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project will engage a wide range of stakeholders from the conception to the closure stage to ensure synergies and complementarity and that activities address real and priorities issues without jeopardizing the interests of vulnerable groups. At the PIF level, a quick mapping of stakeholders was undertaken and the project idea is being developed in consultation with stakeholders at different levels including multilateral/international (UNEP, UNOPS, FAO, WB), national

...the project is being developed in consultation with stakeholders at different levels including international (national, regional, sub-national), national (the 7 governments and their relevant agencies), and sub-national stakeholders (including local communities, farmers, CSOs, Private Sector, fisheries companies, academia, etc.).

Further mapping and consultations will be made at the project preparation and project implementation phases. For instance, local communities, indigenous people, women, men and youth will be actively engaged in the design and implementation of demonstration project in each of the 7 recipient SIDS. Also, several Blue Economy sectors that this project will support such as tourism, fisheries, shipping, finance, and marine biotechnology are largely dominated by private stakeholders. As such, these stakeholders will be further engaged to inform the development and implementation of new blue economy policies and regulations, the design and implementation of pilot BE projects and the knowledge management.

At the project preparation phase, a stakeholder analysis will be undertaken, and a stakeholder Engagement Plan developed to ensure that all relevant stakeholders are fully engaged during the project implementation. The Grievance Resolution Mechanism (GRM) and the national and regional knowledge sharing platforms are the important tools that will ensure project accountability to stakeholders. The GRM will be included in the Stakeholder Engagement Plan to provide guidance on how stakeholder grievances shall be handled within the scope of this project. The project implementation team will ensure that stakeholders, beneficiaries, and all those who will be impacted by the project are informed of the GRM during the PPG and project implementation phases. Also, the national and regional knowledge sharing platforms will be established during the project implementation phase to share project information, data, reports and lessons learned.

Part B. Identifying and Managing Social and Environmental Risks

<p>QUESTION 2: What are the Potential Social and Environmental Risks?</p> <p><i>Note: Complete SESP Attachment 1 before responding to Question 2.</i></p>	<p>QUESTION 3: What is the level of significance of the potential social and environmental risks?</p> <p><i>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</i></p>			<p>QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High</p>
<p>Risk Description <i>(broken down by event, cause, impact)</i></p>	<p>Impact and Likelihood (1-5)</p>	<p>Significance <i>(Low, Moderate Substantial, High)</i></p>	<p>Comments (optional)</p>	<p>Description of assessment and management measures for risks rated as Moderate, Substantial or High</p>
<p>Risk 1: There is a risk that marginalized and vulnerable groups including indigenous people, women, people with disabilities and marginalized youth m</p>	<p>I = 3 L = 3</p>	<p>Moderate</p>	<p>Vulnerable groups and women generally lack knowledge and self-confidence to articulate their own issues and need</p>	<p>To mitigate this risk, Gender Analysis and Stakeholder Engagement analysis will be conducted at the project preparation phase to better understand this risk. Specific mitigation measures in relation to women, youth, neo</p>

<p>may be excluded from all project activities including capacity-building and on site demonstration projects (which will be identified during the PPG phase) such as fisheries, green shipping, aquaculture, innovative finance, etc.</p>			<p>s. These barriers are especially evident with elderly women and people living with disability, who have not attended formal education.</p> <p>Almost 60% of Africa's population is under 25. Youth inclusion in this project is very important to ensure sustainability.</p>	<p>people with disabilities, indigenous people and other vulnerable groups will be included in Comprehensive Gender Action Plan and Stakeholder Engagement Plan that will be executed during the project implementation.</p> <p>Also, a Grievance Resolution Mechanism (GRM) will be developed during the initiation phase of the project.</p>
<p>Risk 2: There is a risk that, in the absence of mitigation measures, demonstration projects that have not yet been identified may have negative impacts on local communities and workers, biodiversity, cultural heritage, land use, water quality and climate.</p>	<p>I=4 L=4</p>	<p>Substantial</p>	<p>7 sustainable Blue Economy pilots are planned under this project, one in each participating SIDS. The identified indicative areas, with details to be determined during the project preparation phase are:</p> <p>Sustaining healthy marine ecosystems (MPA, MSP, LMMA s, habitat restoration, etc.); Sustainable fisheries management; Marine pollution reduction (land-based or sea-based); New and additional blue economy opportunities (aquaculture, marine genetic resources, ocean-based energy, green shipping, etc.).</p>	<p>To manage this risk, during the project preparation phase, based on extensive consultations with local communities and other stakeholders, the SESP will be applied at the site of each demonstration project as part of the process for selecting the appropriate location and focus. An ESMF will be prepared to outline the further assessments that are needed for each demonstration project, supplemented by an IPPF for each country where Standard 6 (Indigenous Peoples) is triggered.</p>
<p>Risk 3: There is a risk that, in the absence of mitigation measures, the process of engaging private sector actors in establishing the blue economy innovative financing schemes and other p</p>	<p>I = 4 L = 3</p>	<p>Substantial</p>	<p>Considering that blended finance is a new concept, it may be challenging for some institutions to fully engage stakeholders</p>	<p>To mitigate this risk, during the project preparation phase, a Private Sector expert will be hired to develop a Private Sector Engagement Plan</p>

<p>project activities may not be as inclusive as required, which could limit the opportunities for some of private sector actors to support or benefit from the schemes and project activities</p>				
<p>Risk 4: There is a risk that, in the absence of mitigation measures, evidence-based strategies, plans and financing mechanisms that support Land Degradation Neutrality and sustainable Blue Economy and other upstream activities may have environmental and social impacts.</p>	<p>I= 4 L= 3</p>	<p>Substantial</p>		<p>To mitigate this risk, the project will be designed such that a Strategic Environmental and Social Assessment (SESA) will be undertaken for developing all strategies, plans and financing mechanisms that support Land Degradation Neutrality and sustainable Blue Economy.</p>
<p>QUESTION 4: What is the overall project risk categorization?</p>				
<p><i>Low Risk</i></p>		<p><input type="checkbox"/></p>		
<p><i>Moderate Risk</i></p>		<p><input type="checkbox"/></p>		
<p><i>Substantial Risk</i></p>		<p><input checked="" type="checkbox"/></p>	<p>The project is given the “Substantial” overall risk categorization given its general nature. Most of activities will be demonstration pilots with half of the total budget (USD 4,367,558), which will be identified during the PPG.</p>	
<p><i>High Risk</i></p>		<p><input type="checkbox"/></p>		
<p>QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)</p>				
<p>Question only required for Moderate, Substantial and High Risk projects</p>				
<p><i>Is assessment required? (check if “yes”)</i></p>	<p>X</p>		<p><i>Status? (completed, planned)</i></p>	
<p><i>if yes, indicate overall type and status</i></p>		<p>X</p>	<p>Targeted assessment(s)</p>	<p>Planned: Stakeholder Analysis; Gender Analysis and Private Sector Engagement analysis</p>

				s during the project preparation phase.
		<input type="checkbox"/>	ESIA (Environmental and Social Impact Assessment)	To be confirmed during the project preparation phase
		<input checked="" type="checkbox"/>	SESA (Strategic Environmental and Social Assessment)	Planned at the Project Preparation Phase
Are management plans required? (check if "yes")	X			
<i>If yes, indicate overall type</i>		<input checked="" type="checkbox"/>	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	At the project preparation phase, planned: Gender Action Plan, Stakeholder Engagement Plan, Private Sector Engagement Plan, Indigenous Peoples Plan/IPPF (if required).
		<input type="checkbox"/>	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	The need for site-specific ESMPs will be determined through screening of proposed demonstration pilots.
		<input checked="" type="checkbox"/>	ESMF (Environmental and Social Management Framework)	An ESMF or a similar framework will be developed at the project preparation phase.
Based on identified risks, which Principles/Project-level Standards triggered?				Comments (not required)

<i>Standard triggered:</i>		
<i>Overarching Principle: Leave No One Behind</i>		
<i>Human Rights</i>	X	
<i>Gender Equality and Women's Empowerment</i>	X	
<i>Accountability</i>	X	
<i>1. Biodiversity Conservation and Sustainable Natural Resource Management</i>	X	
<i>2. Climate Change and Disaster Risks</i>	X	
<i>3. Community Health, Safety and Security</i>	X	
<i>4. Cultural Heritage</i>	X	
<i>5. Displacement and Resettlement</i>	X	
<i>6. Indigenous Peoples</i>	X	
<i>7. Labour and Working Conditions</i>	X	
<i>8. Pollution Prevention and Resource Efficiency</i>	X	

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

SESP Pre-Screening_PIMS 6528_AIO SIDS Blue Economy PIF 13 September 2021_clean

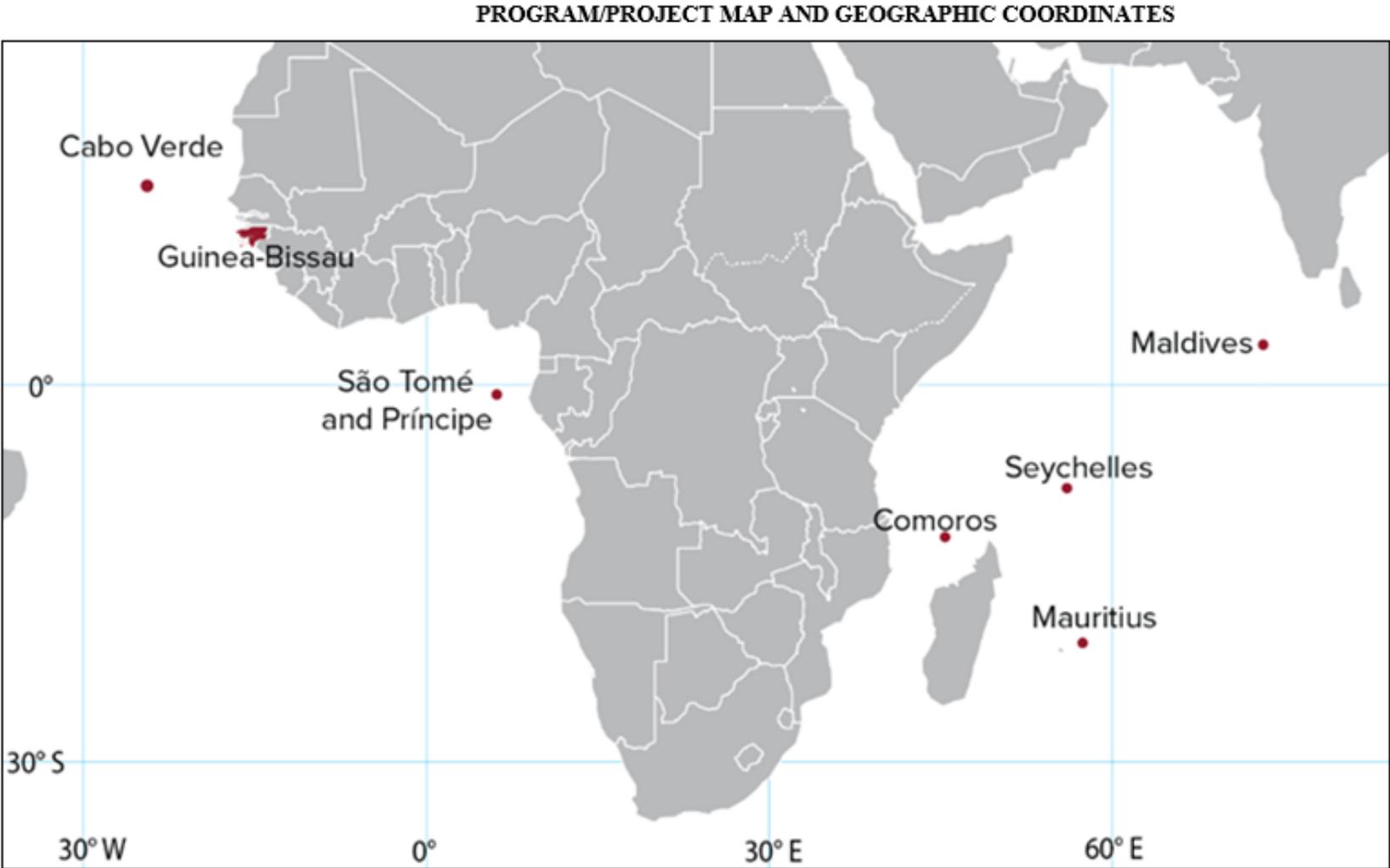
Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Youssouf Elamine	Director General of Environment and Forests	MINISTRY OF AGRICULTURE, FISHERIES AND FORESTS, Comoros	8/25/2021
Lourenco Antonio Vaz	Secretary General of the Ministry of Environment and Biodiversity	MINISTRY OF ENVIRONMENT AND BIODIVERSITY, Guinea Bissau	9/8/2021
Miruza Mohamed	Director	MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY, Maldives	8/26/2021
Dharam Dev Manraj	Financial Secretary	MINISTRY OF FINANCE, ECONOMIC PLANNING AND DEVELOPMENT, Mauritius	8/27/2021
Wills Agricole	Principal Secretary	MINISTRY OF AGRICULTURE, CLIMATE CHANGE AND ENVIRONMENT, Seychelles	8/17/2021
Alexandre Nevsky Rodrigues	National Director of Environment	MINISTRY OF AGRICULTURE AND ENVIRONMENT, Cabo Verde	7/30/2021
Lourenco Monteiro de Jesus	General Director of Environment	MINISTRY OF INFRASTRUCTURE AND NATURAL RESOURCES	9/30/2021

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place



Geo-referenced map of participating Atlantic and Indian Ocean SIDS

Annex B GEF 7 Core Indicator Worksheet

Annex C Project Taxonomy Worksheet

Annex D. Climate Risk Screening

Project Title: Supporting Sustainable Inclusive Blue Economy Transformation in AIO SIDS

Participating Countries: Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé e Príncipe, and Seychelles

GEF Agency project ID: 6528

Hazards	Exposure and sensitivity	Risk rating	Measures to manage risks
Rise of sea level	Mangroves, coral reefs, seagrasses, coastal lagoons and important beaches, freshwater and marine and coastal infrastructure are exposed to negative effects of the rise of sea level. The magnitude of exposure and sensitivity depends on their location. For instance, the impact on freshwater may be felt at long distances whereby rise of sea level may cause salt intrusion of ground water that may quickly be expanded in the aquifers. Also, the sensitivity and resilience of coastal and marine infrastructure will depend on preliminary considerations of climate change vulnerability while putting them in place. Those with less resistant materials will be more affected.	Low to high depending on magnitude of the exposure and sensitivity	A baseline assessment on climate proofing for all project interventions will be conducted at the PPG phase and will be updated at mid-term of the project implementation to find out the trends and adjust mitigation measures accordingly.
Increase in sea water temperatures	Marine stationary and migratory species including those important for local livelihoods (such as fisheries and tourism) and for marine ecosystem functioning (such as coral reefs) are highly exposed to negative effects of the increase in sea water temperatures. However, the sensitivity and adaptability may vary from species to species and the level of threat may depend on the population status (rate of decline, population size and fragmentation in species distribution).	Low to High depending on species	The project will mainstream climate change mitigation and adaptation in all its components and only interventions that enhance climate resilience will be supported. These include sustainable fisheries; clean energy; coral protection and rehabilitation; reduction of pollution in freshwater, marine and agricultural ecosystems; biodiversity
Changes in water current patterns	Connectivity of Marine Protected Areas and dispersal of planktonic stages of important species, renewal of coastal waters, feeding areas and livelihoods that depends on them (e.g., recruitment of bivalves and pelagic fish assemblages), and sedimentation processes and coastline integrity are highly exposed to changes in water current patterns and their intensity. The sensitivity depends	Medium	

	rent patterns and their intensity. The sensitivity depends on the type of the bedrock, species and location.		
Acidification and changes in water chemistry	Coastal livelihoods that depend on calcifying marine species such as bivalves, reef-building corals and plankton are exposed to vulnerability that may be caused by acidification and changes in water chemistry associated with the changing climate. The sensitivity may vary from location to location basing on trends in climate change impacts.	Medium	ecosystems, biodiversity conservation on land and below the water, restoration of coastal landscapes; etc. Also, green and blue bankable projects will be supported to increase the Private Sector participation.
Increase in weather variability and frequency of extreme weather events	In Sao Tome e Principe, crops including vegetables are exposed to increasing weather variability and frequency of extreme weather events such as river flash floods, droughts, storms. Vegetables that will be the crop of focus for the demonstration project in Sao Tome e Principe are sensitive to heavy rains and droughts. Since vegetables have short production cycles and the country has two seasons (long rain season and short dry season), this risk will be mitigated by ensuring that farmers timely plant seeds and where possible small-scale irrigation is used.	Low	Site-specific risk ratings and mitigation measures will be defined at the PPG phase once the demonstration projects will be confirmed, and local stakeholder consultations conducted.
Tropical cyclones and other natural disasters such as earthquakes and tsunamis	Project demonstration sites are exposed to tropical cyclones and other natural disasters such as earthquakes and tsunamis. The magnitude of exposure and sensitivity depends on the type and location of the demonstration project. Site specific mitigation measures will be developed at PPG phase.	Medium	
Increased intensity and frequency of sea storm surges	Coastal habitats, biodiversity and infrastructure, human lives are exposed to increased intensity and frequency of sea storm surges. The sensitivity depends on location and may vary from species to species with regard to biodiversity. Also, infrastructure sensitivity depends on material used.	Medium	
Shifts in climatic zones	Major ocean economic sectors like fisheries and tourism are exposed to shifts in climatic zones. Sensitivity varies from species to species	Low to high depending on species	

Annex E. Risks and opportunities in relation to the COVID-19 Pandemic

Project Title: Supporting Sustainable Inclusive Blue Economy Transformation in AIO SIDS

Participating Countries: Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé e Príncipe, and Seychelles

A. Potential Risks	Risk rating	Mitigation measures
<p>The reduction of governments' financial resources due to the prolonged measures to contain the COVID-19 pandemic may result in reduced co-financing to this project as the urgency may be to recover from the impact of this pandemic.</p>	<p>Moderate</p>	<p>All participating governments provided Letters of Endorsement signed by OFPs. This confirms their commitments to this project. Also, given the increasing number of people being vaccinated and resulting easing of containment measures, positive GDP growth is expected in 2022, and strong recovery in 2023. This means that limited co-finance represents a short-term and low risk that should be buffered through co-finance from other sources. For this, at the PPG phase, all Development Partners on blue economy and land management in AIO SIDS including NGOS and Private Sector will be mapped and engaged to ensure that all possible source of co-financing is contacted. Also, the project includes activities on blended finance and private Sector engagement to reduce the dependency of AIO SIDS on State and Official Development Assistance (ODA) annual budget allocations.</p>
<p>The viability of income generating activities such as fisheries, vegetable production and eco-tourism in demonstration sites may be compromised by prolonged economic slowdown resulting from the COVID-19 pandemic.</p>	<p>Low</p>	<p>The selection criteria of demonstration projects on income generating activities to receive funding will include financial sustainability and resilience to future shocks including pandemics. Also, the project will support interventions on blue and green recovery from the impacts of COVID-19. This may include supporting cooperatives of farmers with high economic recovery potential to get financing for sustainable production, support members of eco-tourism companies to get alternative livelihoods or to develop bankable projects to access support from national recovery funds, etc.</p>
<p>Poor communities and marginalized groups may not fully participate in the project implementation due to the impacts of COVID-19 on their livelihoods.</p>	<p>Low</p>	<p>At the PPG phase, the project will pay a special attention to poor communities and marginalised groups during stakeholder engagement meetings and field visits that will be organized to confirm demonstration sites. This will help to understand the impacts of COVID-19 on their livelihoods among other social issues and to identify opportunities for the project to contribute to addressing the impacts.</p>
<p>COVID-19 impacts on national economies and businesses may cause disruption of supply chains what may lead to unavailability of some products and services and/or increased costs.</p>	<p>Moderate</p>	<p>During the PPG phase, adequate budget will be allocated to accommodate possible price increases and necessary measures to avoid delays in outsourcing equipment, materials, and services. For instance, where international travels will not be possible, virtual consultations will be organized and local</p>

		consultants will be hired to support international consultants in organizing physical meetings with stakeholders and collecting data.
Travel restrictions to the project demonstration sites due to COVID-19 outbreak may delay the project implementation and lead to poor quality of the project results due to lack of appropriate technical expertise	Low	In addition to vaccinating the population above 18, AIO SIDS have put in place other measures to reduce the spread of the COVID-19 pandemic including centers of testing, use of masks, hand hygiene, etc. These measures will be used to ensure timely implementation of the demonstration activities should there be future COVID-19 outbreaks. Where it will be deemed necessary to bring in regional or international experts to support virtually, they will be paired with local experts who can conduct necessary field work and/or ensure that all participants have access to telecommuting facilities.
Restrictions on gatherings and travel due to new COVID-19 outbreaks may disrupt stakeholder engagement	Low	At the PPG phase, the project will develop protocols to mitigate possible transmission during stakeholder engagement meetings. These will be based on national directives and WHO best practices, such as social distancing measures; thresholds on numbers of participants in meetings; provision of Personal Protection equipment (masks, hand sanitizers, etc.) and provision of handwashing/sanitizing facilities.
Delays to implement the project activities due to high contamination rate of the project staff and/or stakeholders by the COVID-19.	Low	At the PPG phase, the project will develop protocols to be followed by project staff and engagement with stakeholders to minimize risks of contamination by COVID-19. Also, business Continuity Plans of the IP and Responsible Parties will be updated should there be future COVID-19 outbreaks, to ensure that only essential staff work from the office.
Limited participation of stakeholders in online meetings, trainings and workshops in case of new COVID-19 outbreaks due to lack of reliable telecommuting equipment and/or capacity.	Low	At the PPG and initiation phases of the project, an assessment on the capacity of key stakeholders to undertake virtual meetings and trainings will be conducted and where necessary the project will support them to get access to internet and other equipment and tools for online communication such as internet modems and computers. Where physical meetings will be inevitable, the project will ensure that participants get COVID-19 tests and/or vaccines.
Opportunities	Potential	Actions
Strengthening resilience through renewed commitments to sustainable development agenda and through blue and green recovery given that the impacts of COVID-19 pandemic have left a lesson to the governments, Civil Society, Private Sector and	High	The project will contribute to green recovery from the more immediate impacts of COVID-19 and will build longer-term resilience in the face of future COVID-19 outbreaks or other pandemics. COVID-19 reminded the global community that sustainable management of oceans and terrestrial ecosystems is key to the health of human beings. The project

donor community that there is an urgent need to link development, public health and environment protection.		will align interventions on sustainable blue economy and sustainable land management with recovery plans of participating countries.
To mitigate the impacts of COVID-19 pandemic, governments and stakeholders put in place new technologies that will continue to be used during after the recovery. Many of them such as telecommuting facilities will help to cut unnecessary spending on travels in the future what will curb carbon emissions and thus improved climate.	High	During the PPG and project initiation phases, assessments of the technological capacity of stakeholders will be undertaken and basing on the findings, a plan for virtual and hybrid meetings, workshops and trainings will be produced at the beginning of every year of the project implementation. The project will benefit from the telecommuting technologies in place to bring together stakeholders in the 7 participating SIDS that are geographically isolated in Project Steering Committee Meetings, knowledge management and information sharing events. Also, these technologies will be useful for developing online data collection, data entry and data analysis protocols with assurance that they will be used. protocols and data governance and progress tracking.
Increased awareness that unsustainable use of biodiversity affects human health and economic development and the need for more integrated programmes to reduce zoonotic diseases	High	All interventions under this project will be implemented using integrated approaches. These include source-to-sea pollution control, sustainable fisheries, restoration of marine and coastal ecosystems, etc.
COVID-19 was a reminder for diversification of revenue streams given that for instance economies that were depending on tourism are the most shaken by the impacts of the pandemic	High	This project has an important component on innovative finance that was requested by governments and other stakeholders. Activities includes developing innovative financing mechanisms for blue economy and Land Degradation Neutrality and putting in place conducive environment; and testing pilots through Public-Private Partnerships