



Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

Prioritising Biodiversity Conservation and Nature-based Solutions as Pillars of Seychelles' Blue Economy

Part I: Project Information

GEF ID

10535

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

☐ CBIT

☐ NGI

Project Title

Prioritising Biodiversity Conservation and Nature-based Solutions as Pillars of Seychelles' Blue Economy

Countries

Seychelles

Agency(ies)

UNDP

Other Executing Partner(s)

Ministry of Environment, Energy and Climate Change (MEECC)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Taxonomy

Focal Areas, Biodiversity, Mainstreaming, Certification -National Standards, Tourism, Species, Threatened Species, Financial and Accounting, Conservation Finance, Conservation Trust Funds, Protected Areas and Landscapes, Community Based Natural Resource Mngt, Coastal and Marine Protected Areas, Biomes, Sea Grasses, Coral Reefs, Mangroves, Wetlands, Influencing models, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Demonstrate innovative approach, Stakeholders, Local Communities, Type of Engagement, Participation, Partnership, Information Dissemination, Consultation, Communications, Education, Awareness Raising, Public Campaigns, Strategic Communications, Behavior change, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Beneficiaries, Private Sector, SMEs, Financial intermediaries and market facilitators, Individuals/Entrepreneurs, Large corporations, Gender Mainstreaming, Gender Equality, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Access to benefits and services, Access and control over natural resources, Knowledge Generation, Capacity, Knowledge and Research, Enabling Activities, Learning, Innovation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Duration

72 In Months

Agency Fee(\$)

470,727

Submission Date

3/21/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-2-7	GET	4,955,023	21,029,711
Total Project Cost (\$)		4,955,023	21,029,711

B. Indicative Project description summary

Project Objective

To conserve globally significant biodiversity through effective management of Seychelles' Marine Protected Areas system and the promotion of nature-based solutions as pillars of the Blue Economy

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthening the political and institutional framework for effective implementation of Seychelles' Marine Spatial Plan (MSP) and management of the expanded MPA system	Technical Assistance	<p>1.1 Strengthened strategic, political and institutional framework and capacity to implement Seychelles' MSP and govern the expanded MPA system</p> <p><i>Indicators:</i></p> <ul style="list-style-type: none"> - <i>Investment Framework and Strategy in place for financing of MSP and MPA system</i> - <i>Capacity development of actors to support MSP implementation and management of the expanded MPA system (number to be confirmed at PPG)</i> 	<p>1.1.1 Institutional, technical and financial capacity of the responsible Oceans Authority^[1] developed for effective governance of Seychelles' MSP process and expanded MPA system</p> <p>1.1.2 A strategic coordination mechanism is established to convene key agencies (MEECC, SNPA, SOA, Ministry of Finance, Trade Investment and Economic Planning, Ministry of Tourism, Aviation Ports and Marine, Office of the Vice President, NGOs, etc.) to agree on strategies for the long-term management and financing of the expanded MPA system framed by Blue Economy and Marine Spatial Planning objectives</p> <p>1.1.3 Institutional and technical capacity of MSP partner agencies (including Ministry of Environment, Energy and Climate Change (MEECC), Seychelles National Parks Authority (SNPA), etc.) developed for effective</p>	GET	950,000	2,735,660

management, enforcement and monitoring of the expanded MPA system

1.1.4 Investment Framework and Strategy^[1] for financing the expanded MPA system, developed and implemented in close coordination with Ministry of Finance

1.1.5 Capacities of Blue Economy financial services institutions (including Seychelles Conservation and Climate Adaptation Trust (SEYCCAT) and Development Bank of Seychelles (DBS)) strengthened

1.1.6 Capacities developed for the new Biodiversity Finance Unit to support implementation of Seychelles' Biodiversity Finance Plan

1.1.7 Public understanding and awareness of Seychelles' vision and strategy for the Blue Economy, MSP and MPA system are enhanced

^[1] This will build on the 'Financing Options to implement 400,000km² of new MPAs under the Seychelles Marine Spatial Plan' paper, which was prepared under 4656 Seychelles PA Financing project in 2019.

[1] As of the date of PIF submission, the scope and functions of the new Seychelles Oceans Authority (SOA) are under discussion. The proposed project will target its support to the authority(ies) that are eventually mandated to coordinate and adaptively manage implementation of the Seychelles Marine Spatial Plan. This assumption applies to every mention of the SOA within this PIF.

2. Strengthening management effectiveness of Seychelles' expanded MPA system	Technical Assistance	<p>2.1 Expansion and strengthened management of four priority conservation sites:</p> <p><i>Indicators:</i></p> <ul style="list-style-type: none"> - MPA landscape expanded from 201 ha to 367 ha - MPA landscape at 4 sites covering 2,579 ha under improved management (supports GEF Core Indicator 2) leading to improved METT scores - Conservation Management Plans developed/implemented for 4 sites - Funding/Business Plans prepared for 4 projects sites 	<p>2.1.1 Four priority sites expanded and management effectiveness enhanced in collaboration with communities and stakeholders:</p> <p><i>Expansion</i></p> <ul style="list-style-type: none"> - Iles Cocos Marine National Park[1] to include Felicité (from 86 ha to 167 ha) - Submission of nomination file to designate[2] Port Glaud Wetlands and Ramsar site[3] (from 120 ha under Ramsar protection to 200 ha) as a Zone 2 PA <p><i>Strengthened management</i></p> <ul style="list-style-type: none"> - Ste Anne Marine National Park (1,423 ha) - Aride Special Reserve (71ha terrestrial and 718 ha marine[4]) <p>2.1.2 Select PA managers (including SNPA, ICS and co-managers) trained and capacitated to effectively manage</p>	GET	2,010,000	9,239,184
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- *Populations of key species at pilot sites remain stable or increase (targets to be established during PPG)*

- *100 people receive capacity training in MPA management, including SNPA, private sector and NGO partners*

- *Increased # of successful enforcement actions (including number of illegal activities detected; number of arrests made; number of successful prosecutions) / convictions for violations of environmental regulations*

site-level MPAs with improved enforcement and monitoring

2.1.3 Management Plan and business/financing plans developed/updated and implemented in project sites

[1] Iles Cocos Marine National Park does not currently have a Management Plan. With the addition of Félicité, a Plan will be required for effective management of the expanded site.

[2] Pending confirmation from MEECC that the RAMSAR site will be formally designated.

[3] Expansion of the Port Glaud wetlands and Ramsar site will complement the establishment of a LMMA covering a number of MPAs including Port Launay and Cap Ternay, adjacent to the Constance Ephelia, to be funded by IKI and implemented by Nature Seychelles, IUCN, the Blue Economy Department and MEECC. Additional information: www.international-climate-initiative.com/en/news/article/seychel-les_protecting_marine_areas/

[4] The marine boundary of Aride Strict Nature Reserve was recently extended to 1km, increasing marine protected area coverage from 200m

(97 ha) to 718 ha, placing significant additional management responsibility on ICS.

3. Investing in innovative nature-based solutions to development	Technical Assistance	<p>3.1 Innovative nature-based solutions support livelihoods and sustainable development in 3 sites</p> <p><i>Indicators:</i></p> <ul style="list-style-type: none"> - <i>Nature-based solutions piloted</i> - <i>Effective management of ecosystems covering Xha (to be determined at PPG)</i> - <i>Innovative public-private partnerships demonstrated</i> - <i>No. of persons with improved livelihoods (to be determined at PPG)</i> 	<p>3.1.1 Nature-based solutions identified and piloted in innovative partnerships with private sector^[1] and local communities leading to reduced localized threats in vulnerable coastal and marine ecosystems:</p> <ul style="list-style-type: none"> - Rehabilitation of eroded coastal ecosystems and protection of Hawksbill turtle nesting sites and seagrass beds in Ste Anne Marine National Park (SNPA-managed): with Club Med Hotel and Ste Anne communities - Recovery of degraded coral reef ecosystems in Iles Cocos Marine National Park (SNPA-managed): with Six Senses Hotel on Félicité - Effective management of biodiverse and highly endangered seagrass bed in Baie Ste Anne, Praslin: co-managed with fishing communities - Effective management of coastal and marine ecosystems (mangroves, seagrasses and coral reefs) in Port Glaud Ramsar site (MEECC-managed): with Constance Ephelia Hotel <p>3.1.2 Local communities benefit from sustainable nature-based livelihoods (with focus on youth)</p>	GET	1,350,000	7,354,867
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[1] Completion of due diligence of private sector partners including UNDP Private Sector Risk Assessment Tool will be required during PPG.

4. Effective gender mainstreaming, knowledge management and M&E	Technical Assistance	<p>4.1 Improved sharing of information among stakeholders and partners to strengthen ownership and management of natural resources</p> <p><i>Indicators:</i></p> <ul style="list-style-type: none"> - No. of persons (estimated 2,500) participating in and benefiting from project activities, disaggregated by gender[1] - Effective lessons learning and knowledge management within and beyond the project <p>[1] These would include PA staff, private operators and linked tourism value</p>	<p>4.1.1 Gender empowerment strategy developed and used to guide project implementation, M&E at pilot sites</p> <p>4.1.2 Participatory M&E and learning framework developed and implemented at pilot sites</p> <p>4.1.3 Lessons learned through participatory M&E and gender empowerment are used nationally and shared internationally</p> <p>4.1.4 South-South cooperation on 'Blue Economy' with Indian Ocean countries and other SIDS</p>	GET	409,165	648,515
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chain businesses.
The intention would be to map the value chains at the start of the project and target select groups (taking care not to incentivize overuse of the sites).

	Sub Total (\$)	4,719,165	19,978,226
Project Management Cost (PMC)			
	GET	235,858	1,051,485
	Sub Total(\$)	235,858	1,051,485
	Total Project Cost(\$)	4,955,023	21,029,711

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(\$)
Government	Seychelles National Parks Authority	In-kind	Recurrent expenditures	4,534,000
Government	Ministry of Environment, Energy and Climate Change	In-kind	Recurrent expenditures	1,000,000
Government	Ministry of Finance, Trade Investment and Economic Planning (Blue Economy Department)	In-kind	Recurrent expenditures	60,000
CSO	Island Conservation Society (Seychelles/UK)	Grant	Investment mobilized	9,763,684
Private Sector	Six Senses Hotel	Grant	Investment mobilized	100,000
Others	University of Seychelles	In-kind	Recurrent expenditures	151,160
Donor Agency	Adaptation Fund: UNDP-AF Coral Restoration project	Grant	Investment mobilized	500,000
Donor Agency	Enhancing coastal and marine socio-ecological resilience and biodiversity conservation in the Western Indian Ocean" German International Climate Initiative (IKI)	Grant	Investment mobilized	150,000
Others	Seychelles Conservation and Climate Adaptation Trust (SEYCCAT)	In-kind	Recurrent expenditures	370,867
Others	Seychelles Conservation and Climate Adaptation Trust (SEYCCAT)	Grant	Investment mobilized	2,400,000
Others	Development Bank of Seychelles	In-kind	Recurrent expenditures	350,000

Others	Development Bank of Seychelles	Grant	Investment mobilized	1,650,000
Total Project Cost(\$)				21,029,711

Describe how any "Investment Mobilized" was identified

*In light of the COVID-19 outbreak and the likely economic consequences, these co-financing amounts may vary at PPG. DESCRIBE HOW ANY "INVESTMENT MOBILIZED" WAS IDENTIFIED: The bulk of the anticipated co-finance will come from recurrent expenditures made by government (the Ministry of Environment, Energy and Climate Change, the Seychelles Conservation and Climate Change Trust, the Development Bank of Seychelles, non-governmental and private partners. Estimated values were derived from an analysis of budget allocations for activities closely linked to implementation of Seychelles' new Marine Spatial Plan in line with the national Blue Economy vision. Estimates have been kept deliberately low at this stage to ensure that targets are kept within realistic bounds, recognising the scale and expected impacts of the COVID-19 pandemic, particularly in relation to Seychelles' tourism sector. The amounts will be confirmed during PPG. Investments have been mobilized from Six Senses Hotel on Felicite Island, which represents corporate investment over the life of the project in environmental CSR.

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	Seychelles	Biodiversity	BD STAR Allocation	4,955,023	470,727	5,425,750
Total GEF Resources(\$)					4,955,023	470,727	5,425,750

E. Project Preparation Grant (PPG)

PPG Required



PPG Amount (\$)

150,000

PPG Agency Fee (\$)

14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Seychelles	Biodiversity	BD STAR Allocation	150,000	14,250	164,250
Total Project Costs(\$)					150,000	14,250	164,250


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)
2,579.00	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)
281.00	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)
Iles Coco Marine National Park	12878	National Park	81.00			

Port Gland Ramsar Site	n/a	200.00	
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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)
2,298.00	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)
Aride Special Reserve	555643551	Strict Nature Reserve	789.00						
Iles Cocos Marine National Park	12878	National Park	86.00						

Ste Anne Marine National Park	6934	National Park	1,423.00
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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)
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433.00

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)
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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 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	1,500			

Male	1,000			
Total	2500	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

The project will contribute to core indicators 2: Marine protected areas created or under improved management for conservation and sustainable use (hectares); 5: Area of marine habitat under improved practices (excluding protected areas) (hectares) and 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF. It will create and improve management of 2,946 ha of marine landscape, comprising expansion from 201 ha to 367 ha, and improve management of four PA sites covering 2,579 ha. It will put 433 ha of marine habitat under improved practices outside protected areas in Baie Ste Anne, which are utilised by local fishing communities based on Praslin and La Digue. The project will benefit (directly) about 2,500 people (1,500 F/1,000 M). These comprise include communities (such as Port Glaud, Baie Ste Anne and within Ste Anne Marine National Park) living in/adjacent to sites targeted under Component 3 to pilot nature-based solutions and localized threat reduction of threats in vulnerable coastal and marine ecosystems.

Part II. Project Justification

1a. Project Description

1a. Project Description

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

Geography: The territory of the Republic of Seychelles comprises a landmass of 455 km² forming 115 islands and an Exclusive Economic Zone (EEZ) covering 1.374 million km² in the Western Indian Ocean. The archipelago is divided into two groups: the mostly granitic islands (Inner Islands) within the Mahé Plateau, and the outer coralline islands (Outer Islands), surrounded by a vast seascape southwest from the Plateau. The unique biodiversity of Seychelles, characterised by gigantism and endemism, has developed largely because of its long geological isolation, allowing evolution to follow its own course separate from surrounding continental areas. The country's environment is relatively well conserved[1], mainly due to its remoteness, but remains vulnerable due to its geography, small economy and long term climate change risks.

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Socio-economic context: Since the early 1990s, Seychelles (population: 97,789 as of August 2019[2]) has transformed its economy from being mostly agrarian (based on cinnamon and copra plantations) to becoming chiefly dependent on high-end tourism and fishing (mainly tuna exports). Seychelles has the highest per capita Gross Domestic Product in Africa (US \$16,434 in 2018[3]). With the strengthening of the economy and the high GDP-per-capita figure, Official Development Assistance flows have fallen by more than 90%, placing a higher financial burden on the Government's budget and increasing its need to borrow commercially. Furthermore, the effects of climate change pose a significant risk to the country's economy, which is largely based on its natural capital – marine, coastal and forest ecosystems and the ecosystem services that flow from these ecosystems, including fish, tourism opportunities, water provision and protection from natural hazards. Seychelles does not currently commercially exploit oil and gas or minerals, although some offshore exploration is being conducted. Tourism is the country's most important economic sector, providing more than 70% of hard currency earnings and employing about 40% of the labour force. Tourism and associated services currently account for 60% of GDP[4]. Much of the tourism industry in Seychelles is centred on its coastal and marine environment, including beaches, diving, sports fishing and other marine excursions. Nature-based tourism is under-developed—both in terms of a lack of diversification of nature tourism products and inadequate mechanisms in place to capture tourism revenue and feed this back into improvement of the tourism products. The government's 2017 Tourism Strategy has set ambitious goals for expanding the tourism sector, and services and attractions offered by MPAs are an important part of this effort. However, growth of the tourism sector requires more robust policies, monitoring and enforcement of environmentally-sustainable practices and human behavior, ensuring their positive impacts on MPA management and ecosystem functioning.[5] Seychelles has very high levels of fish consumption per capita (circa 65 kg per annum)[6], and fishing is an important source of local employment for the many artisanal and semi-industrial fishermen as well as persons employed at the 2nd largest tuna canning factory in the world located in Victoria. Payments by EU fishing fleets to fish large stocks of pelagic tuna in Seychelles' waters constitute an important source of foreign currency income for the country. With limited agricultural land and an underdeveloped agriculture sector, Seychelles is highly dependent on food imports and local fisheries production is therefore critically

important for ensuring food security. Fish catches[7] are valued at around US\$35 million per year, representing less than 10% of GDP, but accounting for more than 90% of exports. A number of initiatives have aimed at improving sustainability of the fishing industry with efforts to improve management planning to regulate fishing, diversify products, reduce by-catch, develop mariculture, etc., including the ongoing WB-GEF SWIOfish3 project and associated initiatives.

Biodiversity[8]: Seychelles is located in the Madagascar and Indian Ocean Islands Region, which has been classified as one of the world's "global biodiversity hotspots"[9]. Some 7,200 species of animal, plant and fungi have been recorded in the Seychelles, including several flagship species, such as the Aldabra giant tortoise (*Aldabrachelys gigantes*) and the coco-de-mer palm (*Lodeicea maldivica*). Endemism is comparatively high (between 50-88% for different animal groups in general, approximately 45% for plants and 48% for birds). Seychelles is a globally important storehouse of marine biodiversity, with some 1,000 fish species recorded and particularly high levels of faunal diversity and endemism. Much of the marine biodiversity is associated with reef ecosystems – 323 species of corals have been identified in the Seychelles, and a 2002 survey of reef areas in the inner granitic islands recorded a total of 44 individual genera of corals belonging to some 14 different families. The Seychelles is recognized as a specific ecoregion for reef-building corals. The granitic Seychelles supports both carbonate and granitic coral reefs; the formation of these coral reefs and coral communities in the granitic inner islands are distinct within the western Indian Ocean due to the underlying geology, and are distinct from those around the coralline and outer islands. Within the inner islands, the most extensive fringing reefs surround the high granitic islands of Mahé and Praslin. The Seychelles' waters also provide habitat for a large numbers of cetaceans (7 dolphin species and 19 whale species have been observed). Five species of sea turtles (Leatherback, Olive Ridley, Loggerhead, Green, Hawksbill) frequent and forage in Seychelles waters but only the Hawksbill and Green Turtle nest on Seychelles beaches.

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Seychelles Marine Spatial Plan and Blue Economy Roadmap: In recent years, Seychelles has developed a dynamic and innovative policy and planning framework for management of its coastal and marine ecosystems. The Protected Areas Policy (2013[10]) sets out the commitment made by the the President of the Republic of Seychelles at the Rio+20 conference[11] in 2012 to protect at least 50% of its terrestrial area and 30% of its marine environment.[12]. In 2013, the government announced its intention to proclaim 30% of the EEZ – a further 410,000 km² – as protected, of which 50% will be a no-take zone, in exchange for debt buy-back negotiated with the Paris Club (a group of creditor nations whose objective is to find workable solutions to payment problems faced by debtor nations); this agreement was finalized in February 2016. The Government of Seychelles has also conducted a Marine Spatial Plan (MSP) initiative with technical support from TNC to plan and manage the sustainable and long-term use and health of the Seychelles EEZ. The MSP legislates marine protection areas that make up 30% of Seychelles' Exclusive Economic Zone and Territorial Sea; promotes the Blue Economy and other national strategies to support ocean health, local economies and economic growth; and addresses climate change in coastal and offshore habitats. A key aspect of the MSP is a zoning plan with three categories: Zone 1 (a High Biodiversity Protection category to cover 15% of EEZ); Zone 2 (a Medium Biodiversity Protection and Sustainable Uses category to provide access and opportunities for existing and new sustainable uses, which covers another 15% of the EEZ); and Zone 3 (a Multiple Use Zone to cover the remaining 70% of the EEZ, aimed at optimizing economic opportunities and the Blue Economy, and to include essential marine infrastructure and public utilities). Areas designated as Zone 1 or Zone 2 are being gazetted under the existing National Parks and Nature Conservancy Act (Zone 1 as Marine National Parks and Zone 2 as Areas of Outstanding Natural Beauty; the latter will be re-designated as sustainable use areas as soon as Seychelles' has passed new PA legislation with a sustainable use category (known as the Nature Reserves and Conservancy Act; anticipated in March 2020). Under MSP Phase 1, completed in early 2018, two new MPAs covering approximately 15% of Seychelles EEZ were designated; 74,282 km² of waters with the Aldabra Atoll (a UNESCO World Heritage Site) extension and 136,000 km² of a commercially important area between the Amirantes group of coral islands and Fortune Bank. Under MSP Phase 2, completed in April 2019, additional areas were designated / expanded, and the total area legally gazetted is now 350,915 square kilometers, or 26% of the EEZ. The third and final phase will focus on protection of shallower inshore or 'territorial sea' waters and remaining deep

ocean areas to meet the goal of designating 30% of the EEZ as Zone 1 and 2. Finally, the country's Blue Economy Roadmap sets out the pathway for Seychelles to support a sustainable and diversified economy, address climate change adaptation, and manage the ocean ecosystem through effective planning. The government is currently planning to convert the BE Roadmap into an official BE Policy, potentially supported by the establishment of a new Seychelles Oceans Authority (SOA) to support its implementation. It is anticipated that the SOA will become the governance mechanism to oversee, coordinate and adaptively manage the implementation of the Seychelles Marine Spatial Plan[13].

Seychelles' Marine Protected Areas System: The Seychelles MPA network is, at present, made up of 16 individual MPAs[14], which are managed by a number of institutional actors, including government, parastatal, nongovernmental organizations and private foundations. The majority of MPAs have been designated under the National Parks and Nature Conservancy (NPNC) Act, which provides for four different types of MPAs: Strict Nature Reserves (these have the highest level of protection and are classified under IUCN Category I); Special Reserves (focused on wildlife protection and also categorized under IUCN Category I); Marine National Parks (classified as IUCN Category II); and Area(s) of Outstanding Natural Beauty (classified as IUCN Category VI). In addition, Shell Reserves have been designated under the Fisheries Regulations (1987), although the demand for local shells is currently limited and the Shell Reserves are not actively managed. There are seven Marine National Parks (Ste Anne, Curieuse, Baie Ternay, Port Launay, Silhouette, Ile Cocos, and Aldabra, which incorporates Aldabra Special Reserve and covers a much larger area), three Special Reserves (Aldabra, Cousin and Aride); four Shell Reserves (North East Point, Pointe Zanguilles, Anse aux Pins and La Digue); and the Amirantes to Fortune Bank Area of Outstanding Natural Beauty and the African Banks and Surrounding Reefs Protected Area. The new Nature Reserves and Conservancy Act will make provision for other forms of protection not currently covered by existing legislation, such as sustainable use and community-based MPAs. In February 2018, the Seychelles greatly increased its marine area under protection when it designated two new MPAs under the NPNC Act (these areas were further extended in April 2019). The new Amirantes to Fortune Bank "Area of Outstanding Natural Beauty" covers an area of 173,468 km² and has been designated as a MSP Zone 2 site. The new Aldabra Marine National Park covers 177,447 km² and has been designated as a MSP Zone 1 site (in addition, the area of the existing Aldabra Special Reserve was increased to 2,559 km²). Management and implementation plans for these areas are being prepared, including policy and regulations, and implementation of a new management approach in these newly designated areas is scheduled to start in 2021.

Selected project MPA sites:

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Ste Anne Marine National Park (MNP): Located in the Inner Islands in close proximity to the Port of Victoria and the populated east coast of Mahé, Ste Anne MNP was established in 1973 and is the oldest of the Seychelles MPAs. It is well known for its corals, reef fish and one of the largest areas of seagrass meadows in the granitic islands. Ste Anne was one of the first marine parks to be established in the Western Indian Ocean Region setting Seychelles at the forefront of conservation efforts. The MNP, which has an area of 14.23 km² and is administered by Seychelles National Parks Authority (SNPA) as a Category II National Park (MSP Zone 1); SNPA has management authority over all of the marine area as well as lands up to 20 metres above the high water mark. Six islands are located within the boundaries of the MNP; all of these islands are privately-owned by different groups or individuals who are directly responsible for their management (Moyenne island has protection status as a National Park and is managed by a private foundation), and thus their land areas are not legally part of the MNP. For this reason, effective partnerships between SNPA and the island owners are critical for conserving the overall ecosystem functioning of the MNP. The primary objectives of the MNP are to conserve the park's resources, to protect coral reefs and other marine environments from harmful disturbances, and to manage the area for multiple uses (recreational, commercial, educational and traditional). The park has an important turtle

rookery on Ste Anne island that lies within the MNP, which accounts for 9.2% of turtle nesting in the inner islands, and has large seagrass beds and sand flats between Ronde, Moyenne, Longue and Cerf Islands; it is also home to a large variety of marine life. The heaviest coral growths in the MNP are along Anse Cimetiere and Anse Manon off Ste Anne, north of Moyenne towards Ste Anne, and to the north and northwest of Cerf, although the areas have suffered significantly from repeated coral bleaching events. The MNP is very popular with tour operators that organise almost daily glass bottom boat trips to the park for tourists. The MNP received over 17,190 paying non-resident visitors in 2018, although this is likely to be an underestimate due to ineffective fee collection and vessel declaration^[15]. The park experiences significant boat traffic from hotels operating within its boundaries, tourism operators offering daily excursions, resident vessels, as well as passing fishing and transport vessels accessing the Port of Victoria. A cargo vessel ran aground in 2018, damaging the reef in the MNP. Overall, the St. Anne MNP is highly used and the lack of effective management and enforcement in recent years has allowed the MNP to become degraded in some areas.

Aride Strict Nature Reserve^[16]: Located in the Inner Islands, Aride has been managed specifically for nature conservation for 44 years, having originally been declared a private nature reserve in 1970 and as a Special Reserve (SR) in 1975. The Royal Society of Wildlife Trusts (RSWT) leased the island to the Island Conservation Society (ICS) in 2003; ICS has several resident staff including the Island Manager, Conservation Officer and rangers, and up to 12 volunteers per year on the island. The Aride SNR currently covers an area of 166 ha, with a land surface area of 71 ha. The reserve boundary now includes the whole island out to a distance of 1,000m and encompasses all of the island's coral reefs, following recent expansion. The south side of the island is lined by fringing reef and has a long beach and narrow coastal plateau. The remainder of the island's coast to the east, west and north of the island is of granite rock. The island is mostly mountainous and is predominantly covered by native woodland. Aride is well known for its large population of seabirds with around 1.25 million seabirds nesting on the island annually. Aride is host to the world's largest colony of lesser noddies (*Anous tenuirostris*) and Audubon's shearwater (*Puffinus lherminieri*), and also hosts the Indian Ocean's largest population of Roseate terns (*Sterna dougallii aridensis*) and a large number of other breeding seabirds, including a colony of sooty terns (*Sterna fuscata*), white tailed tropic birds (*Phaethon lepturus*), brown noddies (*Anous stolidus*) and the only breeding colony of redtailed tropic birds (*Phaethon rubricauda*) in Seychelles' granitic islands. Because Aride is free of predators such as cats, rats, dogs, tenrecs, etc., and contains habitats that support bird nesting and contain invertebrate communities that are important food resources for birds, the island also now harbours a number of endemic land birds that have been introduced from other Seychelles islands in order to establish new populations to safeguard against potential threats. The marine environment around Aride includes resilient patch reefs and corals that provide fish spawning aggregation sites and foraging and nursery grounds for diverse array of marine fauna. Critically Endangered Hawksbill Turtles (*Eretmochelys imbricata*) are present over the reef all year round and there are around 30 nesting females. Bottlenose Dolphins (*Tursiops truncatus*) are commonly seen offshore in small groups and other cetaceans including Sperm Whale (*Physeter macrocephalus*), Humpback whale (*Megaptera novaeangliae*) and Spinner Dolphins (*Stenella longirostris*) are occasionally sighted. Endangered Whale Sharks (*Rhincodon typus*) are an annual visitor and use the shallow waters around Aride as feeding grounds. An average of 2,000 tourists and an additional 250 Seychellois visit Aride annually, with potential to increase this number if carefully managed.

Port Glaud Wetlands and Ramsar Site^[17]: Port Glaud constitutes one of the most significant mangrove wetlands on the island of Mahé, supporting all seven species of mangroves in Seychelles. The coastal area provides an ideal habitat for spawning, nursery, feeding and cover for several fish species including the Seychelles endemic Gouzon or Golden Panchax (*Pachypanchax playfairii*) and Spangled Gudgeon (*Ophiocara porocephala*). It also supports the vulnerable Seychelles Swiftlet (*Collocalia elaphra*), Millionaire's Salad (*Deckenia nobilis*), and critically endangered Sheath-Tailed Bat *Coleura seychellensis*. The mangroves along the coast help in shoreline stabilization, sediment trapping, storm-damage limitation, water quality maintenance, nutrient retention and coral reef and lagoon protection. The main human activities include octopus collection by fishermen, coconut farming, and tourism, with the construction of the

hotel resort 'Constance Ephelia'. This is one of the top sites for environmental education and sensitisation of pupils and students, as well as the general public, especially during World Wetlands Day. The site is mainly threatened by exotic species, which present an obstacle to assisted mangrove restoration. Encroachment by residential areas, erosion and the possibility of additional tourism development are also potential threats. The site is bordered by the Port Launay Marine National Park, which covers the sheltered bay of Port Launay. It was designated as Protected Area in 1979 and covers 163.29 ha. The Port Launay Marine National Park used to be well known whale shark sightings. Although the reefs have been damaged by several El Nino events and subsequent macro-algal coverage, there are still some hard corals, soft corals and fish present on the reef. The Constance Ephelia resort now borders nearly half of the main Port Launay beach, and offers watersports activities to its guests (e.g. canoeing, windsurfing). Port Launay is also one of the most popular beaches among local residents and tourists.

Ile Cocos Marine National Park and Félicité Island: The Iles Cocos Marine National Park was established in 1997. It is set around three small islets fringed by large expanses of spectacular, shallow coral reefs, and was gazetted for its marine ecosystems, reefs and fish. The reefs have been bleached and degraded, but opportunities to support recovery and reduction of local stressors are being explored. Many tourists visit the islands and indiscriminate anchoring that damages already fragile corals is a major issue. The tourists also interact with turtles and have been seen to touch and lift the animals out of the water for photo opportunities. Better demarcation of the MNP with an effective Management Plan and maintenance schedule would reduce impacts and improve resilience. To the south of Iles Cocos MNP, Félicité island is a small heavy forested granitic island 4 kilometres east of La Digue. It is the fifth largest island in the Seychelles archipelago covering 268 ha. Until the 1970s it was a coconut plantation that had a population of about 50. Today, the Six Senses Zil Pasyon resort, with 30 villas and a spa, covers a third of the island. The resort features a strong focus on sustainability, integrating environmental and social projects into its tourist offer. This includes initiatives relating to coral restoration, rehabilitation of native habitats and protection of endemic species, and local education programs.[18] Félicité and the four granitic privately owned neighboring islands are considered "satellite islands" of La Digue, and like Iles Cocos, are routinely visited by tourists.

Baie Ste Anne, Praslin: Wetlands in Seychelles, although not directly protected under the law, are generally given special care owing to the fact that they play a pivotal role in protecting the coastal zones where they are found and are hosts to a range of local flora and fauna. With plans to formalise its protection, wetlands are currently being protected under various components under the Environment Protection Act such as the Acts that deal with the pollution of water and the protection of the coastal zones. The main areas of wetlands on Praslin are in the Grand Anse, Amitie and Anse Kerlan Area with some notable ones at Baie Ste Anne. Specifically, in the protected bays of the larger islands of Praslin and Curieuse, seagrass of the *Syringodium*, *Enhalus*[19], *Thalassia*, *Thalassodendron*, *Cymodocea*, and *Halodule* genera are observed in various densities. In this area, seagrasses are the second most dominant biotic bottom type observed covering a total area of 433 ha, of which 352 ha are described as being of high density. The Seychelles has already made new commitments in 2020 at the UN Climate Action Summit through its Nationally Determined Contribution to strengthen ocean-related measures to tackle the climate emergency, in recognition that seagrass, mangroves and coral reefs are some of the most effective carbon sinks[20]. During 2020-2021, Seychelles will work on a Blue Carbon Project with Oxford University, Pew Trusts and the University of Seychelles and local stakeholders to fully map their national seagrass ecosystems and use the appropriate IPCC guidance to assess their carbon value. In Baie Ste Anne, this research has the potential to combine with action to better protect fish stocks in the lagoons and the livelihoods of fishermen while ensuring effective management of significant seagrass beds. A new project[21] is proposing to informally close the bay of Baie Ste Anne from fishing during the North West Monsoon and encourage fishers to use offshore fishing grounds and re-open it during the rougher South East Trade winds period. During the period of closure, fish in this area will have the opportunity to increase in both numbers and

sizes. The re-opening of fishing during period of rough sea will provide fishers with a better fishing ground where they can continue to fish in safety and earn their livelihoods. This fisheries closure will be done in an informal manner, without the need for any legislation. This will essentially turn the bay of Baie Ste Anne into a Locally Managed Marine Area (LMMA) for the successful management of fisheries resources and threatened marine/coastal ecosystems.

Threats: The most important current threats to biodiversity in and around Seychelles' MPAs include:

- **Degradation of marine and coastal ecosystems including coral reefs, mangrove stands and seagrass meadows:** Climate-induced coral bleaching is among the greatest current threats to coral reefs, causing widespread loss of live coral cover[22]. Conditions under which reefs bounce back from bleaching events or shift from coral to algal dominance are unknown, making it difficult to predict and plan for differing reef responses under climate change[23]. Coral reef bleaching events, including very significant events in 1998 and 2016, have reduced hard coral cover to very low levels at many reef sites in the Seychelles inner islands, including all MPA sites. Eight years after the 1998 event, researchers reported a phaseshift on reefs from coral dominated state to a rubble and algal dominated state throughout the Seychelles granitic islands including within the MPAs that were surveyed. More recent studies have reported a loss of reef structural complexity throughout the Seychelles granitic islands, with a resultant reduction in species richness of reef communities[24]. Coral reefs are also threatened by ocean acidification; a proliferation of marine invasive species, including increasing numbers of coral predators such as black-spined sea urchins (BSU), crown-of-thorns (COTs) starfish, and *Drupella* snails; coral diseases; and high nutrient loads (including from seabird colonies at sites such as Aride). As it is expected that fish biomass will continue to decrease in the absence of effective coral reef fish recruitment, the ability of MPAs to meet the long-term conservation objective of maintaining fish abundance is unsure.
- **Increasing tourism development and visitor pressure:** In 2018, 361,844 visitors visited the Seychelles[25], while the Seychelles MPA network received an estimated total of 114,138 paying non-resident visitors during the year[26]. The government wants to increase the number of visitors to the MPAs, but additional carrying capacity studies are required to determine optimal visitor level as well as studies to quantify the impact of different activities. In 1998, there were only 4 small hotels (with a total capacity of 59 beds) located within or adjacent to sites in the Seychelles MPA network (at the Curieuse, Ste Anne, and Silhouette Marine National Parks). Now, in 2020, many hotels of all sizes and price brackets exist representing the major expansion of the tourism sector in recent years. The construction and operation of these hotels has had and is expected to have further impacts on the integrity of the parks, including destruction of seagrass areas (for jetties and bathing areas), destruction of reefs (to create harbours and berthing areas) and damage to wetland areas. Reductions in water quality resulting from sediment flows into the sea during construction, and increased disturbances in nationally important turtle rookeries, are also possible. In Ste Anne Marine Park alone, current plans include creation of a commercial marina capable of handling 45 vessels that will be built over one of the most intact reef sites in the MNP. Increased use of the marine environment for recreational activities by hotel guests and leisure seekers is also a concern; while MPA regulations restrict activities such as motorised water sports, catch and release fishing, etc., other activities such as snorkeling and diving can have negative effects on the benthic environment through direct physical contact (e.g. anchor damage) and disturbances of wildlife. Finally, while tourism development is seen in the country as a way to improve the financing of MPAs, to date hotels within MPAs are not contributing to MPA management costs, and efforts to increase fees (for example from tourism charter companies) for visits to MPAs have been resisted.
- **Increasing pollution and waste flows:** Various EIA studies for construction projects in MPAs have emphasized the risk of spillage of hydrocarbons during transport to sites and the potential effects of discharge of treated sewage in the marine environment. As most of the tourism development in the MPAs is on small islands, many have their own electricity generators and need to bring in fuel from Mahé, increasing the risk of spillage during unloading of fuel on the

islands. With regard to the discharge of treated sewage, even though all existing and planned hotels have proposed to treat their sewage down to the tertiary level, the volume of high nutrient sewage generated by hotel guests and staff could still play an important role in reducing water quality in the MPAs, especially in areas with low water movement. Private residences in areas upstream of some MPAs add to this pressure.

- **Poaching:** The poaching of seabirds and their eggs as well as octopus is a major threat on numerous islands. On Aride, ICS has been fighting a losing battle with the poachers, who threaten staff (and their families) and even threaten to introduce rats to the island if ICS staff do not desist from direct confrontation. The seabird populations depend on the island's rat-free status and would be decimated by successful rat colonization. The growing threat from poaching comes at a time when natural pressures (including climate change impacts on food availability) are putting additional stresses on these vulnerable populations. In Ste Anne MNP, illegal fish traps and turtle poaching are an ongoing issue.

- **Climate change:** Climate change impacts in the Seychelles are already evident and projected to increase in coming decades. The country's rainy season is projected to be shorter but more intense, and the dry season is projected to be longer. Surface runoff events will become more intense in the rainy season, with potentially devastating impacts in terms of sedimentation in coastal and marine ecosystems.[27] Extreme weather events are likely to produce storm surges that can severely impact coastal ecosystems, as well as possibly increasing the frequency and severity of cyclones. Sea level rise poses a very significant threat to coastal ecosystems such as mangroves and seagrass beds, and increased coastal flooding could raise the salinity levels of the soil and damage water tables, with major impacts on terrestrial flora and fauna. As noted above, coral reef ecosystems in the Seychelles have been significantly impacted by coral bleaching events, which are becoming more frequent and severe due to climate change[28]. Coral reefs may not be able to re-establish in many places if bleaching events continue on a regular basis (with much local variation depending on localized water temperatures, rates of larval settlement/recruitment, and the occurrence of temperature resistant coral types). In addition to natural habitats and biodiversity, the coastal zone and human settlements, agriculture, water resources, fisheries[29], human health, natural disasters and insurance are the key socio-economic sectors that are considered highly sensitive and vulnerable to climate change across the islands.

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Barriers: The current barriers to effective management of Seychelles' Marine Protected Areas System include:

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1. **Gaps in policy, regulatory and institutional frameworks** to coordinate efforts and ensure a coherent national approach to management of biodiversity and to address sustainable development in line with the national Blue Economy Roadmap and Marine Spatial Plan. A harmonized interpretation of laws and regulations and more effective enforcement provisions are needed for effective control over marine and coastal resource extraction, protection and development. Currently, specific barriers to effective MPA system planning, coordination and management include: i) management of MPAs is covered by four pieces of legislation which can make coordination of conservation efforts complex; ii) delays in the adoption of the Nature Reserves and Conservancy Act, under development since 2014, which would provide the overarching management framework and clearer and more diverse PA classifications (including sustainable use areas); iii) absent or outdated PA management regulations; iv) the significant increase in recent years in the number and types of PAs, as well as involved institutions, has increased the complexity of management arrangements and challenges; v) the lack of strategic oversight by government departments to develop and implement a consolidated PA system plan; and vi) limited coordination between implementing institutions, which increases overall management costs.

2. **Limited capacity (i.e. systems, personnel, equipment, financial resources, data, knowledge)** to manage the newly expanded MPA system and protect marine and coastal biodiversity. With pressures and threats increasing daily, an innovative systems approach to managing Seychelles expanded PA estate is essential. Key problems include: i) decision-making is not based on accurate information/data and planned expansion of coastal infrastructure and tourism

growth is poorly managed; ii) lack of enforcement of marine protection, including successful prosecution of perpetrators; iii) absence of a national maritime security plan which incorporates MPA protections; iv) physical lack of connectivity between MPAs, which increases the costs of MPA management and collaboration; v) the need to improve the attractiveness of MPAs (and increase financial benefits from tourism) by restoring ecologically damaged areas and improving the enforcement of regulation; and vi) poor financing capacities.

3. The lack of sustainable Blue Economy business models and income generating activities is impeding full engagement of the private sector and communities (on inhabited islands) in MPA co-management and limiting adoption of more sustainable resource use models. Blue economy business models are in their infancy and opportunities are not being realized by the private sector nor effectively incentivized by Government. As a result, the current absorption capacity of the country for available 'impact finance' is a concern. This has resulted in cost-benefit imbalances at the community level where, for example, local livelihoods are being impacted by the growth of tourism. The benefits in the tourism value chain for communities are limited, as they are primarily accrued by international tourism operators (whose profits are mostly taken offshore) and staff from other countries (who are mostly hired instead of locals). To maintain local enthusiasm for biodiversity conservation and MPA expansion, communities need to be supported in the identification and development of public-private partnerships and businesses, such as ecotourism and 'blue business' development, that will provide tangible livelihood gains.

4. Insufficient data and information management regarding the unique biodiversity of the Seychelles to provide an effective basis for MPA decision-making. Whilst the MSP has gathered significant ecological and economic data to inform the designation process, greater monitoring data will be required to determine whether the gazetted MPAs are effectively achieving their objectives. Efforts have been made to share lessons learned and experiences gained from previous projects and initiatives, but this needs to be further coordinated and strengthened to ensure that the new network of stakeholders is empowered to provide feedback to local, national, regional and international forums dedicated to the disciplines that will be addressed through enhanced management (including biodiversity knowledge, management skills, co-management models and sustainable tourism practices and publicity).

2) The baseline scenario and any associated baseline projects

The **MSP initiative** is a Government-led process facilitated by The Nature Conservancy (TNC) and others, with co-financing through a US\$1 million grant from Oceans 5 to TNC. (Details about the MSP are set out in pp5-6 above). The key baseline activity to help achieve the goals of the new Marine Spatial Plan is the creation of the **Seychelles Conservation & Climate Adaptation Trust** (SeyCCAT), a fund that has been established to oversee and fund activities identified as priorities under the MSP initiative (with a particular focus on operationalizing new MPAs). Funding for the SeyCCAT came from an initial \$21.6 million sovereign debt swap for the Government of the Seychelles in exchange for a commitment to invest in climate adaptation and marine conservation projects in the Seychelles. As part of this debt swap, the Government will pay a substantial amount (still to be determined) into the SeyCCAT over a 20-year period as part of its loan repayment, while some of the proceeds will be withheld to finance projects. Following the 20-year period, the endowment and interest earned (currently estimated at US\$ 6.6 M by 2036) will be used to provide grants and investment funding for activities to implement the Marine Spatial Plan.

The **Seychelles Strategic Plan** (SSP) includes an overall strategic plan for the country, a framework plan for the main island of Mahé with a focus on planning for the 'green spine' or upland forest areas, and a master plan for the capital of Victoria. The SSP is intended to provide the spatial framework for the implementation of objectives set out in the country's various national strategies and plans, including the National Development Strategy (NDS) 2015-2019, the Seychelles Sustainable Development Strategy 2012-2020 (SSDS), the Seychelles Climate Change Strategy 2009 (SCCS) and the NBSAP 2015-2020. The NDS proposes an allocation of 9% of the national budget for programmes related to environment and renewable energy; of this amount, 40% will be allocated to the protection and valorisation of natural capital, and 60% to the promotion of energy efficiency, resource efficiency, water supply and sanitation management.

Projects supported by bilateral and multilateral agencies, which are relevant to this project, are detailed below:

- **GOS-UNDP-AF Ecosystem Based Adaptation in Seychelles (EBA) (2015-2020):** This project, with US\$5.95 million in funding from the Adaptation Fund (AF), is being implemented by UNDP and the Government of Seychelles in order to reduce the vulnerability of the Seychelles to climate change, focusing on two key issues, water scarcity and flooding, through the implementation of a series of pilot actions in four watersheds on Mahé to implement integrated adaptation measures, including wetland enhancement and the management of catchment forests.
- **GOS-UNDP-AF Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future:** This project, which is expected to start in late 2019 and covers both the Seychelles and Mauritius, has received funding of US\$ 10 million from the Adaptation Fund to address coral reef degradation caused by climate induced mass coral bleaching events. The project will seek to reduce the adverse impact of climate change on local communities and coral reef-dependent economic sectors in Mauritius and Seychelles, and to increase climate resilience at both regional and local level by implementing coral reef restoration with thermal tolerant corals as adaptation to climate change.
- **GOS-UNDP-GEF Seychelles' Protected Areas Finance (2016-2020):** This project is working to improve the management and financing of the existing system of PAs, focused on PA units in the Inner Islands managed by SNPA. The project aims to strengthen the financial management capacities of national PA managing entities, support the building and renovation of infrastructure, and introduce new cost-effective practices, systems and schemes aimed at making sites more attractive and increasing their own revenue generation capacity.
- **GOS-UNDP-GEF Outer Islands PA project (2014-2019):** This project is extending PA coverage into the outer islands, and also supporting national planning and capacity building for PA management. The project seeks to promote the conservation and sustainable use of terrestrial and marine biodiversity in the regional scale, such as training in remote sensing and data management, Ocean-Atmosphere (O-A) monitoring capacity and data products, and development of monitoring and mitigation activities for O-A impacts.
- **UNDP-GEF Small Grants Programme** has a number of recent and on-going projects that support activities relevant to this project. For example:
 - o **The Marine Conservation Society of Seychelles (MCSS);** *Community based rehabilitation of coral reef systems*, which aims at rehabilitating 1000² metres of coral reef systems; one off Cerf Island (MPA) and the other off Anse Forbans, South Mahe, while training participants in coral reef restoration and sustainable use of ecosystem goods & services and sensitizing local community & authorities of the importance of coral reefs and their sustainable utilization.
 - o **Wise Oceans Seychelles (WOS);** *Seychelles school marine education programme*, aimed at increasing marine education within science classes on Mahé, noting that the marine environment plays a pivotal role in many aspects of everyday Seychellois life, including fisheries, coastal protection, trade and tourism. As Seychelles government is pushing for the Blue Economy concept, in which the marine environment is recognised as a resource that everyone in Seychelles depends upon, Marine education inspires and creates passion in students to pursue marine sector careers. It is the foundation to work toward the United Nations' Sustainable Development Goals (SDGs) specifically SDG 14 "Life below water", SDG 4 "Quality education" and the GEF SGPs strategic aim 'community landscape/seascape conservation'. Ultimately, an understanding of climate change and the threats it poses to the marine environment is essential if Seychelles hopes to maintain healthy reef ecosystems.
 - o **Wildlife Clubs of Seychelles (WCS);** *Mangrove Restoration & Management Project*, aiming at developing a rehabilitation and educational programme for Victoria wetland site (overlooking the Ste Anne Marine Park) involving the four schools in the area. The programme will feature the adoption of the mangrove area by the schools, using the sites as a learning ground, to improve understanding of this important habitat supporting an array of marine life, including crabs,

molluscs and fish, representing an important habitat migrant birds. As these wetlands are of paramount importance for biodiversity, food security and as buffer zone against the effects of climate change, the programme will use a comprehensive, simple scientific-based approach to restore and maintain the degraded mangrove area.

- **WB-GEF Third South-West Indian Ocean Fisheries Governance and Shared Growth (SWIOFish3) project (2017-2021):** This project addresses fisheries management and expansion of sustainable use zones (a category of marine protected areas) in the Seychelles. There is no expected overlap or duplication between this project and SWIOFish3. SWIOFish3 is a fisheries project and cannot support activities in no-take Marine Protected Areas such as the Marine National Parks that will be supported by this project. Instead, SWIOFish3 will fund activities being implemented in zones designated as *Sustainable Use Zones* as part of the Seychelles Marine Spatial Planning Initiative. Since there is presently no formal protection of coral reefs outside Marine Protected Areas, and since fisheries are dependent on the state of coral reefs, potential activities that SWIOFish3 can support include those that support coral reef conservation outside MPAs such as the preparation of a Coral Reef Conservation Policy, legislation to strengthen protection of coral reefs and fisheries independent surveys.
- **GOS-UNEP-GEF global project “Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries”:** This project seeks to build climate resilience in developing African and Asia-Pacific countries using Ecosystem Based approaches to Adaptation (EBA) through capacity building, knowledge support and concrete, on-the-ground interventions. In the Seychelles, the project is focused on mangrove restoration.
- **UNEP-GEF WIOSAP Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities (WIO-SAP):** This project, to be executed by the Nairobi Convention, will support the implementation of the WIO-SAP with some demonstration activities to reduce stresses to the coastal ecosystem from land-based activities.
- **EU Global Climate Change Alliance Plus Initiative (GCCA+) Component A project (2016-2019):** The general objective of the GCCA+ project is to ensure that the people, economy and environment of Seychelles are able to adapt to and develop resilience to climate change and its effects, thereby safeguarding the sustainable development of Seychelles. The specific objective of the GCCA+ project is to contribute to the implementation of the Seychelles Climate Change Strategy, through strengthening the climate change sector policy framework (Component A), and supporting adaptation to climate change in coastal areas (Component B).
- **Biodiversity Finance Initiative (BIOFIN)**, managed by UNDP, was initiated in response to the urgent global need to divert more finance from all possible sources towards global and national biodiversity goals. The overarching objective of BIOFIN is to deliver a new methodological framework, facilitating the identification, development and implementation of optimal and evidence-based finance plans and solutions. During the first phase, BIOFIN worked with Government to identify key biodiversity finance solutions including: i) Provision of incentives (eg business tax concessions, greater commitment to corporate social responsibility (CSR) to tourism operators, etc.) investing in biodiversity conservation, introducing an environmental levy for cruiseship passengers, and revising the airport tax for biodiversity conservation; Promoting biosecurity through enforcement and alignment of fines and penalties with other environmental legislation and improving cost recovery by revising biosecurity services fees; and Setting up a Biodiversity Finance Unit in order to institutionalize the coordination of all other biodiversity-related projects and their mainstreaming into economic and annual budgetary planning processes.

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

The project will address the barriers and challenges described in the sections above and will be implemented at three sites across the Inner and Outer Islands, where protected area management and financing, co-management capacity and partnerships need to be strengthened, and where nature-based alternative livelihood options are required for sustainable development. The alternative scenario is centred on a community-inclusive multi-stakeholder collaboration at national and local scales. It is in full alignment with the intended next phase of the MSP post-2020.

The Project Objective is 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. It is structured around four components, as follows:

Component 1 – Strengthening political and institutional framework for effective implementation of Seychelles' Marine Spatial Plan (MSP): Seychelles' Marine Spatial Planning process has already led to the expansion of the country's MPA system, and additional MPA sites will be designated as the MSP completes its zoning process by the end of 2020. The expansion of the country's MPA system is a significant achievement, but in order to be effective the expanded systems will require strengthened institutional, policy and financial frameworks for MPAs to enable effective and systemic approaches, including the integration of Blue Economy approaches in MPA management:

- Under Output 1.1.1, the project will provide institutional, technical and financial capacity development for the new responsible Seychelles Oceans Authority (SOA) to manage the country's Marine Spatial Planning program. As of late 2019, new MPA sites designated through the MSP process have had their boundaries defined and gazetted, but the identification of management authorities for each site is still being discussed, and details pertaining to management of the sites (management plans, regulations on allowed activities, etc.) are still being drafted (these are expected to be completed in 2020, and phased implementation will commence in 2021). For this reason, the capacity of SOA staff and processes will be developed in a number of key areas, including coordination of PA site management partners; effective governance of spatial planning; provision of information/expertise to support GoS in matters of marine governance; establishment of the parameters and criteria for MSP development management (e.g. allowable activities for each zone and their realisation); development of standard formats for PA management plans and reporting; monitoring of management plan implementation; development of MSP scientific practices; development of funding options/mechanisms to support sustainable implementation of the MSP; and public education, stakeholder communication and outreach. The project also will build the capacity of the SOA to undertake system level planning of the MPA systems, including integration of new areas designated under the MSP process into the MPA system. It will also support efforts to enable SOA to become financially autonomous in a short period following operationalization.
- Under Output 1.1.2, the project will establish a strategic coordination mechanism, accountable to the Blue Council, for key agencies including MEECC, SNPA, SOA, Ministry of Finance, Trade Investment and Economic Planning, Ministry of Tourism, Aviation Ports and Marine, IDC, Office of the Vice President and NGOs) to agree on strategies for the long-term management and financing of the expanded MPA system framed by Blue Economy and Marine Spatial Planning objectives. Efforts will be stepped up to facilitate inter-sectoral coordination between agencies to support BE and MSP objectives.
- Under Output 1.1.3, the project will work to strengthen the institutional and technical capacity of MSP partner agencies (including Ministry of Environment, Energy and Climate Change (MEECC), Seychelles National Parks Authority (SNPA), etc.) developed for effective management, enforcement and monitoring of the expanded MPA system; at present these activities are under-funded and insufficiently prioritised throughout the MPA system[30].

- Output 1.1.4 will focus on the development and implementation of an Investment Framework and Strategy[31], in close coordination with Ministry of Finance, to provide financing for the expanded MPA system. A national PA finance plan has been implemented for the existing PA system and a costing analysis has been completed for the expanded MPA system. The proposed Investment Framework and Strategy will build on these outputs and support the next level of finance options.
- Under Output 1.1.5 capacities of Blue Economy financial services institutions, including Seychelles Conservation and Climate Adaptation Trust (SEYCCAT) and Development Bank of Seychelles (DBS), will be strengthened as a key element of the Investment Framework and Strategy. SEYCCAT is responsible for management and administration of the Blue Grant Fund[32] while DBS manages and administers the Blue Investment Fund[33], which is a loan scheme established by proceed of the World's first sovereign blue bond and is intended to support diversification and expansion of sustainable fisheries value chains in Seychelles. The project will help SEYCCAT to support: a) Seychellois businesses to develop business plans to access debt-swap and blue bond proceeds, generating a pipeline of investable projects; b) awareness of viable business models for Seychellois, based on global experiences, stimulating the local market; c) enhanced ability of SOA to attract external finance, reduce dependence on grants, and implement cost-effective strategies; d) adequate monitoring and verification procedures, as well as impact management procedures to drive investor confidence and demonstrate global best practice; e) creation of additional financial options to further strengthen and grow the SeyCCAT asset base, in order to close the financing gap for marine management and stimulate sustainable blue economic growth; and f) providing support to private sector stakeholders to apply for Blue Grants (e.g. technical support and/or simplifying the criteria for applications). The project also will work with DBS and the Blue Investment Fund to support access to loans and financing to develop Blue businesses.
- Under Output 1.1.6, the capacities of the new Biodiversity Finance Unit (in MEECC) will be strengthened to support implementation of Seychelles' Biodiversity Finance Plan and select innovative finance solutions identified by BIOFIN (detailed above).
- Under Output 1.1.7, the project will develop and implement an education and public awareness strategy to build public support for and understanding of the MSP and the Blue Economy Roadmap and potential Blue Economy opportunities.

Component 2 – Expanding and strengthening management effectiveness of Seychelles' MPA system: Component 2 will focus on Iles Cocos Marine National Park, Port Glaud Wetlands and Ramsar Site, Ste Anne Marine National Park and Aride Special Reserve in the Inner Islands.

Under Output 2.1.1, four priority sites will be expanded and management effectiveness enhanced in collaboration with communities and stakeholders.

In terms of *expansion*, the Iles Cocos Marine National Park[34] to include Felicité (from 85.55 ha to 167 ha) and the project will support the gazettment of Port Glaud Wetlands and Ramsar site[35][36] (from 120 ha to 200 ha). New Management Plans will be developed for the expanded areas and capacities developed in the management agencies to support effective implementation and enforcement.

Strengthened management will be prioritised in Ste Anne Marine National Park (1,423 ha) and Aride Special Reserve (71ha terrestrial and 718 ha marine[37]) where the marine boundary has just been extended to 1km. The management effectiveness of all sites will be strengthened through the implementation of the new or updated Management Plans in collaboration with communities, private sector partners and other stakeholders. For example, for Ste Anne, the focus

will be on developing an integrated and widely accepted vision for the future of the MPA and implementing the recommendations of the Ste Anne management plan (currently under development). Specific activities will include establishing co-management and/or formal partnership agreements with private hotels; strengthening regulations and enforcement capacities due to the many visitors and activities within the MNP; and monitoring visitor use and impacts and ensuring that all allowable activities comply with the area's conservation status.

For Aride, an indicative list of activities to strengthen management includes implementing the conservation management plan; creating terrestrial and marine habitat maps to support the conservation management plan and ecosystem monitoring; developing an enforcement strategy in partnership with GoS to reduce poaching of seabirds eggs and octopus and patrolling the extended MPA; sustainably upgrading the existing conservation centre (so as to attract more visitors and boost revenues from entrance tickets and sales of items); design and implement a localised coral predator control program to improve coral recruitment and recovery around Aride; carrying out studies of coral disease and the impacts of nutrients on coral reef recovery; carrying out studies to investigate complex relationship between *Pisonia grandis* and seabirds in collaboration with reputed institutions to improve habitat management eg analyses to determine genetic identity of *Pisonia* species and compare *Pisonia* phenology (seeding density and productivity, seeding trigger parameters) across different islands/regions (including in the outer islands of Seychelles and also in the South Pacific where its relationship with sea birds appears largely benign) [38]; carrying out studies to assess population trends and current status of the various seabird nesting populations on Aride by analyzing and modelling almost five decades of long term seabird census data and to develop revised monitoring protocols (as necessary) to assist future management; improving the efficiency and reliability of field data collection eg piloting the development of Open Foris Collect mobile data collection tool (or similar) for seabird, sea turtle, landbird, and vegetation monitoring; creating datasets on seagrass, seabirds, insects, subsistence fishing and fish spawning aggregations, coastal erosion, water quality, and citizen science to feed into ICS's "bio-holistic database"; developing a centralized GIS database; and working with educational partners to integrate information about Aride and updated scientific knowledge into their environmental education programs; and deliver specialized training courses eg about seabirds to raise additional funding for PA management and capacity development.

Under Output 2.1.2, PA managers of project sites (including SNPA, ICS and co-managers) will be trained and capacitated to effectively manage site-level MPAs with improved enforcement and monitoring. The training and capacity development will address persistent shortfalls in the enforcement of MPA regulations by piloting a new monitoring and enforcement model for MPAs. For example, the project will provide training on all aspects of monitoring and enforcement of environmental regulations, including evidence gathering, forensics, arrests, trials/convictions, monitoring of convictions, etc., for persons with relevant authority in these areas, such as SNPA staff, the police, the Seychelles Coast Guard, and prosecutors and judges. The project will seek to improve coordination among these partners, to clarify and document the existing roles and authorities of the partners, and to identify and implement any changes that can improve their coordination and effective actions. Surveillance and enforcement strategies at the project sites can be explored, such as drone monitoring/surveillance and permanent armed guard presence during seabird season on Aride.

Under Output 2.1.3, an up-to-date, state-of-the-art Management Plans with related business plans will be developed or updated for each project site.

Component 3 - Investing in innovative nature-based solutions to development: IUCN[39] defines nature-based solutions (NbS) as “actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”. NbS is thus an umbrella concept that covers a whole range of ecosystem-related approaches that address societal challenges and support achievement of the Sustainable Development Goals. NbS will be piloted in three project sites: Under Output 3.1.2, the project will help to establish partnerships between local businesses and communities to reduce localized threats to vulnerable coastal and marine ecosystems. The project will build on results of BIOFIN to promote investment in biodiversity conservation and facilitate the expanded uptake of the Seychelles Sustainable Tourism Label, particularly by small hotels and operators within or in areas adjacent to the selected project sites. As of July 2019, twenty hotels/resorts in the Seychelles had been certified in the SSTL program, but an assessment of the program needs to be carried out to both determine the reasons for the slow uptake as well as to confirm that the Label aligns with international best practices; the results of this assessment will guide further dialogue with and support for hotels/tourism operators.

Under Output 3.1.1, the project will initially assess options and subsequently pilot select nature-based solutions to demonstrate biodiversity-friendly income generation and sustainable ‘blue business’ models in partnership with private sector partners and local stakeholders including communities. For the Inner Island site of Ste Anne, the primary focus will be on promoting sustainable and ecologically friendly tourism development with an emphasis on minimising land- and sea-based impacts on the MNP. In Iles Cocos Marine Park, the focus will be on establishing a coral recovery programme that strengthens the resilience of reefs impacted by repeating bleaching and damage in recent years through a combined set of actions including better protection, targeted nature-based restoration (in line with best available science and ICRI Coral Restoration Guidelines) and reduction of local stressors (e.g. reducing tourist impacts). The precise approach will be defined during PPG. In Port Glaud, the project will seek to reduce direct pressures on fragile ecosystems within the Ramsar site adjacent to Port Launay Marine Park by strengthening management of the wetlands area, reducing pollution, improving waste management and implementing local education programs to inform adjacent communities about the value of coral reefs, mangroves and seagrass beds and engage them in co-management of the expanded Port Glaud protected area. In Baie Ste Anne, the project will work with local fishing communities to restore and effectively manage Seychelles’ largest and most diverse seagrass bed in the Inner Islands, providing an important step towards conserving vital fish stocks and protecting livelihoods under the proposed LMMA framework.

Under Output 3.1.2, local communities living adjacent or with access to priority conservation areas will be supported to benefit from economic development driven by sustainable nature-based livelihoods, with a focus on youth engagement. In order to establish the precise details of local community access and use of the project sites, and identify possible options for interaction based on allowable activities and bottlenecks for engagement (especially with a focus on women and youth), an assessment will be carried out during PPG or early in the project.

Component 4 – Effective gender mainstreaming, knowledge management and M&E: Under Output 4.1.1, a gender empowerment strategy will be developed and used to guide project implementation and M&E at the three project MPA sites and to be embedded into the SOA as a gender empowerment strategy for all MPAs. Under Output 4.1.2, a participatory M&E and learning framework will be developed and implemented for the project, and under Output 4.1.3 lessons learned through participatory M&E and gender empowerment will be used nationally and shared internationally, thereby cementing Seychelles’ position as a global ‘Blue Economy’ leader. Under Output 4.1.4, South-South cooperation on ‘Blue Economy’ with Indian Ocean countries and other SIDS including Comoros,

Mauritius and Maldives will be facilitated to exchange best practices / lessons learnt, such as blue economy business models that have been effectively implemented in various SIDS; successful approaches to large-scale marine management; national enforcement strategies; and sustainable financing options at both national and regional levels.

4) Alignment with GEF focal area and/or Impact Program strategies

The project is aligned specifically with the GEF Biodiversity Focal Area BD-2-7: Address direct drivers to protect habitats and species, and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate. The project is focused on improving management of the newly expanded Marine Protected Area estate in the Seychelles in alignment with the Seychelles' Marine Spatial Plan and Blue Economy vision. Given the loss of habitat and fragmentation taking place, all fauna and flora species are in need of protection and strengthened management practices, making the Seychelles a high priority for the conservation of biodiversity of global importance. The archipelago is located within one of the 25 global biodiversity hotspots recognized by Conservation International and in one of the 35 critical regions identified by the World Wildlife Fund ("Madagascar and the West of the Indian Ocean"). The project will contribute to global environmental benefits through the improved management of existing Marine Protected Areas. Key biodiversity conservation results will include: i) protecting endangered and endemic species from extinction (across the PA network, specifically in the project sites); ii) improving sustainable land and coastal use practices for conservation of key species and ecosystems; and iii) providing sustainable, biodiversity-friendly livelihood options. By coordinating a cross-sectoral approach to the project's outputs and components, and ensuring integration of land management activities with the Government of Seychelles' 'Blue Economy' strategy and the conservation objectives of the MEECC, the project will ensure long-term socio-economic benefits based on healthy ecosystems.

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

The incremental approach can be summarised as follows: the project will seek to (i) reduce the threat from over-exploitation and further degradation of GOS's MPA system; (ii) strengthen management of GOS's expanded MPA system through effective and improved engagement of, and co-management with, communities to achieve biodiversity conservation goals; and iii) promote the development and implementation of nature-based solutions and biodiversity-friendly livelihoods in select sites to benefit local island communities. Without project interventions, the fragmentation of the island habitats and degradation caused by the range of threats identified above will not only continue, but will most likely accelerate as human populations and tourism pressures increase. There will be insufficient investment in protected area management, resulting in the loss of unique biodiversity with significant costs and detriment to Seychelles' national economy.

Baseline practices	Alternatives to be put in place by the project	Global Environmental Benefits
Lack of coordination and capacity among agencies reduces the effectiveness of MPAs and conservation efforts, and allows ecosystem	<ul style="list-style-type: none"> - Inter-institutional and inter-sectoral coordination to address development priorities and conservation needs to reduce negative impacts on the expanded MPA system - Capacity development within key Ministries including MEECC and the new Seychelles Oceans Authority (mandated to manage 	<ul style="list-style-type: none"> - Improved management and protection of 2,579 hectares of MPAs (see targets and indicators – <u>to be confirmed</u>)

<p>degradation to continue unchecked due to ineffective management and financing</p> <p>Poor management of MPAs and low capacity to enforce PA laws and monitor biodiversity leads to biodiversity loss from unsustainable marine practices and illegal use and poaching of natural resources</p> <p>Uncontrolled use of marine protected areas and key species continues, resulting in local declines and possible extinctions, particularly given the rate of microendemism</p> <p>Habitat fragmentation and degradation trends caused by the range of identified threats will continue and likely accelerate (undermining Seychelles MPA expanded system)</p>	<p>and the new Seychelles Oceans Authority (mandated to manage the MSP)</p> <ul style="list-style-type: none"> - Development of an Investment Framework and Strategy for the expanded MPA system to ensure financial sustainability - Capacity of SeyCCAT, DBS and related institutions strengthened to support Blue Economy financing and investment - Improved understanding nationally and at local project sites of the value of biodiversity and improved livelihoods that can arise from its conservation and sustainable use - PA management plans are revised and strengthened for project sites with emphasis on community and private sector engagement for improved conservation and livelihoods - Capacities of SNPA personnel and other PA managers are strengthened for improved MPA management - Innovative co-management models established between Government, NGOs and communities for coordinated management of project sites based on a common conservation/development vision - Private sector enterprises work with communities and government to reduce land-based and sea-based impacts on MPAs - Community-based business ventures provide 'biodiversity friendly' livelihoods at project sites (e.g. sustainable/ecotourism) in project sites - Nature-based solutions eg mangrove and coral reef recovery, are piloted to address development challenges in project sites and support SDG achievement 	<ul style="list-style-type: none"> - 433 hectares under conservation management (<u>to be confirmed during PPG</u>) - Populations of endemic and threatened species at targeted project sites will be protected from loss of habitat and overexploitation - Conservation of other endemic and globally significant species, including turtles, seabirds, sharks, dolphins and other cetaceans - Improved management of MPAs including updated or new Management Plans with sustainable financing - Innovative co-management models at project sites - Increase in number of biodiversity-friendly livelihood ventures at project sites - Reduced anthropogenic pressures within and surrounding selected sites
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By safeguarding habitats in the MPA system, the project will contribute to biodiversity conservation with direct local and global benefits. Furthermore, by addressing systemic changes to enforcement of national/international laws and regulations on biodiversity conservation, the project will enhance the conservation of key endemic and threatened species, particularly at the project sites (but also potentially at a broader and even national level through

improved governance mechanisms and border controls). As a result of this work, the project will contribute to the following SDGs: 1, 5, 6, 8, 12, 14, 15 and 17.

6) Global environmental benefits (GEFTF)

The project is designed to: i) reduce threats to globally significant biodiversity by strengthening the country's system of marine protected areas in alignment with the Marine Spatial Plan and Blue Economy vision; ii) reverse degradation in, and improve management of, coastal and marine areas with positive impacts for local communities living within and/or adjacent to MPAs; and iii) strengthen capacity and partnerships. It will promote integrated ecosystem management and implement key priority activities for the sustainable management of the Western Indian Ocean Large Marine Ecosystem adopted by the nine coastal and island states of the Western Indian Oceans. The project will also contribute to the goals of the CBD in implementing activities identified in the National Biodiversity Strategy and Action Plan. The project will contribute directly to the CBD goal for protection of 10% of the marine area globally, and contribute directly to the fulfilment of the Government of Seychelles' commitment, as delivered at Rio+20, for protection of up to 30% of its marine ecosystems. It will also support the achievement of the post-2020 CBD Global Biodiversity Framework, which will include a target relating to the conservation and effective management of coral reefs and associated ecosystems in the face of accelerating threats.

7) Innovation, sustainability and potential for scaling up

Innovation: The project will pioneer the first GEF-financed Blue Economy project to be implemented in the Indian Ocean. Specifically, the project will put in place a comprehensive approach to the management of coastal and marine ecosystems in the Seychelles in alignment with the national Marine Spatial Plan that will link sectors and partners responsible for coastal and marine ecosystems while increasing local communities' involvement in nature-based livelihoods. By supporting the operationalization of the new Seychelles Oceans Authority (SOA), and facilitating its role in coordinating the MPA management activities of various governmental, parastatal and private/NGO partners, the project will support the Seychelles in piloting an innovative approach to managing a greatly expanded marine PA estate. A high level of Government support for this innovative approach is expected in view of the commitment of the Government to implement both the new Seychelles Strategic Plan and the Marine Spatial Plan (for the management and conservation of marine ecosystems), under the framework of the national Blue Economy Roadmap. In addition, the project will support Seychelles' next pioneering ocean action to protect and manage coastal ecosystems including mangroves and seagrasses, so demonstrating a nature-based solution as a mitigation component of its Nationally Determined Contribution.

Sustainability: Institutional sustainability will be supported by focusing on capacity building in areas of enforcement of MPA regulations, MPA financing, new MPA partnership models, and the technical aspects of Blue Economy approaches. Specific support to the SOA as the institution responsible for the evolving implementation of the Marine Spatial Plan will ensure sustainability post-2020. In terms of financial sustainability, the financing of MPAs is already being addressed by the UNDP-GEF PA Finance project^[40], while capacity development to strengthen SeyCCAT's capacity to further mobilize resources and disburse grants effectively to support Blue Economy initiatives will be supported by this project. With increased awareness among decision-makers, supported by tangible benefits from improved ecosystem functions generated through the on-the-ground pilot activities supported by this project, GEF investments through this project are expected to catalyse more resources to sustain, replicate and upscale similar activities.

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Scaling Up: The project approach has significant potential for replication and up-scaling beyond the targeted areas by the project, as the challenge of sustainably managing Seychelles' MPA system is relevant to all of the countries Inner and Outer Islands. Beyond Seychelles, the innovative approaches to be tested by this project to advance the Blue Economy vision and implement the Marine Spatial Plan will be highly useful and replicable, as there are many small island countries in the region and at a global level that face similar human resources, natural resources and financial constraints in their pursuit to sustainable development.

[1] Seychelles State of Environment Report (2014). Whilst the state of the environment is good overall, there are however threats and trends needing attention, such as the impacts of invasive species, climate change, issues of water quality and coastal erosion.

[2] <http://worldpopulationreview.com/countries/seychelles-population/>

[3] <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=Bw>

[4] <https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/seychelles2018.pdf>

[5] Les aires marines protégées des Seychelles: caractérisation, bénéfices économiques et durabilité environnementale et financière. 2008; Jude Bijoux

[6] National food and Security Policy (2013). Seychelles Ministry of Agriculture and Fisheries.

[7] Industrial long-line accounted for 14,486 metric tons in 2016; Semi-industrial accounted for 969 metric tons in 2016. Seychelles National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2017.

[8] Seychelles has committed to protect 30% of its marine waters and developed a Marine Spatial Plan to ensure representative species and habitats have long-term protection, improve resiliency of coastal ecosystems in the context of a changing climate, and ensure economic opportunities for fisheries, tourism and other uses.

[9] <https://www.cepf.net/our-work/biodiversity-hotspots/madagascar-and-indian-ocean-islands>

[10] In 2014, Seychelles' PA system consisted of 25 PAs (terrestrial, marine and combined) totalling 55,769 ha.

[11] <http://www.uncsd2012.org>

[12] In terms of terrestrial PA coverage, Seychelles has one of the highest ratios in the world with 47% of its total land or 209 km² reserved for protected areas.

[13] At the time of writing this PIF, the SOA will fall under the President's or Vice-President's office to ensure it can fulfil its cross-portfolio role, but will otherwise be fully independent. The SOA will be empowered under the Seychelles Ocean Authority Act (SOAA) to ensure "the administration, coordination, oversight, monitoring and evaluation, review and adaptive management of the Seychelles Marine Spatial Plan"; it will be responsible for ensuring that implementing agencies are 'managing' MSP areas as per their mandates; developing indicators to measure conditions and changes in the 3 zones and monitoring these over time; and reviewing and adapting the MSP on a periodic basis. The SOA will not directly manage MPA sites; instead, agencies and institutions with existing responsibilities for managing MPAs (e.g. Seychelles National Parks Authority, Seychelles Fishing Authority, Seychelles Island Foundation, Island Conservation Society, Nature Seychelles, and private sector partners that may assume management of areas identified in Phase 2 of the MSP) will continue to carry out this role. Other key line agencies include the Seychelles Coast Guard and Island Development Company. The SOA will also

provide information/expertise to support GoS in matters of marine governance (e.g. Areas Beyond National Jurisdiction (ABNJ), EEZ boundaries, the Joint Management Area (JMA), Agreement for Port State Measures (PSMA), designation of Particularly Sensitive Sea Areas (PSSAs), Oceanographic research and application of the Maritime Zones Act, etc.). SEYMSP Governance Cabinet Paper, 27 November 2018.

[14] <https://www.protectedplanet.net/search?q=Seychelles>; and WIO MPA Outlook—Seychelles *draft*, Bijoux, J. September 2019.

[15] SNPA non-resident visitor statistics 2015-2018.

[16] <https://www.arideisland.com>

[17] <https://rsis Ramsar.org/RISapp/files/RISrep/SC1432RISformer2005.pdf>

[18] <https://www.sixsenses.com/en/resorts/zil-pasyon/sustainability>

[19] *Enhalus* is only found near Praslin (mostly at Baie Ste Anne area) and in much sparser density in certain places along the east coast of Mahe. So this is a unique ecosystem that was once much more abundant in the Mahe & Praslin area, but is now very threatened, mostly due to habitat destruction.

[20] Seagrass accounts for 10% of the ocean's capacity to store carbon—so-called “blue carbon”—despite occupying only 0.2% of the sea floor, and it can capture carbon from the atmosphere up to 35 times faster than tropical rainforests. Seagrass will be Seychelles' next pioneering ocean action.

[21] <https://seyccat.org/piloting-voluntary-fisheries-zone-closure-on-praslin-island-for-the-benefit-of-the-marine-environment-and-fisher-folks/>

[22] Hoegh-Guldberg, O. et al. Coral reefs under rapid climate change and ocean acidification. *Science* 318, 1737–1742 (2007).

[23] Hughes, T. P., Graham, N. A. J., Jackson, J. B. C., Mumby, P. J. & Steneck, R. S. Rising to the challenge of sustaining coral reef resilience. *Trends Ecol. Evol.* 25, 633–642 (2010).

[24] Boom and bust of keystone structure on coral reefs. Shaun K. Wilson, James P. W. Robinson, Karen Chong-Seng, Jan Robinson & Nicholas A. J. Graham. *Coral Reefs*. 2019.

[25] <https://www.nbs.gov.sc/statistics/tourism>

[26] This estimated total does not include Silhouette Island, for which figures are not available.

[27] Government of the Seychelles (2011), Second National Communication to the United Nations Framework Convention on Climate Change

[28] Predicting climate-driven regime shifts versus rebound potential in coral reefs. Nicholas A. J. Graham, Simon Jennings, M. Aaron MacNeil, David Mouillot & Shaun K. Wilson. *Nature*. 2015.

[29] Productive instability of coral reef fisheries after climate-driven regime shifts. James P. W. Robinson, Shaun K. Wilson, Jan Robinson, Calvin Gerry, Juliette Lucas, Cindy Assan, Rodney Govinden, Simon Jennings and Nicholas A. J. Graham. *Nature Ecology and Evolution*. 2019.

[30] As this is a very large undertaking, key elements to be prioritised for support under this project will be identified at PPG.

[31] This will build on the recommendations of the 'Financing options to implement 400,000km² of new Marine Protected Areas under the Seychelles Marine Spatial Plan' study, prepared in May 2019 under the PIMS 4656 PA Finance project, the Marine Spatial Planning Initiative and SeyCCAT.

[32] <https://seyccat.org>

[33] <http://www.dbs.sc/product-loans/blue-investment-fund-bif-scheme>

[34] Iles Cocos Marine National Park does not currently have a Management Plan. With the addition of Félicité, a Plan will be required for effective management of the expanded site.

[35] <https://rsis.ramsar.org/RISapp/files/RISrep/SC1432RISformer2005.pdf>

[36] More information: https://www.international-climate-initiative.com/en/news/article/seychelles_protecting_marine_areas/

[37] The marine boundary of Aride Strict Nature Reserve was recently extended under the MSP to 1km, increasing marine protected area coverage from 200m (97 ha) to 718 ha, placing significant additional management responsibility on ICS.

[38] Estimated cost: \$80K.

[39] <https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions>

[40] Seychelles' Protected Areas Finance Project (GEF Project ID 5485).

1b. Project Map and Coordinates

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

See Annex A

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.

Effective consultation to support project development has taken place since the earliest stages of project development through the establishment of a multi-sector National Steering Committee. The NSC comprises representatives from Government agencies, NGOs and CSOs. The chair is shared by GEF OFP/PS Climate Change, Wills Agricole and PS Biodiversity Alain de Commarmond, with support from the PCU National Coordinator as secretariat. Key stakeholders include: MEECC, Ministry of Tourism, Ministry of Finance, Trade and Economic Planning (Blue Economy), Ministry for Habitat, Infrastructure and Land Transport, Ministry of Agriculture and Fisheries, SFA, SNPA, ICS, MCSS, IUCN, TNC, UNDP, UNISEY, SGP, SEYCCAT and Sustainability 4 Seychelles, which works to find ways to promote sustainable 'green living' in local communities affected by the project e.g. Port Glaud.

Additional stakeholders, including donors, private sector operators and local communities living in close proximity or within targeted sites will be identified and consulted during PPG. The project will not work with Indigenous Peoples. The respective roles of the key stakeholders are outlined in Table 1.

Table 1: Preliminary list of project stakeholders and their roles in the project

Stakeholders	Roles and Responsibilities
Government, Special Authorities and Parastatals	
Ministry of Environment, Energy & Climate Change (MEECC)	Operational Focal Point (OFP). Coordination and implementation of GEF projects in Seychelles through dedicated Program Coordination Unit (PCU). Key participant in project development and final endorsement of Project Document. Will also monitor and evaluate progress and achievements of the project, through the PCU. All contracts for experts and consultants will be drafted, determined and approved through the PCU, as well as disbursement of salaries, allowances and payments.
Programme Coordination Unit (PCU)	
National Steering Committee /	Oversaw and guided the development of the PIF. The site selection exercise was conducted

National Climate Change Committee (NSC/NCCC)	ed through the NSC/NCCC, with stakeholders providing input for the final choices. The Committee will be instrumental in monitoring and evaluating the implementation of the project through the PCU. Provides guidance and input for all related activities, and is chaired by both Principal Secretaries of the MEECC: principal secretary for the Department of Environment and the one for the Department of Energy and Climate Change.
Ministry of Finance, Trade and Economic Planning	Per below:
<ul style="list-style-type: none"> Blue Economy Department <p><i>Member of the NSC/NCCC</i></p>	Department for the promotion, facilitation and coordination of Blue Economy activities. Provides technical assistance for Maritime Boundary Delimitation exercises and MSP processes. As a member of the NSC/NCCC, the Department provides input to guide the development of both the PIF and PPG. The Blue Economy Roadmap is one of the foundation documents for the conceptualisation, development, implementation and monitoring and evaluation of the project.
<ul style="list-style-type: none"> Department of Economic Planning <p><i>Member of the NSC/NCCC</i></p>	With the finalisation of the Seychelles National Development Strategy, the department is a major stakeholder for guiding, monitoring and evaluating the types of co-management modalities and nature-based solutions adopted respectively in Components 1 and 3 of the project. Essentially, the department will guide the types of allowable resource use activities in the selected sites to ensure that they are aligned to the Blue Economy Roadmap, the MSPs and the Seychelles National Development Strategy.
<ul style="list-style-type: none"> Department of Finance 	Will oversee the expenditures associated with the projects, especially the payments of services, goods and the contracting of experts and consultants. Will provide final approval for financial support and annual budgetary allocations for all government departments and agencies, as per the co-financing determined for the project. The department has a Procurement Oversight Unit (POU) which oversees all allocations of contracts for experts and consultants, and payments for goods and services, through a series of stringent administrative guidelines and procedures. The POU may reject the final selection of contracts and payments made by the Project Management Team, on the basis that the necessary guidelines and procedures were not followed. Such actions have caused significant delays in project implementation in the past.
Ministry of Fisheries and Agriculture	With the development of the Seychelles Food and Nutrition Security Policy (NFNSP), the ministry seeks to ensure that there is a resilient and sustainable fisheries and agriculture sector to enhance food and nutrition security, while contributing to national economic growth and respecting the natural environment. The activities proposed in Component 3 of the project will have an impact on this policy and the ministry is thus a key partner in the project design, development and implementation. The ministry will therefore guide the proposed activities to be done in the selected sites to ensure that it is aligned and strengthened

	<p>he country's capacity and ability to deliver on its food and nutrition security objectives and targets, while ensuring efficiency and sustainability in resource use. One of the roles of the ministry is to ensure that there are functional and able institutions, and human capacity and resilience to address food and nutritional security challenges faced by the country from internal and external shocks.</p>
<p>Ministry of Local Government, with its governance structures, such as district administrators for central region, district action teams, and the possibility of district councils being created, as a result of the District Council Act of 2015.</p> <p><i>Member of the NSC/NCCC</i></p>	<p>Local governance structures which manage, oversee and coordinate local communities' concerns, engagement in structural and service-based projects undertaken within their specific district boundaries. Sainte Anne may be considered as part of Greater Victoria and activities there may need the approval and oversight of one of the Central Region district councils. The possibilities are either one of the English River, Mont Buxton or Saint Louis district councils. The District Council Act allows the entities to ensure that citizens have a say in the development and implementation of all projects being implemented in their districts, to ensure accountability, openness, democracy and that there are tangible socioeconomic benefits.</p> <p>The district councils and district administrators will not be applicable for Cosmoledo, Arid e and Astove Islands.</p>
<p>Local communities, (i.e., local populations who seek to engage in leisure activities around protected areas, tour operators, fishers, users of the "shipping lanes" Mahé-Praslin-La Digue-Silhouette which cross marine parks e.g. ferries, fishers, tour operators, Seychelles Navy</p>	<p>Key beneficiaries with the potential for them to participate more in the identification, and monitoring of the socioeconomic activities and conservation programmes linked to the project. Will also be involved in participatory assessments of MPA management effectiveness. Will be involved in all capacity building efforts to strengthen co-management skills and potential beneficiaries of activities in the identified zones/areas.</p>
Autonomous Bodies	
<p>Seychelles Fishing Authority (SFA)</p> <p><i>Member of the NSC/NCCC</i></p>	<p>The Seychelles Fishing Authority (SFA), as a parastatal organization which functions as the executive arm of Government for fisheries and all related matters, created in August 1984 by the Seychelles Fishing Authority (Establishment) Act, seeks to ensure that the Seychelles becomes a leader in fisheries development and research in the Western Indian Ocean and Africa Region. One of its roles is to promote responsible and sustainable fisheries development and the maximisation for the benefit of present and future generations. The SFA has created the necessary framework and conducive environment for the promotion of sustainable fisheries management and responsible fishing practices and the effective conservation and protection of the marine ecosystem. SFA will guide and give inputs on any fisheries-related activities to be done in the selected sites to align them to its principle</p>

	s and own guidelines.
<p>Island conservation Society (ICS)</p> <p><i>Member of the NSC/NCCC</i></p>	<p>As a member of the NSC/NCCC, ICS has been actively engaged in the development of the PIF and will be present for the PPG stage. A registered NGO in Seychelles since April 2001. ICS owns and manages the Aride Island Nature Reserve and has signed an agreement with the Islands Development Company (IDC) to advise and wherever necessary to manage environmental and conservation activities on islands under the lease of IDC. Aride Island is managed by ICS head office on a daily basis and the Aride Island Management Committee (AMC) is the body that oversees all aspects of the management of Aride Island Nature Reserve, reporting to and governed by the Board of Trustees of Island Conservation Society (ICS). The AMC meets every 3 months and oversees the performance of Aride including, implementation of the Aride Conservation Management Plan, production, implementation and review of the Annual workplan, review of the Annual Report, continual review of the Aride Handbook and adherence to procedures and protocols therein, creation of an annual balanced budget according to the agreed schedule per the Aride Handbook, for recommendation to and approval by the ICS Board, science and conservation matters guided by advice provided by the Science Committee and where necessary outside expertise. ICS Seychelles has established a partnership with ICS UK for the lease of Aride Island. ICS UK manages an endowment to financially support Aride Island Nature reserve.</p>
<p>Seychelles National Parks Authority</p> <p><i>Member of the NSC/NCCC</i></p>	<p>SNPA was established in 2009 and has the mandate to protect and manage effectively the ecosystems and biodiversity in designated Protected Areas (PAs) that fall under the jurisdiction of the SNPA, including two national parks, one special reserve, and four marine national parks (including the Ste Anne MNP). SNPA's mandate also includes support for the implementation of national conservation policies and obligations under multilateral agreements; providing tourism and recreational activities for PA visitors; facilitating and conducting research related to biodiversity and protected areas; promoting education and awareness; implementing sustainable forestry practices; and protecting habitats and ecosystems from anthropogenic threats such as forest fire, pollution and coral destruction.</p>
<p>Seychelles Conservation and Climate Adaptation Trust (SeyCCAT)</p>	<p>Set up to manage Blue Bonds and Grants and likely to be a major factor in funding research and socioeconomic activities in identified zones/areas for project implementation.</p>
Private companies	
<p><i>Hotels bordering the Sainte Anne Marine Park:</i> Club Med, JA Enchanted Island Resort, Cerf Island Resort, L'Habitation Hotel</p>	<p>Potential partners for conservation and resource use programmes of the project. May be models for co-management and co-financing of conservation programmes in the marine park.</p>

and Resort, L'habitation Hotel on Cerf Island, and Eden Bleu Hotel	
<i>Six Senses Zil Pasyon</i> (Felicite)	
<i>Constance Ephelia</i> (Port Gland)	
Banks	
Seychelles Development Bank (DBS) – Blue Finance Programme	Managing Blue Finance, a source of funds for Seychellois who want to invest in the transition to sustainable fisheries. Blue Finance seeks to promote and finance sustainable fisheries, ocean protection and the Blue Economy. Blue Finance's mission is to finance fisheries related projects and businesses that are committed to transform the Seychelles fisheries sector to a sustainable basis.
Seychelles Credit Union (SCU)	Bank used by small scale fishers to obtain loans to purchase boats and other fishing equipment. Will be a valuable partner to discuss allowable activities in selected zones/areas.
Other banks	Likely to loan fishers and tour operators. Barclays Bank has a specific loan programme targeting business start-ups and expansion.
Civil Society Organisations	<i>Will be involved in the design, implementation, M&E and public awareness regarding co-management of PAs, community mobilization for development of conservation and socioeconomic activities in the identified zones/areas of the project.</i>
Civil Society Platform Seychelles (CEPS)	Likely to be engaged in arbitrating disputes that may arise from the project implementations and potential restrictions linked to allowable activities in the project's selected zones/areas. for implementation. Has spearheaded and guided the creation of the Artisanal Fishers Association Seychelles (AFSS).
Academia: <i>Training, research and analysis</i>	
The University of Seychelles	Active collaboration in conservation training events and biodiversity surveys, research and analysis.
The Guy Morel Institute (TGMI)	Has developed an elective module "Climate Change and Management", and has included climate change considerations in all certificate and diploma courses. Has been active in assisting SeyCCAT in developing and implementing modules for engaging potential project proposal writers from civil society to access the Blue Grants.

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 Republic of Seychelles is a Party to the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and the Optional Protocol. Seychelles has also signed regional gender equality instruments such as the the Southern African Development Community (SADC) Protocol and Gender and Development, and the African Union (AU) Gender Policy. The country has just completed its CEDAW Update Report 2019 and the Beijing Platform +25 Report. The 1993 Constitution makes provision for gender equality. The National Gender Plan of Action 2019-2023 was completed in April 2019 and serves as a clear roadmap to address present situations of gender inequality in Seychelles. In respect of Seychelles' national and international commitments, in order to support gender equality and the empowerment of women, this project will aim to: Empower women and youth by involving them in all national programmes on environment: policy development, policy and legislation review, planning processes for PAs and MPAs, establishment and management of these, capacity building activities and law enforcement all components of the project; Invite all gender and youth-focused NGOs and CBOs to meetings, seminars, workshops and discussion groups that are addressing environment issues at macro-level; Consider involving all gender and youth-focused NGOs and CBOs in more than small-grant projects, by encouraging them to form commissions and/or federations to work together on major environment projects, albeit on some components until capacity is built to the extent that these federations or commissions or individual NGOs can undertake major projects (eg Activity 2.1.2 of Component 2); Where possible within the project, consider allocating grants to gender and youth-focused NGOs and CBOs to undertake and participate in proposed activities (e.g Activity 3.1.3 of Component 3); All sensitisation campaigns and awareness raising activities will specifically target women and youth either through the gender and youth-focused NGOs and CBOs or as individuals, if they are not so affiliated to encourage them to take responsibilities including for engagement with the authorities on all components of the project (eg Activity 1.1.5 of Component 1); and Gender and youth-focused NGOs and CBOs will be involved in project implementation and capacity development at national and district levels. When the project is further developed during PPG, project sites will be visited and selected for pilot activities, based on the resources available for PA management, biodiversity conservation, ecotourism development, blue economy value chain enterprises, etc. The project will include activities that will address any gender gaps regarding access to and control over natural resources, as well as strengthen the participation of women in decision-making processes and enhance their income-generating potential. The gender strategy will ensure an inclusive approach throughout the project and the results framework will include indicators and set targets that reflect balanced social and economic benefits. The M&E plan to be developed will also ensure adherence to gender-sensitive indicators.

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; Yes

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.

The private sector, both tourism and fisheries, will be engaged in the project in several ways and at site, national, and regional levels, for example during pilot projects in demonstration land/seascapes. SeyCCAT and DBS, access to new grant and loan finance can be enhanced to support the creation of new blue businesses in Seychelles. The key is to ensure that the Blue Economy has social and ecological sustainability at its core, so persuading the private sector to engage but sustainably. Specific opportunities for private sector engagement will be developed in more detail during the PPG phase and individual co-financing commitments will be made at that time. Completion of the required due diligence of private sector partners, including completion of the UNDP Private Sector Risk Assessment Tool, will be completed during PPG.

In summary, consultations with private sector partners have taken place with the support of the relevant management authorities and associations where activities are envisaged. Specifically:

- MEECC/Port Glaud: The Constance Ephelia already actively leads efforts to support mangrove restoration in the Ramsar site and is interested to take action to protect/effectively vulnerable fringing reefs in the adjacent Port Launay MPA managed by SNPA. The RTA and PCU National Coordinator met the hotel's conservation team during PIF development.
- SNPA/Iles Cocos: The Six Senses Hotel on Felicité Island (which will be included in the expansion of Iles Cocos MNP) has reached out to SNPA to request partnership to better manage and protect delicate reefs and marine biodiversity on and around the island. Their co-financing commitment was confirmed through SNPA.
- SNPA/Ste Anne): The Club Med Hotel on Ste Anne is under construction. Discussions with hotel management have commenced and efforts to manage local impacts and protect the important turtle nesting site on the island are under way. Communities living within Ste Anne MNP are also committed to reduce the impacts of increasing tourism and promote sustainable management of marine and coastal ecosystems within the Park. These discussions are being facilitated by SNPA.
- ICS (Aride): Efforts to work with local tour operators based on Praslin and La Digue to better manage visitors wishing to visit Aride will be stepped up with the support of the project, while improving education within local communities about poaching seabirds and fishing within the SNR perimeter.
- SEYCCAT Blue Grants Fund and (Baie Ste Anne): Discussions have been held with Praslin Fishers Association (via Dr. Jude Bijoux), which is currently implementing a self-imposed fisheries closure with the full support of the Praslin island community. SEYCCAT also provides small grants to local fishing cooperatives on Praslin and La Digue through the Blue Grants Fund to support sustainable practices and management. Building on the Coastal Wetlands and Climate Change project that is being supported by Pew, TNC and SEYCCAT, which will map significant blue carbon habitats in Seychelles, the project will support more effective management of the globally significant seagrass bed in Baie Ste Anne. Full feasibility will be explored during PPG.

5. Risks

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 2: Risk analysis and mitigation measures

Risk	Risk Rating	Risk Mitigation Measures
Potential disagreements on governance issues (e.g. governance of areas designated under the MSP)	Low	Cooperative development of project activities with MEECC and strengthening of the new responsible Oceans Authority. Detailed stakeholder engagement plan developed and followed during project implementation
Institutional knowledge and capacity remains weak for the management of the entire national PA landscape	Low	Project activities have been designed specifically to address this risk and provide capacity building and training to Government, NGO, academic and community stakeholders. Technical and scientific expertise will be drafted in from the region (and internationally) to build PA management skills and provide 'training of trainers'
Lack of financial means to hire necessary personnel to manage the MPA system, carry out activities in the field, and ensure sustainability of the MPA system	Moderate	Project activities will be designed to assist the GOS with the design of a sustainable financing strategy to ensure that funding exists to maintain the management of the expanded MPA system
Conflicts among community stakeholders regarding roles in the project and access to natural resources	Moderate	Extensive consultation with stakeholders and collaborative project design with communities, associations and leaders
Altered livelihood activities of local fishing communities if and when voluntary closures and other management actions are employed to recover valuable seagrass beds and better manage fisheries in Baie Ste Anne. This could affect local communities' income	Moderate	Extensive consultation with potential project-affected communities at demonstration sites during PPG and assessment of potential impacts on current levels of access and use, which lead to the development of a comprehensive Stakeholder Engagement Plan that will set out processes for engagement and consultation with communities across all stages of the project. Potential development and implementation of a Livelihood Action Plan (to be determined during PPG).

Communities and private sector opt for short-term gain from natural resource use rather than sustainable use	Moderate	Convincing public awareness and creation of alternative income-generating activities that provide solid financial benefits
Climate change impacts ^[1] , including sea level rise, coral bleaching, coastal erosion, and more frequent and severe cyclones, could impact project outcomes	Moderate	A key component of the project will be the development of sustainable use and livelihood options designed to reduce stresses on ecosystems within MPAs (MSP Zone 1) as well as outside PAs (MSP Zone 2), thereby contributing to climate change mitigation and adaptation. Co-management of coral reefs, mangroves and seagrass beds to attenuate storm damage, degradation and over-exploitation, as well as development of tourism and fishery models that incorporate reef conservation in its business models, will demonstrate GOS's commitment to provision of a healthy ecosystem to attract tourists, sustain the livelihoods of fishers, and mitigate against the effects of climate change. PPG assessments will fully consider climate vulnerability by adopting local and expert advice on how to integrate climate resilience into project design and implementation and will assess this risk at the project site level. Project design will take into account the results of the assessment and fully integrate climate change mitigation and adaptation measures including through land restoration methodologies livelihoods support, capacity building and awareness. Demonstrations of nature-based solutions can be a key tool in addressing climate change.

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The Risk Matrix incorporates risks highlighted in the project's pre-SESP, which has been completed and cleared through the mandatory PIMS+ milestone prior to PTA technical clearance.

^[1] As a SIDS, Seychelles is vulnerable to the impacts of climate change and climate variability. The main climate change threats facing Seychelles are similar to those threatening other SIDS: changes in rainfall patterns leading to flooding, landslides on one hand and extended periods of drought on the other, increases in sea temperature, changes in acidity and damage to marine ecosystems, increases in storms and storm surges, and sea level rise during the longer term. This will have significant impacts on infrastructure, agriculture, fisheries, tourism, energy and water security, biodiversity, waste management and on human health and well-being. Seychelles NDC 2020 notes that much of the human activity in Seychelles is concentrated around the low-lying, coastal areas, which are at the highest risk of flooding from heavy rainfall, storm surges, and sea level rise during the longer term. Future planning will focus on losses from flooding and landslides. Seychelles is particularly vulnerable to climate change as follows: Critical Infrastructure (roads, ports, government buildings, electricity, water and sewerage management systems); Tourism (in proximity to the coast or in areas vulnerable to flooding and landslide); Food Security (currently reliant on food imports, and need support for local sustainable and climate-smart agriculture and fisheries efforts); Coastal and Marine Resources (considering the aims of the *Blue Economy* and *Seychelles Strategic Plan 2015*); Water Security (particularly considering issues of storage and distribution);

Energy Security (particularly considering the reliance on fossil fuels); Health (particularly addressing the burden placed on high-density populations in the coastal areas and general vulnerability to climate-sensitive diseases); Waste (particularly for landfill sites in high risk, coastal locations); Disaster preparedness (particularly addressing the need for more research to understand climate change impacts, and resources to predict, prevent and respond to disasters).

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.

The Implementing Partner for this project will be the Ministry of Environment, Energy and Climate Change in close coordination with the Ministry of Finance and Blue Economy and the Ministry for Tourism, Ports, Civil Aviation and Marine, among others. The Project will be managed through the GEF-GOS [Programme Coordinating Unit](#), which houses and manages all projects financed by the GEF and Adaptation under implementation by the Government through the UNDP. The PCU will have overall management responsibility for the Project. The UNDP will ensure that implementation and execution roles will be kept separate. No Direct Project Costs will be requested for this project. Where required, support services will be provided through a third party as the preferred way forward. The UNDP will ensure that PIRs and the mandatory M&Es are carried out. Through the UNDP's Coordination Unit, linkages and synergies will be established between the project and other GEF-financed projects, including: (i) GOS-UNDP-AF project Ecosystem Based Adaptation in Seychelles (EBA) (2015-2020)); (ii) GOS-UNDP-AF project Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future; (iii) GOS-UNDP-GEF Seychelles' Protected Areas Finance project (2016-2020); iv) GOS-UNDP-GEF Outer Islands PA project (2014-2019); and v) WB-GEF SWIOFish3 project (2017-2021). The institutional structure of the project will be confirmed during PPG, but it is anticipated that this will involve a Project Management team within the PCU with the responsibility to oversee project M&E and guarantee coordination of implementation across project sites. A Project Steering Committee will be established to provide guidance and assist with decision-making and will comprise representatives from MEECC as the Ministerial agency mandated with the conservation of biodiversity in the Seychelles, the Seychelles National Parks Authority, island authorities, NGOs, community and private sector representatives. The Steering Committee structure will be finalised during PPG.

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 is country-driven and the project's design is consistent with, and supportive of, national development strategies and approaches. The project scope and strategy is based on the outcomes of a National Portfolio Formulation Exercise (NPFE) carried out during end 2018-early 2019 to establish priorities for funding from GEF-7. The Project is consistent with, and contributes to the implementation of a number of national policies, strategies, plans and reports focused on conservation and sustainable development in the Seychelles, including:

- The new National Development Strategy 2019-2023 (NDS) is the over-arching document for environmental management in the Seychelles; the NDS incorporates the Seychelles Sustainable Development Strategy 2012-2020 (SSDS) and the country's commitments under the CBD, UNFCCC and UNCCD, and is in line with the recommendations of the National Capacity Self-Assessment (NSCA) conducted in 2005. It identifies a number of priorities for biodiversity conservation and ecosystem management that the proposed project supports, including: a) new legislation on fisheries and law enforcement; b) mainstreaming biodiversity into production sectors; c) putting in place sustainable financing mechanisms for protected areas and outer islands; d) enlarging land, coastal, and marine protected areas; e) monitoring and protecting endangered species; f) promoting land conservation and drainage; and g) urban planning development and geographic information systems.
- Biodiversity conservation priorities are defined in the Seychelles' National Biodiversity Strategy and Action Plan (NBSAP; 2015-2020), which is the national mechanism for implementation of the CBD, and in the country's Fifth National Report to the Convention on Biological Diversity (2014), which identifies the following "main threats" to biodiversity that the proposed project will help to address: invasive alien species (IAS) in terrestrial ecosystems; habitat loss in lowland wetlands; a variety of threats to marine and coastal ecosystems; climate change impacts on Seychelles' biodiversity and related socio-economic well-being; and insufficient knowledge and related data management.
- The Seychelles Protected Area Policy (2013) has the aim of providing a framework for the elaboration of legislation and associated guidelines for the establishment, coordination, guidance and management of Protected Areas (PAs) in Seychelles, with a stated vision "...to have a Protected Areas System on the land and in the sea that protects and conserves high conservation value, comprehensive and ecologically representative examples of the Seychelles' natural diversity and cultural heritage and that provides ample opportunities for the fair and equitable sharing of the benefits arising from the sustainable use of these resources." This policy will be reinforced by the new Nature Reserves and Conservancy Bill, which will be enacted and come into force in 2020.
- The draft Strategic Plan for the Environment Sector (2017-2022), which acknowledges that the environment sector represents a key component of the Seychelles' pursuit of sustainable development. The Vision of the Seychelles Sustainable Development Strategy (SSDS) has been adopted. The Vision is '*To contribute to the realization of the nation's economic, social and cultural potential through an innovative, knowledge-led approach, being mindful of the need to conserve the integrity of the Seychelles natural environment and heritage for present and future generations*' and the Mission is '*To have an ecologically balanced environment that build resilience against climate change and disasters and provide a reliable, affordable and ecosystem services for the people*'.

- The project also complies with and supports national commitments and objectives relevant to the targeted focal areas of the project. Issues of land management are elaborated in the Seychelles National Action Plan for Sustainable Land Management (2011), which is in line with the aims and requirements of the UNCCD, and the recent National Land Use Plan (2013) and Land Use Guidelines (2013); all of these documents prioritise sustainable land management and have a strong environmental protection component. The Seychelles also is participating in the UNCCD Land Degradation Neutrality (LDN) Target Setting Programme (LDN-TSP). Other important land management documents include the Seychelles National Agriculture Investment Plan, the Water and Sanitation Development Plan, and the Solid Waste Policy, which recognise the need for effective management of agricultural and industrial pollution and wastes.
- Seychelles National Climate Change Strategy (2009) recognizes that the effects of climate change could lead to changes in precipitation patterns that would have an impact on biodiversity and water dependent ecosystems. The project also will contribute to the Seychelles Nationally Determined Contribution (NDC; 2015) under the UNFCCC, in which “the Republic of Seychelles will reduce its economy-wide absolute GHG emissions by 122.5 ktCO₂e (21.4%) in 2025 and estimated 188 ktCO₂e in 2030 (29.0%) relative to baseline emissions”, and it will support the INDC’s Long Term Vision, which includes “Put in place measures to adapt, build resilience and minimise vulnerability to the impacts of climate change, especially in critical sectors such as water, food and energy security, and disaster management”.
- The project is aligned with key national policies and strategies relevant to the management of water resources and watersheds. The Water Policy for Seychelles (2017) is now being taken forward into a Water Bill for approval by the National Assembly. This is the first comprehensive Water Policy and Bill developed for the Seychelles. The Bill will institutionalize and create a formal legal basis for Watershed Committees as managers of local watershed resources. The Policy recognises that point and non-point pollution sources are undermining economic growth and productivity as a consequence of the deterioration in environmental health quality (Refer to Policy Statement B 1.4). The policy prioritizes identifying non-point sources of pollution and redressing the lack of data, capacity and resources. In addition, both the Water Master Plan (2010-2025) and the Sanitation Master Plan (2010-2025) aim to address increasing levels of waste, polluted water runoff, etc.
- The National Integrated Water Resources Management (IWRM) Plan, approved by the Cabinet of Ministers in July 2017, addresses weaknesses and gaps that were identified during the formulation of the National Water Policy. The IWRM Plan states that the low level of connections to the sewer system and poor maintenance of existing treatment systems are seen as major threats to ecosystem services as well as social and economic development.
- Project activities are also fully in line with Seychelles obligation towards the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, and with priorities identified in the Strategic Action Programme for the Protection of Coastal and Marine Environment of the Western Indian Ocean from Land-based Sources and Activities, the Strategic Action Programme for the sustainable management of the WIO Large Marine Ecosystems (WIO LME SAP, 2014) and the Seychelles Marine Ecosystem Diagnostic Analysis (MEDA) and the Transboundary Diagnostic Analysis for the Western Indian Ocean.

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.

As part of the project's strategy on knowledge sharing and strategic communication and information management, activities will be carried out under Component 4 to capture, analyse and share lessons learned for improved management of the newly expanded MPAs. The knowledge management approach includes the creation of platforms and knowledge-networks that will bring together existing stakeholder associations and groups where lessons learned and experiences can be shared. The project will also identify and compile available documentation and data that will be necessary for decision-making and improved management of MPAs. It will also ensure that best practices in gender mainstreaming will be used to guide project activities and enable disenfranchised community members to become active participants in sharing of needs and experiences. Importantly, the project will support South-South cooperation on 'Blue Economy' with Indian Ocean countries and other SIDS facilitated to exchange best practice/learn lessons.

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
Mr. Wills Agricole	Principal Secretary/Energy and Climate Change, GEF Operational Focal Points	MINISTRY OF ENVIRONMENT, ENERGY AND CLIMATE CHANGE	5/17/2019

ANNEX A: Project Map and Geographic Coordinates

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

Seychelles lies between approximately 4°S and 10°S and 46°E and 54°E.





