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**United Nations Development Programme
Government of Seychelles
Global Environment Facility**

| | | |
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| Project title: A Ridge to Reef Approach for the Integrated Management of Marine, Coastal and Terrestrial Ecosystems in the Seychelles | | |
| Country: Seychelles | Implementing Partner: Ministry of Environment, Energy and Climate Change (MEECC) | Management Arrangements: National Implementation Modality (NIM) |
| UNDAF/Country Programme Outcome: UNDP Country Programme 2017 – 2020; Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded; Output 4. Effective institutional, legislative and policy frameworks in place to enhance the implementation of disaster and climate risk management measures at national levels | | |
| UNDP Strategic Plan Output: UNDP Strategic Plan 2018-2021; Output 2.4.1: Gender-responsive legal and regulatory frameworks, policies and institutions strengthened and solution adopted to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation; Output Indicator 2.4.1.1: Number of countries with gender-responsive measures in place for conservation, sustainable use, and equitable access to and benefit sharing of natural resources, biodiversity and ecosystems | | |
| UNDP Social and Environmental Screening Category: Moderate Risk | UNDP Gender Marker: 2 (the project promotes gender equality in a significant and consistent way) | |
| Atlas Project ID/Award ID number: 00116471 | Atlas Output ID/Project ID number: 00113606 | |
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| Planned start date: 1 July 2019 | Planned end date: December 2025 | |
| LPAC date: 18 October 2018 | | |

Brief project description: The objective of the project is to undertake a comprehensive Ridge to Reef (R2R) approach that addresses the 'whole island' priorities of improved management and conservation of upland forest and agricultural ecosystems as well as coastal and marine ecosystems in the Seychelles to produce global benefits in terms of conservation of globally significant biodiversity and the effective management of large marine ecosystems (including coastal and near-shore marine ecosystems), and to arrest and reverse ecosystem degradation. The project is designed to: i) reduce threats to globally significant biodiversity by strengthening the country's system of marine protected areas and reducing negative land-based impacts on those ecosystems, as well as strengthening the management of forested Key Biodiversity Areas and their surroundings; ii) reverse land degradation in areas outside of formally protected areas and in productive land through the promotion of SLM/SFM practices and agroforestry, leading to the restoration and sustainable flows of forest ecosystem services with positive impacts to communities as well as to adjacent coastal and marine ecosystems; and iii) strengthen capacity and partnerships to promote integrated ecosystem management based on the R2R approach. By addressing a range of terrestrial threats to the marine environment, including flows of pollutants, nutrients and sediment, disrupted hydrological services, degradation of critical habitat, etc. that have significant negative impacts on important coastal/marine ecosystems including wetlands, mangroves, seagrass beds and coral reefs, the project will simultaneously improve the management of the terrestrial landscape, improve the effectiveness of integrated coastal management practices, and secure the integrity of existing and new marine protected areas in the Seychelles. At the policy and strategic level, the project will unite the three most important spatial and resource planning processes in the country, namely the Marine Spatial Plan (for the seascape), the Seychelles Strategic Plan (for the landscape), and national and district level Land Use Plans. The project will build on these baseline activities by providing strategic incremental funding to implement priority actions in each of the plans.

FINANCING PLAN

| | |
|---|----------------------|
| GEF Trust Fund or LDCF or SCCF or other vertical fund | USD 3,898,914 |
| UNDP TRAC resources | USD 75,000 |
| (1) Total Budget administered by UNDP | USD 3,973,914 |

PARALLEL CO-FINANCING (all other co-financing that is not cash co-financing administered by UNDP)

| | |
|--|-----------------------|
| UNDP | USD 2,893,000 |
| Ministry of Environment, Energy and Climate Change (MEECC) | USD 3,836,714 |
| Seychelles National Park Authority (SNPA) | USD 9,749,571 |
| Seychelles Agricultural Agency (SAA) | USD 7,950,000 |
| University of Seychelles (UniSey) | USD 880,000 |
| Marine Conservation Society Seychelles (MCSS) | USD 772,000 |
| Terrestrial Restoration Action Society of Seychelles (TRASS) | USD 1,123,661 |
| (2) Total co-financing | USD 27,204,946 |
| (3) Grand-Total Project Financing (1) + (2) | USD 31,178,860 |

SIGNATURES

| | | |
|--|--|-------------------------------|
| Signature: print name below <i>ALAIN DE COMARMOND</i> | Agreed by Government | Date/Month/Year: 8/1/20 |
| Signature: print name below | Agreed by Implementing Partner | Date/Month/Year: |
| Signature: print name below <i>Armand</i> | Agreed by UNDP Resident Representative | Date/Month/Year: 9/01/2020 |

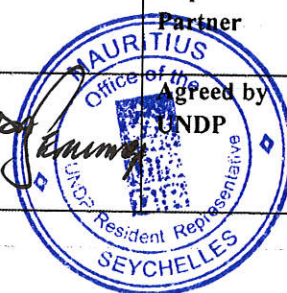
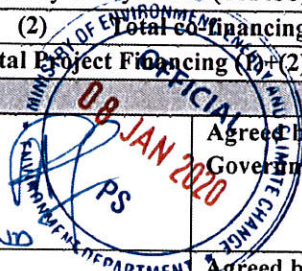


TABLE OF CONTENTS

| | | |
|--------------|--|-----|
| I. | development challenge | 7 |
| II. | Strategy | 21 |
| III. | Results and Partnerships | 38 |
| | i. Expected Results: | 38 |
| | ii. Partnerships | 67 |
| | iii. Stakeholder Engagement | 74 |
| | iv. Gender equality and empowering women: | 78 |
| | Mainstreaming Gender | 78 |
| | v. South-South and Triangular Cooperation (SSTrC) | 84 |
| IV. | PROJECT MANAGEMENT | 85 |
| | i. Cost efficiency and effectiveness | 85 |
| | ii. PROJECT MANAGEMENT | 85 |
| | iii. Agreement on intellectual property rights and use of logo on the project’s deliverables and disclosure of information: | 86 |
| | iv. Risk Management | 87 |
| | v. Social and environmental safeguards | 95 |
| | vi. Sustainability and Scaling Up | 95 |
| V. | Project Results Framework | 98 |
| VI. | Monitoring and Evaluation (M&E) Plan | 103 |
| VII. | Governance and Management Arrangements | 108 |
| VIII. | Financial Planning and Management | 114 |
| IX. | Total Budget and Work Plan | 118 |
| X. | Legal Context | 124 |
| XI. | Risk Management | 124 |
| XII. | Mandatory Annexes | 127 |

Acronyms and abbreviations

| | |
|--------|---|
| ABFA | Anse Boileau Farmers' Association |
| AF | Adaptation Fund |
| AfDB | African Development Bank |
| a.s.l | Above sea level |
| BD | Biodiversity |
| BIOFIN | Biodiversity Finance Project |
| BKA | Bee Keeper's Association |
| BSAFA | Baie Ste Anne Farmers Association |
| CBD | Convention on Biological Diversity |
| CC | Climate Change |
| CEPF | Critical Ecosystem Partnership Fund |
| CITES | Convention on International Trade in Endangered Species of Wild Fauna and Flora |
| CSO | Civil Society Organization |
| DOE | Department of Environment (of MEECC) |
| DRDM | Division of Risk and Disaster Management |
| EBA | Ecosystems Based Adaptation |
| EU | European Union |
| EXACT | Ex-Ante Carbon Balance Tool |
| FAO | Food and Agricultural Organization of United Nations |
| FOSA | Forestry Outlook Studies in Africa |
| FSC | Forest Stewardship Council |
| FSP | Full Size Project |
| GDP | Gross Development Product |
| GEF | Global Environment Facility |
| GHG | Greenhouse Gas |
| GIS | Geographic Information Systems |
| GM | Global Mechanism |
| GOS | Government of Seychelles |
| GVI | Global Vision International |
| HAB | Harmful Algal Bloom |
| HCVF | High Conservation Value Forest |
| IAS | Invasive Alien Species |
| ICM | Integrated Coastal Management |
| IUCN | International Union for Conservation of Nature |
| IWM | Integrated Watershed Management |
| IWRM | Integrated Water Resources Management |
| KBA | Key Biodiversity Area |
| LD | Land Degradation |
| LFPA | Local Food Producer's Association |
| MCSS | Marine Conservation Society Seychelles |
| MEECC | Ministry of Environment, Energy and Climate Change |
| METT | Management Effectiveness Tracking Tool |

| | |
|--------|---|
| MFF | Mangroves For the Future |
| MHA | Ministry of Home Affairs |
| MNP | Marine National Park |
| MPA | Marine Protected Area |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NDC | National Disaster Committee |
| NGO | Non Governmental Organization |
| NISTI | National Institute of Science, Technology and Innovation |
| NTFP | Non-Timber Forest Products |
| PA | Protected Area |
| PCA | Plant Conservation Action Group |
| PCU | Project Coordination Unit |
| PIF | Project Identification Form |
| PIR | Project Implementation Review |
| POPP | Programme and Operations Policies and Procedures |
| PPG | Project Preparation Grant |
| PPP | Public Private Partnership |
| REDD+ | Reduced Emissions from Deforestation and Forest Degradation |
| RRA | Rapid Rural Assessment |
| R2R | Ridge to Reef |
| SAA | Seychelles Agriculture Agency |
| SBS | Seychelles Bureau of Standards |
| SCCS | Seychelles Climate Change Strategy |
| SENPA | Small Enterprise Promotion Agency |
| SEYFA | Seychelles Farmers Association |
| SGP | Small Grants Programme |
| SFM | Sustainable Forest Management |
| SFRSA | Seychelles Fire & Rescue Services Agency |
| SIAH | Seychelles Institute of Agriculture and Horticulture |
| SIDS | Small Island Developing State |
| SIF | Seychelles Islands Foundation |
| SLM | Sustainable Land Management |
| SNPA | Seychelles National Parks Authority |
| SPA | Seychelles Planning Authority |
| SSP | Seychelles Strategic Plan |
| STAP | Scientific and Technical Advisory Panel (GEF) |
| STB | Seychelles Tourism Board |
| TE | Terminal Evaluation |
| TOR | Terms of Reference |
| TPA | Temporal Protected Areas |
| TRASS | Terrestrial Restoration Action Society Seychelles |
| UNDP | United Nations Development Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UNISEY | University of Seychelles |
| VDD | Val d'Endor Farmers Association |

I. DEVELOPMENT CHALLENGE

Country Overview

Like many small island states, the Seychelles is highly dependent on the healthy functioning of both its terrestrial and marine ecosystems for its economic development and social well-being. A significant proportion of the country's economy depends on natural ecosystem services, including productive marine ecosystems for fisheries and pristine and diverse terrestrial and marine ecosystems to sustain the all-important tourism industry. The country's territory consists of a landmass of 455 square kilometres forming 115 islands, and an Exclusive Economic Zone (EEZ) covering 1.37 million square kilometres. The Seychelles has a total population of 94,228 and an estimated GDP (2018) of US\$ 2.99 billion, or a GDP/capita of US\$ 30,486. Approximately 86% of the population lives on Mahe Island and most of the remainder on the narrow coastal plains of the other two main granitic islands (Praslin and La Digue). The country ranks second in Africa in terms of GDP per capita (us\$ 23,799 in 2014) and it displays fairly high levels of human development (HDI was 0.772 in 2014) but high inequity (Gini coefficient was 0.658 in 2013). Most MDGs have been met and foreign aid has fallen substantially in the past few years. The Seychelles economy is primarily dependent on tourism and fishing (including a large tuna export industry and significant numbers of local inhabitants active in local small-scale commercial and artisanal fishing).

The archipelago is divided into two groups: the mostly granitic islands (or 'Inner Islands') within the Mahé Plateau, and the outer coralline islands ('Outer Islands') stretching southwest from the Plateau. The 42 granitic islands are peaks on a largely submarine plateau, situated in the north-eastern part of the archipelago. The granitic islands of Seychelles are some of the oldest oceanic islands and the only mid-oceanic granitic islands in the world. The soils of the granitic islands are generally very poor and slightly acidic, due to the geologically very old granitic base rock, which is inherently poor in nutrients, and are typically short of organic matter. The soils of the coralline islands typically have high salt content, and lack several nutrients and trace elements. Mahé, the largest and tallest island in the Seychelles (145 km²; 905 meters.), is typical of the granitic islands: a mountain ridge runs the length of the island, the upper elevations remain largely forested, and the lower regions have been developed for residential and agricultural use. The islands experience a humid tropical climate with little seasonal variation in temperature. They receive heavy monsoon rains from November to February, and in the cooler months the trade winds blow steadily from the southeast. The abundant rainfall and warm temperatures, along with soil enriched by guano, allowed lush palm forests to develop on the islands, most of which have now been cleared.

Seychelles is located in the Madagascar and Indian Ocean Islands Region, which has been classified as one of the world's "*global biodiversity hotspots*". 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 gigantea*) 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 Seychelles¹, 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. (Seychelles coral reefs have suffered several major coral bleaching events in the past few decades, as described in the threats section below). The Seychelles is recognized as a specific ecoregion for reef-building corals.^{2,3} The granitic Seychelles supports both coral reefs and coral communities on rock (i.e. corals that do not form 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. On the west coast of Mahé, true fringing reefs have only developed in sheltered bays, such as Baie Ternay and Port Launay, while around Curieuse, there is a shallow fringing reef along the south coast. Two of the MPAs targeted by the project – the Port Launay Marine National Park and the Curieuse Marine National Park, showed some of the highest Scleractinian coral species richness in a 2000 survey, with 68 and 48 different species respectively.⁴ The Seychelles’ waters also provide habitats for a large numbers of cetaceans (7 dolphin species and 19 whale species have been observed) and its beaches to 4 species of nesting sea turtles (3 of which are Red-Listed).

With a very limited land area, the Seychelles experiences intense competing pressures on land resources for tourism, agriculture, housing, water provision and other needs, and 200 years of human settlement have exerted a serious influence on the native biota of the islands. Habitat loss and fragmentation, as well as invasive species, have caused several extinctions, and reduced populations of many species to extremely perilous levels. Human use continues and poses a serious threat to the Seychelles’ native flora and fauna⁵. Coastal freshwater ecosystems in the lowland areas of the granitic islands are some of the most threatened native habitat-types in the Seychelles. The area of such ecosystems has declined significantly and the remaining freshwater ecosystems are threatened by declining water quality due to reclamation, sedimentation, pollution and drainage. Near-shore marine ecosystems including mangroves, seagrass beds and coral reefs have also declined significantly in recent decades and continue to be under significant threat from land-based sources of pollution, including sediments, nutrients and agricultural chemicals flowing from upstream landscapes and from developed coastal areas. In terms of forest cover, most of the granitic islands were covered by pristine forest, but agricultural expansion, timber production and settlement/infrastructure have contributed to the loss, fragmentation and alteration of forest habitats. Today, less than 5% of the original native forest remains intact, primarily in upland areas that have been spared from development (although they continue to be negatively impacted by invasive alien species). Intact native lowland forests (0-300 m) and sub-montane forests (300-550 m) are limited to a few

¹ Klaus, R. (2015). *‘Identification of priorities for the expansion of the marine and terrestrial protected area system of the Seychelles, Final report’*, Government of Seychelles, United Nations Development Programme^{GEF}

² Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. Spalding et al. *Bioscience* 57(3), July/August 2007 / Vol. 57 No. 7

³ Obura D (2012) The Diversity and Biogeography of Western Indian Ocean Reef-Building Corals. *PLoS ONE* 7(9): e45013. doi: 10.1371/journal.pone.0045013

⁴ Klaus, R. (2004). *Coral Bleaching Indices in Theory and in Practice: A Comparative Evaluation of the 1997/98 Indian Ocean Coral Bleaching Event*. Ph.D. Thesis, University of Warwick, 343p.

⁵ www.worldwildlife.org

fragmented areas on Silhouette and Curieuse islands, and mangroves have been reduced to just 43 hectares on the inner granitic islands.⁶

Threats

Anthropogenic threats to the Seychelles' biodiversity and its terrestrial, coastal and marine ecosystems include:

Ecosystem Conversion: In the Seychelles, deforestation, degradation, fire, agricultural expansion, and land reclamation are major causes of land-cover change, contributing to land degradation and erosion, and the decline and extinction of terrestrial species (22 species have gone extinct, and 34% of plants, 45% of amphibians, 64% of birds, 34% of mammals and 43% of reptiles are threatened with extinction). Originally, most of the granitic islands were covered by pristine forest, but agricultural expansion, timber production and settlement/infrastructure have contributed to the loss, fragmentation and alteration of these forest habitats. Establishment of coconut, cinnamon, vanilla and patchouli plantations by settlers early in the 19th century caused widespread deforestation; these plantations eventually covered most of the islands, up to an elevation of some 700m above sea level. In addition, frequent forest fires have destroyed native forests across the inner islands: fire has degraded forests covering approximately 40% of Praslin and Curieuse, 20% of Mahé and La Digue, and 10% of Silhouette⁷. Once native forests are destroyed by fire, they rarely come back without rehabilitation interventions; on Praslin, 1,500 ha of forest have been affected by fires, of which 1,250 ha are now shrubland/bush vegetation composed mainly of exotic flora, 100 ha are just beginning to recover vegetation, and 160 ha are severely degraded (i.e. bare, exposed sites). Of the 160 ha that are severely degraded, 53 ha are considered to be a high priority for restoration⁸. Forest fires continue to be a significant threat (especially for dry palm forests); conflicts over land and other issues frequently result in intentional fires as a protest tool or way of settling disputes, while unintentional fires result from negligence while burning rubbish or harvesting wild honey, and a general lack of awareness of the threat and impacts of forest fires. Agriculture in the Seychelles takes place on both the coastal plains and the upland slopes; the rapid expansion of the tourism industry in the past few decades has necessitated further local production of food while also converting much of the coastal plains to tourism development and pushing agriculture into more of the upland areas, which has increased soil erosion and land degradation. Whether through plantations, fires or conversion to agriculture, the upland terrain of the granitic islands is typically very steep and prone to significant soil erosion when vegetative cover is removed. For the marine and coastal environment, the Marine Ecosystem Diagnostic Analysis of the Seychelles⁹ identifies most habitat destruction in the Seychelles' coastal zone as occurring on the inhabited Inner Islands and mostly affecting the immediate coastal marine environment. Coastal wetlands have been destroyed on a scale even greater than that of forests; coastal development has reduced the size of wetlands by 90%, which has destroyed important habitats and greatly reduced the capacity of coastal ecosystems to store freshwater (leading to increased flooding of coastal areas), to filter freshwater flowing into the marine environment, and to protect the landscape from storm surges and flooding. The coastal

⁶ Table 10 in Senterre, B. and Wagner, M. (2014). *Mapping Seychelles habitat-types on Mahé, Praslin, Silhouette, La Digue and Curieuse*. Consultancy Report. Government of Seychelles, United Nations Development Programme, GEF

⁷ Senterre, B. (2009). *Distribution and determinants of forest fires and land degradation on Praslin, Seychelles*.

⁸ Senterre, B. (2009). *Cost-effective techniques for the rehabilitation of burned and degraded lands in the Seychelles*.

⁹ ASCLME (2012). *National Marine Ecosystem Diagnostic Analysis*. Seychelles, Contribution to the Agulhas and Somali Current Large Marine Ecosystems Project (supported by UNDP with GEF grant financing)

zones of the granitic islands are also vulnerable to beach erosion and the impacts of sea level rise due to global climate change. Mass coral bleaching and subsequent coral death caused by thermal stress remains the greatest driver of coral reef degradation in the Seychelles¹, particularly in the Inner Islands where live hard coral cover was reduced to less than 5% at many sites as a result of the 1998 mass coral bleaching event. The death of hard corals is usually followed by a breakdown of the reef structure and a loss of structural complexity, which causes a loss of habitat and biodiversity on the reef. In January 2016 another extensive mass coral bleaching event decimated the coral reefs causing loss of > 90% of live coral cover. Despite the facts that some reefs slowly regain their live hard coral cover, many other reef sites have undergone a phase-shift from a coral dominated state to a rubble and algal-dominated state that is difficult to reverse.

Ecosystem Degradation: The primary causes of soil erosion on the main granitic islands have been identified as forest degradation from fires, construction, and the cultivation of crops on hillsides without the use of appropriate soil conservation measures¹⁰. Soil losses resulting from these activities reduce land productivity and cause declines in water quality and quantity, including disruption of the hydrological cycles in downstream coastal wetlands. Another important impact, however, stems from sediments flowing into the sea where they “smother” and kill the corals upon which the Seychelles’ beaches, fish stocks and coastal population depend^{11,12}. Studies measuring sediment runoff in two rivers flowing into the Praslin Marine National Park—the Casimir River which flows through a very degraded landscape and the Pasquiere River which flows through less degraded forest—demonstrated that the Casimir river was depositing red silt up to 75 m from the shoreline (and thus onto the reef), while the Pasquiere River and Davidson River which flow into the same lagoon had negligible deposits¹³. A further growing concern is coastal erosion, which is more common in the inner islands where it has been aggravated by anthropogenic effects.¹⁴ Flooding of the coastal plains after high-intensity rains is common during the rainy season; although this is a natural phenomenon, it is aggravated by deforestation of the uplands and increasing infrastructure developments on the coastal plain. This flooding results in crop losses and, in severe cases, may cause long-term land degradation by leaving the land unfit for further cultivation. Apart from negatively affecting the physical and chemical attributes of the soil, rainwater also encourages subsequent weed growth, and it further introduces a number of adverse soil borne organisms. Land degradation from physical development / construction is also frequently observed, and is aggravated through unsustainable building practices on steep slopes. The most prominent feature of this is landslides, which recurrently take place after high intensity rainfall and may damage infrastructure and cause deforestation and land degradation. The impacts of bush fires, apart from converting ecosystems, can also include significant degradation in the form of soil erosion, water runoff, air pollution, and changed soil

¹⁰ Antoine H., Carolus I., Naya N., Radeconde V., and Sabury E. (2007). *Seychelles National Summary Report - Land-based Activities, Sources of Pollution and Pollutant Levels in Water and Sediment*.

¹¹ Clifton J., Etienne M., Barnes D., Barnes R., Suggett D., Smith D. (2012). ‘Marine conservation policy in Seychelles: Current constraints and prospects for improvement’, *Marine Policy* 36 (2012) 823–831.

¹² Antoine *et al*, 2007.

¹³ Henriette, E., Bunce, S., Lesperance, M., Laboudallon, V. and Lesperance, B. (2011). Ridge to Reef - Where does all the soil go? Raising awareness and engaging community to participate in measuring soil erosion at Anse Possession, Praslin – Seychelles. Demonstration project of coastal monitoring including socio-economic aspects as a tool for developing local capacity building, raising public awareness and future long-term monitoring. Terminal Report for the Mangroves for the Future project. Terrestrial Restoration Action Society of Seychelles Seychelles; and Talma, E. and Lesperance, M. (2011). Marine Survey in Baie of Pasquiere, Praslin Island, Seychelles. Terrestrial Restoration Action Society of Seychelles, Seychelles

¹⁴ Bijoux, J.P., Decomarmond, A., Ameeruddy, R. (2008). *Status of the Marine Environment Report, Seychelles*. UNEP-GEF-WIO-LaB Project: Addressing Land Based Activities in the Western Indian Ocean.

properties in terms of microbial activities and water retention. The soil types and steep slopes in many areas of the granitic islands mean that exposed top soil easily erodes after torrential rains, and after the loss of vegetative cover, topsoil and organic matter, soils will crust and bake in the sun and become rock-hard. Forest fire destruction of standing cavity trees as well as dead logs on the ground has negative effects on small mammal species and birds, while severe fires can lead to increased water temperatures and high carbon dioxide levels in rivers, which can adversely affect the spawning of river and marsh species. Excessive sedimentation in coastal areas, in particular after periods of heavy rains, is responsible for smothering corals and other benthic marine organisms by forming a thin layer over their surface as sediments settle. Excessive sedimentation is also responsible for reducing the penetration of photosynthetically active radiation (PAR) that can be used by marine plants for photosynthesis. Sedimentation affecting the Curieuse Marine National Park mostly comes from the bare mountain slopes found along the Northern Shores of Praslin island; during periods of heavy rains, the red soils are washed down the slopes and enter the Curieuse Marine National Park, so that the sea in the area turns red and underwater visibility reduces to almost zero. Physical damage to marine habitats caused by indiscriminate boat anchoring remains an important and growing threat to coral reefs, in particular from “bareboat” chartered yachts that are skippered by tourists with little to no knowledge of the location of reefs. Anchor damage is affecting the structure of reefs and contributing to the creation of rubble beds, which support very low levels of marine biodiversity and do not offer a stable environment for coral to recruit and survive.

Pollution and Waste: Land-based pollution (sedimentation and nutrients from agriculture) is identified as one of the greatest threats to the health of marine ecosystems within 5 km of the shore of the main inhabited islands of the Seychelles.¹⁵ Pollution of inland waters by faecal bacteria has been identified as a major concern¹⁶; most of the areas on Mahé are not on a sewer system and the existing sewers are generally in critical condition and in need of refurbishment. Leaks are likely to increase if the network is not refurbished, leading to further pollution of rivers.¹⁷ Management of septic tanks is also not optimal. The large number of tourism visitors (currently increasing by 19% per year), who primarily visit coastal areas, is putting additional strains on the sewer system. Run-off and wastes from agricultural activities also produce significant negative impacts on lowland ecosystems. About 20% of crop farmers use fertiliser and all farmers use pesticides as a mean to control agricultural pests. The practice of small livestock rearing is another major source of water and coastal pollution; approximately 90% of legally-registered pig farms (plus illegal farms) have inadequate septic tanks/soakage systems, so that fluid effluents flow directly into rivers and streams or seep into the soil¹⁸. Residents of the Val d’Endor watershed have registered numerous complaints about animal waste emanating from surrounding farms that is polluting the rivers and reservoirs used for domestic consumption. Waste flows (from pig farms and other sources) are suspected of being one of the primary causes of a widespread Harmful Algal Bloom (HAB) event that affected much of the Inner Islands of the Seychelles in late 2015, resulting in substantial fish die-offs and negative impacts on tourism and fisheries¹⁹, thereby posing a threat to the two main economic sectors in the country. A recent study in the Seychelles has underlined the importance of

¹⁵ Payet, R. (2006). ‘Decision processes for large marine ecosystems management and policy’. *Ocean & Coastal Management*, 49:110-132.

¹⁶ State of the Environment Report (2014); Richetr, I. and Adonis, G. (2014). ‘Carrying capacity study for the districts of Bel Ombre, Beau Vallon and Glacis’. Consultancy report. Government of Seychelles, United Nations Development Programme, GEF

¹⁷ UNEP/AU/SIDA/Output 3.2e (2010) *Country Report – the Republic of Seychelles: policy, legislation and institutional analyses and recommendations for LBSA Protocol ratification and implementation*.

¹⁸ Antoine et al, 2007.

¹⁹ Seychelles News Agency, 26th October 2015. [Toxic algal bloom or lack of oxygen? Tests needed to determine abnormal fish deaths in Seychelles.](#)

addressing pollution in order to protect nearshore coral reefs, finding that “complex reefs in deeper water that are not deluged with pollution recover best...and may serve as coral refuges.”²⁰ Similarly, increased nutrient levels in terrestrial runoff (which are known to produce denser phytoplankton levels, which in turn increase the survival rates of larval starfish) were a key factor in a 2014 outbreak of the Crown of Thorns Starfish (*Acanthaster planci*) that produced significant damage to coral reefs in the inner islands²¹. Finally, because many septic systems are inadequate, there is a significant risk of contamination by sewage and storm runoff during intense storm events typical of the wet season.²²

Invasive Alien Species: Human-facilitated introduction of exotic species is a continuing threat in the Seychelles; alien species now comprise 57% of the total flora of the Seychelles, and this percentage is likely to increase with time. Introduced goats, pigs and cattle inhibit regeneration of native forest; and introduced cats, dogs, common mynah (*Acridotheres tristis*) and tenrec (*Tenrec ecaudatus*) prey upon native species, particularly birds, lizards, caecilians and invertebrates. Virtually all forests in Seychelles are mixed with exotic plant species. According to FAO (2014)²³ the two most serious threats appear to be cinnamon (*Cinnamomum verum* or *C. zeylanicum*) and *albizia* (*Falcataria moluccana*), found in 6,790 ha. The fast-growing *albizia* outcompetes native vegetation, reducing light-levels on the forest floor. Casuarina (*Casuarina equisetifolia*) is another invasive alien tree that produces a thick debris of twigs that does not provide a good habitat for native plants. Other woody invasive species are cocoplum (*Chrysobalanus icaco*) and *Adenantha pavonina* (FAO l.c.). The main problematic non-woody plant species²⁴ are the creepers *Merremia peltata*, *Philodendron* sp., *Epipremnum* sp., *Thunbergia grandiflora*, *Quisqualis indica*, *Syngonium podophyllum*, *Pueraria phaseoloides* and *Passiflora edulis*; the fern *Dicranopteris linearis*; the grass *Panicum maximum*; the aquatic plants *Eichhornia crassipes* and *Pistia stratiotes*; and other herbaceous plants such as *Agave sisalana*, *Alocasia macrorrhiza*, *Ananas comosus*, *Caladium* sp., *Clerodendrum* sp., *Desmodium canum*, *Dieffenbachia seguine*, *Elettaria cardamomum* *Furcraea foetida*, *Stachytarpheta jamaicensis* and *Stachytarpheta urticaefolia*.

Over-Exploitation of Natural Resources: Unsustainable harvesting of timber and forest products played a major role in removing vegetation and exposing soil layers to the climatic elements in the past. After the first settlement of humans some 250 years ago there was widespread exploitation of hard wood forest for various use including housing and boat construction. The demand for wood and other non-timber forest products for the craft industry, as well as charcoal for the tourist industry (barbecues), is also on the rise. There is localized overcutting in some of the plantations, e.g. mahogany. Other forest products such as latannier (*Phoenicophorium borsigianum*) leaves for thatching are harvested in unsustainable volumes and at times in a destructive manner. In recent years, there has been a pronounced increase in poaching of the valuable Coco-de-Mer (*Lodoicea maldivica*) nuts on Praslin island, which poses a threat to the long-term survival of the species.

²⁰ Coral Reefs Show Remarkable Ability to Recover from Near Death. Biello, D. Scientific American, January 15, 2015.

²¹ Engelhardt U. (2014). Status and age composition of current outbreaks of the crown-of-thorns starfish (*Acanthaster planci*) on the reefs around North Mahé Island, Republic of Seychelles; Eames J./WiseOceans (2015). 2015 Status assessment of the crown-of-thorns starfish (*Acanthaster planci*) population in Petite Anse, Mahé, Seychelles.

²² Clifton J., Etienne M., Barnes D., Barnes R., Suggett D., Smith D. (2012). ‘Marine conservation policy in Seychelles: Current constraints and prospects for improvement’, Marine Policy 36 (2012) 823–831.

²³ FAO 2014 Global Forest Resources Assessment 2015 – Country Report Seychelles. 75 pp. The report mentions *Albizia* as *Paraserianthes falcataria*, however most commonly used is *Falcataria moluccana*, including Invasive Species Compendium (www.cabi.org), last modified Jan. 2018.

²⁴ Kueffer, C. and Vos, P. 2004. Case Studies on the Status of invasive Woody Plant Species in the Western Indian Ocean: 5. Seychelles. FAO Forest Health & Biosecurity Working Papers FBS/4-5E. 58 pp.

The collection of bird eggs from migratory seabird populations is also considered unsustainable. Unsustainable levels of fishing have led to the depletion of fisheries stocks and the removal of keystone species (e.g. sharks, large reef fish), with cascading effects on marine ecosystems. Poaching of nesting turtles by humans is also a major threat, with a number of poaching incidents reported during each turtle-nesting season. Turtle nesting is also impacted by disturbances of female turtles when they come on to the beach to deposit their eggs, including the presence of humans (and dogs) on the beach, the playing of loud music from cars or nearby houses close to turtle nesting beaches, and damage to nesting habitat by vehicles driving over the beach crest.

Climate change: Over the past 40 years, the Seychelles has experienced average increases in maximum and minimum temperatures of 0.33°C and 0.82°C respectively. Climate change is also influencing the seasons, with the rainy season projected to be shorter but more intense and the dry season projected to be longer. Given the steep slopes and low water retention capacity in the catchment areas of the granitic islands, it is suggested that longer dry seasons will affect water resources, ground water recharge and the availability of water for consumers and the ecosystem. Surface runoff events will become more intense in the rainy season and ecosystem desiccation – with attendant fire risks – more widespread in the dry season.²⁵ “Extreme” dry periods (usually in the period of the southeast monsoon between June-September) are already believed to have increased the incidence of forest fires and water shortages. Changes in the chemical parameters of ground water at Cap Samy at Base Saint Anne Praslin and at Anse Royale indicate that lack of water during the dry season causes farmers to resort to accessing easily available ground water, which unfortunately becomes increasingly brackish and eventually unusable. The frequency of extreme weather events, such as heavy rainfall and storm surges, is expected to increase and will affect mainly coastal areas. In addition, with rising sea level it is projected that groundwater in coastal areas will become more saline, which may favour certain types of plant or fauna and at the same time make the water unsuitable for irrigation or human consumption. Finally, 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. In addition, there is evidence that the flow of nutrients and/or sediments from the granitic islands is naturally higher than from the other islands in the country, and that healthy coral reefs are mostly resilient to these runoff effects, with the exception of coral reefs that are in the process of recovering from coral bleaching events, where the flow of nutrients and sediments from natural or man-made causes greatly inhibits coral reef recovery²⁶.

Barriers

The baseline for the proposed project is characterised by a number of key deficiencies and barriers to the integrated and effective management of terrestrial, coastal and marine ecosystems in the Seychelles and the ecological, socio-economic and other services they provide. These barriers, which will persist in the absence of the GEF intervention, include:

Inadequate policy / regulatory frameworks, management capacities and ecological data to enable the expansion of the country’s system of marine protected areas while simultaneously reducing negative land-based impacts on those areas: Key Biodiversity Areas (KBAs) in upland forest areas and Temporal Protected Areas (TPAs)

²⁵ Government of the Seychelles (2011), Second National Communication to the United Nations Framework Convention on Climate Change

²⁶ 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 volume 518, pages 94–97 (05 February 2015)

for turtle nesting beaches represent two classes of ecosystems that are among the highest priorities for biodiversity conservation in the Seychelles. However, the absence of updated legislation relevant to protected areas means that neither KBAs or TPAs can be officially designated as Protected Areas; furthermore, existing legislation does not provide for mechanisms to support community co-management of KBAs, TPAs, or protected areas in general in the country. Another important barrier to effective management of critical ecosystems is the need for a clear and consistent policy for landowners whose land uses are restricted when new conservation designations are enacted. This issue is particularly relevant for landowners in upper elevation forest zones, where Forest Reserves, National Parks, and other forms of protected areas (including the possibility of formally designated KBAs) either already include private lands or may be extended to areas that are currently private. Community participation in the management of protected areas is also constrained by a lack of experience or tradition in the country of the general public being engaged in natural resources management decisions, as well as very little experience among government agencies in engaging private landowners on cooperative resource management decision-making. In already existing protected areas, staff for the most part play a very limited role focused on patrolling and fee collection, with little activity or capacity to carry out other functions such as enforcement, visitor management, partnering with tourism companies, or ecosystem monitoring, protection, and restoration. Ecological information is generally inadequate to support PA designations or management. Even for priority ecosystems, there is currently limited knowledge and understanding of biodiversity, its status and trends, species ecology and biology, etc. The lack of knowledge about habitats and biodiversity undermines decision-making as well as environmental impact assessment measures needed to protect critical habitats from development pressures. Data that is generated on species distributions, species ecology and other biodiversity parameters is scattered and there is no effective framework in place for bringing the information together. A lack of substantive biodiversity valuations is preventing the integration of biodiversity into national accounting and budgeting and is acting as a key barrier to the effective conservation and sustainable use of biodiversity in the country. For KBAs, the lack of baseline data on biodiversity is a barrier to developing the nomination files to designate these sites as official PAs. In the marine environment, most of the environmental monitoring data that exists is specifically for coral reef areas, with no long-term monitoring data available for seagrass beds and other habitats. Wetlands and mangrove areas have been mapped but few sites have detailed map of species distribution. Finally, while education and awareness programs on critical ecosystems and biodiversity in the Seychelles have been well developed, to date most of the programs have focused on schoolchildren, and more resources should be dedicated to educating the adult population, particularly those who make use of / exploit natural resources.

Policies, regulations, institutional structures and capacities, and resource management practices in the Seychelles do not effectively address land degradation or support and conserve the flow of ecosystem services from terrestrial to coastal and marine ecosystems: Understanding of the inter-dependency of terrestrial, coastal and marine ecosystems, of the need for effectively managing the flow of coastal and terrestrial resources through a comprehensive R2R approach, and of effective mechanisms for doing so, are all very limited in the Seychelles. Existing coordination among institutions, sectors and stakeholders that manage or influence terrestrial, coastal and marine resources and ecosystems is poor, meaning that the environmental impacts of development (particularly on the Seychelles' fragile and limited terrestrial and coastal forestry resources) are not being carefully considered or even understood. Given the small size of the islands in the Seychelles, and the proximity of people and the natural resources that they depend on, pressures on the environment are contributing to the accelerated degradation of critical ecosystems that not only support subsistence and livelihoods for at least 48% of the population, but underpin the national economy which depends on fisheries and tourism for 70% of GDP and more than 90% of exports. Government resource management institutions

operate in silos and there is a lack of inter-departmental linkages and coordinated policy-making or management, for example between agencies responsible for land use planning and those engaged in resource management. There are limited coordinated (cross-sectoral) actions focused on management of wildlife and habitats, particularly in engaging local communities as guardians of their resources. Although Seychelles is in the process of decentralizing administrative authority for many issues, to date local administrative bodies (e.g. Regional Councils and District Administrations) have very little role in the management of natural resources; NGOs and CSOs also are not well integrated with or considered in government programs. In the regulatory environment, many of the penalties in existing environmental laws/regulations, especially financial penalties, are too lenient, do not reflect current conditions, and therefore do not act as effective deterrents to illegal resource use / exploitation, development, etc. The lack of land use planning at the local (district) level means that many areas of land originally designated for agricultural development are being diverted to other socio-economic activities; at the same time, farmers are hesitant to make long-term investments in their land without the protection of official land use plans / designations. The regulatory environment governing land uses and practices is also insufficient to ensure healthy ecological functioning and sustainable development opportunities from Ridge to Reef. For example, the existing Public Health Act regulates water pollution, solid and liquid waste disposal and animal keeping, but only provides for water quality monitoring as it relates to human health. Similarly, the effluent quality standards in Section 2 of the Environment Protection (Standards) Regulations (1995) lack some parameters linked with farm effluents, and the regulations do not provide flexibility for small treatment systems or systems with lower levels of technology. In addition, MEECC is not monitoring or enforcing the standards due to lack of capacity, while the Public Health Authority only enforces following complaints. The Seychelles Agricultural Agency, despite having well-established guidelines for application of organic matter and nutrients on farming land, does not have official or updated guidelines or regulations for managing and monitoring wastewater and organic wastes, or the application of fertilizers or manure on farms. The Rivers Committee, despite being the main regulator for water resources, is only mandated to govern permits for water extraction or any modifications of rivers and stream, but it does not have the mandate to investigate cases of pollution or malpractice by farmers or others. Another critical barrier to effectively implementing R2R approaches in the Seychelles is the lack of concrete experience and examples of resource management activities that address the interconnectedness of terrestrial, coastal and marine habitats. As explained above, there is limited capacity in the country to monitor and manage the flow of impacts from upland forests and agricultural lands to coastal and marine ecosystems and to ensure that the flow of ecosystem services remains healthy. The country also has limited capacity and experience in addressing impacts once they are identified, including capacity to prevent or fight forest fires, to reduce the spread and control of invasive alien species, and to restore degraded forests and agricultural lands, meaning that negative impacts on water quality and quantity, high levels of sediment flows, and other problems continue with little effective mitigation.

Insufficient knowledge and experience in ecosystem health monitoring, information management and inter-sectoral coordination necessary to strengthen capacity and partnerships for integrated ecosystem management based on the R2R approach: There is a poor understanding among many institutions in the Seychelles of the scope of the problems associated flows of impacts from the ridge to the reef, including for example sediment and nutrient runoff into coastal and marine ecosystems that contributes to harmful algal blooms and increases in invasive alien species. This problem is compounded by the lack of data on biological invasion rates over time and inadequate knowledge of species invasiveness and distribution, which hampers effective IAS analysis and planning. In general, government institutions and other stakeholders do not readily share information, in part because they do not recognize how issues are interlinked issues and are therefore unable to

act in a holistic manner with shared and complementary actions. However, the lack of data sharing practices / protocols among government agencies and between government, NGOs, academic institutions and the private sector contributes to this problem, as does the lack of national policies on data sharing and laboratory functions (data collected by individual organisations remains theirs and there is no requirement for data to be shared, even for the preparation of national reports). Thus, it is frequently the case that environmental data that is generated is not readily available either due to the physical location of the data, the data format, or restrictive data sharing policies of institutions. Institutional and individual capacity constraints are also an important barrier to implementing R2R approaches. For example, there are not enough trained personnel for the monitoring of water resources and the country has no comprehensive and coordinated water quality monitoring programme. Thus, while some agencies (PUC, Public Health Authority, UniSey and SAA) have monitoring programmes that collectively provide a glimpse of the location and extent of pollution, the lack of a cross-sectoral approach and involvement of the general public and NGOs means that the data is often believed to be inconclusive, which renders enforcement difficult. Finally, there is a lack of private sector participation in ecological monitoring and protection, although this is slowly changing as some environmental NGOs are forming partnerships with private sector companies to make use of a portion of their Corporate Social Responsibility Tax (CSRT) to fund specific projects.

Relevance of the Development Challenge to National Priorities

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 the first 8 months of 2015 to establish priorities for funding from GEF-6, which called for a project for "A Ridge to Reef approach to landscape and seascape planning and management in Seychelles", with the objective "To support the operationalization of national planning processes, linked to regional plans and international conventions, through long-term climate change mitigation, carbon sequestration, protection of biodiversity in terrestrial and marine ecosystems, through new management regimes, capacity enhancement and innovative knowledge generation and management". In GEF-6 NPFE, National stakeholders emphasized the needs to strengthen the management of forest and forestry, particularly in areas outside of protected areas and productive lands, to restore the country's terrestrial ecosystem functions and its services for their sustainable future. This is in line with a key priority of Ministry of Environment, Energy and Climate Change to raise the profile of forestry in the national awareness and budget allocation.

Development planning in the Seychelles is guided by the Government's Strategy 2017, developed in 2005, and subsequent Vision 2020, which set out the priorities and main approaches for development. The new National Development Strategy (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. The National Development Strategy (NDS) 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. The SSDS had two strategic goals that are in line with the R2R project: 1) reinforcement of the

institutional and legal mechanisms of water management, and ensuring the protection of critical watersheds and forest areas, in order to ensure that there is effective and integrated management of water resources; and 2) ensuring that wastewater is subjected to appropriate treatment and discharged in an environmentally safe manner.

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.

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.²⁷

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 Intended Nationally Determined Contribution (INDC; 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 National Water Policy, which was approved by the Cabinet of Ministers in July 2017, makes reference to Ridge to Reef principles and explicitly recognises the fact that upstream activities in catchment areas have an effect on the plateau and the coastal areas, as the Policy states that "*the pollution of groundwater and surface water, or high sedimentation loads from erosion in catchments, can result in marine (reef) pollution*". Furthermore, 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. As the R2R project moves into its implementation phase, it will therefore be in a stronger position to engage communities in active management of watersheds

²⁷ Government of Seychelles (2014). *Fifth National Report to the United Nations Convention on Biological Diversity*; p. 6

and their water resources and will be able further to pilot watershed management approaches for adoption throughout the country. The proposed R2R project is also in line with several specific components of the National Water Policy. 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. Policy Statement B 1.5 calls for the MEECC to gather data in a number of streams and water bodies and hence provide a water quality map that can be referred to by decision makers and water managers. 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. A collaborative approach is proposed in order to better monitor the quality of surface waters, ground water and coastal waters, and to allow for the sharing of information as well as resources such as laboratory equipment. With the introduction of the proposed Apex body (an independent regulatory body that will replace the existing Rivers' Committee) and the new national "Water Act" it is paramount that this approach is planned and experimented upon on a pilot scale in order to effectively later on plan on a national or larger scale.

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.

Relevance of the Development Challenge to Global Environmental Issues

The project is designed to: i) reduce threats to globally significant biodiversity by strengthening the country's system of marine protected areas and reducing negative land-based impacts on those ecosystems, as well as strengthening the management of forested Key Biodiversity Areas and their surroundings; ii) reverse land degradation in areas outside of formally protected areas and in productive land through the promotion of SLM/SFM practices and agroforestry, leading to the restoration and sustainable flows of forest ecosystem services with positive impacts to communities as well as to adjacent coastal and marine ecosystems; and iii) strengthen capacity and partnerships to promote integrated ecosystem management based on the R2R approach and implement key priority activities for the sustainable management of the Western Indian Ocean Large Marine Ecosystems adopted by the nine coastal and island states of the Western Indian Oceans. Through these actions, the project will contribute to the goals of the UNCCD by addressing key drivers of environmental degradation (e.g. land conversion, unsustainable land use, etc.) and contribute to the achievement of GEF-6 LD-2 Program 3 Outcomes 2.1 and 2.2 in Seychelles. 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 also 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. In addition, the project represents the country's commitment to invest in transboundary priorities jointly agreed among the nine coastal and island states of the Western Indian Ocean through the ministerial endorsement of the two strategic documents, namely the Strategic Action Programme for the Sustainable Management of the Western Indian Ocean Large Marine Ecosystems and the Strategic Action Programme for the Protection of Coastal and Marine Environment of the Western Indian Ocean from Land-based Sources and Activities. The project will also contribute to the Government's commitment and obligation to the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, including its Land-based Sources and Activities Protocol. Finally, the project will assist the Seychelles in making its contribution to the fulfilment of Aichi Targets at the national level, as follows:

| Aichi Targets | Activities of proposed project contributing to Aichi Targets |
|---|--|
| <p>Target 6: By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.</p> | <p>Strengthen MPA monitoring and enforcement capacity to reduce / prevent illegal fishing and harvesting of marine resources, to reduce negative impacts of tourism on coral reefs (e.g. the problem of anchor damage on reefs), etc.</p> |
| <p>Target 7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.</p> | <p>Sustainable land management principles and practices applied to agricultural production in priority watersheds Agroforestry production expanded into degraded upland sites as well as existing areas of agricultural production in order to reduce negative impacts on downstream ecosystems and to provide buffer zones for KBAs</p> |
| <p>Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity</p> | <p>Strengthened enforcement (or adoption of new specified policies and regulations) to reduce/mitigate marine pollution and damage to MPAs. Levels of agricultural chemicals in ecosystems downstream of target areas reduced to acceptable limits New water quality and effluent standards and codes of practice developed and implemented</p> |
| <p>Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.</p> | <p>Reduced soil erosion rates due to reduced incidence / extent of forest fires Reduced anchor damage on coral reefs through improved enforcement and education activities Agroforestry production expanded into degraded upland sites as well as existing areas of agricultural production in order to reduce the flow of nutrients, pollution and sedimentation into downstream coastal and marine ecosystems Improved management of coastal freshwater ecosystems, leading to reduced stress to MPAs from domestic wastewater through improved collection and management of domestic wastewater</p> |
| <p>Target 11: By 2020, at least 17 per cent of</p> | <p>5 new temporal MPAs encompassing 40 ha formally established</p> |

| Aichi Targets | Activities of proposed project contributing to Aichi Targets |
|---|--|
| terrestrial and inland water, and 10 per cent of coastal and marine area, especially areas of particular importance for biodiversity and ecosystem services, and conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes, | 2,235 ha of upland forests within KBAs with nomination files for official designation as protected areas, increasing representativeness and habitats within the terrestrial PA system and connectivity through the ‘green spine’ of Mahe Improved management of three existing marine protected areas (Port Launay, Baie Ternay and Curieuse Marine National Parks) encompassing 1,421 ha 11,712 ha of upland forests areas (Green Corridors on Mahe and Praslin) benefitting from improved forestry policies and application of SLM/SFM practices |
| Target 12: By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. | Five TPAs strengthen protection of 40.5 ha of critical nesting habitat for Hawksbill turtles (<i>Eretmochelys imbricate</i>) Strengthened MPAs and reduced land-based impacts on marine ecosystems supporting conservation of globally significant corals, most of them IUCN red-listed |
| Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. | Restoration and rehabilitation of selected MPAs through coastal reforestation (10 ha of coastal forests and 20 ha of mangroves); and improved management of coastal freshwater ecosystems. 10 ha of fire-degraded upland forest restored 60 ha of IAS-degraded forest restored |
| Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification. | 43,853 tCO ₂ eq (146,178 tCO ₂ eq over 20 years) of GHG emissions avoided / sequestered through avoided deforestation and forest degradation, reforestation, agroforestry and conservation agriculture ²⁸ |

Relevance of the Development Challenge to SDGs

Sustainable Development Goal 2 to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”. Project activities to increase agricultural production (both in terms of crops and agroforestry) and make agricultural practices more well aligned with natural ecosystem functions and limits in key watershed areas will increase food security (including in the face of potential climate change impacts) and sustainable agricultural practices, and thereby directly support SDG 2.

Sustainable Development Goal 6 to “Ensure availability and sustainable management of water and sanitation for all”, places emphasis on addressing water scarcity and in providing access to clean drinking water. In the Seychelles, where 95% of the population has access to clean drinking water, the emphasis may well be with investing in adequate waste management infrastructure, provision of sanitation facilities, and protecting and restoring water-related ecosystems (such as forests, mountains and ecosystems) in order to reduce the level of degradation of water quality and ensure that water catchment services are retained. In this regard, the proposed

²⁸ Details on carbon calculations provided in Annex D – ExAct Tool, and in Annex S – Project Technical Information

project will support SDG 6 through conservation of watershed functions including water supply and water filtering, with benefits for local populations as well as ecological functioning.

Sustainable Development Goal 15 encourages member States to “Protect, conserve, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. Under SDG 15, Target 15.3 states: “By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world”. Although land degradation in the Seychelles is quite different from that observed in places such as the Saharan countries, the Seychelles is faced with significant drivers of land degradation, including climate change, Invasive Alien Species, forest fires, and erosion. Fires and erosion in particular give rise to considerable deposition of sediments and silt in water bodies, which when excessive, lead to poor water quality, reduced water flows, and the detriment of aquatic systems and even inshore marine ecosystems. Thus, project activities to address the risk of fire, IAS and soil erosion/loss will directly support SDG 15.

II. STRATEGY

Overview of the project strategy

The long-term solution is to undertake a comprehensive Ridge to Reef²⁹ (R2R) approach that addresses the ‘whole island’ priorities of improved management and conservation of upland forest and agricultural ecosystems as well as coastal and marine ecosystems in the Seychelles to produce global benefits in terms of conservation of globally significant biodiversity and the effective management of coastal and near-shore marine ecosystems, as well as arresting and reversing ecosystem degradation. The project is designed to: i) reduce threats to globally significant biodiversity by strengthening the country’s system of marine protected areas and reducing negative land-based impacts on those ecosystems, as well as strengthening the management of forested Key Biodiversity Areas and their surroundings; ii) reverse land degradation in areas outside of formally protected areas and in productive land through the promotion of SLM/SFM practices and agroforestry, leading to the restoration and sustainable flows of forest ecosystem services with positive impacts to communities as well as to adjacent coastal and marine ecosystems; and iii) strengthen capacity and partnerships to promote integrated ecosystem management based on the R2R approach in the Seychelles and the Indian Ocean region.

This approach acknowledges and actively incorporates the issues of scale, proximity and interconnectedness of environmental systems on Small Island Developing States (SIDS), and utilises a multi-focal area approach to provide ‘joined up’ solutions for sustainable development. By addressing a range of terrestrial threats to the marine environment, including flows of pollutants, nutrients and sediment, disrupted hydrological services, degradation of critical habitat, etc. that have significant negative impacts on important coastal/marine ecosystems including wetlands, mangroves, seagrass beds and coral reefs, the project will simultaneously improve the management of the terrestrial landscape, improve the effectiveness of integrated coastal

²⁹ The ‘ridge-to-reef’ approach is promoted by the GEF globally, most notably in the Pacific SIDS through the GEF-5 multi-agency, multi-focal area Program titled ‘Ridge-to-Reef’ (UNDP as the lead IA with FAO and UNEP participating as co-IAs). The GEF continues to promote the same approach in GEF-6, as outlined in GEF-6 IW Program 4 (paragraph 53 of the GEF-6 Strategy).

management practices, and secure the integrity of existing and new marine protected areas in the Seychelles. At the policy and strategic level, the project will take advantage of and unite the three most important spatial and resource planning processes in the country, namely the Marine Spatial Plan (for the seascape), the Seychelles Strategic Plan (for the landscape, most notably the ‘Green Spine’ on Mahé and other upland forest areas in the Inner Islands), and district Land Use Plans (which embrace integrated coastal management principles and act as the most suitable vehicle to engage District Authorities and local communities in the implementation of these strategic plans). The project will build on these baseline activities by providing strategic incremental funding to implement priority actions in each of the plans.

The project Objective is to manage and conserve the flow of marine, coastal and terrestrial ecosystem services in targeted islands of the Seychelles for multiple benefits through the Ridge-to-Reef approach. To achieve this Objective, the project will implement four key strategies (components) as follows:

Component 1: Expansion of marine and terrestrial protected areas of the Seychelles’ Inner Islands:

Under Component 1, the project will undertake activities to expand and strengthen the system of terrestrial and marine protected areas (focused on KBAs and coastal MPA sites along the west coast of Mahe island, and on Praslin and Curieuse islands), which will conserve globally significant biodiversity, including globally significant corals, while also protecting valuable ecosystem services that sustain the highly important tourism and fishing industries in the country. Specifically, the project will support the establishment of temporal marine protected areas (known as TPAs), which target the critical habitats of migratory marine vertebrates that are often affected by seasonal, environmental and physical cues that may be temporary in time, extent and geographic location.³⁰ In the Seychelles, legislation has been recently introduced to support the use of TPAs under the Protected Area Policy and the new Nature Reserves and Conservancy Act (NRCA). In one pilot, applying the TPA increased Hawksbill turtle nesting success from 33% in 2013 to 61% in 2015.³¹ In addition, the project will expand and strengthen the management of 6 KBAs gazetted in upland forest ecosystems that produce significant downstream impacts on coastal and marine ecosystems. Activities under Component 1 will also contribute to the protection and conservation of the globally significant coral reef ecosystems.

Component 2: Strengthened management of upland KBAs and adjacent areas to enhance the flow of ecosystem services through the R2R approach: Under Component 2, the project will promote sustainable land and forest management to maintain and restore upland and coastal forest ecosystem functioning, reduce erosion, sedimentation and nutrient run-off impacts on coastal and marine ecosystems, and strengthen forest management planning and information capacities (including technical capacities to reduce the impacts of forest fires and agriculture) and capacities of local communities to ensure their full ownership and engagement in promoting SLM/SFM practices in areas outside of protected areas and in productive land. Activities will take place in upland areas of the Inner Islands and will support sustainable land and forest management activities in high-value forest landscapes, including restoration of forest areas degraded by fire and IAS. At sites adjacent to these forest areas, the project will support the uptake of biodiversity-friendly sustainable land and forest management practices including agroforestry interventions. In addition to the upper elevation forest sites, four

³⁰ Temporal MPAs are more sustainable than regular MPAs in several ways. In financial terms, temporal MPAs have much lower recurring costs than regular MPAs, as such costs consist primarily of: minimal infrastructure to maintain (apart from some signage / buoys); very minimal staffing requirements (periodic monitoring during only part of the year, an activity that frequently can be carried out by existing marine conservation / fisheries staff); and very localized needs for public education and outreach. Additionally their operation can be sustainably financed through community stewardship and corporate social responsibility programmes with local businesses, especially in Seychelles’ case where pristine nature and wildlife are the core assets of the countries tourism sector.

³¹ Webster et al. (2015). Turtle and terrapin monitoring on the south of Mahe. Marine Conservation Society Seychelles

priority watersheds have been selected where varied R2R approaches in sustainable forest and agricultural management will be piloted. Through better management of forested landscapes and watersheds, the project will address the direct drivers of degradation downstream in coastal and marine habitats.

Component 3: Promoting the ‘Ridge to Reef’ (R2R) approach through knowledge management, ecosystem health monitoring and inter-sectoral coordination: Under Component 3, the project will accelerate the R2R approach through management of ecosystem monitoring data, information sharing, policy harmonisation and partnership building. The project will generate quantitative knowledge on the effectiveness of the R2R approach for the conservation of aquatic, coastal and marine ecosystems, and it will institutionalise integrated ecosystem health monitoring. Targeted investments in capacity building of Unisey and other satellite partners to monitor the health of ecosystems, and to embed these practices in the institutional programs of Unisey and other partners, will produce long-term benefits in support of R2R approaches to land and resource management. The monitoring data will inform policy decision-makers representing various sectors on the Seychelles Sustainable Development Strategy Steering Committee and other policy-making bodies, and will enable them to formulate concrete recommendations on policy and monitoring harmonisation for the effective implementation of the R2R approach. The private sector will be supported to participate in ecosystem monitoring and stress reduction activities. Local administrators, in particular Regional Councils and District Administrations, will be capacitated to take a leading role in coordinating local initiatives and community participation to support R2R approaches that are being implemented in their respective districts.

Component 4: Knowledge Management, M&E and Gender Mainstreaming: The project will develop and implement a long-term monitoring strategy to ensure that environmental benefits (global, local and national) are assessed using appropriate tools and systems and the project records and disseminated lessons learned for scaling-up locally and more widely regionally. This will include participatory methods involving local farmers, landowners, and other community members, as well inter-agency collaboration among MEECC, SNPA, UniSey/BERI, various NGOs, and others. Knowledge management efforts will focus on: (i) improving knowledge and information collection and management systems to enhance awareness about best practices on implementing Ridge to Reef approaches through communication, documentation and dissemination; (ii) strengthening policies that support conservation and sustainable use of upland forest, mixed use agricultural lands, aquatic ecosystems, and marine and coastal resources; (iii) ensuring gender considerations mainstreamed into watershed and natural resource planning and management; and (iv) monitoring and evaluating project investments to ensure that these are meeting project outcomes and contributing to the sustainable development of the Seychelles. The development of a stakeholder engagement plan (Annex K) is intended to promote meaningful stakeholder awareness, understanding and participation in biodiversity conservation, sustainable forest and land management, and development of sustainable agriculture / agroforestry and associated alternative livelihoods, as well as to document, disseminate and scale up successful lessons and best practices in R2R approaches in the Seychelles and throughout the Indian Ocean region. This will be accomplished through awareness campaigns, and creation and maintenance of an online public access database and documentation repository. The project will also integrate gender considerations into the way that information is prioritized, collected, shared, communicated, and used within the various thematic areas associated with Ridge to Reef approaches, according to the Gender Analysis and Mainstreaming Plan (Annex M). Knowledge sharing and dissemination will ensure that project benefits will be expanded nationally and regionally, including through linkages with other initiatives in the Indian Ocean region, such the Blue Economy Summit, Indian Ocean Rim Association conferences, SIDS conferences, and meetings of the Nairobi Convention.

Innovation

The project will constitute the first GEF-financed Ridge to Reef project to be implemented in the Indian Ocean. Specifically, the project will put in place a comprehensive R2R approach to the management of terrestrial, coastal and marine ecosystems in the Seychelles that will link sectors and partners responsible for the management of upland forest and agricultural areas with those responsible for downstream coastal and marine ecosystems, and increase local communities' involvement in SLM/SFM activities systematically through the establishment of forest/watershed management committees and their engagement in the forest/catchment/coastal ecosystem restoration activities in the context of R2R approach, and for the first time focus a major project on addressing land-based stresses to the coastal and marine environment. 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 (with a special focus on the upland 'green spine' of the main islands), the district land use plans currently under development, and the Marine Spatial Plan (for the management and conservation of marine ecosystems) currently under development.

Another innovative element of the proposed project is the establishment of marine Temporal Protected Areas (TPAs) to enhance protected of turtle nesting beaches on the island of Mahe. TPAs constitute an innovative approach for mainstreaming ecosystem and biodiversity considerations effectively into a productive seascape and as a coping strategy for fluctuating impacts of climate change. TPAs are not 'temporary' PAs; rather they are permanently designated, but activated and managed only at certain times of the year (temporal). In the Seychelles, TPAs will be open to community use (as regulated under the wider Mahe fisheries management plan) at times of the year when they are not critical for conservation functions (e.g. turtle nesting / hatching seasons), thereby emphasizing conservation and productive use of the marine seascape at different times depending on ecological conditions. The proposed TPAs provide a promising new approach to MPA management in the Seychelles, and are well aligned with the country's evolving approach to protected areas as the proposed Nature Reserves and Conservancy Act will allow for Protected Areas in the Seychelles to be managed by communities. In general, the Government of Seychelles is interested in transitioning from an implementing role to a facilitation role in environment conservation, and community-managed TPAs provide an opportunity for the Government to transfer responsibility for environmental protection to a greater portion of the Seychelles community.

Lessons learnt and justification for project strategies / approaches

Overall, the design of this project was developed in strong cooperation with national and international stakeholders (see Annex P, Consultation During Project Development), who were involved in the project design process from the earliest stage through the integration of all available information, data and lessons learned into the project's Theory of Change, Outputs and Outcomes and Results Framework. The design and level of detail in the project Outputs, Workplan and Budget is such that it will provide detailed guidance to the project implementation team, while at the same time allowing considerable flexibility for the team to select different options and partners for delivery based on evolving conditions. In order to achieve tangible and cost effective impacts on the ground, the project geographic scope is focused on subsets of important and linked Key Biodiversity Areas, Watersheds, Temporal Protected Areas, and Marine Protected Areas where ridge to reef impacts/flows are both significant in their importance and of a nature and scale where project can make a

demonstrable difference in ecosystem functioning / services. A key lesson learned from assessing other Ridge to Reef projects and studies³², and in response to concerns raised by a number of stakeholders, was to adjust the project design to become more of a Ridge TO Reef approach rather than a Ridge AND Reef approach, by adding four priority watersheds to the project area that more effectively link project activities in upstream KBAs and adjacent forested areas with activities and results in downstream coastal and marine ecosystems.

In terms of overall technical guidance, the proposed project will seek to learn from and utilise lessons learned and best practices from a number of recent and on-going initiatives in the Seychelles, including: integrated coastal management planning developed under the GOS-UNDP-AF project Ecosystem Based Adaptation in Seychelles (EBA) (2015-2020) regarding community-based watershed management; UNEP-GEF Coastal EBA project (2014-2016); small-scale approaches for integrated management of watersheds and coastal ecosystems piloted under the GOS-UNEP-UNDP-GEF IWRM regional project (2012-2017); scientific knowledge and approaches developed under the UNDP-GEF SAPPHERE project (2017-2021); strategies and methodologies for the control of invasive alien species developed under the GOS-UNDP-GEF project Mainstreaming Prevention and Control Measures for Invasive Alien Species into Trade, Transport and Travel Across the Production Landscape (2008-2014); information and design guidelines for temporal marine protected areas developed under the GOS-UNDP-GEF Strengthening Seychelles' Protected Area System through NGO Management Modalities project (2010-2015); and strategies for implementing sustainable land management, including community based forest fire prevention and recovery and capacity building in soil surveying/testing, developed under the UNDP-GEF project “Capacity Development for Sustainable Land Management in Seychelles” (2007-2012).

With regard to Component 1, the project support for Temporal Protected Areas is based on demonstrated success of this approach in terms of increasing the nesting success of Hawksbill turtles and in generating community buy-in and participation that helps to ensure effective monitoring and reduce poaching activity³³, as well as the expected cost-effectiveness of turtle TPAs (which have much lower recurring costs than regular MPAs) and more opportunities for financing through community stewardship and corporate social responsibility programmes with local businesses, thereby increasing the sustainability of the TPA approach. The project support for KBAs is also based on lessons learnt in the Seychelles, where private and community co-management of protected areas has been successful and is aligned with on-going government efforts to move away from directly managing some conservation programs. Similarly, activities to strengthen MPA management capacity and baseline environmental information and data is based on the country’s wish to avoid having a protected area estate with “paper parks” that are unable to ensure effective conservation.

With regard to Component, the project’s strategy for implementing Ridge to Reef approaches is based on integrating project interventions into existing national policy priorities and initiatives, rather than trying to create / impose stand alone programs. In this regard, the project the project will take advantage of and unite the three most important spatial and resource planning processes in the country, namely the Marine Spatial Plan (for the seascape), the Seychelles Strategic Plan (for the landscape, most notably the ‘Green Spine’ on Mahé and other upland forest areas in the Inner Islands), and district Land Use Plans. The R2R project also

³² Makino A, Beger M, Klein CJ, Jupiter SD, Possingham HP (2013) Integrated planning for land-sea ecosystem connectivity to protect coral reefs. *Biological Conservation* 165:35-42; Clarke P and Jupiter S (2010) *Principles and Practice of Ecosystem-Based Management: A Guide for Conservation Practitioners in the Tropical Western Pacific*. Wildlife Conservation Society. Suva, Fiji.

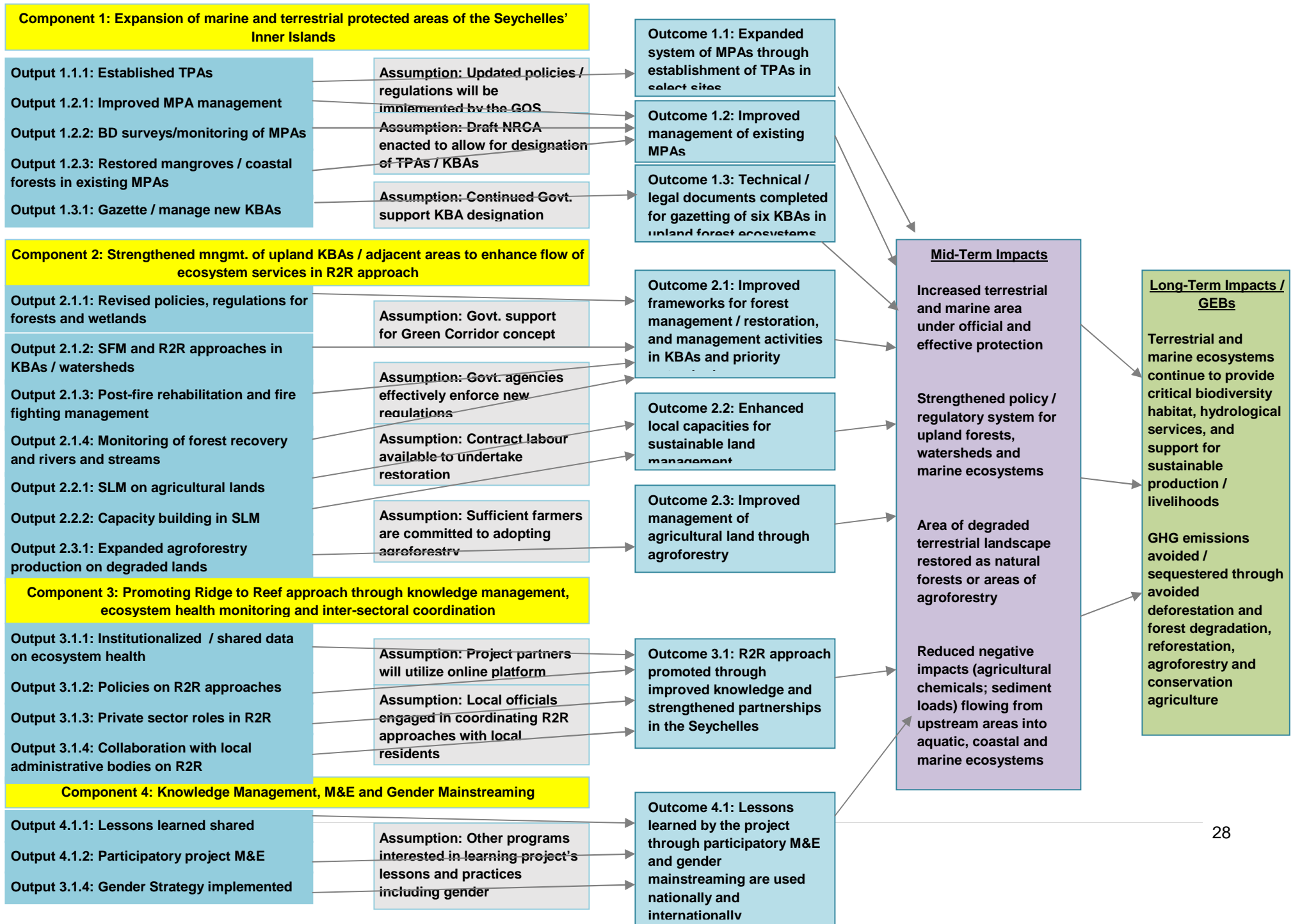
³³ Webster et al. (2015). Turtle and terrapin monitoring on the south of Mahe. Marine Conservation Society Seychelles

will seek to use lessons learned in the GOS-UNDP-AF project Ecosystem Based Adaptation in Seychelles, in particular regarding integrated IAS removal and forest planting (focusing on understory IAS species; focusing on forest light management; etc.); approaches for managing stream flows to reduce sedimentation of coastal ecosystems (e.g. through use of gabion weirs and other devices that allow for natural hydrological flows); and developing watershed management plans (with effective community participation and leadership). Proposed project activities on IAS removal are also based on lessons learnt from an FAO technical cooperation project on Forest Genetic Resources Inventory (2018), which noted that invasive creepers can significantly modify the genetic composition of the forests and, as a result, decrease the ecosystem services provided by the forests, including provision of water resources. Project activities for ecological surveying / assessment will use drones and aerial/satellite imagery where possible in order to avoid the logistical and cost challenges ground surveys in highly challenging upland environments. Learning from numerous prior agriculture-related projects in the country, the R2R project has designed the capacity building activities for agricultural SLM to be carried out through learning-by-doing on demonstration farms. Lessons have been applied to project design from the AF-UNDP project “Ecosystem Based Adaptation in Seychelles” on the design of agroforestry interventions, including which associations of agroforestry species have shown to be most successful in Seychelles and strategies on appropriate sites for agroforestry. In addition, the FAO technical cooperation project “Support to the development of appropriate agroforestry systems in Seychelles”, implemented from Nov. 2014 to Oct. 2016 introduced different agroforestry models on six pilot farms using combinations of fruit trees, spices and some endemic and rare species; this project developed valuable information / guidance on effective techniques for removing IAS and ensuring soil conservation on the undeveloped fringes and boundaries of farmlands; on which tree species, tree spacing and agricultural crops provide the best results for agricultural productivity; and on the market potential for different agroforestry products, all of which will guide activities in the R2R project.

With regard to Component 3, the project recognizes that in the Seychelles institutional arrangements for monitoring the health of coastal and marine ecosystems, particularly in terms of impacts from the terrestrial environment, are extremely limited and much of the information on such impacts is anecdotal, while at the same time the storage and sharing of research data and findings from environmental monitoring activities remains weak. For this reason, the project design places an emphasis not just on generating new ecological data, but also on ensuring that such information is consolidated, shared among relevant partners, and used to guide policy making on the natural environment. In addition, the experiences of several other projects in the country have shown local participation in resource management is becoming increasingly important as policy authority continues to be decentralized, and for this reason the project will conduct training for regional council members and district administrators on leading community participation and public works activities, and in ensuring the involvement of women and youth in such activities.

With regard to Component 4, the project is designed so that the activities are inter-connected and will ensure effective learning and adaptive management of the project, including gender mainstreaming, given that such an approach has been recognized as essential for GEF-funded projects in order to ensure their effective management, in particular for a multi-focal area project such as the proposed R2R project. In addition, learning from the experience of many past GEF-funded projects in the Seychelles, the R2R project will minimize the significant cost and challenge of finding capable and available technical experts in the country by securing long-term technical expertise to support project programs in two critical areas (forestry / KBAs and

agriculture / agroforestry), and by contracting both governmental and non-governmental Responsible Parties who are demonstrated national leaders in various technical areas (e.g. MPA management; TPAs; restoration of degraded forest landscapes; SLM approaches in agriculture) to take a leading role in implementing specific elements of the project.

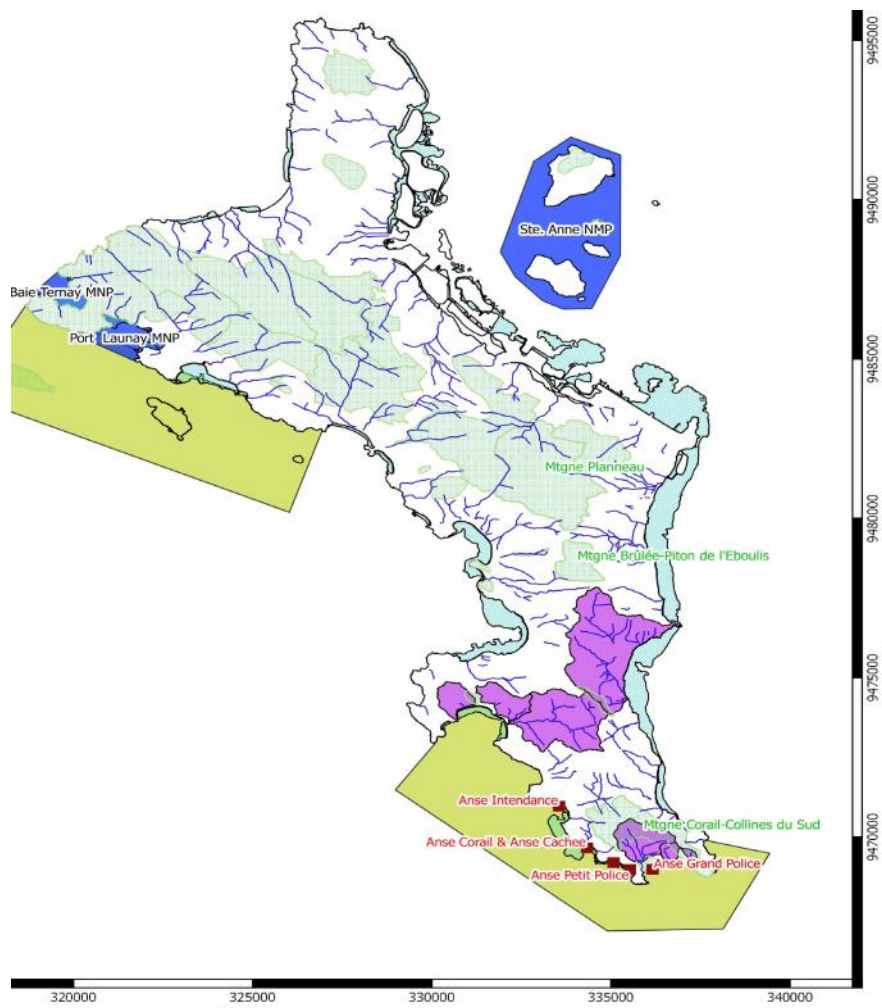


Project Site Information

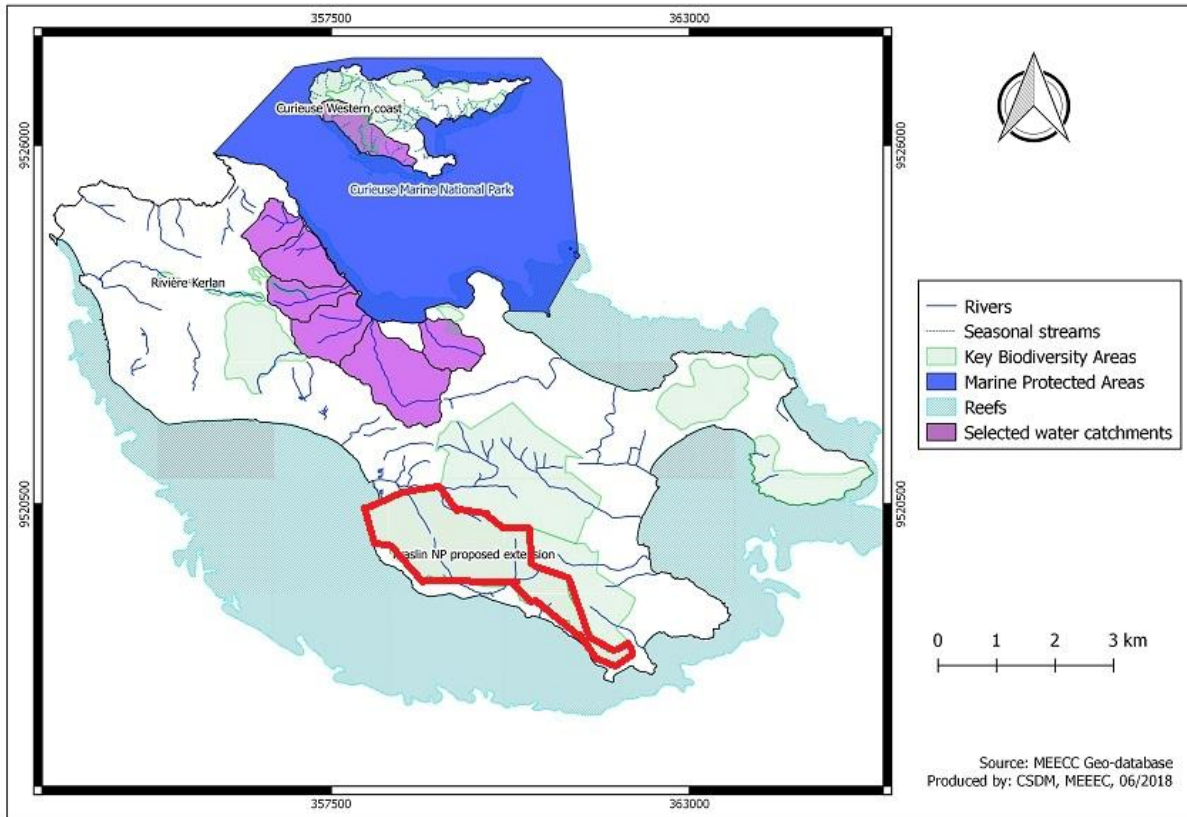
Additional information on the project sites, including maps, is provided in Annex O.

Table 1: Overview of Project Approach in different ecosystems / sites

| Type of Area | Overview of Project Activities | Location | Sites | # of Sites | # of Ha. |
|---|---|---|---|------------|----------|
| Key Biodiversity Areas | <u>Project Output 1.3.1</u> <ul style="list-style-type: none"> • BD surveys and threat analyses (as needed) • Work with local landowners (to determine what KBA gazetting / management will imply) • Create nomination files and gazette KBA sites • Develop and implement management plans for the KBA sites and associated capacity building for local landowners / communities, SNPA or Forestry Unit staff | Upland forests on: South-central Mahe Praslin Curieuse | 1. Montagne Planneau 2. Montagne Corrail – Collines du Sud 3. Montagne Brulee – Piton de l’Eboulis 4. Praslin National Park extension 5. Riviere Kerlan 6. Western coast | 6 | 2,235 |
| Upland Forests / Green Corridors | <u>Project Output 2.1.1</u> <ul style="list-style-type: none"> • Develop Green Corridor concept, aligned with R2R • Develop / revise forest policy and legislation to promote effective management of forests • Strengthen enforcement of forest regulations • Develop mechanisms to compensate private landowners • Rationalize mechanisms / responsibilities for forest policy and implementation • <u>Project Output 2.1.2</u> • Sustainable forest management (in areas adjacent to KBAs or target watersheds) | Upper forest corridors on Mahe and Praslin | The “Green Corridors” or higher elevation forests along the mountain spines of Mahe and Praslin | 1 | 11,712 |
| Priority Watersheds | <u>Project Outputs 2.1.2 -2.1.4, 2.2.1-2.2.2, 2.3.1</u> <ul style="list-style-type: none"> • Removal of IAS; replanting of forest trees • Forest fire prevention / control / recovery • Agroforestry • SLM in agriculture (focused on reducing sediment, waste and chemical flows) | Southern Mahe Eastern coast of Praslin | 1. Val d'Endor 2. Anse Royale to Anse Forbans 3. Police Bay 4. Petit Cours to Pt. Chevalier & Curieuse | 4 | 1,693 |



Map of Project Sites - Praslin



Key Biodiversity Areas (KBAs)

Table 2: Information on KBA Sites targeted by the R2R Project

| KBA Sites | Brief Description |
|---|--|
| Montagne Planneau (Mahé) | 1,436 ha, 9% of Mahé, a key area in establishing a protected ‘green spine’. The area is home to 70 endemic species and 75 KBA species. The natural habitats are less extensive compared to those of the Morne Seychellois N.P., but the semi-natural habitats contain a large number of small refuges that have been only slightly affected by humans and contain very rare species. There is scope for reforesting and restoring degraded areas. The western side is adjacent to shrubland targeted for agroforestry interventions. |
| Montagne Corrail - Collines du Sud (Mahé) | 299 ha, the southernmost relict of natural vegetation on Mahé. It extends from sea level to the ridge. Fragments of submontane vegetation remain in the upper valleys close to these summits, with some very rare species. The lowland slopes have been much more disturbed, some large patches of natural dry forests remain on steep slopes, and other areas need to be restored. The lower slopes are the only place on Mahé where natural lowland mesic forest still exists, quite similar to the pristine forests of Pointe Civine on Silhouette. This is the southernmost section of the ‘green spine’. Agroforestry and CSA interventions are needed particular in areas along the southern ring road to control erosion and pollution flowing from Takamaka district into coastal wetlands and nearshore areas (e.g. around Police Bay). |
| Montagne Brulee – Piton de l’Eboulis (Mahé) | 114 ha, a link area in the ‘green spine’ south of the Montagne Planneau area, and including one of the only two known relicts of submontane habitat in its natural state on Mahé (the other being Mont Ternay). The area has extremely rare species and has previously been proposed as a new National Park (Baader <i>et al.</i> 2008). Lower slopes are eroded and in need of restoration activities. |
| Praslin National Park extension (Praslin) | A 320 ha extension to the NP has been proposed to the southern slopes of Fond Azore (8.5% of the area of Praslin). This would improve the conservation of key biodiversity on that island, including the Black parrot and Coco de Mer. The area is fire prone and has been extensively damaged in the past; it also needs to be managed as part of the firebreak around Vallee de Mai. Likely the project will support gazetting of the area as an extension to the NP. |
| Riviere Kerlan (Praslin) | 12 ha, a small relict area that is heavily degraded but contains pockets of unique vegetation. This surrounding area is degraded, with erosion of exposed soils. |
| Western coast (Curieuse) | 54 ha, mostly degraded but with some patches of natural vegetation containing rare and endemic species. The western part contains some of the best-preserved mangrove habitat in the inner islands, although this is damaged by sedimentation and fire. This area will be targeted for mangrove restoration, and potentially for restoration of other coastal forest-types. |

Green Corridors

The Government of Seychelles, in its Seychelles Strategic Land Use and Development Plan (2015) and in subsequent stated goals of the Ministry of Environment, Energy and Climate Change (MEECC), has adopted the concept of Green Corridors (the forested mountain spines of the islands of Mahe and Praslin) as an organizing principle for ensuring careful planning for these least developed areas on the islands. Although the areas of the Green Corridor on each island have not been precisely defined or mapped (see Annex P for more information on maps), an estimate has been made that 11,712 hectares of upland forests fall within the two corridors combined. The MEECC intends to use the R2R project to both better define the boundaries of the

Green Corridor and to begin to define a strategy for ensuring that the corridors continue to provide their critically important watershed catchment and biodiversity habitat functions, while also exploring options for sustainable uses (e.g. forestry) and integrating the strategy into the on-going land use planning processes in the country. The Green Corridor concept may also provide the framework for connecting important watersheds with KBA sites as well as existing and potential new Forest Reserves.

Watersheds

During the PPG phase, concern was raised by a number of stakeholders that the project design (as delineated in the PIF) constituted more of a Ridge AND Reef approach than a Ridge TO Reef approach. In large part, this concern related to the possibility that the terrestrial sites selected by the project in the PIF were 1) not upstream of the coastal and marine sites and therefore not impacting those sites; or 2) upstream of the coastal and marine sites but not producing any significant negative impacts for those areas; or 3) both. For this reason, four priority watersheds have been selected where many of the R2R approaches in sustainable forest and agricultural management and monitoring / management of aquatic ecosystems will be piloted.

Table 3: Overview of Conditions and proposed R2R project activities in each Watershed

| Watershed | Existing Conditions / Activities | R2R Project Activities |
|--------------------|--|--|
| Val d'Endor (Mahe) | The Val D'Endor watershed area (covers 360 ha on the southwest of Mahé. This is an area of significant agricultural production (with around 95 active farms on approximately 100 ha), with farms distributed evenly along the middle and lower parts of the watershed, while the higher areas are part of the central green forest corridor. Much of the forest is dominated by invasive species like cinnamon and cocoplum, as well as creepers. The terrain in the area is mostly steep and with red soil that is often impacted by erosion and gullyng, but as a counter measure many agricultural lands have been terraced. The farms grow mostly root crops (cassava, sweet potato and yam) and fruits (banana, pawpaw, citrus, avocado and pineapple). On the coastal plateau there are both freshwater wetlands and mangroves. Freshwater ferns and other invasive species have invaded many wetlands, but recent efforts have helped to rehabilitate the functionality of some wetlands. In the sea outside the watershed is an area of about 150 ha of fringing reefs. The watershed has been the site of activities to remove IAS understory species and carry out reforestation. There is an active Watershed Committee at this site. | Agroforestry SLM in agriculture SFM Reforestation IAS removal Forest monitoring River monitoring |
| Anse Royale (Mahe) | The Anse Royale watershed area has an area of approx. 560 ha and a population of about 4,400, and is an important agricultural area on Mahe. During the dry season, river flow reduces to a minimum and certain parts of the small rivers become completely dry. Pesticides and fertilizers from the agricultural sector pollute the rivers, worsened by household chemicals, fecal bacteria, and at certain locations solid waste. The watershed has a high load of nutrients, resulting in downstream impacts, including algal HAB in certain periods. The upper parts of the watershed are made up of altered secondary forest on steep mountain slopes, dominated by a number of IAS forest species. | |

| | | |
|------------------------|--|---|
| | <p>Along the coast is a small mangrove area consisting mainly of White mangrove (<i>Avicennia marina</i>) and Red mangrove (<i>Rhizophora mucronata</i>). Many tourists make use of the beaches, affecting the beach dune vegetation and giving other negative environmental impacts. The coast is protected by 300 ha of fringing reefs, forming part of the long Mahé east coast reef structure, dominated by fleshy algae (<i>Sargassum</i>, <i>Turbinaria</i>). UniSey has carried out water quality monitoring (chemicals and bacteriological to track pollution sources) and flow monitoring (monitor impacts of barrages / gabions they are creating) in this watershed. There is an active Watershed Committee at this site.</p> | |
| Grand Police (Mahe) | <p>The Grand Police area consists of a small watershed (233 ha) and adjacent areas on the southernmost tip of Mahe, most of which is undeveloped; although private landowners own much of the area, there is very little farming or other development in the area. The watershed includes a forest area that is connected with the Collines du Sud KBA and through that to the Green Corridor area of Mahe. The Collines du Sud KBA is the only location on Mahé Island where the rare endemic orchid (<i>Oeoniella Aphrodite</i>) can be found, and recent studies have found significant biodiversity in areas outside of the current boundaries of the KBA. For that reason, a possible new protected area in Grand Police would connect with Collines du Sud as one common PA or two geographically connected PAs. This site also encompasses the Grand Police Wetlands, which is the largest remaining, untouched freshwater wetland in the Seychelles, of high ecological significance for the preservation of a variety of endemic plant and animal species (the wetlands provide habitat for two Critically Endangered species of freshwater terrapin, the yellow-bellied and black mud turtles, which have reduced populations of 120 and 660 respectively). The Grand Police beach is the single most important beach for nesting hawksbill turtles on Mahé. The area has only small areas of reefs, probably due to its high exposure to the SE trade winds. The sea around the southern point of Mahé Island where the watershed empties is an important feeding aggregation site for migratory whale sharks (<i>Rhincodon typus</i>), listed as Vulnerable on the IUCN Redlist of Threatened Species. There is no Watershed Committee at this site, although the Anse Forbans Community Program and Grand Police Citizen’s Initiative are actively involved in land/resource use decisions in the area.</p> | <p>IAS removal Reforestation Forest monitoring River/wetlands monitoring?</p> |
| Petit Coeurs (Praslin) | <p>This project site consists of 6 small watersheds on the NE Coast of Praslin totalling 347 ha, all of which have an outlet at the Curieuse Channel between Praslin and Curieuse islands. Dry, exposed, steep mountain slopes characterize the area, with some trees but mostly low shrub vegetation with many invasive species present. During the rainy season, laterite soil from the slopes is washed into the bay, which forms part of the Curieuse Marine National Park, and impacts the important reef system there. Tourism is very popular in this area, with two large hotels and many small guesthouses in operation. Population density is on the low side, which apart from tourism is</p> | <ul style="list-style-type: none"> • IAS removal • Reforestation • Forest monitoring • River monitoring |

| | | |
|--|--|--|
| | <p>based on some small-scale agriculture found mostly on the coastal plateau. During the dry season the region suffers from extreme water shortages, especially in residential areas in the hills. The Curieuse Channel has important coral reefs; at Anse Petit Cours, the reef has been described as a coral refuge, due to the apparent ability of the majority of corals at the site to remain healthy during mass coral bleaching events. There is a Watershed Committee on Praslin, but it does not currently work in this area.</p> | |
|--|--|--|

Temporal Protected Areas (Turtle Nesting Beaches)

Table 4: Information on Turtle TPA Sites targeted by the R2R Project

| Turtle TPA Sites | Brief Description |
|-----------------------------------|--|
| Turtle TPA 1 - Anse Grand Police | <p>South Mahé, Takamaka district. 8.763 ha. Primary beach crest vegetated habitat of the nesting platform (0.944 ha) and sand beach (1.738 ha) falling into near-shore shallow water coral reef system of near-shore foraging habitat (6.081 ha). Current condition ‘abandoned’ but restricted-access beach bordering Grand Police Wetlands a freshwater low-land KBA (SYC-13) and Montagne Corail-Collines du Sud a dry forests mountain habitat KBA (SYC-11); the whole area has outline permission for development of a luxury resort and so potential for major impacts although it is hoped a joint NGO-private sector management plan can be developed. Due to the restricted public access, turtle poaching (by boat) is fairly common at this beach.</p> |
| Turtle TPA 2 - Anse Bazzarca | <p>South Mahé, Takamaka district. 5.815 ha. Primary beach crest vegetated habitat of the nesting platform (0.573 ha) and sand beach (0.855 ha) falling into near-shore shallow water coral reef system of near-shore foraging habitat (4.388 ha). Current condition open-access beach bordering a minor public paved road with private property all around. The property on the opposite side of the road is currently for sale with outline permission for development of a small resort and so there is potential for increase in disturbance. Due to the road proximity, turtle poaching is fairly common at this beach.</p> |
| Turtle TPA 3 - Anse Intendance | <p>South Mahé, Takamaka district. 12.371 ha. Primary beach crest vegetated habitat of the nesting platform (1.535 ha) and sand beach (3.700 ha) falling into near-shore shallow water coral reef system of near-shore foraging habitat (7.136 ha). Current condition open-access beach bordering a five star luxury resort and the Intendance Wetlands, a freshwater low-land marsh area which is currently under private sector / NGO management with potential for up-scaling to a RAMSAR site; the area has outline permission for further development of the resort but if current management regimes remain this should not increase threats. Due to the management and beach usage, no turtle poaching has been noted on this beach for several years.</p> |
| Turtle TPA 4 - Anse Petite Police | <p>South Mahé, Takamaka district. 5.237 ha. Primary beach crest vegetated habitat of the nesting platform (0.190 ha) and sand beach (0.284 ha) falling into near-shore shallow water coral reef system of near-shore foraging habitat (4.736 ha). Current condition restricted-access beach bordering Petite Police Wetlands, a part of the freshwater low-land KBA (SYC-13); the whole area has outline permission for development of a luxury resort and this particular area is designated for the construction of a super-yacht marina, so potential could be entirely obliterated.</p> |

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| Turtle TPA 5 - Anse Corail & Anse Cachee | South Mahé, Takamaka district. 8.325 ha. Primary beach crest vegetated habitat of the nesting platform (0.489 ha) and sand beach (0.493 ha) falling into near-shore shallow water coral reef system of near-shore foraging habitat (7.343 ha). Current condition: two adjacent private beaches with no public access except by crossing private property. There has been recent development on the beach crest affecting the nesting platform but this seems to now be complete. The area is bounded by numerous private dwellings and a small guesthouse which seems to have been turned into a private residence but has recently been sold and may be further developed. These two beaches have regular poaching incidents. |
|--|--|

Marine Protected Areas

The project sites include three Marine National Parks (MNPs): Curieuse MNP, and the Port Launay and Baie Ternay MNPs, which are located adjacent to each other in northwest Mahe.

Table 5: Summary Information on MPA Sites targeted by the R2R Project

| Sites | Brief Description |
|--------------------|--|
| Port Launay MPA | Port Launay Marine National Park covers an area of 158 ha and contains mangroves, coastal wetlands, near-shore coral reefs and seagrass beds. At one end of this protected area is a small mangrove area that is degraded as a result of restricted water flows. The park is located in close proximity to the Port Launay Wetlands RAMSAR site, which is one of the best preserved mangrove areas in the Seychelles Inner Islands. Threats to the park include coastal development, run-off from laterite soils, and sewage flows from adjacent developed areas. Excessive sedimentation and nutrient inputs have impacted the parks coral reefs, and are thought to be a contributor to the 2014 outbreak of Crown of Thorns Starfish (COTS) in the park. The site is also downstream of an area damaged by forest fire in 2015. |
| Baie Ternay MPA | Baie Ternay Marine National Park covers an area of 87 ha. The central part of the park is occupied by coral reefs that cover a total area of 27 ha and have been described as the healthiest remaining coral reef around Mahe Island. Behind the fringing reef is an extended reef flat that in certain areas is covered by seagrass. Closer to shore is a mud flat that is exposed at low tide and visited by waders. A small mangrove area is also found within this park. The site is a pupping and nursery ground for lemon sharks (<i>Negaprion acutidens</i>). As a result of its sheltered location it is also popular as a mooring and anchoring site for yachts. A major tourism development at the site was cancelled in 2015. The park was severely impacted by the COTRS outbreak in 2014. |
| Curieuse MPA | Curieuse is the site of two National Parks, the Curieuse Marine National Park with an area of 1,176 ha, and the Curieuse Island National Park with an area of 152 ha, which are under joint management. The park has about 200 ha of coral reefs and also has important areas of seagrass beds, mangroves and coastal freshwater wetlands. At Anse Petit Cours, the reef has been described as a coral refugia due to the apparent ability of the majority of corals at the site to remain healthy during mass coral bleaching events. Curieuse MNP is also an important nesting sites for Hawksbill turtle (<i>Eretmochelys imbricata</i>) and to a lesser extent Green turtle (<i>Chelonia mydas</i>). The population of nesting hawksbill turtle has increased by around 300% since the area has been protected. Threats at the site include reef degradation caused by mass coral bleaching events and physical damaged caused by the anchors of the many yachts and pleasure craft that |

| | |
|--|---|
| | makes use of the park. The marine ecosystems of the park are also threatened by pollution and run-off from coastal tourism development and degradation of upland areas on nearby Praslin. |
|--|---|

III. RESULTS AND PARTNERSHIPS

i. Expected Results:

The project is designed to achieve following **Long-Term Impacts** (Global Environmental Benefits):

5 new temporal Turtle TPAs encompassing 40 ha formally established and supported by regulations to conserve biodiversity and maintain ecosystem goods and services

- Baseline = 0; End of Project = 5 TPA management plans completed and under implementation

Area (ha) of mangrove and other coastal forest ecosystems restored using native species

- Mangrove: Baseline = 0; End of Project = 10
- Coastal Forest: Baseline = 0; End of Project = 20

No. of KBAs with required technical documents and draft legal documents for gazetting presented to the Government

- Baseline = 0; End of Project = 6 (covering 2,235 ha)

Restoration of areas critical for ecological functioning in priority watersheds / upland forests

- No. of ha of fire-degraded upland forest restored: Baseline = 0; End of Project = 10
- No. of ha cleared of IAS flora and replanted with native tree species: Baseline = 0; End of Project = 60

No. of ha reforested within priority watersheds and in areas within / adjacent to target KBAs

- Baseline = 0; End of Project = 100

Amount of tCO₂eq GHG emissions avoided / sequestered through avoided deforestation and forest degradation, reforestation, agroforestry and conservation agriculture³⁴

- Baseline = 0 tCO₂eq; End of Project = 43,853 tCO₂eq (146,178 over 20 years)

The Long-Term impacts will be achieved via attainment of the Mid-Term Impacts:

Objective Level

Capacity of national partners to implement integrated Ridge to Reef approaches, as measured by total scores on the UNDP Capacity Scorecard: Baseline = 71% (32/45); End of Project = 82% (37/45)

Component 1. Expansion of marine and terrestrial protected areas of the Seychelles' Inner Islands

³⁴ Details on carbon calculations provided in Annex D – ExAct Tool, and in Annex S – Project Technical Information

Strengthened management of Temporal Protected Area (TPAs) covering 40 ha and Marine Protected Areas (MPAs) covering 1,421 ha, as measured by increased scores on GEF Management Effectiveness Tracking Tool (METT)

- Turtle TPAs: Baseline = 28; End of Project = 40
- Baie Ternay / Port Launay MNP: Baseline = 61; End of Project = 71
- Curieuse MNP: Baseline = 71; End of Project = 76

Component 2. Strengthened management of upland KBAs and adjacent areas to enhance the flow of ecosystem services through the R2R approach

No. of ha in Green Corridors (areas of high environmental value) benefitting from improved forest policies and watershed management practices

- Baseline = 0; End of Project = 11,712

% increase in enforcement measures taken by relevant agencies for reduction and mitigation of stress from land-based sources and activities to coastal and marine ecosystems

- Baseline = TBD; End of Project = 30%

Number of functioning Watershed Committees, with gender and age diversity

- Baseline = 1 committee; End of Project = 4, with 50% women and 15% youth participation

No. of ha of low-productivity land in the Val d'Endor and Anse Royale watersheds converted to agroforestry

- Baseline = 0; End of Project = 100

Levels of agricultural chemicals in freshwater ecosystems downstream of target areas for reforestation, sustainable agriculture and agroforestry interventions reduced to acceptable limits, as measured by:

- P mg/l: Baseline = TBD; End of Project = 5mg/l
- N mg/l: Baseline = TBD; End of Project = 50mg/l
- COD: Baseline = TBD; End of Project = 80

Component 3. Promoting the 'Ridge to Reef' (R2R) approach through knowledge management, ecosystem health monitoring, and inter-sectoral coordination

Number of institutional partners using the online platform to share data, findings and other information generated by field interventions on Ridge to Reef approaches

- Baseline = 0; End of Project = 5

No. of recommendations from relevant policy-making bodies for harmonising policies and monitoring efforts to improve the effectiveness of the R2R approach

- Baseline = 0; End of Project = 4

No. of local officials sensitised on R2R approaches and partnering with the project to facilitate community involvement in the management of KBAs, ecosystem monitoring, and undertaking sustainable agriculture and forest management interventions

- Regional Council members / staff: Baseline = 0; End of Project = 8
- District Administration members / staff: Baseline = 0; End of Project = 12

Component 4: Knowledge Management, M&E and Gender Mainstreaming

No. of lessons learned on R2R approaches shared with other national and international conservation programmes

- Baseline = 0; End of Project = 5

% of women among the project participants

- Baseline = 0; End of Project = 50%

To achieve the Outcomes following **Outputs** will be delivered by the project:

Outcome 1.1: Expanded system of marine protected areas (MPAs) in the Seychelles' Inner Islands through the establishment of TPAs (*temporal MPAs*) in select sites

Output 1.1.1: Establishment of new *temporal MPAs* (known as TPAs) at coastal sites downstream of areas where the project is undertaking the reduction of land-based stresses on coastal and marine ecosystems

The project will support the establishment and management of 5 temporal marine protected areas (known as TPAs) for marine turtles, all of which are designed to protect migratory species during certain critical stages in their life history. TPAs target the critical habitats of migratory marine vertebrates that are often affected by seasonal, environmental and physical cues that may be temporary in time, extent and geographic location. TPAs are not 'temporary' PAs, rather they are permanent but activated and managed only at certain times of year (temporal)³⁵. This work will be led by the Marine Conservation Society of Seychelles (MCSS), a local NGO with demonstrated experience and technical expertise in working on turtle conservation in the country, including on-going programs at turtle nesting beaches for collecting data, monitoring (including drone patrols), reporting infringements (i.e. reporting turtle poaching to the police), and working with local communities.

The aim of establishing Turtle TPAs is to afford greater protection at nesting beaches along the south coast of Mahe to Critically Endangered Hawksbill turtles (*Eretmochelys imbricata*) during their nesting seasons (October and April). The areas that will be designated as Turtle TPAs include the beaches of Anse Grand Police, Anse Bazarca, Anse Intendance, Anse Petite Police and at Anse Corail and Anse Cachée. A total area of 40 hectares is proposed for inclusion in the new TPAs, encompassing beach, nesting platform and near-shore

³⁵ Additional information on TPAs and their suitability for conservation of marine species in the Seychelles is provided in Annex O (Project Site Information)

foraging habitats. Nomination files for the declaration of the five TPAs were prepared and presented to the Ministry responsible for environment matters in 2013. However, the process was delayed as the Ministry wanted the TPAs to be declared under the Nature Reserves and Conservancy Act (NRCA), which is now expected to be enacted by the end of 2018; the NRCA will provide the legal framework for the designation of TPAs that does not exist in the present legal framework. The project will support the revision and updating of the nomination files submitted in 2013; the gazetting of the TPAs by government; putting up signage at TPA sites, and the preparation and enactment of regulations for TPA sites. For example, although marine turtles have been protected in the Seychelles since 1994 under the Wild Animals (Turtles) Protection Regulations, additional site-specific regulations at important sites are required. In addition, the behaviour of Hawksbill turtles in the Seychelles is unusual in that they nest during the day, which makes them more vulnerable to capture and disturbance, thus necessitating detailed regulations for their protection. Management plans will be prepared for each Turtle TPA site with clear targets, indicators and performance measurement system. A strong emphasis will be placed on monitoring and surveillance to reduce the risk of disturbance to nesting turtles (disturbance of turtle nesting is becoming a more widespread problem in some of the proposed Turtle TPA sites, which were seldom used in the past, including the playing of loud music that is affecting the number of successful turtle nesting attempts, and frequent disturbances by dogs, which have been documented to scare turtles away and even physically attack turtles and dig up turtle nests). The project will consult with communities and work with the tourism industry to inform people that the Turtle TPAs are being monitored by drones, in order to address any privacy concerns and also to act as a deterrent to poachers. One of the main tools for implementation will be an education campaign on any new regulations governing human activity in the TPAs, in order to highlight the sensitivity of the areas and to guide public on what behaviours are and are not allowed. More generally, a public education and awareness programme will be implemented to raise awareness of local communities on the need to have TPAs and what community members can do to support the conservation of turtles. Finally, a community-based approach will be adopted for the rehabilitation of degraded Turtle TPA sites to improve nesting and nest success. As the ecology of marine turtles is still not well understood, the project will have an important component dealing with primary research to inform management, focused on nesting site fidelity and selectivity. Community participation in activities such as monitoring and beach restoration will build on MCSS' experience in working with community groups and the District Administration in the Takamaka district on similar issues.

Key partners for delivery of Output 1.1.1: MCSS, MEECC

Budget: GEF - \$339,200

Outcome 1.2: Improved management of existing MPAs (Port Launay, Baie Ternay and Curieuse Marine National Parks)

Output 1.2.1: Improved management of three existing marine protected areas (Port Launay, Baie Ternay and Curieuse Marine National Parks) encompassing 1,421 ha

The Port Launay, Baie Ternay and Curieuse Marine National Parks (MNPs) are managed by the Seychelles National Parks Authority (SNPA). The SNPA's head office is located in Victoria, with outstations at various locations, including one at the Curieuse MNP and another at Cap Ternay (which covers both the Port Launay

and Baie Ternay MNPs). SNPA currently carries out activities related to enforcement, monitoring and education at these sites, but such activities are quite limited in scope. The on-going UNDP-GEF PA Finance project has assisted SNPA in developing management plans for these sites: Curieuse has recently completed a new Management Plan, while a joint management plan for Port Launay / Baie Ternay is still in draft form (in terms of implementing the plans, the PA Finance project will help to expand infrastructure / visitor facilities at these sites, and establish financing mechanisms to support PA management over the long term). The proposed project will support the MNPs in implementing other key aspects of the MNP management plans, focused on improved monitoring and enforcement, ecosystem protection and restoration, tourism partnerships and development, and staff capacity building, and regular review of the implementation of the plans and tracking of management effectiveness. The MNP managers will receive leadership training to help them to implement the management plans and to more effectively engage with communities and tourism operators; the project will explore the possibility of getting support for such training from organizations like the ICCF Group (USA) and/or other organizations (e.g. based in Africa). The project will support community participation through outreach and awareness building on the new management plans; facilitating community involvement / employment in the ecosystem restoration activities in the MNPs (under Output 1.2.3), and supporting community and NGO participation in new tourism activities in the MNPs.

The project will revise existing regulations controlling activities within the MNPs, such as: restrictions on anchoring; boat traffic, discharges, etc.; regulations to prevent illegal fishing (especially at Curieuse, and for octopus in Port Launay); regulations to support co-management of protected areas; better regulations on mooring rules to protect coral reefs; and regulations to support exclusion zones around priority areas (for example, improving conservation of Anse du Ris and sites in Baie Ternay by putting more moorings there, monitoring diver/snorkeler visitors, etc.). In addition, the project will disseminate information on revised regulations to relevant institutional partners (police, coast guard, etc.). The project also will seek to ensure that rangers are granted stronger powers to deal with visitors who are not adhering to park regulations; to increase the penalties for breach of regulations, and to disseminate information on such changes to relevant agencies (e.g. SNPA, police, coast guard). The project also will help to strengthen MNP monitoring and enforcement, including development and implementation of new Monitoring Control and Surveillance (MCS) plans, new training manuals and regular refresher training course for rangers, development of Standard Operating Procedures (SOP) for MNP sites, and improvement of materials and equipment for proper monitoring and enforcement of park regulations. This will include the purchase of new equipment such as patrol boats, video recording system for collection of evidence and drones to increase the coverage and effectiveness of patrols as well as reduce the operating cost. For the Port Launay and Baie Ternay MNPs, scooters will also be purchased to allow rangers to be more mobile and to be able to patrol the road along the shores that connects these two Marine National Parks. The project also will strengthen environmental monitoring information and capacities in the MNPs, by building the capacity of SNPA staff to undertake environmental and socio-economic research through actual research monitoring of marine habitats and species, and by providing training in scientific writing and guidelines for the management of data as well as improved information management infrastructure. To address any potential negative impacts on fishermen from strengthened monitoring and enforcement, during the 1st year of project implementation, a Livelihoods Action Plan for fishermen will be developed for implementation during the remaining period of project implementation.

Plastic wastes are an increasingly severe problem in the MNPs; such wastes wash up along the beach and mangrove areas and have been documented as the source of severe adverse impacts on marine organisms

ranging from the small nekton that lives in that water column to turtles that often mistake plastic for food. For this reason, the project will support activities to address plastic wastes, including beach and mangrove clean ups, provision of information boards about littering, provision of trash bins, and the creation of awareness materials with special emphasis on plastic waste. As many of the anthropogenic impacts in the MNPs are concentrated in globally significant coral reef ecosystems, a major focus of the project will be to strengthen the conservation of coral reefs. To begin, the project will support enhanced monitoring of coral reef sites, using boat mounted videos cameras and drones (the project also will ensure that the new NRCA regulations will accept evidence from such sources for enforcement purposes), to detect and prevent damage to reefs from boat anchors or pollution. Special emphasis also will be placed on improving the conservation of marine turtles and other megafauna such as sharks that makes use of the MNPs as nursery habitats during certain periods of the year. Nesting platforms will be rehabilitated to improve nesting and nest success rate for turtles, and enforcement activities will be increased to deter poachers.

Since the impact of tourism on coral reefs is significant, notably through anchor damage by operators of rented yachts who have very little experience in operating boats and little knowledge about the areas of coral reefs within the MNPs, a new partnership with yacht operators will be implemented to decide on joint measures and activities for reducing the impacts that anchors are causing. The project will support installation of mooring buoys and a system for maintenance and certification of buoys for yachts and small hire crafts that bring visitors to the parks; the availability of properly maintained mooring buoys would allow the SNPA to implement a “No anchoring” policy within certain zones of the MNPs as per the new park zoning schemes. The project also will engage directly with yacht rental companies to develop joint actions to limit anchor damage, for example through: (a) the preparation of new guidelines for yacht mooring and anchoring in the park, (b) preparation of awareness materials on mooring and anchoring procedures for yachts (video briefs, leaflets, manuals), (c) training of staff of yacht rental companies on how to deliver environmental briefings to skippers renting yachts before they leave port, and (d) designation of anchoring locations for larger yachts and cruise ships that makes use of the parks. In partnership with SNPA and local NGOs, the project will develop and make available to visitors information about conservation activities being undertaken in the MNPs, as well as the benefits generated by the MNPs (in particular the important tourism related benefits generated by the Curieuse MNP for the residents of nearby Praslin and La Digue islands). As the MNPs also are sites of rich history and cultural heritage, the project will develop and disseminate information materials on these visitor attractions to both enhance visitor satisfaction and also increase awareness of and support for conservation of the MNPs.

Finally, building on the involvement of the tourism sector in the drafting of the new MNP management plans, the project will work with partners such as the Seychelles Hotel and Tourism Association (SHTA), the Department of Tourism, and various Destination Management Companies (DMCs) to strengthen tourism partnerships in MNP management and better promote the MNPs as sites for responsible nature-based tourism. The project will support SNPA in linking its website to those of STB and local DMCs; and in preparing guidelines and an accreditation system for private guides working in the Marine National Parks. To enhance the tourism appeal of the MNPs, the project will develop interpretation relating to flora, fauna, and places of interest in multiple languages, particularly at viewpoints and other natural stopping points; will support the creation of an underwater trail in Port Launay bay that will provide visitors with an enhanced snorkelling experience while also limiting snorkelling activities to particular areas of the reef; and will support efforts to gain eco-certification for Anse St. Jose beach (in Curieuse MNP) and the Port Launay beach. The project will explore the possibility of implementing an “open call” for proposals from local tourism operators to develop

business opportunities in partnership with SNPA, where some of the fees/profits generated will be retained by SNPA. Possibilities might include developing kayak tours at the MNP sites, where the project might fund the underwater trail and tourism partner pay the operating costs and provide some of the revenues to SNPA; or the project provides funds to pay for small kiosks in the MNPS where local persons can sell souvenirs, etc.

Key partners for delivery of Output 1.2.1: SNPA, MEECC, Seychelles Tourism Board

Budget: GEF - \$257,000

Output 1.2.2: Detailed biodiversity surveys and ecosystem monitoring of selected MPAs (including wetlands, coral reefs, mangroves and seagrass beds)

The project will work with partners such as SNPA and GVI to carry out ecological analyses of key land-based threats to marine and coastal ecosystems, and to gauge the impacts of those threats, with the goal of informing more strategic MNP management. In addition, the project will carry out biodiversity surveys in various marine habitats within the MNPs to document existing biodiversity; this data will become an important baseline against which future biodiversity in the parks can be measured. Pictures of different species found during the biodiversity surveys (supplemented by information from the biodiversity surveys and photographic archives of the herbarium project at the Natural History Museum) will be used to prepare photographic identification guides of plants and animals from different habitats, and these will be uploaded to the Seychelles marine images database (an existing online education tool). Existing protocols and manuals for biodiversity surveys will be tailored for use by the project to ensure that all personnel follow the same protocol.

The primary reason for the designation of the three MNPs targeted by this project was the conservation of marine biological diversity, and all three sites have a variety of marine habitats including coral reefs, granitic reefs, macro-algal beds, seagrass, mangrove, inter-tidal mudflats and freshwater coastal wetlands, which together support high numbers of species, many of which are not adequately protected. In order to improve understanding and management of these ecosystems, the project will implement a program of coral reef monitoring, building upon an existing monitoring program that has been operational within the Port Launay and Baie Ternay MNP since 2005 (coral reef monitoring was also undertaken in the Curieuse MNP until 2011, when shark attacks in the vicinity of the park caused the programme to be discontinued). The same sites that were previously monitored will form part of the new monitoring program; in addition, sites outside the park will be monitored to investigate the effect of protection on habitat health. The project will also initiate coral reef monitoring at sites downstream of the four watersheds targeted under Component 2. Coral reef monitoring will encompass benthic cover on the reefs as well as monitoring of coral reef associated fishes, macro-invertebrates such as black-spined sea urchins, Crown of Thorns (COTs) Starfish, sea cucumbers and macro-gastropods as well as coral recruitment (Note: No activities are designed to actively manage / remove COTs since their numbers have greatly decreased as a result of the 2016 mass coral bleaching event). In addition, the project will determine the feasibility of monitoring water quality at coral reef sites downstream of river outflows, based on parameters developed under Output 2.1.4. MPA staff will receive training in different habitat monitoring techniques, which will support SNPA's new strategy to get rangers focused on conservation and move them away from dealing with only fee collection. Finally, other habitat monitoring programmes will be put in place to document the health of seagrass, macro-algae, mangrove, and freshwater wetland habitats.

Key partners for delivery of Output 1.2.2: SNPA, GVI

Budget: GEF - \$97,000

Output 1.2.3: Restoration and rehabilitation of selected MPAs through coastal reforestation and improved management of coastal freshwater ecosystems

Wetlands play an important role in the overall ecology of the MNPs, including controlling the quality of water entering the marine environment. The Baie Ternay, Port Launay and Curieuse MNPs harbour two types of wetlands: mangroves and coastal freshwater wetlands. Under Output 1.2.3, the project will work to restore water flows in mangrove areas that have been cut off from the sea and where anoxic conditions are causing mangroves to die. In certain areas, both mangrove and freshwater wetland ecosystems will be restored through the removal of invasive species such as mangrove fern (*Acrostichum aureum*) and coco plum (*Chrysobalanus icaco*), and through the planting of native coastal species. The reforestation activities will be complementary to the SLM/SFM activities mentioned under Output 2.1.2, with seedlings produced in the nurseries supported under that output; in addition, White mangrove (*Avicennia marina*) and Red mangrove (*Rhizophora mucronata*) will be produced in collaboration with the UniSey nursery. The project will train local Watershed Committees in how to support natural regeneration while combatting IAS and how to plant mangrove seedlings. As detailed in table xxx, a total of 20 hectares of mangroves and 10 hectares of other coastal forest ecosystems in the target MNPs will be restored.

Table 6: Targets for coastal reforestation in the project area, average figures

| Woodlot type | Current trees/ha | Trees/ha planted* | Final total trees/ha | Total ha | Total no of trees | Required seedlings |
|--|------------------|-------------------|----------------------|-----------|-------------------|--------------------|
| Reforestation with replacement of IAS | 100 | 900 | 1000 | 10 | 10,000 | 9,000 |
| Mangrove plantations, currently no trees | 0 | 1600 | 1600 | 10 | 16,000 | 16,000 |
| Mangrove plantations, some current trees | 400 | 1200 | 1600 | 10 | 16,000 | 12,000 |
| Total | | | | 30 | 42,000 | 37,000 |

*Produced in 2 local watershed committee nurseries, 1 NGO nursery and 1 university nursery

In the Curieuse MNP, the project will restore water flows to mangrove ecosystems by digging channels to connect different parts of the mangroves. The project also will work with SNPA and TRASS to carry out removal of invasive species and planting of native coastal species in areas of mangrove and other coastal vegetation. Freshwater wetlands in Curieuse are important and widespread on the coastal plateau and constitute an important ecotourism resource, but currently access to these areas is limited. The project will improve access trails and construct viewing platforms where visitors can sit and observe the scenery and unique biodiversity of these freshwater wetlands. In the Port Launay MNP, the project will enhance coastal freshwater ecosystem functioning. At Anse Souillac, water flows to the mangroves will be restored by unblocking the mouth of the mangrove to allow water to flow between the mangrove and the sea during high tides. In the Port Launay Ramsar site, the project will carry out a clean up (removal of solid waste) of the wetland ecosystem in partnership with District Administration and the Ephelia Resort. In addition, the project will explore options to reduce sediment flows that impact coral reefs in the MNP. The project will likely replicate the approach of the

AF-funded EBA project is building gabion rock weirs that can reduce sediment loads flowing downstream. However, if hydrological studies (of location, elevation and river bed gradient upstream) demonstrate that the water flows and sediment transport is too significant at this site (particularly if the sediment transport includes large rocks), the project will explore other options such as natural patterning of the river bed to allow for sediment trapping and the use of as sufficiently sized barriers (boulders) to withstand the effects of maximum flows.

Key partners for delivery of Output 1.2.3: SNPA, TRASS, District Administrators, Ephelia Resort

Budget: GEF - \$229,284

Outcome 1.3: Required technical and legal documents completed for gazettement of six Key Biodiversity Areas (KBAs) in upland forest ecosystems that produce significant downstream impacts on coastal and marine ecosystems

Output 1.3.1: Strengthened management capacity and status for 6 KBAs covering 2,235 ha of upland forest ecosystems, with a focus on conserving biodiversity and carbon stocks

The Project will support the process to prepare the required documentation for the legal gazettement of 6 KBAs in upland forest ecosystems covering an area of 2,235 hectares. Since most of the area of these 6 KBAs is under private ownership, the project will start by consulting with local landowners to determine what KBA gazettement and management will imply, and exploring possible management structures for KBA sites (the project will consider piloting several different management approaches, including community management by private landowners and local community groups, or co-management by these landowners / community groups with other partners such as SNPA and NGOs, possibly supported by District Administrations and Regional Councils). By working with landowners well before any PA designation is made, the project will pilot a new approach for the Seychelles for resolving issues related to private lands within protected areas (this work will be aligned with broader work under Output 2.1.1 to help the government to determine a policy or process for putting private lands under varying forms of protection, as well as efforts to ensure that KBAs are considered in government land use planning processes). It is important to note that many landowners will likely be receptive because they generally don't use the lands found within these KBAs for much since they are in inaccessible areas, and furthermore they might see benefits from tourism-related incomes if the KBAs are designated as official PAs.

The project will determine, confirm or update the KBA boundaries and map them with GIS. In addition, the project will carry out habitat mapping and high-resolution biodiversity assessments, using one or more of several approaches. For the habitat mapping, the project will reference the habitat maps done in 2014 for Mahe, Praslin, and Curieuse³⁶, as well as the KBA database housed at the Natural History Museum; in addition, it will explore the possibility of using multi-spectral satellite imagery for habitat classification in GIS format, such as

³⁶ Senterre B. & Wagner M. 2014. Mapping Seychelles habitat-types on Mahé, Praslin, Silhouette, La Digue and Curieuse. Consultancy Report, Government of Seychelles, United Nations Development Programme, Victoria, Seychelles, 116 pp.

the Pléiades imagery & data, which is available from Land Info Worldwide Mapping (<http://www.landinfo.com/satellite-imagery-pricing.html>). For the biodiversity assessments, the project will use the methods/protocols for biodiversity inventory of KBAs established under the GEF project ‘*Mainstreaming Biodiversity Management into Production Sector Activities*’ in 2013, as well as referencing data in the KBA database at the Natural History Museum. Finally, both the habitat mapping and BD assessments will be validated with on-site ground-truthing of habitat and key species, building on the work done for the initial designations of these KBAs. Given the very large size of the Montagne Planneu KBA (1,436 ha) and the costs of doing ground truthing for an area of that size, the nomination file for this site may be based on the satellite imagery and the work previously completed in 2014.

To prepare the areas for gazetting, the project will consolidate information on all land ownership at each site; determine the most suitable classification for KBAs (as Forest Reserves, Multi-Use Areas, landowner conservancies, and/or some other classification) and under which legislation; and prepare the technical justification and required draft legal documents (e.g. nomination files) to present to the Government for initiation of the legal approval process. The technical justifications for the KBAs will identify and describe globally significant biodiversity and ecosystem services, e.g. HCVF and ecosystems services of the upland forests, including soil and water conservation, climate change adaptation and mitigation services, and mitigation of natural disasters. This justification will also include downstream impacts on coastal freshwater and brackish water ecosystems, mangrove forests, as well as coral reefs and biodiversity along the coasts of Mahé and between Praslin and Curieuse.

The project will also support management of the KBAs, since the upland forest ecosystems produce downstream impacts on lower watershed areas, coastal and marine ecosystems. Project activities will include developing KBA management plans with zoning (e.g. core areas that are off limits surrounded by outer buffer areas), and implementing KBA monitoring programs, with a primary focus on monitoring to prevent illegal activities such as tree felling, harvesting of medicinal plants, and construction. The activities will be strengthened through associated capacity building for KBA stakeholders on SLM, SFM, IAS and watershed management in the form of workshops, exchange visits and technical assistance, in partnership with relevant Watershed Committees and other community-based organizations, SNPA, and Forestry Unit staff. Finally, the project will support education and outreach on KBAs, with a focus on knowledge products tailored to increase awareness of KBAs and their values among the general public as well as District Administrators and Regional Councillors.

MEECC will lead most of the consultation, outreach and planning activities under this output. For the Grand Police / Collines du Sud KBA area, MCSS is currently working under contract with MEECC to carry out habitat mapping and biodiversity assessments in the area, and MCCS will continue to be a key partner together with MEECC in developing the management strategy, monitoring programs, etc. in partnership with the Anse Forbans Community Program, Grand Police Citizen’s Initiative, and other community groups, the District Administrator, the relevant member of the National Assembly, and the local landowners. In addition, the project will explore opportunities to work with the existing Watershed Committee in the Caiman watershed, which is just below the Montagne Planneu KBA site, including partnering with the committee in activities to achieve a protected designation for the project and to undertake KBA management / monitoring.

Key partners for delivery of Output 1.3.1: MEECC, Watershed Committees, MCSS, other NGOs and community groups, local landowners

Budget: GEF - \$183,762

Outcome 2.1: Improved frameworks for forest landscape management and restoration, and implementation of on-the-ground management activities in KBAs

Output 2.1.1: Proposed revisions to policies and related legal and regulatory frameworks to promote effective management of wetlands and forests in Seychelles, and strengthened enforcement to reduce / mitigate stresses from land-based sources and activities to coastal and marine ecosystems

With regard to legal and regulatory frameworks for forest ecosystems, the project will support a broad participatory process, led by DoE's Forestry Division and involving the MLUH, SNPA and Seychelles Planning Authority (SPA), to develop and/or revise policy and legislation to promote effective management of forests in the Seychelles. The Government is expected to present a draft updated National Forest Policy in the first semester of 2019, which will partly be based on the initial results of the on-going FAO-supported National Forest Assessment. The project will support the review of the draft and continuation of the National Forest Policy process; the new policy is expected to include delimitation of clear responsibilities between DoE and SNPA, as well as language on how the Government accesses, acquires and/or manages important KBAs or other areas of BD on private lands. In addition, the project will review, update or eliminate old forest legislation, e.g. the Breadfruit and Other Trees Act, the Lighting of Fires Act, and the State Lands and Rivers Act (1903) to better support Ridge to Reef approaches. The project will also support DoE, SNPA, SAA and SPA in undertaking strengthened enforcement of environmental, agricultural and forestry legislation and regulations designed to reduce and mitigate stresses from land-based sources and activities to coastal and marine ecosystems through a watershed approach.

Building on the recognition in the Seychelles Strategic Land Use and Development Plan³⁷ of the need for a Green Corridor approach on Mahe (for the western side of the island and the central forest ridge) and for Praslin (for the central forest ridge), the project will assist the Government of Seychelles and other national stakeholders in developing the Green Corridor concept and integrating it with the Ridge to Reef approach. The Green Corridor approach as outlined in the Strategic Plan is well aligned with a Ridge-to-Reef approach, since R2R is a watershed management approach that starts on the top of the islands (the "green corridor"). The idea of the green corridor approach on the islands of Mahé and Praslin is to assure protection of natural resources within the central, high elevation area of each island, which includes the existing Morne Seychellois National Park on Mahé and Praslin National Park. To strengthen this approach, the project will support the Government (MEECC and Seychelles Planning Authority) in: 1) developing a strategy for treating the Green Corridor on each island as an integrated whole (i.e. as areas with both conservation zones and multiple use zones, and including recognition of the need for "conservation corridors" linking areas of high value habitat); 2) defining the land and resource use categories for the different areas of the two corridors (which might include National Parks; KBAs; Forest Reserves as sustainable use zones; additional buffer zones; etc.); and 3) carrying out an

³⁷ Government of Seychelles 2015 (modified Oct. 2016) Seychelles Strategic Land Use and Development Plan; 472 pp.

initial mapping exercise of the Green Corridor, with the use of satellite images, orthophotos and GIS; any preliminary information from the FAO National Forest Assessment study; and possibly some ground truthing activities. At the same time, the project will work with the Forestry Division of MEECC and SNPA to explore options for expanding the scope of the current timber harvesting permit process, which focuses only on ensuring that permitted species / sizes are harvested, to a broader forest management approach that incorporates income from timber harvesting permits with SFM investment plans, primarily in the Green Corridors. Activities under this output will also include efforts to strengthen inter-institutional coordination between MEECC and SPA on land use planning, including developing guidelines / categories for forest use. The proposed project activity to extend the Collines du Sud KBA to Grand Police on the southern tip of Mahé would be coherent with the Green Corridor vision.

With regard to legal and regulatory frameworks for wetland ecosystems, the project will convene a Seychelles Bureau of Standards (SBS) working group to review relevant legislation, and using data on aquatic ecosystems collected under Output 2.1.4, to propose regulatory amendments to better conserve watersheds and wetland ecosystem services. The existing Rivers, Reserves and State Land Act provides some minimal protections for riparian zones that are enforced by the SPA, but this act is due to be replaced by a new Water Act, which provides a good opportunity for the project to support the establishment of expanded conservation regulations for riparian habitat within KBAs and target watersheds, in which an area of at least 15 – 25 meters along each side of a waterway would be protected, with some areas (e.g. Val d’Endor, Mont Plaisir) having a buffer area of 50 meters or more. The project will also seek to develop / strengthen regulations under the draft Water Act on the classifications of watersheds, establishment of an independent regulator, a new process to require the PUC to get permits for water extraction, and other elements that support watershed management; under the Public Health Act for management of aquatic ecosystems (at present the act only applies to rivers used as drinking water resources, rather than all rivers and wetlands), in conjunction with the country’s draft Wetland Policy and action plan, which is focused on defining better mapping and protection of wetland systems and prioritizing community involvement.

Another goal of the project will be to support the creation of new Water Quality and Effluent Standards and Codes of Practice to better conserve watersheds and wetland ecosystem services. By strengthening the existing standards, and clearly defining the division of responsibilities between Department of Environment and the Department of Health, the project will make it easier for effective enforcement activities to take place; in addition, the project will work with SBS to provide training for DOE and Health staff. The most relevant legislation for new standards is the Environmental Protection Act, 2016 (Act 18 of 2016), Section 4(1), which states that the MEECC will (*inter alia*): (d) Develop, evolve and where necessary adopt standards for the quality of the environment in its various aspects and for emission or discharge of environmental pollutants from any source whatsoever; (e) Commission research and sponsor studies on problems relating to environmental pollution; and (k) Prepare manuals, codes or guidelines relating to environmental protection and for the prevention, control and abatement of pollution. Other relevant legislation includes the Seychelles Bureau of Standards Act, 2014 (Act 2 of 2014), which under Part IV, Section 14 (1), stipulates that: *the Bureau shall formulate and implement a procedure for the development of Seychelles’ Standards*. The project will engage with the SBS technical committee to support the establishment of national standards and a Code of Practice; it can also refer to the World Health Guidelines for Drinking Water for guidance on the methodology to collect water samples, frequency of sampling, preservation of samples, development of water quality guidelines, etc., and to the Water Safety Plan currently being drafted by the Public Health Authority and the Public Utilities

commission, which will establish guidelines for water quality taking into account the particular source. Once a methodology is accepted by all parties, the enactment of the standards can be made by referring to the EPA 2016, more particularly to Section 14 of Part III (Prevention, Control and Abatement of Environmental Pollution).

Key partners for delivery of Output 2.1.1: MEECC, SNPA, Attorney General's Office

Budget: GEF - \$168,422

Output 2.1.2: Watershed management approaches and biodiversity-friendly sustainable forest management practices adopted and implemented in and around target KBAs and watersheds

Under this output, the project will support implementation of integrated management of upland forests and four adjacent priority watersheds through a suite of inter-related activities, including: i) watershed management planning; ii) strengthening capacities for watershed management and SFM among private landowners, farmers, and resource managers; iii) sustainable forest management activities in priority areas; iv) controlling plant IAS through targeted management actions; v) propagation of native plants in forest nurseries; and vi) planting of native trees and shrubs.

The project will develop and/or support the implementation of Watershed Management Plans in three priority watersheds on Mahe (Val d'Endor, Anse Royale, and Grand Police) and one priority watershed on Praslin (Anse Petit Coeurs), promoting the integration of SLM, SFM and biodiversity conservation into forestry, agroforestry and agricultural practices within each watershed and thereby increasing natural forest cover, reducing the risks of IAS spread, wildfires and land degradation, and promoting soil, water and biodiversity conservation. These plans will build on the activities of the AF-supported EBA project, which is expected to complete some or all of the watershed management plans, but is not expected to support implementation of the plans. The watershed management plans will be integrated with the District Land Use Plans currently being formulated by the MLUH, thereby giving the watershed management plans stronger policy and regulatory backing, increased visibility, and higher potential for long-term funding support. Within the context of the district land use plans, the Watershed Management Plans will seek to identify and protect areas that are critical for supporting Ridge to Reef management approaches, including important zones for water catchment and storage, priority aquatic habitats and wetlands, areas of high erosion risk, etc. Water supply for agriculture is a key issue in some watersheds, where forest degradation and/or insufficient water storage have caused farmers to take water illegally from rivers and streams, or forced them to depend on water from desalination plants that in turn release brine water that negatively impacts coastal ecosystems and coral reefs. The plans will be prepared and implemented through a participatory approach together with Watershed Committees and other community-based organizations where relevant. Gender mainstreaming of the watershed plans and project activities will be sought, while noting that the existing watershed committees already have a strong gender balance, and active youth participation will be assured through collaboration with local wildlife clubs, schools, and the University of Seychelles. In certain areas, collaboration with environmental NGOs will be important, in particular with TRASS at the Petit Coeurs site and MCSS at the Grand Police site.

The project will train and support four Watershed Committees; the existing watershed committees in Mont Plaisir (Anse Royale) and Baie Lazare (Val d'Endor), and new watershed committees for Grand Police and Petit

Coeurs (unless the existing watershed committee on Praslin expands its scope to include the area of Petit Coeurs). The primary focus of the committees will be to act as stewards of the water resources within their watersheds by becoming actively involved in policy and planning decisions, as well as coordinating local community participation in watershed management field activities. The project will provide training / education to committee members on watershed management concepts, community organizing, public awareness, advocacy, and decision-making (if a new water regulatory authority is established under the pending Water Act, the committees could have a meaningful voice in water policy decisions). In addition, committee members and other local partners (including landowners within KBAs) will receive technical training and assistance in organizing and carrying out watershed management and sustainable forest management activities on the ground, such as constructing basic water control / storage works (e.g. barrages), control of invasive species, tree seedling production, reforestation, BD-friendly SFM practices, etc. In all of these areas, the project will seek to employ and integrate local and traditional knowledge and practices. Much of the training of committee members and other local residents will be carried out by MEECC (Forestry Division), SNPA, TRASS and MCSS. In turn, the Forestry Division and SNPA will receive capacity building through the project in planning, coordination, monitoring and information management to support SFM and watershed management approaches.

Within the context of the integrated watershed management plans, the project will support implementation of biodiversity-friendly sustainable forest management practices in the upper areas of the four target watersheds and in and around target KBAs that form part of the green corridors on Mahé and Praslin. Within these areas, project forestry field activities will be carried out in a limited number of sites, mapped and selected through participatory processes together with local stakeholders (watershed committees, NGOs, local landowners), with an emphasis on areas of important BD habitat or degraded micro watersheds where levels of sediment and nutrient runoffs need to be reduced. Specific SFM activities might include sustainable timber production (selective logging that can assist forest restoration), harvesting of thatching materials, charcoal production (using IAS), and support for local carpentry and crafts using wood and non-wood raw materials.

A key element of the watershed management activities will be the restoration of degraded forest areas through IAS removal and/or tree planting in the four target watersheds, including areas adjacent to existing KBAs and other priority forest ecosystems. Plant Invasive Alien Species (IAS) are a major concern in all of the target watersheds for their impact on forest health as well as aquatic ecosystems and hydrological functions. The project will undertake the removal of IAS forest understory species that have a strong negative impact on natural hydrological functions (through water demand and blocking of hydrological flows), in outcompeting native plants and trees (including IAS creepers strangle other plants), and in contributing to land degradation (creepers for example have shallow root systems that contribute to soil runoff). The project also will explore the potential for combining IAS control with revenue generation, such as the removal of mahogany (*Swietenia macrophylla*) and selling the timber in the international market where it is highly valued (although the species is CITES-protected in its area of origin in the American tropics, such protection does not apply in the Seychelles where it is an exotic), or the production of charcoal from invasive Casuarina, particularly since the country currently imports charcoal (primarily for the tourism sector). The project will also establish / expand forest nurseries with better infrastructure and equipment such as irrigation systems, compost sheds, retaining walls, etc. in order to increase the production of tree species for replanting in areas where IAS control measures have been implemented. On Praslin, the project will support strengthening of the forest nursery managed by TRASS, which will also be a key partner in the IAS removal and tree planting activities (possibly in partnership with the Small Grants Programme - SGP, which worked with TRASS in 2017 to develop a rehabilitation plan and

community mapping for degraded land on Praslin). On Mahe, the project will support existing forest nurseries (e.g. a community nursery in Baie Lazare) and the establishment of new community forest nurseries that will be managed by the Watershed Committees. A mix of native forest species to be produced and planted will be collectively decided by the watershed committees and technical partners, including fruit trees and tree species that are valuable for timber production and for NTFPs such as palm thatching and medicinal plants, thereby ensuring strong local stakeholder buy-in. Forest areas in the four watersheds and in areas within / adjacent to KBAs will be restored, including 60 hectares of existing forest where IAS will be removed and supplemental tree planting will take place, and 100 hectares of currently deforested land where trees will be planted. IAS control and reforestation activities will take place on a mix of state and privately owned lands. As part of the reforestation interventions, the project will seek to get increased protection (i.e. restrictions on development) for reforested areas in the District Land Use plans.

Table 7: Targets for community reforestation in the project area

| Woodlot type | Total ha | Current trees/ha | Trees/ha planted | Final total trees/ha | Required seedlings |
|--|------------|------------------|------------------|----------------------|--------------------|
| IAS removal and tree planting in existing forest | 60 | 100 | 900 | 1000 | 54,000 |
| Forest planting in areas with no current trees | 100 | 0 | 1100 | 1100 | 110,000 |
| Replanting 1 year later (avg. 10%) | n/a | 0 | 110 | 1100 | 11,000 |
| Total | 160 | | | | 175,000 |

In coordination with SNPA and TRASS, the project will provide training and supervise reforestation and silvicultural management in replanted areas with watershed committee members and local residents, landowners and farmers. Much of the IAS removal and tree planting work will be done by contracted local residents, though professional contractors may be needed for some IAS removal (forest thinning) activities; these residents will receive initial training as well as on-going mentoring and supervision of their activities. Persons working on a regular basis in the nurseries and in IAS removal and tree planting will receive in-kind incentives like seeds and high-demand species such as fruit trees for their own use, and the watershed committees can also establish their own systems for incentives and distribution of workload.

Key partners for delivery of Output 2.1.2: MLUH, MEECC (Forestry Division), SNPA, Watershed Committees, SGP, TRASS, UniSey, local landowners / residents

Budget: GEF - \$516,122

Output 2.1.3: Technical approaches to post-fire forest rehabilitation and long-term monitoring are piloted and the institutional capacity for forest fire fighting is strengthened at national, regional and local levels

The project will pilot technical approaches for post-fire forest rehabilitation on 10 hectares of fire-degraded upland forest (not all 10 ha will be rehabilitated, as these are trials and not widespread replanting / rehabilitation activities). Most of the area for these pilots will likely be on Praslin (where forest fires are much more common), primarily in areas within one of the target watersheds or KBAs. TRASS, which has experience in post-fire rehabilitation work, will be a leading partner in these activities, with potential support and participation

of MEECC, SFRSA, SNPA, PCA and the relevant Watershed Committees. Reforestation will start at the beginning of the main rainy season (Nov-Dec) to ensure that the plants are well established before the dry season. The project will explore options for using various plant species that are less fire prone, including species that have the potential to enhance livelihoods opportunities, e.g. in areas with farmers, replanting could include inter-cropping between the tree seedlings with species such as banana, cassava, sweet potato, tomatoes, lettuce, Chinese cabbage, cucumber, egg plant, sweet corn, pumpkin, capsicum, chiles, broccoli, etc. These agricultural crops would provide shade to the soil to reduce the spread of invasive species, while at the same time providing shade to some native tree species that are not pioneers and need shade as seedlings. In cases where fire has eliminated all vegetation, seedling spacing will provide sufficient shadow to the ground as soon as possible, thereby limiting competition from invasive species. Where some vegetation has survived or if native species are re-sprouting from the ground, seedling spacing could be increased while natural regeneration of native species will be supported, combined with removing invasive vegetation before it seeds. Organic matter from invasive species will be left on the ground as mulch and green manure. The project also will support TRASS and/or the University of Seychelles (whose students can get field experience and carry out thesis-related work) in carrying out long-term monitoring of forest recovery in areas where rehabilitation of burned forest is undertaken, including rapid assessments immediately after fires to know what to replant in a given area. In addition, during the first years after establishment of a regeneration area / plantation, it will be important to define the percentages of native species compared with IAS, and to mark larger spots of IAS on the map so field crews can easily reach the site and take action to eliminate the plants.

The project also will work to strengthen institutional capacities for forest fire prevention and fire fighting. The project will support national training events and inter-institutional coordination in forest fire prevention and fire fighting, with the participation of the National Disaster Committee (NDC), the National Fire Brigade, Seychelles Fire & Rescue Services Agency (SFRSA), the Environment and Emergency Section of the Ministry of Local Government, as well as MEECC's Department of Risk and Disaster Management (DRDM), DoE / Forestry Division, and SNPA. The project also will work with the Forestry Division, SNPA and TRASS to strengthen capacities to monitor, prevent, and mitigate the risk of forest fires through satellite technology, drone technology and GIS. The Seychelles Fire & Rescue Services Agency (SFRSA) is responsible for all fire and rescue operations in the country, including fire prevention and fighting of forest fires, and will be a key partner for planning and implementing forest fire prevention and management activities, especially in the project sites. The project will support institutional strengthening and capacity building of SFRSA to fight forest fires and reduce their impact on forest ecosystems, as well as assist the agency in developing and implementing effective public education and awareness programmes on forest fire prevention. In addition, each administrative district has an emergency brigade that responds to various types of emergencies including fires, landslides, flooding etc.; the project will strengthen the capacity of district emergency brigades where the project pilot areas are situated by providing participating community members with basic equipment, tools and protection for fire fighting, as well as training in fire prevention, mitigation, fire fighting and post-fire recovery. In strengthening fire-fighting capacity, the project will seek to coordinate with the AF-funded EBA project, which is creating a fire contingency plan for the Praslin national park in collaboration with the SFRSA Fire and SNPA, and has identified 8 sites where it will construct small earthen dams to create water supply for fire fighting (and to support local farmers).

Key partners for delivery of Output 2.1.3: MEECC (DRDM), SFRSA, TRASS, SNPA, Forestry Division

Budget: GEF - \$239,422

Output 2.1.4: Systems and capacities established for long-term monitoring of forest recovery, and for monitoring of rivers and streams flowing out of target KBAs and through priority watersheds

Under this output, the project will undertake monitoring of forests, agricultural areas, and rivers and streams in priority areas in order to quantify the effectiveness of improved management of terrestrial and aquatic ecosystems in conserving the ecological functioning of coastal and marine ecosystems. The primary goal of this output is to enable national stakeholders, including MEECC (various departments), BERI, SAA, SBS, Health, PUC, TRASS, MCSS and local communities (through Watershed Committees and other groups), to monitor the impacts of R2R interventions on land-based stressors of coastal and marine ecosystems at selected project sites; to build their capacity to monitor ecosystem health over the long-term; and to generate and share the data and findings with other interested parties and the general public.

Regarding forest monitoring, the project will develop and implement forest recovery monitoring plans for selected sites, specifically: 1) sites where the project has undertaken removal of IAS and/or forest rehabilitation under Output 2.1.2; and 2) monitoring of 10 transects in the Baie Lazare (Val d'Endor) area, where IAS removal / forest rehabilitation is currently being monitored (including # of seedlings, # of natives vs. invasives, forest light levels, etc.) by the AF-funded EBA project and will be taken up by the R2R project (once the EBA project ends) in order to generate longer-term data on forest recovery. In addition, the project will monitor deforestation in the four target watersheds; using information developed during the PPG phase on existing current forest cover and the baseline scenario for projected future deforestation in a business-as-usual scenario. This baseline data showed average annual deforestation rates from 1991-2011 of 1.49% in Val d'Endor; 0.92% in Anse Royale – Anse Forbans; and 5.43% in Petit Cours – Pointe Chevalier (data for the Police Bay watershed was not available). This information will be validated at project start so that activities are based on reliable deforestation data for all pilot areas (the project also will coordinate efforts with the on-going FAO-supported National Forest Assessment). In addition to monitoring overall deforestation in the watersheds, the project also will compare deforestation data with land use plans in those watersheds where they have been approved (i.e. Anse Royale), thereby providing policy makers and resource managers with information on compliance with existing land use plans. To enable the monitoring of forest recovery and deforestation, the project will support SNPA, TRASS and the GIS Units in MEECC and MHILT to establish systems and capacities for forest monitoring.

The project also will support the establishment of a long term monitoring program for freshwater ecosystems, which will be led by the Standards Section of MEECC and UniSey / BERI, with involvement of numerous other partners. MEECC's Standards Section has a staff of 13, but at present only 3 persons are working on water quality issues, primarily focused on sampling and compliance for issuing permits. UniSey / BERI is currently doing water quality monitoring (chemical and bacteriological tracking of pollution sources) and flow monitoring (monitoring the impacts of installed barrages / gabions) at Mont Plaisir under the AF-supported EBA project, and BERI has a team of researchers with relevant technical capacities. In addition, students of the University of Seychelles are involved in these existing projects and would provide an excellent resource for such work under the proposed project, which will create the chance for research or practical work related to R2R to be included in UniSey's academic program and possibly as part of assignments or research papers. To begin, the project will support an assessment of existing freshwater ecosystem monitoring programs and

capacities³⁸ in the Seychelles, focused on UniSey/BERI and MEECC (Standards Section), and also including the Ministry of Health, SAA, SBS, and PUC, and will implement a capacity building strategy in terms of equipment, materials and training to undertake ecosystem monitoring. For institutional stakeholders, students and local community members involved in freshwater ecosystem monitoring, training will be provided in water and sediment analysis techniques, including training in the sampling programme, the site locations and the template for data collection. The project will develop protocols and standards (based on international best practices) for data collection / monitoring and for information sharing among partners and for the general public, and based on this, data sharing agreements will be signed among the key partners.

Based on the assessments and capacity building noted above, the project will carry out monitoring of freshwater ecosystems in the targeted watersheds of Anse Royale, Val d'Endor, Police Bay and Petit Coeurs, particularly in areas downstream of project forestry, agriculture and agroforestry interventions. The project will carry out a threats and impacts analysis (including identifying areas along watercourses affected by human activities through surveys as well as water quality testing; establish baseline data and indicators for monitoring and map the watercourses from ridge to reef using ground-truthed satellite maps and previously mapped water course data. The project also will describe and characterize various habitat zones and undertake BD assessments of different habitats along the watercourses (with a focus on aquatic ecosystems) and monitor the health / populations of aquatic species. The project will monitor physical/chemical conditions in rivers and streams, with a special focus on monitoring conditions in areas downstream of the forest recovery sites noted above and agricultural areas under Outcomes 2.2 and 2.3, including measuring changes in sedimentation rates, chemical composition of soils and water, water temperatures, and water flow rates. In addition, the project will study the effects of introduced obstructions on waterways by comparing waterways that have been obstructed with others that are only minimally changed, and seek to develop related policy recommendations on watershed management (e.g. moving away from heavy infrastructure to ecologically friendly barrages for water storage). In several of the watersheds, local NGOs will be key partners -- MCSS will be a key partner in the Grand Police watershed given its existing monthly water quality monitoring programs for wetlands in the area, while TRASS will be a key partner at the Petit Coeurs watershed, where it has experience with measuring sediment flows into mangrove areas and the ocean (with potential impacts on the Curieuse MNP).

A key outcome of the monitoring work program will be the development of a strategy for consolidating data from monitoring of aquatic ecosystems in order to develop information / reports that can support policy and regulatory changes in resource management. In addition, the project will undertake public education and awareness activities to increase awareness of the importance of aquatic ecosystems, and support outreach and information sharing by utilizing MiniSASS (a summarized format for monitoring river health) in its work and introducing MiniSASS and the results of project monitoring in at least three schools.

Key partners for delivery of Output 2.1.4: SNPA, TRASS, Planning Division, MEECC (Biodiversity Division; Climate Change Division; Standards Section), BERI, SBS

Budget: GEF - \$310,424

³⁸ This will build on an initial survey done during the PPG phase; see Annex S

Outcome 2.2: Enhanced local capacities for implementation and enforcement of sustainable land management to reduce impacts of land-based stresses on coastal and marine environments

Output 2.2.1: Biodiversity-friendly sustainable land management practices implemented on agricultural lands

Local observations have shown that environmentally friendly farming practices that include traditional smallholder farms (less than 2.5 ha) contribute to biodiversity conservation while also achieving their primary goal of food production. This is true in particular where there are heterogeneous agricultural landscapes that retain some tree cover, usually as fragments, dispersed trees, or shade canopies; typically these are native species that remain due to their protected status. These types of landscape contribute to the maintenance of important ecosystem services, such as natural pest management, carbon sequestration, water and soil conservation, and ecological connectivity for a significant portion of the original biota. Farms with such landscape configurations that connect forest patches (e.g. common for example at Val d'Endor) retain higher structural and floristic complexity than landscapes lacking connectivity or habitat continuity (such as the Anse Royale plateau).

Under this output, the project will work in partnership with MEECC, SAA, TRASS, and local farmer associations to support the adoption by smallholder farmers of biodiversity-friendly SLM practices, with a strong emphasis on integration of local and traditional knowledge. A key component of activities under Outputs 2.2.1 and 2.2.2 will be the strengthening and up-scaling of networks already initiated by the GEF Small Grants Programme that link local farmers, SAA staff, and international institutions like IAEA. Project activities will take place primarily in the Val d'Endor and Anse Royale watersheds, which have significant agricultural production, and possibly also in some degraded areas in the Praslin watershed. Prior to promoting SLM practices, the project will work with local community user groups such as farmer organizations and watershed committees in a participatory rural appraisal to collect and share information on current and traditional SLM practices, including practices that may be in the process of being forgotten as well as the use of certain traditional plant varieties that have cultural importance but are in decline. The appraisal will include transect walks, mapping of land use and land use change, matrix scoring of species and cultivation practices, and ranking to identify the most promising species and management. Based on the appraisal results, the project will support adoption of a variety of SLM practices by smallholder farmers, which are likely to include: (i) farm planning, considering soil, slope, water, etc.; (ii) contour strips of trees, shrubs, grasses and other perennial plants, to prevent soil erosion in sloping land management, which is even more efficient when combined with terracing; (iii) planting of leguminous trees as fallows or interspersed with crops to fix nitrogen and improve soil fertility; (iv) incorporating leaves into soil as green manure to increase crop yields; (v) minimum tillage to reduce soil erosion; (vi) mulching to contribute to weed control; and (vii) integrated pest management (in partnership with the National Biosecurity Agency - NBA), to reduce contamination of water resources from pesticides. At the same time, the project will work with TRASS, local producer organizations and other partners to incorporate alternative livelihood initiatives, such as beekeeping and agro-tourism, to provide farmers with additional opportunities to increase their incomes in a sustainable manner within the agricultural landscape. As an additional incentive for farmers to adopt SLM practices, the project will work with partners to develop business plans and targeted market opportunities for participating farmers. In this regard, the project will work with SAA to develop business plans (SAA currently helps farmers to do the paperwork to get loans from the Development Bank of Seychelles) and to ensure that participating farmers are supported by SAA

extension officers in finding markets for their products, and with the GEF Small Grants Programme which is exploring a new project to establish an organic certification system for the country, in partnership with SAA and SBS.

The project also will provide technical assistance to farmers on strategies to reduce the impacts of wastewater coming from animal husbandry (pig and chicken) operations on downstream coastal and marine ecosystems. Such operations have increased in recent years, producing negative impacts on human health and contaminating rivers, streams and coastal and marine ecosystems. The project will seek to develop a system to measure effluents from livestock operations (SAA, which has a new soils lab, can provide the facilities and expertise for this work), strengthen existing regulations and provide training and equipment to improve enforcement capacities. In addition, the project will provide training and awareness building among animal husbandry operators and local farmers to potentially adopt animal waste effluent management systems which can collect waste from animal husbandry operations (many of which are in upper elevation areas and thus impacting entire watersheds), treat it onsite, and then sell the fertilizer product to farmers in the area (such an approach complies with national regulations, and there is one operation in the Val d'Endor watershed that is already doing this).

Key partners for delivery of Output 2.2.1: TRASS, SAA, Ministry of Health, Local Food Producer's Association (LFPA), Anse Boileau Farmers' Association

Budget: GEF - \$253,750

Output 2.2.2: Capacity of smallholder farmers built for sustainable land management practices on agricultural lands

In order to support the uptake of SLM practices in agriculture, the project will work in collaboration with watershed committees and local farmer associations to operate one demonstration farm each in the target watersheds of Val d'Endor and Anse Royale; these farms will receive incentives and technical assistance based on agreements to use the farms for demonstration activities and training. The project will train farmers in SLM practices through a participatory hands-on approach, including in-situ training (at the demonstration farms) with practical demonstrations, and ex-situ training (in workshops, meetings, etc.) on certain SLM concepts, development of business plans and markets, and agrotourism and other livelihoods opportunities. In order to address the very limited knowledge among local farmers regarding soil fertility, the project will work with local farmer associations and other partners to develop new extension training and demonstration materials on soil fertility practices; to develop a manual for the effective handling of pesticides and fertilisers on agricultural lands and disseminate this to farmers (focusing on farms located adjacent to KBAs); and to develop a Standard Operating Procedure for responding to impacts from pesticides / fertilizers on water and soil quality and non-target organisms (e.g. bees).

In addition to training farmers directly, the project will also seek to strengthen national technical and management capacities in support of SLM practices in agriculture. For example, the project will work with SAA to strengthen soil testing capacities through technical training of lab technicians and the purchase of some equipment and materials for more advanced soil testing. Although SAA extension officers have greatly reduced their role in hands on field training for farmers, the project will provide training to SAA staff on coordinating

and disseminating technical information, for example by improving the sharing of information generated by the SAA research group to farmers and farmer associations.

Key partners for delivery of Output 2.2.2: Watershed Committees, Farmer Associations, SAA, Bee Keeper's Association (BKA), Seychelles Farmers Association (SEYFA), Local Food Producer's Association (LFPA), Baie Ste Anne Farmers (BSAFA), Val d'Endor Farmers Association (VDD)

Budget: GEF - \$229,750

Outcome 2.3: Improved management of agricultural land through agro-forestry

Output 2.3.1: Agroforestry production expanded into degraded upland sites as well as existing areas of agricultural production

Under this output, the project will work in partnership with MEECC, SNPA, SAA, TRASS, and local farmer associations to support the adoption of agroforestry systems by farmers and other local landowners. Project activities will take place primarily in the Val d'Endor and Anse Royale watersheds, focused on the upper zones of the watersheds that border KBAs and/or the Green Corridor), as well as deforested areas in the Petit Coeurs watershed on Praslin. Establishment of agroforestry buffer zones adjacent to KBAs and other high value forests will enhance the ecological integrity of these sites, while also reducing erosion impacts on downstream agricultural lands and reducing the flow of nutrients, pollution and sedimentation into downstream coastal and marine ecosystems. Agroforestry systems also contribute to human well-being by providing additional income, increasing food security through a higher diversity of agricultural products (e.g. fruits, nuts, medicinal plants), helping to stabilize soils and water tables, and providing fuel wood (e.g. charcoal is in demand in Seychelles) and construction material (e.g. *Phoenixophorium* leaves for thatching) and thus reducing exploitation from native stands reducing deforestation.

In Seychelles, agricultural production is projected to continue to move from flat areas to hills in the coming years, bringing a risk of both decreased food production and degradation of the forests. The development of appropriate agroforestry systems, adapted to local land capacities and markets, is one important response to counter this trend, as such systems can reduce erosion and the flow of nutrients, pollution and sedimentation into downstream coastal and marine ecosystems, while also improving incomes and food security for local residents. The Seychelles is seeking to increase agricultural production at the same time that most lands suitable for agricultural crops are already being cultivated or are devoted to other uses; agroforestry on the other hand provides an opportunity to expand agricultural production in upper watershed areas that are not suitable for crop production. The recent reorientation of SAA's extension officers towards market development also provides an opportunity to expand markets for agroforestry with significant government support. While agroforestry is not widespread in the country, a recently completed FAO-supported project "Support to the development of appropriate agroforestry systems" initiated important steps to developing agroforestry in the country, including training on agroforestry techniques, establishment of four pilot farms where farmers learned to adopt agroforestry, training in business plan development for agroforestry operations, and development of a policy options note for agroforestry development in Seychelles.

Under this output, the project will strengthen the policy framework for agroforestry by supporting work to finalise the agroforestry policy initiated under the FAO agroforestry project and secure official adoption of the policy, and by supporting revisions to the duration of agricultural land leases by Government to reflect the longer timeframes of agroforestry investments. The project will also build the capacity of farmers to adopt and manage agroforestry production systems to improve soil and water conservation, reduce erosion and prevent runoff of sediments and pollutants into rivers, and retain nutrients in the farmland. To do this, the project will develop agroforestry training materials and organise workshops and on-site demonstration activities for farmers using lessons from the recently completed FAO TCP agroforestry project. More generally, the project will design agroforestry interventions, including strategies on which associations of agroforestry species have shown to be most successful in Seychelles and strategies on appropriate sites for agroforestry, drawing on lessons from the AF-UNDP project “Ecosystem Based Adaptation in Seychelles”; from GEF Small Grants Programme projects that have linked local farmers, SAA staff, and international institutions; and from the knowledge of local farmers, farmer organizations and NGOs.

The project will support the expansion of existing nursery production of agroforestry species. SAA currently has a small nursery for endemic species and fruit trees on Mahe, with the potential to increase production according to demand; there is another SAA nursery focused on endemic species on Praslin that also could expand its production. For agroforestry activities in the field, the project will identify farms and private landowners in the selected watersheds that can adopt organic agroforestry practices using native species and local varieties where the conservation of biodiversity and restoration of degraded land can be simultaneously achieved. In order to maximize R2R benefits and minimize costs (e.g. for removal of vegetation), the project will focus on introducing agroforestry systems on 50 ha of recently abandoned agricultural areas and 50 ha of degraded forest areas in upper watershed zones. Potential agroforestry sites will be rehabilitated as needed with clearing of vegetation and a combination of physical measures to reduce erosion and biological measures such as the planting of shrubs and other species to increase soil retention capacity. Farmers will be provided with seedlings, and guided in selecting appropriate combinations of tree and crop species to be used in systems of inter-cropping between tree seedlings, possibly including crop species such as banana, cassava, sweet potato, tomatoes, lettuce, Chinese cabbage, cucumber, egg plant, sweet corn, pumpkin, capsicum, chiles, broccoli, etc. Tree-crop interactions will be a key consideration in the design of the agroforestry systems, to increase the overall value of the system, maximize complementarity and assure appropriate tree management. In comparison to annual crops, the use of perennial tree crops is less expensive, and agroforestry gives the opportunity to build a layered production from ground cover to tree canopy that is useful with relatively little maintenance. The agricultural crops will provide sufficient shadow to the soil to reduce the spread of invasive species, while at the same time also giving shadow to some native tree species that are not pioneers and require shade in their sapling phase. When the tree canopy is nearly closed, the agricultural crops will be eliminated, and thinning carried out between the trees, with priority given to the elimination of IAS.

The project will also explore the viability (in terms of farmer interest and market opportunities) of introducing organic agroforestry. While this concept is not well known in the country, small traditional farms where farmers have experience in cultivating multiple traditional varieties, using traditional practices for pest management and soil treatments, and growing traditional foods, may be good candidates for adopting organic approaches (this category of farmers is common in the farming community in Val d’Endor, which also includes active groups of women farmers). Where applicable, silvopastoral agroforestry systems may also be promoted that combine rotational grazing with tree crop production. Some of the species used to improve soil fertility also

have fodder value and can improve animal manure quantity and quality; combined with compost from plant material, this has the potential to reduce the need for industrial fertilizers and thereby reduce the adverse impacts in the watersheds and the ocean.

Key partners for delivery of Output 2.3.1: Ministry of Agriculture, SAA, TRASS, Seychelles Farmers Association (SEYFA), Local Food Producer's Association (LFPA), Val d'Endor Farmers Association (VDD)

Budget: GEF - \$284,750

Outcome 3: R2R approach promoted through improved knowledge and strengthened partnerships in the Seychelles

Output 3.1.1: Integrated ecosystem health monitoring at the project sites institutionalised and information-sharing mechanisms scaled up to support implementation of R2R approaches

Seychelles has made great strides in environmental conservation, including designating over 50% of its terrestrial landscape for conservation, and on-going programs to do the same for 30% of the country's EEZ. However, despite this high investment in environmental conservation, the storage and sharing of research data and findings from environmental monitoring activities remains weak. At present, institutional arrangements in the Seychelles for monitoring the health of coastal and marine ecosystems, particularly in terms of impacts from the terrestrial environment, are extremely limited and much of the information on such impacts is anecdotal. In general, environmental monitoring of coastal and marine ecosystems is also highly fragmented, with activities carried out by the Ministry of Environment, Energy, and Climate Change, the Ministry of Health, University of Seychelles, SNPA, Seychelles Fishing Authority, Seychelles Agricultural Agency, and various NGOs. In the case of the proposed project, ecosystem health monitoring will take place under various outputs in both Component 1 and Component 2, with leadership from partners including BERI, MEECC, SNPA, TRASS, MCSS and possibly others including private sector partners (see Output 3.1.3). To address this diffuse generation and responsibility for monitoring and information management, the project will utilize a common data platform (described in the next paragraph), while at the site level it will seek to facilitate improved collaboration and cost-effective ecosystem health monitoring practices. One approach will be to coordinate the timing and resources used for similar project monitoring and assessment activities, for example by utilizing the same drones for monitoring patrols in MPAs and TPAs as well as ecosystem assessments to support KBA designations and watershed management plans. Another approach will be to take an existing app developed by NISTI for farmers to use to report on their agricultural production and adapt it for use in the project's ecosystem health monitoring activities; this app (which works on both online and offline on phones, tablets, computers, etc.) can be used to automatically upload collected data to the NISTI platform.

As part of the country's development objectives, the Government of Seychelles is investing in the establishment of a central online repository managed by the National Institute of Science, Technology and Innovation (NISTI), which will allow for easier access to research data and findings for national stakeholders (the NISTI platform may also serve as a mechanism for the Seychelles to consolidate its reporting under the NBSAP and other national policies and action plans). NISTI has already invested in building the central "cloud" repository, and the platform became live in 2018. The proposed project will seek to capitalise on the establishment of this

platform by working with NISTI to develop processes whereby ecosystem health monitoring data generated under the project will be uploaded, stored and made available on this online platform, thereby allowing project partners to manage and share data and results, and for the project to share the experience of Seychelles R2R interventions with national and international partners and interested parties. The Blue Economy Research Institute (BERI), which will be a key partner on much of the ecosystem health monitoring under Component 2, will be used as a pilot partner where BERI's data on ecosystem health (and possibly other data sets) will be uploaded and shared on the NISTI platform. After this pilot effort, the project will work with other institutions monitoring ecosystem health under the project, in particular MEECC, SNPA, MCSS and TRASS and any private sector partners, to integrate the information they produce under the project into the NISTI platform (a consultant will be contracted at project start to develop data sharing protocols that will be signed by the Responsible Parties and other key partners in the project). In addition, BERI and NISTI staff will receive training and support to coordinate the management of information and data coming from the ecosystem health / water quality monitoring activities of all project partners (and eventually from other sources such as SBS, PUC, and the Department of Health). In terms of sharing the data, experiences and lessons learned from project R2R interventions, NISTI will generate analytical reports based on the data on the platform at the request of MEECC, which will take the leading role in sharing this information with national and international partners and interested parties (see Output 4.1.1).

Key partners for delivery of Output 3.1.1: BERI, NISTI, MEECC, SNPA, MCSS, TRASS

Budget: GEF - \$80,000

Output 3.1.2: Policy recommendations for harmonising policies and monitoring efforts of appropriate national policy-making bodies to advance R2R approaches

One of the most important issues currently facing policy makers and the public in the Seychelles is the need for a clear and consistent policy for landowners whose land uses are restricted when new conservation designations are enacted. This issue is particularly relevant for landowners in upper elevation forest zones, where Forest Reserves, National Parks, and other forms of protected areas (including the possibility of formally designated Key Biodiversity Areas) either already include private lands or may be extended to areas that are currently private. Many of these areas constitute the upper portions of important watersheds on Mahe and Praslin, and thus the designation of conservation zones and/or restrictions on some land uses / practices could have important implications for promoting Ridge to Reef approaches in the country (for example for the formal designation of KBAs as protected areas). Several government institutions, including MEECC and the Ministry of Land Use and Housing, have been working to develop recommendations for policies and/or regulations that will cover the compensation of landowners. These efforts have only recently begun, and while a list of possible compensation mechanisms, including acquisition with financial compensation, land exchange, tax incentives, leasing, conservation easements, purchase by third party and donation to the Government, ecological gifting, transfer of development rights, and allowing certain development/activities, has been developed, these have yet to be studied in a systematic manner. The proposed project will therefore assist these institutions in undertaking a detailed assessment / literature review of possible compensation mechanisms, and in generating a report with clear policy recommendations that will be provided to the Planning Department, MEECC, and other relevant stakeholders.

Under this output, the project also will ensure that all policy recommendations generated by the project will be forwarded to MEECC as well as appropriate national policy-making bodies. One such body is expected to be the National Development Strategy (NDS) committee, which would be charged with overseeing policies related to management of the natural environment in the Seychelles; however, the National Development Strategy is still in draft form and the exact role of the committee remains to be defined. In addition to any policies on compensation for landowners, this would also include the policies developed / revised under Output 2.1.1, including for example the National Forest Policy, changes in forest area land use planning, standards and guidelines for water quality, etc. Finally, the project will carry out a general review to determine if any other gaps or potential problems exist in the existing policy framework that might limit the application of Ridge to Reef approaches; if such problems are found, the project will work with the MEECC to develop a strategy for addressing these issues and with the NDS committee or a similar body to ensure broad support for the implementation of such strategies.

Key partners for delivery of Output 3.1.2: MEECC

Budget: GEF - \$30,000

Output 3.1.3: Private sector involvement (especially in monitoring and stress reduction activities) strengthened to support the implementation of R2R approaches

Private sector involvement is critical to various elements of the proposed project, including the role of private sector partners in the tourism sector in the functioning of marine protected areas under Outcome 1.2. Under this output, the project will focus on developing partnerships with private sector players in monitoring the ecological conditions in areas where Ridge to Reef approaches are being carried out, with a focus on the project's four target watersheds and in particular on the watersheds of Anse Royale – Anse Forbans and Val d'Endor in the southern part of Mahe island. At these sites, the project will engage farmers and/or farmer associations in soil monitoring, and also work with them as well as with other landowners in water quality monitoring. The project also plans to work with private water bottling companies as partners in water quality monitoring. In partnership with the Ministry of Tourism, the project will work with hotels in areas within or near to the target watersheds to monitor water quality / ecosystem health in critical ecosystems (primarily wetlands) on their properties; this work will be linked to an existing initiative that is developing green performance indicators for tourism operations in the Seychelles. Finally, under Seychelles law, large private companies are mandated to allocate a percentage of their profits to Corporate Social Responsibility (CSR) programs. SNPA has plans to develop a strategy for working with private partners who allocate all or part of their CSR funding for conservation-related activities, and the project will work with SNPA to determine if some CSR funding / partnerships can be applied to R2R-related programs.

Key partners for delivery of Output 3.1.3: Private sector partners (hotels, water bottling companies, etc.), Farmer Associations

Budget: GEF - \$35,000

Output 3.1.4: Regional Councils, District Administrations and the general public sensitised on R2R approaches and are aware of the R2R projects that are being implemented in their respective districts

The Seychelles has been undergoing a multi-year process of decentralizing decision-making and engagement with the general public, and the project will recognize and take advantage of this trend in terms of integrating Ridge to Reef approaches into local level processes and activities. Regional Councils are part of a newly formed (July 2018) governance mechanism that oversees the work of the District Administrations, which are critical partners in terms of promoting community participation in environmental clean up campaigns and beautification projects (District Administrators also have nominal responsibility for implementing coastal zone management plans, but in practice no such plans are actively being implemented). With the recent changes to governance, the Regional Councils are expected to play a greater role in overseeing site level conservation programs within the districts. The project will therefore develop and implement a communication and engagement strategy for Regional Councils, District Administrators to both sensitize these stakeholders on Ridge to Reef concepts and encourage their participation in the implementation of R2R approaches, focusing on the areas of Mahe and Praslin in which the project is undertaking field-based activities. The project will seek to partner with these local officials to promote and facilitate community involvement in project activities for the management of KBAs, for undertaking sustainable agriculture and forest management interventions, and for ecosystem monitoring. To support this approach, the project will create a communication toolkit for local officials that they can use to disseminate information about R2R concepts and to organize community participation in R2R interventions. To complement this outreach with local officials, the project will develop and implement a public awareness strategy on Ridge to Reef concepts, focusing on educating the public about the flow of impacts from terrestrial to coastal and marine environments, and the linkages between ridge to reef processes and the livelihoods of farmers, fishermen, and others (including tourism sector) who depend on the safeguarding of ecosystem services. This outreach and education effort will be led by the MEECC, with expected participation of well-established environmental education NGOs such as Sustainability for Seychelles and Wildlife Clubs of Seychelles.

Key partners for delivery of Output 3.1.4: MEECC

Budget: GEF - \$55,000

Outcome 4: Lessons learned by the project through participatory M&E and gender mainstreaming are used nationally and internationally

Output 4.1.1: Lessons learned are shared with national and international conservation programmes

An effective M&E system (Output 4.1.2) and regular analysis of M&E data will allow the project to: (i) identify the most effective project strategies; (ii) check project assumptions (hypotheses) and risks; (iii) prepare management responses to changing political, economic, and ecological conditions; (iv) learn from successful and unsuccessful project experiences; (v) incorporate learning in project planning and adaptive management; and (vi) share experiences with GEF and other projects in the Indian Ocean region and globally. Lessons learned through the project implementation will be reflected in the Annual Project Reports to ensure that the project uses the most effective strategies to deliver project Outputs and achieve project Outcomes in the changing environment.

The project will ensure that information and knowledge accumulated and produced through the project will be documented and made available for wider communication and dissemination of project lessons and experiences, including to support the replication and scaling-up of project results. The project will produce and consolidate a variety of information products, lessons learned, case studies and technical outputs that it will share with the general public, key national partners, and regional / international partners, including products and information generated by the ecological assessment and monitoring activities under numerous outputs in Components 1 and 2, as well as the information products and data sets created under Output 3.1.1 and the public awareness work carried out under Output 3.1.4. To systemize and share the lessons and knowledge, the project will partner with MEECC, NISTI, BERI and the Ministry of Education to utilize a variety of communication strategies and mechanisms, including:

- The online platform for research data and findings being managed by the National Institute of Science, Technology and Innovation (NISTI), and specifically the information on R2R approaches and coastal / marine ecosystem health generated and collected there through BERI and other partners
- Use of the GOS-GEF-UNDP Programme Coordination Unit website to make available project reports, publications, datasets, etc.
- Special paper publications, including manuals, guidance, methodologies, etc.
- Exchange visits for local communities to demonstrate the best practices on R2R approaches, facilitated through Watershed Committees
- Publications in mass media, conservation, and scientific journals
- Other available communication tools and approaches

Since this project will be the first GEF-funded project in the Indian Ocean promoting the R2R approach, in addition to disseminating information nationally, the project will put a strong emphasis on knowledge sharing and collaborative engagement with other SIDS in the Indian Ocean (Comoros, Maldives and Mauritius), thereby also supporting South-South Cooperation. Project team members will participate in and give presentations at regional meetings such as the Blue Economy Summit, Indian Ocean Rim Association conferences, SIDS conferences, Nairobi Convention meetings, etc. In addition, the project will support exchanges with the Maldives to share information and strategies on MPA management, including management planning, tourism management, PA financing, ecosystem monitoring, etc.

Key partners for delivery of Output 4.1.1: PMU, MEECC, BERI, Min. of Education

Budget: GEF - \$90,250

Output 4.1.2: Participatory project monitoring, evaluation and learning framework is developed and implemented

The project will develop a robust Monitoring and Evaluation (M&E) system and encourage stakeholders at all levels to participate in M&E activities to provide sufficient information for adaptive management decision-making. Participatory project monitoring and evaluation is a key part of the RBM approach practiced by UNDP

and GEF for all project and programmes. For M&E, the project will use standard UNDP approaches and procedures (see Monitoring and Evaluation Plan section for details) and the following groups of indicators:

- Output Indicators will be used to measure delivery of the project outputs (the project's products and services) and monitor routine project progress on monthly and quarterly basis. Collection of information on the output indicators will be performed by the PMU and represented in the project Quarterly and Annual Reports.
- Outcome Indicators will be used to indicate the progress toward and achievement of the project outcomes (e.g. capacity or behavioural changes that take place as a result of the utilization of the project outputs by target groups of stakeholders). Collection of information on the outcome indicators will be performed by the PMU or might require hiring of consultants. Project progress against outcome indicators will be reflected in the Annual, Mid-Term and Terminal Project Reports, and Mid-Term and Terminal Evaluation Reports.
- Mid-Term Impact Indicators will demonstrate how the project outcomes contribute to mid-term project impacts (e.g. reduction of direct threats for conservation and sustainable development targets). Collection of information for mid-term impact indicators will be carried out primarily by the PMU and the project's Responsible Party partners; however, it could also require outside consultants. Monitoring of these indicators will be performed at the project mid-term and completion to compare project progress in reducing key threats against baseline data. Information on mid-term impact indicators will be generally presented in the Results Framework, Mid-Term and Terminal Project Reports, and Terminal Evaluation Report.
- Long-Term Impact Indicators or GEBs will be used to measure the level of achievement of the ultimate project impacts (improved ecosystem services through the reduction of negative impacts flowing from land-based sources into coastal and marine ecosystems; areas of natural ecosystems formally protected; areas of natural ecosystems restored; amount of carbon benefits). Long-term project impacts can be only partially achieved during the project lifetime (5 years) and might fully materialize several years after the project is over. To measure long-term project impact, the project will support monitoring of water quality / quantity in target watersheds; mapping and/or BD assessments of MPAs, KBAs and target watersheds; drone surveys of turtle nesting beaches, surveys of coral reef cover to measure actual project impacts, etc. Information for long-term impact indicators will be collected with wide involvement of the project partners and consultants and will be reflected in the Results Framework, Mid-Term and Terminal Project Reports, and Terminal Evaluation Report. The measurement of long-term impact indicators will include measuring the project impacts against the relevant Aichi targets.
- Gender and Youth Indicators will be used to assess impact of the project activities on gender and youth equality and involvement of women in project-supported activities. The on-going data collection on these indicators will be annually carried out by the PCU in the framework of the Gender Mainstreaming Strategy (Output 4.1.3).

Key partners for delivery of Output 4.1.2: Project Management Unit

Budget: GEF - \$30,000

Output 4.1.3: Gender Strategy to guide project implementation, monitoring and reporting is developed and implemented

The project's Gender Mainstreaming Strategy will include the following core components (these area also described in Annex N - Gender Analysis and Mainstreaming Plan):

Gender Analysis and Action Planning: The project will engage different stakeholders and implementing partners to identify the impact of gender on natural resources management and conservation; this framing of gender issues will support the implementation of the Strategy / Action Plan for Gender and Youth Mainstreaming developed during the PPG phase. The project also will identify and promote how women and youth have been engaged in high visibility activities related to project policies, programs, regulations and monitoring systems, in particular for Component 1 (activities 12, 15 & 17 in the project workplan), Outputs 2.1.2, 2.1.3, 2.1.4, and Component 3. Specific project activities will include:

- Develop a Stakeholder Analysis, focusing on gender and youth focused NGOs and CBOs
- Identify strengths and weaknesses of stakeholders in terms of participation and contribution to the project implementation
- Propose capacity-building activities for stakeholders to enable them to fully engage in the project
- Active involvement of women in the project M&E processes
- Develop and implement project gender strategy
- Adopt measures that ensure gender sensitive planning and budgeting
- Ensure that both men and women, and young people are visible and inclusive in the project documents
- Apply gender and youth clause to human resource recruitment, encouraging the applications from both men and women, with special emphasis on young women, given the imbalance in the present PPG Team
- At inception: gender and youth screening of the project design and work plan
- TORs of all staff to include specific responsibilities that support mainstreaming of gender and youth throughout project implementation

Gender Mainstreaming Capacity Building: The project will strengthen capacity for mainstreaming gender in all implementing partners, key stakeholders and beneficiary communities by using gender mainstreaming frameworks and tools. The Project Management Unit will seek to engage with the different stakeholders, including state actors such as ministries and departments and autonomous agencies created to undertake some of the environment conservation and protection work, and also non-state actors including environmental NGOs such as Sustainability for Seychelles (S4S) and Nature Seychelles, and other NGOs / CBOs such as SIDS Youth AIMS Hub-Seychelles (SYAH), Women in Action and Solidarity Organisation (WASO) and Gender and Media Plus (GemPlus) to study their capacity. This exercise will help to identify the strengths and weaknesses of these organisations to be able to fully and meaningfully engage in the process of the project implementation. Capacity building can be provided to those organisations with the aim to complete the project efficiently and effectively, and to ensure sustainability by local entities. It is also important for the project to be able to strengthen the capacity of all stakeholders, including beneficiary communities, to adopt and use a Gender and Youth Lens to assess and propose actions that are inclusive so that women and men and youth can become true

participants in the project implementation. Participants are able to contribute to the discussions and recommendations made. Specific project activities will include:

- Conduct at least 3 workshops per year on gender & youth engagement for all stakeholders on the management of the selected areas
- Engage gender & youth focused NGOs in trainings / workshops
- Incorporate gender issues in the process of lessons learning
- Involve women and women organizations in generation gender lessons
- Ensure that there is a component of capacity-building for gender and youth, especially for those activities where they are less likely to be meaningfully engaged through lack of training, expertise and capacity

Gender Mainstreaming Knowledge and Evidence Generation for Policy Influencing: The project will develop a framework to measure Gender Performance Indicators; monitor households on key gender indicators; document and share lessons learned; facilitate policy dialogue on key institutional barriers; and influence policy shifts. The project has developed a Gender and Youth Mainstreaming Plan with an Indicator Framework (Annex N) for monitoring, evaluation and learning to ensure that there is gender equality (50/50) and equity and meaningful youth participation. The number or proportion of men, women and youth in all project activities (planning, administration, research, consultancies, and other activities) are noted, recorded and assessed for improvements as the project is implemented. Specific project activities will include:

- PCU / MEECC opens consultancy bid with specific encouragement for female & young consultants to apply
- Review initial gender mainstreaming plan
- Gender & youth reports completed annually or biannually for updates & monitoring of progress
- Development of a selection criteria checklist
- Active engagement of women & youth groups as research officers / enumerators / data collectors
- Apply gender specific analysis in the project M&E
- Track gender disaggregated data for M&E
- Consider gender related reporting in KM and Lessons Learnt reports
- Use stories focused on gender & youth to showcase success
- Collect gender and youth sensitive data (age, district, socioeconomic status, education, employment) for reporting and planning

Key partners for delivery of Output 4.1.3: Project Management Unit

Budget: GEF - \$42,250

ii. Partnerships

This GEF project is built on other baseline programmes and projects that address the management of terrestrial, coastal and marine ecosystems in the Seychelles, and is designed to create synergies and establish strong collaboration and partnerships with many of them (see the table below).

| Existing Initiatives | Proposed collaboration with Project |
|--|--|
| Government Strategic Planning Programs (Among the most important baseline programs are the 3 strategic plan initiatives of the Govt. of Seychelles described below) | |
| <p>Seychelles Strategic Plan: The draft 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 includes 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. The 40% amounts to approximately US\$ 75 million (US\$ 15 million/year) during the project period and constitutes the primary budgetary allocations for key institutions concerned with environmental protection (detailed below).</p> | <p>One of the key elements of the SSP relevant to Ridge to Reef management is the proposal to develop a strategy for managing the Green Corridors (upland forest areas) on the main islands of Mahe and Praslin. Project activities to enhance management of upland forest areas will include assisting the Government of Seychelles and other national stakeholders in developing the Green Corridor concept and integrating it with the Ridge to Reef approach.</p> |
| <p>District-level Land Use Planning: The first phase of the district-level Land Use Planning exercise has been completed for all 25 District Administrations in the country (22 in Mahé, 2 in Praslin and 1 in La Digue). Through an on-going reform and decentralisation effort, it is expected that the District Administrations will have more significant responsibilities in the implementation of the land use plans, which will be the major implementation mechanism for ICM on the ground. As the implementation of the land use plans will have significant impacts (both positive and negative) on the terrestrial and coastal ecosystems, it is imperative to strengthen the overall capacity of District Administrations on integrated ecosystem management planning and implementation.</p> | <p>As the implementation of the land use plans will have significant impacts (both positive and negative) on terrestrial and coastal ecosystems, the R2R project will work to strengthen the overall capacity of District Administrations on integrated ecosystem management planning and implementation (Output 3.1.4). In addition, the project will integrate the watershed management plans developed under Output 2.1.2 with the District Land Use Plans currently being formulated by the MLUH, thereby giving the watershed management plans stronger policy and regulatory backing, increased visibility, and higher potential for long-term funding support. The project also will seek to get increased protection (i.e. restrictions on development) in the District Land Use plans for areas reforested through the project field interventions.</p> |
| <p>Marine Spatial Plan (MSP) for Seychelles: A Marine Spatial Plan (MSP) for Seychelles is being drafted to help the country meet its commitment to expand the area of its strict marine protected areas (high biodiversity zones) to 15% of the EEZ, and the areas of marine sustainable use zones (medium biodiversity zones) to another 15% of the EEZ, while also optimising the sustainable use and effective management of the EEZ as a whole. The MSP is a Government-led process in partnership with The Nature Conservancy (TNC) and others, with co-financing through a US\$1 million grant from Oceans 5 to TNC. In 2010,</p> | <p>The Marine Spatial Plan includes 3 different types of zones:</p> <ul style="list-style-type: none"> ○ Zone 1: High BD zones (top 15%) where allowable activities will be most restricted ○ Zone 2: Medium BD Sustainable Use zones (next 15%) where more uses will be allowed ○ Zone 3: Multiple use zones (70%) <p>Once the specific zones are identified and given a classification, they will be legally gazetted under the new</p> |

| Existing Initiatives | Proposed collaboration with Project |
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| <p>the Government of Seychelles set a goal for protected area expansion: 50% of all terrestrial areas and 30% of the Exclusive Economic Zone including 15% in ‘no take’ areas. Currently, more than 47% of the land is protected and 0.04% of the ocean. The MSP Initiative uses an ecosystem-based approach to propose new marine protected areas in conjunction with improved management for uses and activities in the 1.37 million square kilometres of ocean. The MSP will include proposals for the location/boundaries of the new MPA system (zoning of the EEZ). The Government of Seychelles has adopted a phased approach and has integrated the MSP process into a number of different projects to facilitate the sequential progression and to allow time for the refinement of planning outcomes. The Seychelles Marine Spatial Planning Consortium and the associated Steering Committee are being formed partly in response to this decision, and to ensure harmonisation of on-going and planned projects/initiatives, thereby avoiding duplication.</p> | <p>Protected Areas Act. Following that, each of the new Zone 1 MPAs will need to develop a PA management plan (Zone 2 areas will develop resource management plans). The proposed Ridge to Reef project will complement and support the overall MSP by enabling implementation of the management plans for the Curieuse, Baie Ternay and Port Launay MPAs, which will provide valuable lessons learned for newly gazetted areas under the MSP both in terms of the development of and the implementation of MPA management plans.</p> |
| Other Government Baseline Programs | |
| <p>Seychelles Conservation & Climate Adaptation Trust (SeyCCAT): The key baseline activity to help achieve the goals of the new Marine Spatial Plan is the creation of a Seychelles Conservation & Climate Adaptation Trust (SeyCCAT), a fund that is being established to oversee and fund activities identified as priorities under the MSP initiative (and with a particular focus on operationalizing new MPAs). Funding for the SeyCCAT will come from an initial \$39 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, and the interest earned on these funds (currently estimated at US\$ 0.4 million/year) will be used to provide grants, loans and investment funding for activities to implement the Marine Spatial Plan.</p> | <p>SeyCCAT is focused on supporting the system of marine protected areas in the Seychelles, sustainable fisheries, climate change adaptation, ecosystem rehabilitation, and blue economy businesses. As such, it will be a valuable partner for the Ridge to Reef project, particularly as it seeks to strengthen MPA management functions and improve coral reef conservation; for this reason, the R2R project will keep informed of new SeyCCAT grants, loans and investment funding, and seek to partner with those organizations who receive funding for activities in the coastal and inshore marine environments.</p> |
| <p>Government Budgetary Programs: On-going Government projects and programmes funded through budgetary allocations constitute a significant part of the baseline for this project. As noted above, the NDS expects to allocate approximately US\$ 75 million (US\$15 million/year) during the project period for the protection and valorisation of natural capital; most of this funding will support the programmes of the Department of Environment (DoE) and the Division of Risk and Disaster Management (DRDM) within the MEECC, and the Seychelles National Parks Authority (SNPA). Additional NDS funds (from the US\$ 60 million per year allocation for production sectors) will support programmes of the Seychelles Agricultural Agency (SAA).</p> | <p>As described in the Expected Results above, the project is closely aligned with and dependent on the activities of the MEECC (the project executing agency), SNPA, SAA, and other partners, and approximately US\$ 11.5 million of the project co-financing will come from government budgetary allocations to the institutions.</p> |
| Bi-Lateral and Multi-Lateral Agencies | |

| Existing Initiatives | Proposed collaboration with Project |
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| <p>GOS-UNDP-AF project 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.</p> | <p>The EBA project has provided a baseline for watershed forest rehabilitation and developed a methodology for post-rehabilitation monitoring of the Val d’Endor watershed on the island of Mahé. The R2R project and the EBA project will collaborate on activities related to protection of hydrological regimes in 2 watersheds on Mahe and 1 watershed on Praslin. The R2R project also will seek to use lessons learned in the EBA project regarding integrating IAS removal with forest planting (because only removing exotic species creates conditions for further invasion and confers limited benefits to native species); managing stream flows to reduce sedimentation of coastal ecosystems; developing watershed management plans; capacitating watershed committees; etc.</p> |
| <p>GOS-UNDP-AF project Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future: This project, which starts in early 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.</p> | <p>The R2R project will collaborate / share information with the AF-funded project in documenting threats and processes leading to the loss of coral reefs. The AF-funded project will focus on rehabilitating damaged coral reefs, while the R2R project will focus on addressing threats to the reefs (Outputs 1.2.1 and 1.2.2). Both UNDP and MEECC will sit on the steering committees for each project, and the Project Managers for both projects will be based at the Programme Coordination Unit, which will greatly facilitate this collaboration.</p> |
| <p>EU GCCA+ 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).</p> | <p>The R2R project will seek to learn from the lessons generated by the GCCA+ project (Component B) regarding effective coastal zone management, in particular lessons regarding enhanced stream channel and wetland productivity and flood buffering capacity, enhanced shoreline protection, and mitigation of saltwater contamination.</p> |
| <p>FAO-supported Technical Cooperation Programs: FAO is supporting a variety of technical cooperation programmes in the Seychelles, with a total budget of approximately US\$ 2.2 million from 2018-2021. The most significant and relevant of these programs is an on-going <u>National Forest Assessment</u>, which started in April 2018 and will last until the end of 2019. In view of the availability of new technologies and more cost-efficient approaches in forest assessment, the Government of Seychelles with assistance of FAO has decided to carry out an “integrated forest land and tree resources assessment” at national level that will allow the country to produce the required information for</p> | <p>The National Forest Assessment being undertaken with FAO support is not designed to produce forest maps, so it will be difficult to use the information generated in the assessment directly for planning or monitoring at the local level. However, it may be possible to use the data for further processing at the regional level (for example, in planning related to the Green Corridors and the upland forest KBAs on Mahe and Praslin). The R2R project also will seek to build on and continue the development of new forest policy and legislation initiated under the FAO programme.</p> |

| Existing Initiatives | Proposed collaboration with Project |
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| <p>policy and decision-making, and at the same time, produce the necessary information to comply with international reporting requirements such as the UNFCCC and CBD (the last countrywide forest inventory in Seychelles was conducted in 1993). The project is anchored in the Forestry Division of the Ministry of Environment, Energy and Climate Change (MEECC). Other relevant projects in the FAO program include on-going projects to audit agricultural land and to develop new forest policy and legislation (after the forest inventory), as well as planned projects to provide grants to small innovative farmers, to study agrotourism potential, and to support climate smart agriculture.</p> | |
| GEF-funded Projects | |
| <p>UNDP-GEF Small Grants Programme has a number of recent and on-going projects that support activities relevant to the R2R project, including: 1) a project on water-smart farms (Jan. 2018 – Dec. 2019) that is addressing water conservation in response to the scarcity of water during drier months and the high costs of water abstraction; 2) a project on protecting coral reefs against invasive species (Jan. 2018 – Dec. 2019); 3) a project on climate smart wetland rehabilitation and agro-ecology (2017-2018) that aims to rehabilitate areas in two wetlands on South Mahe and use the large volume of invasive plant material that will be removed to generate bio-safe organic fertilizer; and 4) two project with the Anse Forbans Community Conservation Programme and the Baie Ste. Anne Farmers Association to strengthen the sustainable co-management of coastal resources in Praslin and La Digue islands through a “Participatory Three-Dimensional Modelling” process (2017 - 2018).</p> | <p>These SGP projects can provide lessons learned and collaboration with the R2R project, including using farmer associations and other user groups supported under SGP projects to implement R2R project activities (in particular under Outputs 2.1.1, 2.1.2 and 2.3.1). SGP will provide <u>networking opportunities</u> with a number of SGP grantees managing projects / activities similar to the R2R project; these persons could participate in the R2R project’s capacity building and implementation in areas such as sustainable beekeeping, land conservation, organic farming, climate change mitigation / adaptation, etc.</p> |
| <p>AfDB-GEF SCCF Building Resilience in the Water Sector in Seychelles project (2016-2019): This project will strengthen flood prevention infrastructure on Mahé and installation of river/stream gauging stations.</p> | <p>The R2R project will explore opportunities to collaborate with activities under this AfDB-funded project to reduce stresses on coastal and marine ecosystems and enhance ecosystem resilience, for example by examining data produced by the river/stream gauging stations in areas where the R2R project is undertaking watershed management activities.</p> |
| <p>WB-GEF 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 the R2R 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 as part of the R2R Project. Instead, SWIOFish3 will fund activities being implemented in zones designated as <i>Sustainable Use Zones</i> as part of the Seychelles Marine Spatial Planning Initiative. During phase 2 (2018 – 2020) of the MSP initiative, there will be</p> | <p>Coordinate in marine environmental management: i.e. planning of MPAs under this project with MPAs and fisheries management under SWIOFish3 (Output 1.1.1). This project focuses on high-biodiversity areas (MPAs) in the Inner Islands whereas SWIOFish3 focuses on multiple use zones, with particular focus on greeting the Seychelles’ fisheries sector. The two projects are significantly different yet complementary, contributing synergistically to operationalizing the PA Policy and the new Marine Spatial Plan, as well as policy and legislation related to coral reef conservation.</p> |

| Existing Initiatives | Proposed collaboration with Project |
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| <p>activities designed to zone areas falling within the territorial sea. If there are any <i>Sustainable Use Zones</i> designated within the territorial sea, then the SWIOFish3 Project will be able to fund activities such as the preparation of management plans, annual assessment of management effectiveness and biological and socio-economic monitoring. 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.</p> | |
| <p>GOS-UNDP-GEF Seychelles' Protected Areas Finance project (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.</p> | <p>The R2R project will collaborate with the PA Finance project in exploring possible sustainable funding mechanisms for Key Biodiversity Areas and Turtle TPAs that are designated as protected areas, and in improving the management of the three target Marine Protected Areas on Mahe and Curieuse (Outputs 1.1.2 and 1.1.3).</p> |
| <p>GOS-UNDP-GEF Outer Islands PA project (2014-2018): 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 Seychelles' Outer Islands by expanding the protected areas system and strengthening protected area management, supported by broad-scale ecosystem planning and sustainable land management activities to conserve ecosystem functions.</p> | <p>The R2R project will seek to learn lessons from the Outer Islands project in terms of integrating new areas (e.g. KBAs or TPAs) into the official protected area estate of the Seychelles, and in cost effective strategies for managing marine protected areas.</p> |
| <p>UNEP-GEF Coastal EBA project (2014-2016): This project is focused on the island of Praslin and deals with spatial planning for integrated marine and coastal environment and resource management for ecosystem based adaptation.</p> | <p>Some of the activities of the Coastal EBA project, such as integrated coastal management planning, will be used to guide activities under Component 2 of the R2R project. In addition, the R2R project will seek to learn from and build upon the work of the EBA project in mangrove restoration activities.</p> |
| <p>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.</p> | <p>The R2R project will seek to collaborate with and learn from this project's activities on mangrove restoration (which will take place primarily outside of protected areas).</p> |
| <p>GOS-UNEP-UNDP-GEF Implementing Integrated Water Resource and Wastewater Management in Atlantic and Indian Ocean SIDS regional project (2012-2016): This project</p> | <p>The project is piloting small-scale approaches for integrated management of watersheds and coastal ecosystems that will provide lessons learned for the</p> |

| Existing Initiatives | Proposed collaboration with Project |
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| <p>is focused on IWRM interventions on La Digue island, specifically to promote water use efficiency, water security, rehabilitation of marshes and private sector partnership.</p> | <p>proposed project (Outputs 2.1.2 - 2.1.4). This demonstration also will inform the on-going water sector reform process, which will support the efficient implementation of watershed management practices (Output 2.1.2)</p> |
| <p>UNDP-GEF SAPPHIRE regional project (2016-2020): This project will support the implementation of the WIO LME SAP at the regional level, covering 9 coastal and island states in the Western Indian Ocean. The project will address training needs in the region which can be more cost effectively done at 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.</p> | <p>The SAPPHIRE project can provide useful inputs into the integrated ecosystem health monitoring efforts to be promoted by the R2R project. The SAPPHIRE project can also support the technical capacity building of BERI to become a Centre of Excellence in the region on the sustainable Blue Economy. Further, the SAPPHIRE project will support the development of a National Action Plan for the Seychelles, which complements the WIO LME SAP and help mainstream the regional priorities identified in the WIO LME SAP into the national development policy context of Seychelles.</p> |
| <p>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.</p> | <p>If/when the project identifies stress reduction demonstration activities in Seychelles, the R2R project will closely coordinate and collaborate with such demonstration activities for improved synergy, coordination, data and knowledge sharing at the national level in the Seychelles. In addition, the results from the R2R project can be presented by the Government of Seychelles to other WIO countries through Nairobi Convention fora.</p> |
| <p>Global Biodiversity Finance Initiative (BIOFIN): This program is managed by UNDP, in partnership with the European Commission and the Governments of Germany, Switzerland, Norway and Flanders. The \$29 million initiative was launched in October 2012, set to run until the end of 2018, with further support being sought to extend it. An additional \$3.1 million in finance is provided through several GEF-financed UNDP-managed projects working in participating countries to support governments to revise National Biodiversity Strategies and Action Plans and to implement specific financing solutions. BIOFIN aims to develop a methodology for quantifying the biodiversity finance gap at national level.</p> | <p>The R2R project will seek to collaborate with the BIOFIN project activities related to mobilizing potential finance actors and finance mechanisms to reach national biodiversity targets (BIOFIN Component 3) and to initiating implementation of a Resource Mobilization Strategy (BIOFIN Component 4), specifically with the goal of exploring options for sustainable financing mechanisms to support the management of MPAs, KBA and Turtle TPAs post-project.</p> |
| <p>The Pacific Ridge to Reef (R2R) is a Global Environment Facility (GEF) global test case and programmatic initiative involving multiple United Nations, Regional and National agencies, and Pacific Small Island Developing States (PacSIDS) to support and address national priorities and development needs while delivering global environmental benefits. The goal of the program is to maintain and enhance Pacific Island countries' ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal resource management that</p> | <p>Cross-regional learning from the GEF-supported Pacific R2R projects under implementation will facilitate remote discussion (project-to-project or across a group of projects) where the Seychelles can learn directly from other country experiences that are directly relevant and informative to the R2R project; and to enable the Seychelles project team and partners to join international or cross-regional workshops or events that promote learning between SIDS and R2R projects. One of the techniques that has been used successfully in the Pacific</p> |

| Existing Initiatives | Proposed collaboration with Project |
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| contribute to poverty reduction, sustainable livelihoods and climate resilience. | region is 3-dimensional modelling of watersheds; these models are produced during a process of 1-2 weeks during which the discussions around the model provide not only strategies for watershed and community development but also learning by doing capacity building. |

iii. Stakeholder Engagement

This project was developed using transparent, open, and fully participatory approach with the involvement of all groups of relevant stakeholders (government organizations, multilateral and bilateral agencies, NGOs, local communities, and the private sector) at national and project area levels. Individual and focus group consultations were conducted on the islands of Mahe, Praslin and Curieuse. Key objectives of consultative process were the following:

- Inform all group of stakeholders on the project preparation and allow them to participate in the project development and share their concerns about the project proposed implementation;
- Evaluate current patterns and level of impact of threats/processes affecting biodiversity, ecosystem services, and land and resources uses in the project areas and identify obvious barriers to implementation of Ridge to Reef approaches;
- Collect information on baseline programmes and projects related to the project objective;
- Understand social and political context in the country and the project areas;
- Assess current capacity of government agencies and local communities to manage natural resources sustainably;
- Develop relevant project Outputs based on key national and project area needs;
- Conduct Social and Environmental Screening Procedure and identify key risks for the project implementation;
- Clearly define project area for interventions and collect information on Outcome and Impact Indicators; and
- Identify potential project partnerships (see Partnerships section above) and clarify stakeholder roles in the project implementation.

A total of 94 stakeholders were consulted (37 women and 57 men) (see Annex P).

As a result of Stakeholder Analysis, the following groups of stakeholders were identified for project implementation (see details in Annex K: Stakeholder Engagement and Communications Plan).

| Stakeholder | Functions | Expected Role in Project Implementation |
|--|---|--|
| Ministry of Environment, Energy and Climate Change (MEECC) | The Ministry of Environment, Energy and Climate Change (MEECC) is mandated to provide the governance framework for a cluster of three interrelated sectors; environment, energy and climate change adaptation. MEECC includes the Environment and Energy and Climate Change Departments. The two Departments are responsible for the development of policy and regulatory frameworks, while various Authorities and Agencies (i.e. NGBF, LWMA, PUC, | MEECC will be the Executing Agency for the project. It will do so through the Programme Coordination Unit (PCU), a dedicated unit within MEECC that oversees, supports, and coordinates the different UNDP / GEF environmental projects in the Seychelles. The PCU was established in 2008 and has implemented jointly with its partners 12 programmes in excess of US\$10 million. Within MEECC, DOE will be the leading partner in |

| Stakeholder | Functions | Expected Role in Project Implementation |
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| | SNPA, SEC and NMS) are the execution entities with the responsibility to put these policies into practice. | implementing activities, especially regarding public education and awareness, regulatory and policy changes for forest and marine ecosystems; management of coastal freshwater ecosystems; gazettement of KBA sites; forest monitoring; and reforestation / IAS control activities. |
| Seychelles National Parks Authority (SNPA) | SNPA is a government entity incorporated under the provision of the Environmental Protection Act. SNPA is mandated with the management of both marine and terrestrial parks; currently it receives its operating expenses fund from the central budge, but starting in 2019 SNPA will be self-funding, primarily through visitor fees. SNPA conducts various research programmes on land and in the ocean, frequently in collaboration with various internationally recognized institutions. SNPA also places strong emphasis on education and awareness activities, and organizes various national events throughout the year to promote conservation. | SNPA will be the lead partner in the project activities to strengthen selected marine protected areas (Outcome 2.2) and for the forest management activities in areas under its jurisdiction (e.g. Praslin NP, Curieuse Marine NP). SNPA also will be key partner in coastal / marine ecosystem monitoring activities; coastal reforestation (including mangroves); upland forest restoration; and forest ecosystem monitoring. |
| Seychelles Agricultural Agency (SAA) | SAA is the lead entity for implementing national agricultural programmes and projects that support the enhancement of national food security, facilitate the increase of the agriculture sector in the country's gross domestic product and key socioeconomic indicators, and drive the development and modernization of the agricultural sector in conformity with the integral development framework of Seychelles. In terms of extension work, agricultural extension agents employed by SAA previously provided farmers with advice on fertilizer use, soil organic resources, terracing, use of fire for clearing, etc. However, in late 2018 the role of extension agents was changed to focus almost exclusively on supporting market linkages / contracts between farmers and commercial buyers (i.e. monitoring of production levels of crops, livestock, etc. so that major commercial consumers have a reliable supply and farmers have a reliable market). | SAA will act as an important partner in guiding and supporting sustainable agriculture and agroforestry activities, including implementation of soil conservation, fertility management, water conservation and other sustainable practices. |
| Seychelles Fire & Rescue Service | The Seychelles Fire & Rescue Service (within MEECC) is responsible for all fire and rescue operations in the country, including fire prevention and fighting of forest fires. | The Fire & Rescue Service will play a leading role in implementing the forest fire management activities of the project, including training of community fire brigades and improving institutional coordination. |
| Division of Risk and Disaster Management (DRDM) | DRDM (a unit within MEECC) is responsible for disaster risk management, emergency management and civil protection. | DRDM will act as a partner in institutional coordination and strengthening of forest fire management, and in assessing critical risks and mitigation strategies related to land-based impacts on coastal and marine ecosystems. |
| Seychelles Fisheries Authority (SFA) | SAA has the mission to develop the Seychelles' fishing industry to its fullest potential and to safeguard the resource base for sustainable development, including activities in: Policy Development & Planning; Fisheries Research; Fisheries Management; Fisheries Infrastructure Development; Monitoring, Control and Surveillance; Economic planning and management; | SFA will help to implement outreach and management of fishing communities that are active in the marine protected areas targeted by the R2R project, and it will assist in coordinating R2R project implementation with the GEF-funded SWIOFish3 project |

| Stakeholder | Functions | Expected Role in Project Implementation |
|--|--|--|
| Public Utility Cooperation (PUC) | <p>and Aquaculture</p> <p>The Public Utilities Corporation (PUC) is a parastatal body wholly owned by the Government of Seychelles; its major operations include: 1) generation, transmission, distribution and sale of electrical energy on the main islands of Seychelles, 2) treatment of raw water and supply of potable water to the population of Seychelles, and 3) treatment and safe disposal of wastewater to the environment.</p> | <p>PUC will contribute its monitoring data for the project activities related to integrated ecosystem health monitoring, in particular related to aquatic ecosystems in terms of water flows, quantities, sediments, etc.</p> |
| Watershed Management Committees | <p>At present, watershed committees are in place in Mont Plaisir (Anse Royale) and Baie Lazare (Val d'Endor) on the island of Mahe, and an island-wide committee on Praslin. The primary purpose of the committees is to act as stewards of the water resources within their watersheds by becoming actively involved in policy and planning decisions, as well as coordinating local community participation in watershed management field activities.</p> | <p>The project will establish a new watershed committee for the Grand Police area, and possibly a new committee for the Petit Coeurs area on Praslin (unless the existing Praslin committee decides to cover this area). The watershed management committees will be key partners in participatory watershed planning and management, SLM and SFM. It is expected that the Watershed Committees would be in charge of local seedling production in community nurseries, and for coordinating local community activity in IAS removal, reforestation and agroforestry.</p> |
| Farmers / Farmer Associations | <p>There are organized farmers in most rural areas of Seychelles, including the National Farmer's Association and the Val d'Endor Farmer's Association.</p> | <p>The project will work with farmers and farmer organizations in planning and implementing field activities in agriculture (including business plan development), agroforestry, SLM and other areas, including exchange visits between farmers from different project sites.</p> |
| Fishermen / Fishermen Associations | <p>Various fishermen associations exist for inshore fishermen in the Seychelles, some of which are active in co-management of specific fisheries resources.</p> | <p>Fishermen's Associations / Co-Management Committees will be consulted regarding plans to establish / strengthen MPAs, in particular regarding fishing activities within the Curieuse Marine National Park.</p> |
| Ministry of Education | <p>The Ministry of Education is responsible for public education at all levels within the Seychelles.</p> | <p>The Ministry of Education (engaged through the MEECC's Department of Education and Awareness Raising) will support / participate in project education and knowledge-sharing activities related to newly designated KBAs, forest fire prevention, watershed management approaches, etc.</p> |
| The University of Seychelles (UniSey) and the Blue Economy Research Institute (BERI) | <p>UniSey is the institutional home for the Blue Economy Research Institute (BERI) and supports relevant regional partnerships such as an Indian Ocean Rim Association grant to strengthen regional environmental research platforms. BERI is helping to implement a UN Environment NRDC project relating to mangrove restoration and water quality monitoring; is contributing to water quality monitoring under the GEF-funded Outer Islands project; and is participating in other projects relating to lobster abundance, species climate sensitivity studies, and coral restoration. BERI works closely with the UniSey Island Biodiversity Conservation (IBC) Centre on scientific studies, ecological research, and conservation programmes on island biodiversity, including a project funded by the CEPF. BERI has a team of six full time researchers,</p> | <p>UniSey and BERI will be key partners in project activities related to aquatic ecosystem monitoring (Output 2.1.4) and the consolidation, management and sharing of environmental information (Output 3.1.1). In addition to the research staff at BERI, over 60 undergraduate students enrolled at the Department of Environment in UniSey could be available to participate in ecological research / monitoring assignments supervised by BERI staff. BERI also has the potential to tap into a bigger network of foreign professional volunteers and post graduate students to further strengthen its capacities to participate in the R2R project.</p> |

| Stakeholder | Functions | Expected Role in Project Implementation |
|--|--|---|
| Marine Conservation Society Seychelles (MCSS) | <p>with a mix of teaching and research workload.</p> <p>MCSS is a registered NGO in the Seychelles with a number of on-going projects relevant to the R2R project, including: 1) development of initial nomination files for turtle TPAs in southern Mahe; 2) a contract with MEECC to carry out biodiversity assessments and community outreach in the Grand Police area to support the potential acquisition of land and designation of a new protected area at this site in southern Mahe; MCSS continues to work with local community members at this site to monitor and protect the nesting beach for sea turtles, and is working on conservation of the coastal freshwater wetlands in the area; 3) monitoring of South Mahe turtle nesting population since 2003; 4) monitoring of endemic terrapin populations; 5) the Cerf Island Conservation Programme; 6) replication of the Cerf Island programme at Anse Forbans and with hotel partners (Le Meridien Fisherman’s Cove, Hilton Northolme and H Hotel Beau Vallon); and 7) a Wildlife Conservation and Rehabilitation Centre, including a digital veterinary x-ray facility and tortoise and terrapin rehabilitation facilities.</p> | <p>The project will partner with and build upon MCSS’s work on Temporal Protected Areas to conserve turtle nesting beaches in southern Mahe, and on turtle and coastal wetlands conservation and community outreach in the Grand Police area. In addition, MCSS is a key partner in the pending project “Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future”, and it will help to facilitate collaboration between the two projects, especially regarding coral reef conservation in southern Mahe.</p> |
| Terrestrial Restoration Action Society of Seychelles (TRASS) | <p>TRASS is a registered NGO in the Seychelles that specialises in the restoration of degraded terrestrial land. TRASS has been in operation since 2009 and it focuses its activities mainly on the island of Praslin. TRASS has 50 members and can draw on approximately 200 volunteers. To date, TRASS has rehabilitated over 30 hectares of forest and has planted over 60,000 seedlings. TRASS has past and on-going project for forest conservation and SFM, fire prevention, restoration of burned and degraded sites, and agroforestry. TRASS manages its own forest nursery, which has a workforce of 6 persons.</p> | <p>TRASS activities on reforestation will provide valuable experience and lessons for the R2R project’s activities in this area. TRASS mostly focuses on private lands; together with SNPA, the two organizations could jointly address ecosystem restoration in landscape with a mix of public and private land. TRASS also brings a wealth of experience in local community outreach. TRASS is expected to be a key partner for the R2R project on Praslin at the Petit Cours to Pt. Chevalier watershed site.</p> |
| Private sector | <p>Hotels in the Seychelles are frequently partners in conservation activities, including a number of hotels whose properties include important coastal wetlands. Tourism destination companies are potentially important partners for promoting sustainable tourism, in particular within marine protected areas.</p> | <p>Private tourism partners such as island owners and lessees will be consulted regarding MPAs and programmes for monitoring and collection of marine data; private hotels and water bottling companies will participate in monitoring and conservation of aquatic ecosystems.</p> |
| District Administrations / Regional Councils | <p>Through the on-going decentralisation efforts of the National Government, more responsibilities are being delegated to District Administrations and Regional Councils, including the implementation of the land use plans, which may have significant positive and negative impacts on the terrestrial and coastal</p> | <p>Building the capacity of District Administrations and Regional Councils through sensitisation and training activities will yield positive impacts in the application of the R2R approach on the ground, including the organization of local community support and participation for R2R interventions.</p> |

| Stakeholder | Functions | Expected Role in Project Implementation |
|-------------|-------------|---|
| | ecosystems. | |

iv. Gender equality and empowering women:

Mainstreaming Gender

This GEF project is classified as a gender and youth targeted one. It is expected that the results obtained will allow for equality and equity for both sexes, with a suggested 50/50 of women, men and young people. Indeed, there are strong gender and youth interventions incorporated in the project design. During the project development the PPG team tried to involve as many women and young people as possible in the consultation process. Women’s participation has been higher than that of young people, with most of the people consulted being women older than 35 years of age. For example, the chairpersons of WASO, and GemPlus are older women whereas the SYAH members are young women. All the ecoschool coordinators, except for one, were all female. Whilst they were not directly consulted, the members of the school environment clubs tend to be overwhelmingly female.

For the project implementation process, it is believed that when the NGOs are fully engaged, the greater participation will be from women and girls. This will be an issue for the achievement of 50/50 gender equality: the coordinators and heads are likely to be male whereas the implementers at grass-root levels are more likely to be female. This is an imbalance that may need to be corrected through the recruitment process when the project is implemented.

To implement gender and youth mainstreaming, the project has developed and will implement a Gender and Youth Mainstreaming Strategy that covers all activities to be undertaken. However, to ensure that the Strategy is actualized, there is a need for active engagement of gender and youth for the first 6 months of the project implementation (Output 4.1.3). The proposed strategy contained therein will guide the PMU on involvement and integration of women and youth, not only in the delivery of the project outputs, but also in the monitoring and evaluation of the process and the results obtained. Ideally, it is also recommended that at the PMU level, there is gender and youth equality and equity to avoid what has been discovered in the consultations, namely that older males will likely be the heads of the project whereas women and young people will be implementers, or even non-participant observers. This needs to be avoided to ensure that the UNDP recommended guidelines for gender and youth engagement in projects are satisfied.

The key guidelines for the strategy are outlined below:

1. In spite of the lack of gender and youth balance and rank in the PPG Team, it is important to ensure that this situation is not perpetuated during the setting up of the final Project Management Team or Unit. Therefore, there should be major efforts expended to obtain women and youth participation as much as possible, ever striving to achieve 50/50 for gender and perhaps, 70/30 for youth. There are opportunities and organisations that can help to address this issue adequately. Thus, relevant gender representation on various levels of project governance will be pursued. All project staff recruitment shall be specifically undertaken inviting and encouraging women applicants. The TORs for key project staff all incorporate gender and youth mainstreaming related responsibilities.

2. Given the gender and youth imbalance between the likely heads and implementers of the project and its activities, there will be a need to incorporate practical and meaningful gender and youth related actions in the implementation process. The following can be done:
 - a) 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;
 - b) Invite all gender and youth-focused NGOs and CBOs to meetings, seminars, workshops and discussion groups that are addressing environment issues at macro-level;
 - c) 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 (e.g., Activity 5 of Component 1);
 - d) 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 2.2.1 of Component 2);
 - e) 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;
 - f) Gender and youth-focused NGOs and CBOs will be involved in project implementation and capacity development at national and district levels.
3. In line with recommendations from UNDP and the Seychelles' own international (CEDAW, SADC Protocol on Gender) and national obligations (National Gender Policy), the project will adopt the following principles in the day to day management and implementation of the project:
 - i. No use of gender and youth stereotypes and stereotype-laden languages in daily interactions, communications and informal and formal project documents;
 - ii. Respect in tone and in treatment for all members of the project team at national and district levels
 - iii. No use of language or behaviour denoting bias and disrespect for the individual based on gender, age, race, sexual orientation, religion and other any other forms of affiliations.
4. The project will promote gender and youth mainstreaming and capacity building within its project staff to improve understanding of gender issues, and will appoint a designated focal point for gender issues to support development, implementation, monitoring and strategy on gender mainstreaming internally and externally. This will include facilitating gender equality in capacity development and women's empowerment and participation in the project activities. The project will also work with UNDP experts in gender issues to assist in ensuring compliance to stated rules and guidelines. These requirements will be monitored by the UNDP Gender Focal Point during project implementation.
5. To further emphasise the importance given to gender and youth in the project, there is an Indicator Framework that will use gender and youth disaggregated indicators as an integral part of the monitoring and evaluation process of the project progress and reporting, and will facilitate involvement of men and women and young people in the M&E process.

Table 8: Gender Action Plan: Cross-cutting Activities

| Gender Action | Indicator | Target | Baseline | Timeline | Responsibility |
|--|--|---|------------------------------------|--|------------------------------------|
| Inclusion of women & youth on national steering committees for the project or Project Management Unit | % of women & youth on NSCs | 50% women 15% youth | 0 | Within 3 months of implementation, in Yr1 | MEECC & other stakeholders |
| Develop Terms of Reference for NSCs to engage with women / youth | ToR developed, reviewed & validated ToR adopted | ToR in use by the NSCs | 0 | Yr1 | MEECC & other stakeholders PCU |
| Management committees set up in the selected areas/sites | # of management committees % of women & youth on committees | 50% of women 15% - 30% youth | No data | Within 1 year of implementation, Yr1 | MEECC |
| Consultations with the local communities in the selected areas/sites | Number of participants % of women & youth consulted | 50% parity for women & men Min. 30% youth | No data | Throughout the project, on-going | MEECC |
| Engage stakeholders to study impacts of women / men / youth on selected areas & the types of activities each group is conducting | # of meetings with stakeholders Analyses of activities in selected areas Reports on analyses done | 1 initial report on impacts of women / men / youth in selected areas | PPG report | One report Yr1 Follow-up reports throughout project's lifespan, e.g., 1 every 2 years | MEECC Project Gender Expert |
| Appointment of women & youth to the Project Management Unit once implementation begins | Number of persons on PCT % of women % of youth | 50% parity for gender 30% for youth | 0 for women / youth | Yr1 | MEECC PCU |
| Capacity-building activities to develop management & MLE tools, emphasizing the capacity needs and priorities of women & youth | # of capacity building activities developed integrating priorities and needs of women & youth % of women / men % of youth | 50% parity for gender 30% for youth Min. 2 workshops in Yr1, Yr2, Yr3 | 0 workshops 0 training sessions | | MEECC Project Gender Specialist |
| Gazetting of MPAs, KBAs | # of documents drafted # drafted by female / young consultants | 50% parity in consultants' assignments | 100% male 0 youth | | MEECC |

Gender Related Activities by Project Outputs

Men and women, and young people will participate fully and on equal terms in the development of project activities and their implementation, monitoring, evaluation and reporting. Gender and youth-focused

organisations (CBOs and NGOs) will be invited and encouraged to develop a shared agenda and programme of activities for the project. Partnerships between women and youth organisations and the project team will foster gender balance and youth engagement, leading to a balanced participation of men and women and youth in all project activities. Women and young persons will be encouraged to apply for project consultancies including for example research and preparation of site management plans, site monitoring, policy development and review, linking the findings of field work to policy changes, etc. Persons living adjacent to or within the area of project field sites will be engaged in much of the work being carried out the sites, and the project will work of involve women and school environment clubs, which will be eager to conduct activities such as tree-planting and monitoring of forest lands as part of their own programmes of activities.

Table 9: Gender related activities at the Output Level

| Project Outputs | Responsible organizations | Gender Mainstreaming Actions |
|--|--------------------------------------|---|
| Component 1: Expansion of marine and terrestrial protected areas of the Seychelles' Inner Islands | | |
| Output 1.1.1: Establishment of new <i>temporal MPAs</i> (known as TPAs) at coastal sites downstream of areas where the project is undertaking the reduction of land-based stresses on coastal and marine ecosystems | MCSS, MEECC | <ul style="list-style-type: none"> • Consultative meetings with gender-focused & youth-focused NGOs/CBOs & with women & youth to participate in review & development of nomination file, and preparation of Turtle TPA management plans • Environment-focused NGOs involve their young & female members • Active engagement of youth & women in preparation of regulations for Turtle TPAs; public education and awareness activities; monitoring, control and surveillance activities • Public education and awareness activities target women and youth |
| Output 1.2.1: Improved management of three existing marine protected areas (Port Launay, Baie Ternay and Curieuse Marine National Parks) encompassing 1,421 ha | SNPA, MEECC | <ul style="list-style-type: none"> • Active engagement of youth & women in SNPA activities to strengthen management of three MNPs and in development of partnerships with tourism sector • Target women and youth in awareness raising about conservation activities being undertaken in the MNPs |
| Output 1.2.2: Detailed biodiversity surveys and ecosystem monitoring of selected MPAs (including wetlands, coral reefs, mangroves and seagrass beds) | SNPA, GVI | <ul style="list-style-type: none"> • Active engagement of youth & women in development and implementation of surveys and monitoring activities in MPAs |
| Output 1.2.3: Restoration and rehabilitation of selected MPAs through coastal reforestation and improved management of coastal | SNPA, TRASS, District Administrators | <ul style="list-style-type: none"> • Active engagement of youth & women in field activities to restore water flows to mangrove areas, remove IAS, and restore mangroves and other coastal forests |

| Project Outputs | Responsible organizations | Gender Mainstreaming Actions |
|---|---|---|
| freshwater ecosystems | | |
| Output 1.3.1: Strengthened management capacity and status for 6 KBAs covering 2,235 ha of upland forest ecosystems, with a focus on conserving biodiversity and carbon stocks | MEECC, NGO partners, Watershed Committees | <ul style="list-style-type: none"> • Consultative meetings with gender-focused & youth-focused NGOs/CBOs & with women & youth to participate in review & development of nomination files, and preparation of KBA management plans • Active involvement of women in the implementation of on-the-ground management activities in KBAs |
| Component 2: Strengthened management of upland KBAs and adjacent areas to enhance the flow of ecosystem services through the R2R approach | | |
| Output 2.1: Proposed revisions to policies and related legal and regulatory frameworks to promote effective management of wetlands and forests in Seychelles, and strengthened enforcement to reduce / mitigate stresses from land-based sources and activities to coastal and marine ecosystems | MEECC (DOE Forestry Unit), SNPA, Attorney General's Office | <ul style="list-style-type: none"> • Active involvement of women in the process of revising policies and regulations regarding forest management, Green Corridor, watershed and wetland ecosystem services, and water quality standards |
| Output 2.1.2: Watershed management approaches and biodiversity-friendly sustainable forest management practices adopted and implemented in and around target KBAs and watersheds | MLUH, SNPA, TRASS, local landowners / residents | <ul style="list-style-type: none"> • Ensure diverse participation on watershed committees; target of 50% women / 15-30% youth • Establish 50/50 policy for training, provide women friendly training facilities • Engage diverse local community participation in project field activities, including SFM, forest nurseries, IAS removal, forest planting and silvicultural management; target of 50% women / 15-30% youth |
| Output 2.1.3: Technical approaches to post-fire forest rehabilitation and long-term monitoring are piloted and the institutional capacity for forest fire fighting is strengthened at national, regional and local levels | Fire and Rescue Services, community fire groups, DOE Forestry Unit, SNPA, TRASS | <ul style="list-style-type: none"> • Establish 50/50 policy for training, provide women friendly training facilities • Engage diverse local community participation in project field activities for fire rehabilitation and monitoring; target of 50% women / 15-30% youth |
| Output 2.1.4: Systems and capacities established for long-term monitoring of forest recovery, and for monitoring of rivers and streams flowing out of target KBAs and through priority watersheds | MEECC, BERI / UniSey, TRASS, SNPA | <ul style="list-style-type: none"> • Establish 50/50 policy for training in monitoring activities, provide women friendly training facilities • Engage diverse local community participation in project field activities for monitoring of forest and watershed recovery, and associated public education and awareness activities; target |

| Project Outputs | Responsible organizations | Gender Mainstreaming Actions |
|---|--|---|
| | | of 50% women / 15-30% youth |
| Output 2.2.1: Biodiversity-friendly sustainable land management practices implemented on agricultural lands | SAA, farmer associations, TRASS, Min. of Health | <ul style="list-style-type: none"> Engage diverse local community participation in project field activities on agricultural lands; target of 50% women / 15-30% youth |
| Output 2.2.2: Capacity of smallholder farmers built in sustainable land management practices on agricultural lands | SAA, PMU, Watershed committees, farmer associations | <ul style="list-style-type: none"> Establish 50/50 policy for training in monitoring activities, provide women friendly training facilities |
| Output 2.3.1: Agroforestry production expanded into degraded upland sites as well as existing areas of agricultural production | Min. of Agriculture, SAA, TRASS, farmer associations | <ul style="list-style-type: none"> Engage diverse local community participation in project field activities for agroforestry; target of 50% women / 15-30% youth Establish 50/50 policy for training in monitoring activities, provide women friendly training facilities |
| Component 3: Promoting the ‘Ridge to Reef’ (R2R) approach through knowledge management, ecosystem health monitoring and inter-sectoral coordination | | |
| Output 3.1.1: Integrated ecosystem health monitoring at the project sites institutionalised and information-sharing mechanisms scaled up to support implementation of R2R approaches | BERI, NISTI, MEECC, SNPA, MCSS, TRASS | <ul style="list-style-type: none"> Active engagement of women & youth as research officers / enumerators |
| Output 3.1.2: Policy recommendations for harmonising policies and monitoring efforts of appropriate national policy-making bodies to advance R2R approaches | OMU | <ul style="list-style-type: none"> Active engagement of women & youth in reviewing policy framework and developing and communicating policy recommendations |
| Output 3.1.3: Private sector involvement (especially in monitoring and stress reduction activities) strengthened to support the implementation of R2R approaches | PMU, private partners | <ul style="list-style-type: none"> Engage diverse local community participation in project activities for monitoring stress reductions, in partnership with hotels, water bottling companies, etc. |
| Output 3.1.4: Regional Councils, District Administrations and the general public sensitised on R2R approaches and are aware of the R2R projects that are being implemented in their respective districts | MEECC, PMU | <ul style="list-style-type: none"> Conduct training for regional council members and district administrators and gender parity in community public works activities, and in ensuring that female-headed households are targeted as beneficiaries of the project Seek more involvement of men & youth working in these offices (most Council |

| Project Outputs | Responsible organizations | Gender Mainstreaming Actions |
|---|--|---|
| | | members and DAs are women) |
| Component 4: Knowledge Management, M&E and Gender Mainstreaming | | |
| Output 4.1.1: Lessons learned are shared with national and international conservation programmes | PMU, MEECC, BERI, Min. of Education | <ul style="list-style-type: none"> • Incorporate gender issues in the process of lesson learning • Involve women and women organizations in generating gender lessons |
| Output 4.1.2: Participatory project monitoring, evaluation and learning framework is developed and implemented | PMU & partners in project field activities | <ul style="list-style-type: none"> • Apply gender specific analysis in the project M&E • Ensure active involvement of women in the project M&E processes |
| Output 4.1.3: Gender Strategy to guide project implementation, monitoring and reporting is developed and implemented | PMU | <ul style="list-style-type: none"> • Develop and implement project gender strategy • Adopt measures that ensure gender sensitive planning and budgeting • Track gender disaggregated data for M&E • Consider gender related reporting in KM and Lessons Learned reports |

v. South-South and Triangular Cooperation (SSTrC)

The GEF alternative represented by this project will contribute to South-South and Triangular Cooperation by sharing Seychelles' experiences and lessons learnt in integrated Ridge to Reef approaches that combine management of upland forests, mid-elevation forests, agricultural and agroforestry landscapes, aquatic ecosystems, and coastal and marine ecosystems, among the GEF community of practice and other partners including regional organizations such as the Indian Ocean Commission and donors such as FAO, EU and UN Environment. The project will put a strong emphasis on knowledge sharing and collaborative engagement with other SIDS in the Indian Ocean (Comoros, Maldives and Mauritius), and project team members will participate in and give presentations at regional meetings such as the Blue Economy Summit, Indian Ocean Rim Association conferences, SIDS conferences, Nairobi Convention meetings, etc. The project will support Seychelles' participation and reporting to the Nairobi Convention, which is a partnership between governments, civil society and the private sector working towards a prosperous Western Indian Ocean Region with healthy rivers, coasts and oceans. In addition, the project will support exchanges with the Maldives to share information and strategies on MPA management, including management planning, tourism management, PA financing, ecosystem monitoring, etc. Finally, the project also will strengthen Seychelles' capacity to fulfil its commitments under the International Convention on International Trade in Endangered Species of Wild Fauna and Flora by conserving CITES-listed species such as green turtles (*Chelonia mydas*) and hawksbill turtles (*Eretmochelys imbricata*).

IV. PROJECT MANAGEMENT

i. COST EFFICIENCY AND EFFECTIVENESS

The project will minimize the significant cost of finding and contracting a large number of technical experts by securing two technical experts under long-term (5-year) contracts to lead many of the project interventions regarding forestry / KBAs and agriculture / agroforestry. In addition, the project will contract both governmental and non-governmental organizations as Responsible Parties to lead interventions on MPA management, TPAs, restoration of degraded forest landscapes, and SLM approaches in agriculture; because these organizations already have experience, trained personnel, and equipment and materials relevant to such activities, they will provide a more cost effective approach to achieving the project outputs. In addition, the project will work with partners such as TRASS and MCSS who can mobilize significant community volunteer participation in project activities; with BERI, which can involve students from the University of Seychelles in project ecological monitoring activities; and with existing farmer's associations and other partners.

The project has selected target areas, including Key Biodiversity Areas, Watersheds, Temporal Protected Areas, and Marine Protected Areas, where ridge to reef impacts/flows are of a nature and scale such that the project can make a tangible difference in ecological functions while avoiding spreading project funding too broadly. Regarding TPAs, these are a cost effective approach to conservation of marine areas because they only require management interventions during specific parts of the year, and they have much lower recurring costs than regular MPAs, i.e. minimal infrastructure to maintain (apart from some signage / buoys); very minimal staffing requirements (periodic monitoring during only part of the year, an activity that frequently can be carried out by existing marine conservation / fisheries staff and with the participation of local community members); and very localized needs for public education and outreach. In addition, because the TPAs and KBAs that will be supported by the project will be under private, NGO or community management, they will have a higher potential to secure financing to complement the GEF funding through community stewardship and corporate social responsibility programmes with local businesses, and other funds from the private sector and donors.

ii. PROJECT MANAGEMENT

Day-to-day administration of the project will be carried out by a Project Manager (PM), with support from the Programme Coordinator, Finance Assistant and Administrative Assistant working in the UNDP-GEF-GOS Programme Coordination Unit (PCU). The PM will also have support from long-term Technical Advisors on Forestry and on Agriculture / Agroforestry. The PCU, which provides financial management / reporting support services to a number of UNDP-GEF projects in the Seychelles from its offices in Victoria, will provide office space for the PM and technical advisors.

In addition, several entities have been selected as Responsible Parties (RPs) to implement different outputs on behalf of the Implementing Partner on the basis of a written agreement or contract to provide services using the project budget. There are four RPs for this project: Seychelles National Parks Authority (SNPA); Seychelles Agriculture Agency (SAA); Blue Economy Research Institute (BERI); and Marine Conservation Society Seychelles (MCSS). Responsible Parties will be accountable for their designated Outputs in coordination with

the NPM. The designated Responsible Parties and the National Project Director (MEECC) will sign a Memorandum of Understanding for execution of project activities. The RPs will directly collaborate with the project partners and local communities to deliver relevant project Outputs and select appropriate sub-contractors to implement relevant project activities based on the UNDP requirements.

Additional details on the project management arrangements are provided in Section VII (Governance and Management Arrangements).

Finally, this project is built on other baseline programmes and projects that address the management of terrestrial, coastal and marine ecosystems in the Seychelles, and is designed to create synergies and establish strong collaboration and partnerships with many of them. A detailed analysis on how the project will work with and build on other projects is provided in Section III (Results and Partnerships), Part ii (Partnerships).

iii. AGREEMENT ON INTELLECTUAL PROPERTY RIGHTS AND USE OF LOGO ON THE PROJECT'S DELIVERABLES AND DISCLOSURE OF INFORMATION:

To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy and the GEF policy on public involvement³⁹.

³⁹ See https://www.thegef.org/gef/policies_guidelines

iv. RISK MANAGEMENT

During the PPG process and SESP assessment, a set of key project risks was identified (see Table below and Annex I - UNDP Risk Log). As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

Updated project risks are reflected in the table below:

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|--|---------------|--------------------------|--|-----------------------------|--|
| Continued introductions / spread of IAS minimize progress on reducing forest fires or increasing carbon sequestration. | Environmental | P = 3 I=2 Moderate | Seychelles’ biosecurity system / protocols are expected to reduce introductions of new IAS, implemented through the new National Biosecurity Agency (NBA) that is tasked with monitoring and responding to any new introductions, and the existence of new emergency response protocols. | National Biosecurity Agency | The risk of new IAS introductions is declining with the work of the NBA, but IAS spread may continue to be a risk. |
| Opposition from fishermen to new MPAs or strengthened MPA regulations; opposition from landowners to designation of KBAs as protected areas. | Political | P = 3 I=2 Moderate | Regarding KBA sites, in those cases where at least part of the site is privately owned, any designation of a KBA site as an official protected area will not go forward until the Government of Seychelles has approved a compensation mechanism for private landowners; the Government is already working on a policy in this regard, and the proposed project will assist it in doing so. In addition, as described under Output 1.1.3, the first step in proposing any KBA sites for designation will be outreach and consultations with relevant private landowners. In existing MPAs, the project will focus on strengthening the enforcement of existing regulations, rather than imposing new regulations. It is not anticipated that the strengthening of the existing network of MPAs will have any major | SNPA | The risk should decline as project outreach to landowners and fishermen allows them to see the benefits accrued. |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|-------------|------|----------------------|--|-------|--------|
| | | | <p>negative impacts on fishermen's livelihoods, while it will have a major positive impact on the country's marine conservation efforts by showing that the Seychelles is not only interested in numbers like percentage of EEZ under protected status but also in the effectiveness of these protection designations. Most of the country's MPAs have long been established and illegal fishing activities are already controlled, what the project will be doing will be increasing the level of compliance and increasing the level of respect of MPA stakeholders for these areas. In addition, the changes in access to marine resources are intended to increase the sustainability of these assets and produce a positive impact on livelihoods over the long-term. Regarding KBA sites, in those cases where at least part of the site is privately owned, any designation of a KBA site as an official protected area will not go forward until the Government of Seychelles has approved a compensation mechanism for private landowners; the Government is already working on a policy in this regard, and the proposed project will assist it in doing so. In addition, as described under Output 1.1.3, the first step in proposing any KBA sites for designation will be outreach and consultations with relevant private landowners. In existing MPAs, the project will focus on strengthening the enforcement of existing regulations, rather than imposing new regulations. It is not anticipated that the strengthening of the existing network of MPAs will have any major negative impacts on fishermen's livelihoods, while it will have a major positive impact on the country's marine conservation efforts by showing that the Seychelles is not only interested in numbers like percentage of EEZ under protected status but also in the effectiveness of these protection designations. Most of the country's MPAs have long</p> | | |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|-------------|------|----------------------|--|-------|--------|
| | | | <p>been established and illegal fishing activities are already controlled, what the project will be doing will be increasing the level of compliance and increasing the level of respect of MPA stakeholders for these areas. In addition, the changes in access to marine resources are intended to increase the sustainability of these assets and produce a positive impact on livelihoods over the long-term.</p> <p>For example, the rehabilitation activities done by the project in coastal and mountain areas will reduce the level of sedimentation and improve health of coral reefs and coral reef associated fisheries, thereby producing net benefits for fishermen. The biodiversity surveys planned will also identify the characteristics of important/critical nursery areas for coral reef associated fish and make suggestions to improve their management, which will further benefit fishermen. The project approach is also in line with voluntary measures that fishermen on Praslin are taking to improve management of fisheries resources around this island; the project ensure effective consultations with fishers during implementation by having someone from the fishing industry on the project's steering committee. The project can also collaborate with on-going efforts to re-introduce Honorary Wardens (who can be fishermen) and how fishermen can otherwise be more actively involved in the management of natural marine resources. Finally, it is important to note that most fishermen are law abiding and would welcome better enforcement so that they do not lose out to those fishermen who do not follow the law. During the 1st year of project implementation, a Livelihoods</p> | | |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|--|-----------|--------------------------|--|---------------------------------------|---|
| | | | Action Plan for fishermen will be developed for implementation during the remaining period of project implementation. With regard to the establishment of new MPAs, the project is only proposing to establish Turtle Temporal Protected Areas, which – because they are generally small in size and only seasonally in force – are not perceived by fishermen to be a threat to their livelihoods. In addition, the Turtle TPAs will not have any impact on fishing. The changes in access to marine resources from strengthening enforcement of existing regulations are intended to increase the sustainability of these assets and produce a positive impact on livelihoods over the long-term, which should mitigate opposition from fishermen. | | |
| Socio-economic pressures (e.g. the importance of tourism development for the national economy) prevent effective implementation of development controls to protect coastal freshwater ecosystems | Political | P = 2 I-3 Moderate | The Seychelles Planning Authority has previously given permission for development in sensitive areas, including KBAs, and current EIA processes are inadequate. Recent legal decisions have overturned Government land use planning designed to protect sensitive areas on constitutional grounds. However, EIA regulations are currently being revised and strengthened, including new regulations regarding wetlands, and this project will support these efforts as needed. In addition, the enactment of the proposed Nature Reserves and Conservancy Act is expected to greatly increase the visibility and support for effective protections of important natural ecosystems in the country | SNPA, Planning Authority, AG's Office | This risk is projected to decline as new laws, regulations and policies are coming into place |
| Many of the project's | Environme | P = 3 I=3 | The risk of climate change impacts on ecosystem | PMU, SNPA, | This risk may possibly |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|---|------|----------------------|--|------------------|--|
| field-based outcomes are vulnerable to the potential impacts of climate change. Most forest management, reforestation and agricultural activities can be negatively impacted by drought and/or extreme weather events, which may reduce vegetative cover and rates of recovery, and increase erosion/sedimentation problems. Coral reefs may be impacted by coral bleaching events, harmful algal blooms, and outbreaks of the Crown of Thorns starfish | ntal | Moderate | conservation / restoration activities will be minimised with careful planning and mitigation strategies, as described in the ProDoc. For agriculture, agroforestry and reforestation activities, the project will seek to plant seedlings during seasons when extreme storm events or droughts are least likely, and to select species most likely to survive such events. For coral reefs, the project will focus on coral reef sites with the following characteristics that contribute to resilience to coral bleaching: (i) sites known to be less susceptible to bleaching; (ii) sites found downstream of large catchment areas where there is more freshwater input that helps to cool down the sea in these areas; (iii) sites where no phase shifts from coral domination to macro-algae or rubble domination have been observed; (iv) sites with low levels of anthropogenic disturbances (e.g. from boat anchor, pollution, land-based sedimentation) so that impacts are not cumulative with those from climate change; and (v) sites with reefs that have high rugosity, which seems to be more resilient. With regard to COTS, in the past outbreaks have been mainly concentrated on the northwest coast of Mahe, which are far from the areas selected by the R2R project. In addition, the project's monitoring and surveys of marine environments will allow for early detection and control of COTS outbreaks. The project also will make use of citizen monitoring to report COTS presence and use civil society actions to control densities at more socio-economically important sites such as where there is regular diving and snorkelling | TRASS, MCSS, SAA | increase if climate change trends continue |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|---|-----------|----------------------------|---|----------------|--|
| | | | by tourists. With regard to algal blooms, it is very difficult to mitigate as these blooms are caused by natural upwellings of nutrient rich waters that have been locked at depths off the Mahe Plateau. | | |
| Failure to enact the National Parks and Nature Conservancy Bill would limit the legal conservation status of the proposed KBAs and Turtle TPAs, and would reduce public awareness and support for protecting such areas | Political | P = 2 I-3 Moderate | Project activities to carry out biodiversity assessments and create/refine nomination files for KBAs and TPAs will of themselves help to generate momentum and pressure to enact the proposed NRCA. In addition, active monitoring programs at these sites will help to conserve biodiversity (and in the case of KBAs, reduce land degradation) even if enactment of the NRCA is delayed for another year or two. | MEECC | This risk is expected to be eliminated in the 1st year of the project activities, and possibly even before the project starts. |
| The project may restrict access to the use of natural resources for certain groups, possibly including fishermen (who tend to be poor) and private landowners in upper elevation forest areas. For example, the project will help to strengthen the management of existing Marine Protected Areas (MPAs), possibly including increased enforcement of | Social | I = 2 P = 3 Moderate | Regarding KBA sites, in those cases where at least part of the site is privately owned, any designation of a KBA site as an official protected area will not go forward until the Government of Seychelles has approved a compensation mechanism for private landowners; the Government is already working on a policy in this regard, and the proposed project will assist it in doing so. In addition, as described under Output 1.1.3, the first step in proposing any KBA sites for designation will be outreach and consultations with relevant private landowners. In existing MPAs, the project will focus on strengthening the enforcement of existing regulations, rather than imposing new regulations. It is not anticipated that the strengthening of the existing network of MPAs will have any major negative impacts on fishermen's livelihoods, while it will have a major positive impact on the country's marine conservation efforts by showing that the | MEECC, SNPA | This risk is expected to be mitigated by Government policies that address land and natural resources usage rights |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|--|------|----------------------|---|-------|--------|
| <p>restrictions on fishing in these areas. Finally, the project will work to designate selected Key Biodiversity Areas as official protected areas; this could limit the ability of some private landowners who own land within the KBAs in terms of developing the land and/or in some uses of natural resources.</p> | | | <p>Seychelles is not only interested in numbers like percentage of EEZ under protected status but also in the effectiveness of these protection designations. Most of the country's MPAs have long been established and illegal fishing activities are already controlled, what the project will be doing will be increasing the level of compliance and increasing the level of respect of MPA stakeholders for these areas. In addition, the changes in access to marine resources are intended to increase the sustainability of these assets and produce a positive impact on livelihoods over the long-term.</p> <p>For example, the rehabilitation activities done by the project in coastal and mountain areas will reduce the level of sedimentation and improve health of coral reefs and coral reef associated fisheries, thereby producing net benefits for fishermen. The biodiversity surveys planned will also identify the characteristics of important/critical nursery areas for coral reef associated fish and make suggestions to improve their management, which will further benefit fishermen. The project approach is also in line with voluntary measures that fishermen on Praslin are taking to improve management of fisheries resources around this island; the project ensure effective consultations with fishers during implementation by having someone from the fishing industry on the project's steering committee. The project can also collaborate with on-going efforts to re-introduce Honorary Wardens (who can be fishermen) and how fishermen can otherwise be more actively involved in the management of natural marine resources. Finally, it is important to note that most fishermen are law abiding and would welcome better enforcement so that they do not lose out to those fishermen who do not follow the law.</p> <p>During the 1st year of project implementation, a</p> | | |

| Description | Type | Impact & Probability | Mitigation Measures | Owner | Status |
|---|------|--------------------------|--|-----------------|--|
| | | | Livelihoods Action Plan for fishermen will be developed for implementation during the remaining period of project implementation. | | |
| Alternative livelihoods in agriculture and forestry to be promoted by the project could reproduce existing discriminations against women. | | I = 3 P=2 Moderate | <p>During the development of the project, a Gender Analysis was undertaken, and a Gender Mainstreaming Plan was prepared based on that analysis. That Plan (in Annex N of the Prodoc), outlines the management measures that will be undertaken to address this risk and leverage it for multiple benefits. Opportunities for improving the lives of women and girls were identified in the Gender Analysis and built into the design of the project. With regard to the participation of women (and youth) in agriculture and forestry, proposed actions include:</p> <ul style="list-style-type: none"> · Establish 50/50 policy for training and provide women friendly training facilities to build capacities for implementation and enforcement of sustainable forest and agriculture management · Ensure effective participation of women in resource management committees of target communities · Active involvement of women & youth in both trainings & extension activities · Target participation of 50% women / 15-30% youth in forestry and agriculture activities <p>For full details of those measures, please see Annex N.</p> | PMU, SAA, MEECC | This risk is expected to be mitigated by project gender mainstreaming activities |

v. SOCIAL AND ENVIRONMENTAL SAFEGUARDS

The Social and Environmental Screening Procedure (SESP) was followed during project preparation, as required by the SESP Guidance Note of the UNDP. Key risks identified in the SESP were presented to and discussed with project stakeholders at the project Validation Workshop held in October 2018; inputs from those discussions were incorporated into a revised SESP. The social and environmental sustainability of project activities is in compliance with the SESP for the project, including detailed proposals for the mitigation of risks identified in the SESP (see Annex F. UNDP Social and Environmental and Social Screening Template). The SESP identified **Moderate social and environmental risk** for this project (see details in the Annex G) that could have potential negative impacts in the absence of safeguards in project management.

To avoid any potential risks or any likely impacts, the project will develop a Livelihoods Action Plan for fishermen under Output 1.2.1 to guide the project actions to mitigate the risks associated with more effective enforcement of existing fishing regulations with Marine National Parks. There are no indigenous people in the Seychelles, therefore the project will not affect their rights and livelihoods in any way. The project staff and partners will ensure social and environmental screening of all proposed investments to determine if there are any negative impacts. If the impacts are considered significant or cannot be managed by simple and practical mitigation measures that can be implemented within the capacity of the communities and other stakeholders, these activities will be avoided. The Project Board will monitor social and environmental risk for the project activities on an annual basis. Annual supervisory review by the PMU will assess the extent to which the risks have been identified and managed. Environmental and social grievances will be reported to the GEF in the annual PIR; the National Project Manager (NPM) will have responsibility for safeguards oversight and management of the project grievance mechanism. Overall, the project is expected to result in positive impacts for biodiversity conservation, sustainable land management socio-economic conditions through the greater participation of local communities and improved management with regard to upland forests, agricultural lands, aquatic ecosystems, and coastal and marine ecosystems. Additional proposed measures for risk mitigation are included in the Project Risks and Mitigation Matrix above and in Annex F.

vi. SUSTAINABILITY AND SCALING UP

Institutional sustainability will be supported by focusing on capacity building of key partner institutions in areas such as forest management, forest fire fighting, forest rehabilitation, development of nomination files for protected areas, enforcement of MPA regulations, ecological monitoring, data management capacity, and the technical aspects of Ridge to Reef approaches. In addition, by selecting SNPA, SAA, BERI and MCSS as Responsible Parties to the project, the project will channel funding of project activities through these organizations and link them with other technical partners and experts in implementing activities, thereby building their capacity through actual implementation. The sustainability of the newly established watershed management committees, which will enhance the bottom-up approach in forest and watershed management practices in the country, will be ensured by linking them to relevant District Administrations and, as their capacity develops, by giving them increasing implementation and monitoring functions at the local level. The sustainability of the management committees will ensure strong local community engagement in the SLM/SFM practices in productive lands and lands outside of formal protected areas over the long term. Finally, sustainability will be enhanced through linking project activities with existing spatial and resource

planning processes in the country (i.e. the Marine Spatial Plan, the Seychelles Strategic Plan, and district Land Use Plans.

Financial sustainability will be supported through increased awareness among decision-makers of the tangible benefits of R2R approaches in terms of improved ecosystem functions and livelihoods opportunities, so that GEF investments through this project will help to catalyse more resources to sustain, replicate and upscale similar activities. In terms of protected areas, the cost effectiveness of the TPA model and their low recurring costs give them strong potential for financial sustainability, while the potential for private, NGO and/or community co-management of both TPAs and KBAs makes them strong candidates in the Seychelles funding environment for on-going private sector and/or donor support. As for official MPA sites, the financing of MPAs is being addressed at the national level by the UNDP-GEF PA Finance project⁴⁰ and the SeyCCAT. In the productive landscape, farmers will receive support in linking to markets for agricultural and agroforestry products, and in implementing SLM activities that can help to reduce their costs of production; in this way, the project will help farmers to improve profitability and provide an incentive to continue activities after the project has ended.

In terms of social sustainability, the project is designed to not only build capacity but also raise awareness of the importance and benefits of Ridge to Reef approaches to support “whole island management” and to contribute to the sustainable Blue Economy in line with the priorities and objectives of the Seychelles Strategic Plan. In addition, the development/strengthening of stakeholder participation and gender mainstreaming mechanisms at both the national and project area levels (see Annex K. Stakeholder Communication and Involvement Plan and Annex M. Gender Analysis and Mainstreaming Plan), notably including participatory management of KBAs and TPAs and the critical role of local Watershed Committees as well as local officials in overseeing many project field interventions, will ensure broad social participation and ownership, while the development of opportunities for local residents to expand their income-producing activities through SFM and sustainable agriculture and agroforestry will generate incentives for on-going adoption of such measures.

Environmental sustainability will be achieved through the implementation of project activities that will strengthen the management of existing protected areas; provide stronger legal / regulatory protection and status for areas of critical habitat and important ecological services (KBAs, TPAs, Green Corridors); restore degraded forest and agricultural lands; and reduce the negative impacts of activities in upper elevation forests and agricultural landscapes on downstream aquatic, coastal and marine ecosystems.

With regard to Scaling Up, the involvement of multiple government partners, international agencies, NGOs, and local communities in project implementation, including as Responsible Parties, will lead to upscaling of the project’s interventions. The project approach has significant potential for replication and up-scaling within the Seychelles, as the challenge of sustainably managing upland forest and agricultural lands and reducing their negative impacts on downstream ecosystems is largely the same among all of the granitic islands in the country, including large islands such as Silhouette and La Digue, and other smaller islands on the Mahé plateau. In addition, the innovative approaches to be tested by this project, such as Temporal Protected Areas, R2R approaches to integrated management of resources / ecosystems, and community-led watershed management committees, will be highly useful and replicable beyond the Seychelles, as there are many small

⁴⁰ Seychelles’ Protected Areas Finance Project (GEF Project ID 5485)

island countries that face similar human resource, natural resource, and financial constraints in their pursuit of sustainable development. The careful documentation of lessons learned by the project (Component 4) will strongly support up-scaling, and communicating and disseminating project results under Output 4.1.1 will help in generating demand for similar initiatives in the country and abroad.

V. PROJECT RESULTS FRAMEWORK

| |
|--|
| <p>This project will contribute to the following Sustainable Development Goal (s): SDG 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture; SDG 6 - Ensure availability and sustainable management of water and sanitation for all; and SDG 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> |
| <p>This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: UNDP Country Programme 2017 – 2020; Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded; Output 4. Effective institutional, legislative and policy frameworks in place to enhance the implementation of disaster and climate risk management measures at national levels</p> |
| <p>This project will be linked to the following output of the UNDP Strategic Plan: UNDP Strategic Plan 2018-2021; Output 2.5. Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation</p> |

| | Objective and Outcome Indicators | Baseline ⁴¹ | Mid-term Target ⁴² | End of Project Target | Data Collection Methods and Assumptions ⁴³ |
|--|--|---|--|---|---|
| <p>Project Objective: To manage and conserve the flow of marine, coastal and terrestrial ecosystem services in targeted islands of the Seychelles for multiple benefits through</p> | <p><u>Indicator 1 (mandatory IRRF indicator 2.4.1):</u> Gender-responsive legal and regulatory frameworks, policies and institutions strengthened and solution adopted to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation</p> <ul style="list-style-type: none"> National Forest Policy Breadfruit and Other Trees Act, the Lighting of Fires Act, and the State Lands and Rivers Act (1903) Regulatory amendments under new Water Act to better conserve watersheds and wetland ecosystem services | <p>Draft</p> <p>Out of date</p> <p>None</p> | <ul style="list-style-type: none"> Revised and discussed with stakeholders Updated and discussed with stakeholders | <ul style="list-style-type: none"> Submitted to Govt. for approval Submitted to Govt. for approval Submitted to Govt. for approval | <p><u>Data Collection Methods:</u></p> <p>Enacted / published policy, legal and regulatory documents</p> <p>UNDP Capacity Scorecard results</p> <p><u>Assumptions:</u> Updated policy and legislation documents will be officially approved and supported for</p> |

⁴¹ Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and need to be quantified. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

⁴² Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

⁴³ Risks must be outlined in the Feasibility section of this project document.

| | Objective and Outcome Indicators | Baseline ⁴¹ | Mid-term Target ⁴² | End of Project Target | Data Collection Methods and Assumptions ⁴³ |
|---|---|--------------------------------------|---|--|---|
| the Ridge-to-Reef approach | <ul style="list-style-type: none"> Water Quality and Effluent Standards and Codes of Practice Policies and/or regulations regarding compensation of landowners whose land uses are affected by PA designations | Outdated None | <ul style="list-style-type: none"> Drafted and discussed with stakeholders Drafted and discussed with stakeholders Drafted and discussed with stakeholders | approval <ul style="list-style-type: none"> Submitted to Govt. for approval Drafts sent to MEECC and Planning | implementation by the Government of Seychelles |
| | Indicator 2: Capacity of national partners to implement integrated Ridge to Reef approaches, as measured by total scores on the UNDP Capacity Scorecard | 71% (32/45) | 76% (34/45) | 82% (37/45) | |
| Component / Outcome 1: Expansion of marine and terrestrial protected areas of the Seychelles' Inner Islands | Indicator 3: 5 new Turtle Temporal Protected Areas (TPAs) encompassing 40 ha formally established and supported by regulations to conserve biodiversity and maintain ecosystem goods and services (<i>GEF Core Indicator - Marine protected areas newly created</i>) | 0 | 5 TPAs gazetted | 5 TPA management plans completed and under implementation | <u>Data Collection Methods:</u> TPA and KBA gazettelement documents GEF 6 METT results |
| | Indicator 4: Strengthened management of Temporal Protected Area (TPAs) covering 40 ha and Marine Protected Areas (MPAs) covering 1,421 ha, as measured by increased scores on GEF Management Effectiveness Tracking Tool (METT): (<i>GEF Core Indicator - Marine protected areas under improved management effectiveness</i>) | METT Scores: • 28 • 61 • 71 | METT Scores: • 35 • 66 • 74 | METT Scores: • 40 • 71 • 76 | Field surveys of coastal forest restoration sites <u>Assumptions:</u> The draft Nature Reserves and Conservancy Act will be enacted in a timely manner to provide the legal framework for the |
| | Indicator 5: Area (ha) of mangrove and other coastal forest ecosystems restored using native species (<i>GEF Core Indicator - Area of wetlands (including estuaries and mangroves) restored</i>) | • 0 | • 10 | • 20 | |

| | Objective and Outcome Indicators | Baseline ⁴¹ | Mid-term Target ⁴² | End of Project Target | Data Collection Methods and Assumptions ⁴³ |
|---|--|------------------------|---------------------------------|--|---|
| | <ul style="list-style-type: none"> Coastal Forest | 0 | 5 | 10 | designation of Marine Temporary Protected Areas |
| | <u>Indicator 6</u> : No. of KBAs with required technical documents and draft legal documents for gazetting presented to the Government (<i>GEF Core Indicator - Terrestrial protected areas newly created</i>) | 0 | 2 | 6 (covering 2,235 ha) | Continued government support for formal designation of KBAs |
| Component / Outcome 2: Strengthened management of upland KBAs and adjacent areas to enhance the flow of ecosystem services through the R2R approach | <u>Indicator 7</u> : Number of functioning Watershed Committees, with gender and age diversity | 1 committee | 4, with 30% women participation | 4, with 50% women and 15% youth participation | <u>Data Collection Methods:</u> Watershed Committee meeting minutes |
| | <u>Indicator 8</u> : Restoration of areas critical for ecological functioning in priority watersheds / upland forests: (<i>GEF Core Indicator - Area of forest and forest land restored</i>) | | | | Field surveys of upland forest restoration sites and agroforestry sites |
| | <ul style="list-style-type: none"> No. of ha of fire-degraded upland forest restored No. of ha cleared of IAS flora and replanted with native tree species | 0 0 | 4 40 | 10 60 | FAO ExAct tool |
| | <u>Indicator 9</u> : No. of ha reforested within priority watersheds and in areas within / adjacent to target KBAs (<i>GEF Core Indicator - Area of forest and forest land restored</i>) | 0 | 40 | 100 | <u>Assumptions:</u> |
| | <u>Indicator 10</u> : No. of ha of low-productivity land in the Val d'Endor and Anse Royale watersheds converted to agroforestry (<i>GEF Core Indicator - Area of degraded agricultural lands restored</i>) | 0 | 40 | 100 | Government continues to support development of the Green Corridor concept as an organizing principle for management of upland forests on Mahe & Praslin |
| <u>Indicator 11</u> : Amount of tCO ₂ eq GHG emissions avoided / sequestered through avoided deforestation and forest degradation, reforestation, agroforestry and conservation agriculture ⁴⁴ (<i>GEF Core Indicator - Carbon sequestered or emissions avoided in the sector of agricultural, forestry and other land use</i>) | 0 tCO ₂ eq | 18,273 | 43,853 (146,178 over 20 years) | Relevant agencies are willing to actively undertake enforcement of environmental regulations | |

⁴⁴ Details on carbon calculations provided in Annex D – ExAct Tool, and in Annex S – Project Technical Information

| | Objective and Outcome Indicators | Baseline ⁴¹ | Mid-term Target ⁴² | End of Project Target | Data Collection Methods and Assumptions ⁴³ |
|---|---|------------------------|---|----------------------------------|--|
| | | | | | <p>Sufficient contract labour will be available to undertake restoration (Seychelles has significant problems with labour shortages)</p> <p>Sufficient numbers of farmers are interested / committed to adopting agroforestry production</p> |
| Component / Outcome 3: Promoting the ‘Ridge to Reef’ (R2R) approach through knowledge management, ecosystem health monitoring and inter-sectoral coordination | <u>Indicator 12:</u> Number of institutional partners using the online platform to share data, findings and other information generated by field interventions on Ridge to Reef approaches | 0 | 2 | 5 | <u>Data Collection Methods:</u> Usage reports generated by online platform / data management system Policy documents issued |
| | <u>Indicator 13:</u> Integrated ecosystem health monitoring at project sites institutionalised, with information management and dissemination coordinated by DOE, BERI and NISTI, to support the implementation of R2R approaches | No system exists | Ecosystem data being collected and consolidated | Data management system operating | Reports on training / sensitization at district and regional levels |
| | <u>Indicator 14:</u> Policy recommendations to improve the effectiveness of R2R approaches, based on the integrated ecosystem health monitoring results, adopted by relevant ministries | 0 | 1 | 2 | <u>Assumptions:</u> Key partners (BERI, SAA, MCSS, TRASS and SNPA) for project field activities will share data and use the online platform |
| | <u>Indicator 15:</u> No. of local officials sensitised on R2R approaches and partnering with the project to facilitate community involvement in the management of KBAs, ecosystem monitoring, and undertaking sustainable agriculture and forest management interventions <ul style="list-style-type: none"> • Regional Council members / staff • District Administration members / staff | 0 0 | 4 6 | 8 12 | Regional Council and District Administration staff are |

| | Objective and Outcome Indicators | Baseline ⁴¹ | Mid-term Target ⁴² | End of Project Target | Data Collection Methods and Assumptions ⁴³ |
|---|---|------------------------|---------------------------------|---|--|
| | | | | | willing to participate and interested in playing a role in coordinating R2R approaches with local residents |
| Component 4: Knowledge Management, M&E and Gender Mainstreaming | <u>Indicator 16:</u> No. of policies / strategies / programs supporting R2R approaches agreed with other national and international conservation programmes | 0 | 2 | 5 | <u>Data Collection Methods:</u> Signed agreements with partner programs Project reports on participation of women, numbers of beneficiaries <u>Assumptions:</u> Other programs are interested in learning lessons and practices developed by the project, including gender mainstreaming practices |
| | <u>Indicator 17:</u> % of women among the project participants | 0 | >=30% | >= 50% | |
| | <u>Indicator 18:</u> Total number of direct project beneficiaries (m/f) ⁴⁵ : (<i>GEF Core Indicator</i>) | 0 | >= 270 (at least 40% are women) | >= 600 (at least 40% are women) ⁴⁶ | |

⁴⁵ This indicator captures the number of individual people who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources. GEF Core Indicators 2018

⁴⁶ Total number of the direct project beneficiaries under Outputs 2.1.2 – 2.1.4, 2.2.1 – 2.2.2, 2.3.1, including: Community members and government officials trained in SFM through the watershed management committees and community organizations (150/350); Civil society members and government officials trained through forest fire fighting task forces (50/100); Farmers trained in agroforestry, soil conservation, and other SLM practices (50/100); Smallholder farmers practicing biodiversity-friendly SFM practices (20/50)

VI. MONITORING AND EVALUATION (M&E) PLAN

The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. Supported by Knowledge Management and M&E outputs under Component 3, the project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies⁴⁷.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.⁴⁸

M&E Oversight and monitoring responsibilities:

Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc.) occur on a regular basis.

⁴⁷ See https://www.thegef.org/gef/policies_guidelines

⁴⁸ See https://www.thegef.org/gef/gef_agencies

Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the *independent mid-term review* and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.⁴⁹

Additional GEF monitoring and reporting requirements:

⁴⁹ See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results: *Management Effectiveness Tracking Tool*. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted as Annex D to this project document – will be updated by the Project

Manager/Team (not the evaluation consultants hired to undertake the *MTR* or the *TE*) and shared with *the mid-term review consultants* and terminal evaluation consultants before the required *review/evaluation* missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed *Mid-term Review report* and Terminal Evaluation report.

Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

Final Report: The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Mandatory GEF M&E Requirements and M&E Budget

| GEF M&E requirements | Primary responsibility | Indicative costs to be charged to the Project Budget (US\$) | | Time frame |
|---|--|---|---|--|
| | | GEF grant | Co-financing | |
| Inception Workshop | UNDP Country Office | 10,000 | 1,000 (UNDP) | Within two months of project document signature |
| Inception Report | Project Manager | None | None | Within two weeks of inception workshop |
| Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP | UNDP Country Office | None | None | Quarterly, annually |
| Monitoring of indicators in project results framework (as described under Output 4.1.2) | Project Manager and Responsible Parties and possibly specialized consultants | 20,000 | None | Annually |
| GEF Project Implementation Report (PIR) | Project Manager and UNDP Country Office and UNDP-GEF team | None | None | Annually |
| NIM Audit as per UNDP audit policies | UNDP Country Office | 42,000 | 15,000 (UNDP staff time for management of the audit process of approx. 3,000/year) | Annually or other frequency as per UNDP Audit policies |
| Lessons learned and knowledge generation | Project Manager | None | 10,000 (UNDP funding for publication of project materials in reports and websites; preparation of a photo essay on the project results) | Annually |
| Monitoring of environmental and social risks, and corresponding management plans as relevant | Project Manager UNDP CO | None | 20,000 (site visits by UNDP staff) | On-going |
| Addressing environmental and social grievances | Project Manager UNDP Country Office BPPS as needed | None for time of project manager and UNDP CO | 10,000 (UNDP staff time to coordinate missions and programs of BPPS experts) | Costs associated with missions, workshops, BPPS expertise etc. can be charged to the |

| GEF M&E requirements | Primary responsibility | Indicative costs to be charged to the Project Budget (US\$) | | Time frame |
|---|---|--|--|--|
| | | | | project budget. |
| Project Board meetings | Project Board UNDP Country Office Project Manager | None | None | At minimum annually |
| Supervision missions | UNDP Country Office | None | Site visits conducted by UNDP | Annually |
| Oversight missions | UNDP-GEF team | None | None | Troubleshooting as needed |
| Knowledge management (as described under Output 4.1.1) | Project Manager | 125,000 | Sharing lessons with other relevant SIDS / R2R programs at the international level | On-going |
| Gender strategy to guide project implementation (as described under Output 4.1.3) | Gender Expert Project Manager | 45,000 | None | On-going |
| GEF Secretariat learning missions/site visits | UNDP Country Office and Project Manager and UNDP-GEF team | None | None | To be determined. |
| Mid-term GEF Tracking Tool to be updated | Project Manager and Responsible Parties | None | None | Before mid-term review mission takes place. |
| Independent Mid-term Review (MTR) and management response | UNDP Country Office and Project team and UNDP-GEF team | 25,000 | 10,000 (UNDP staff support to Mid Term Review process) | Between 2 nd and 3 rd PIR. |
| Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response | UNDP Country Office and Project team and UNDP-GEF team | 30,000 | 10,000 (UNDP staff support to Terminal Evaluation process) | At least three months before operational closure |
| HACT Micro Assessment/Spot Checks | UNDP Country Office | 0 | 25,000 (yearly spot checks and project visits by UNDP staff) | Yearly |
| TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses | | 297,000 (7.6% of GEF grant) | 101,000 | |

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Seychelles, and the Country Programme. NIM was selected for the project management based on the HACT assessment of the Implementing Partner (Annex K).

IMPLEMENTING PARTNER

The Implementing Partner for this project is the Ministry of Environment, Energy and Climate Change (MEECC). The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

The Implementing Partner is responsible for:

- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures

The Implementing Partner will also appoint a National Project Director. The National Project Director (NPD) is responsible for ensuring the smooth implementation of the project in line with planned project objective and outcomes. The NPD should ideally be a senior officer within the IP and will be a member of the Project Board (PB). The NPD will provide strategic support as needed to the project and with assistance from the Project Manager will also be responsible for ensuring cooperation, collaboration and efficient implementation of the project by the Responsible Parties and project partners and reporting on project progress to the PB and for coordinating the flow of results and information from the project to the Project Board. The function of the NPD is not funded through the project.

PROJECT BOARD

The Project Board (also called Project Steering Committee) co-chaired by MEECC and UNDP is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Board are contained in Annex E.

The PB will comprise not more than ten (10) representatives drawn from relevant line Ministries, Government departments, civil society organizations, and UN agencies. Potential members of the Project Board are reviewed and recommended for approval during the Local Project Appraisal Committee (LPAC) meeting before project implementation. Potential Project Board members for this project include representatives of the following organizations:

- MEECC (co-chair)
- UNDP (co-chair)
- Programme Coordination Unit
- Responsible Parties (SNPA, SAA, BERI, MCSS)
- Ministry of Fisheries and Agriculture
- Ministry of Land Use and Housing

- PUC
- At least one farmer association
- At least one District Administrator
- Other entities can be invited into the PB based on their role in the implementation of the project.

The Project Manager (PM) will be an ex-officio member of the PB and will serve as secretary to the Board.

- The Project Board will meet after the Inception Workshop and at least once each year thereafter. Specific responsibilities of the Project Board include:
- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the Project Manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Provide ad hoc direction and advice for exceptional situations when the Project Manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.

The Project Board will include the following roles:

Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role will be held by the Principle Secretary of Environment of MEECC and can be delegated to the National Project Director. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher-level outcomes. The Executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

Specific Responsibilities of the Executive (as part of the above responsibilities for the Project Board):

- Ensure that there is a coherent project organization structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organise and chair Project Board meetings.

Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance

regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Supplier for this project is the UNDP Seychelles Programme Manager who may delegate this role to the senior UNDP CO staff. Specific Responsibilities the Senior Supplier (as part of the above responsibilities for the Project Board) are following:

- Make sure that progress towards the outputs remains consistent from the supplier perspective and adheres to the GEF policies and criteria;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiaries for this project will be relevant District Administrators as representatives of local communities (ultimate beneficiaries of the project).

The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

Specific Responsibilities of the Senior Beneficiary (as part of the above responsibilities for the Project Board):

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored via Grievance Redress Mechanism.

Project Assurance: UNDP provides a three-tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency, particularly by the

UNDP Seychelles Programme Manager. The UNDP Regional Technical Advisor will provide additional quality assurance as needed.

OTHER PROJECT MANAGEMENT

Programme Coordination Unit: A centralized Programme Coordination Unit (PCU) has been established by UNDP and MEECC to oversee, support, administer and coordinate the implementation of all GOS-UNDP-GEF environment and energy projects in Seychelles. The PCU currently comprises a Programme Coordinator / Chief Technical Advisor (PC-CTA), Project Managers for the GOS-UNDP-GEF projects under implementation, and financial and administrative support staff. The UNDP Country Office is currently developing a grievance redress mechanism. Based on the guidance received and current practice, for NIM projects all grievances will be addressed to the PCU/UNDP in writing- which will then be taken up by the Project Steering Committee and the National Project Director. If a resolution is not achieved, the grievance would be referred to a higher office, either at Ministerial level or to the Resident Representative's office, for further action.

Project Manager: The day-to-day administration of the project will be carried out by a Project Manager (PM). The NPM will be recruited using standard UNDP recruitment procedures. The NPM has the authority to administer the project on a day-to-day basis on behalf of MEECC, within the constraints laid down by the PSC. The NPM's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The NPM will prepare Annual Work Plans (AWP) in advance of each successive year and submit them to the PSC for approval. The NPM will have responsibility for safeguards oversight and management of the project grievance mechanism. The NPM will liaise and work closely with all partner institutions to link the project with complementary national programs and initiatives. The NPM will report in the first instance to the PC-CTA at the PCU, and is accountable to the Project Director for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds.

The NPM will be technically supported by contracted national and international service providers and/or consultants. They will also work in close collaboration with counterpart conservation agencies and institutions. Recruitment of specialist support services and procurement of any equipment and materials for the project will be done by the PCU in liaison with the NPM and PSC, and in accordance with relevant recruitment and procurement rules and procedures. The TOR for the NPM is included in Annex E.

Responsible Parties (RPs): Several entities have been selected to implement different outputs, based on comparative advantage identified during the PPG, on behalf of the Implementing Partner on the basis of a written agreement or contract to provide services using the project budget. There are four RPs for this project:

- SNPA: Lead responsibility for project activities related to existing Marine Protected Areas (Outputs 1.2.1 – 1.2.3); also for some of the project activities related to sustainable forest management (Outputs 2.1.2)
- SAA: Responsibility for project activities related to sustainable agriculture practices and associated capacity building and agroforestry production (Outputs 2.2.1, 2.2.2 and 2.3.1)
- BERI: Lead responsibility (with MEECC) for project activities related to monitoring of water quality and aquatic ecosystems, and institutionalizing and disseminating information on these elements (Outputs 2.1.4 and 3.1.1)
- MCSS: Lead responsibility for project activities related to Temporal Protected Areas for marine turtles (Output 1.1.1); also possible involved in monitoring of physical/chemical conditions in rivers and streams (Output 2.1.4)

Responsible Parties will be accountable for their designated Outputs in coordination with the NPM. The designated Responsible Parties and the National Project Director (MEECC) will sign a Memorandum of Understanding for execution of project activities. Under each MoU, each RP will agree to establish a dedicated project account and to provide all required reporting to the PCU Mandatory. HACT assessments for MEECC, SNPA, SAA, BERI, and MCSS were conducted by the UNDP CO and included in Annex I. The RPs will directly collaborate with the project partners and local communities to deliver relevant project Outputs and select appropriate sub-contractors to implement relevant project activities based on the UNDP requirements.

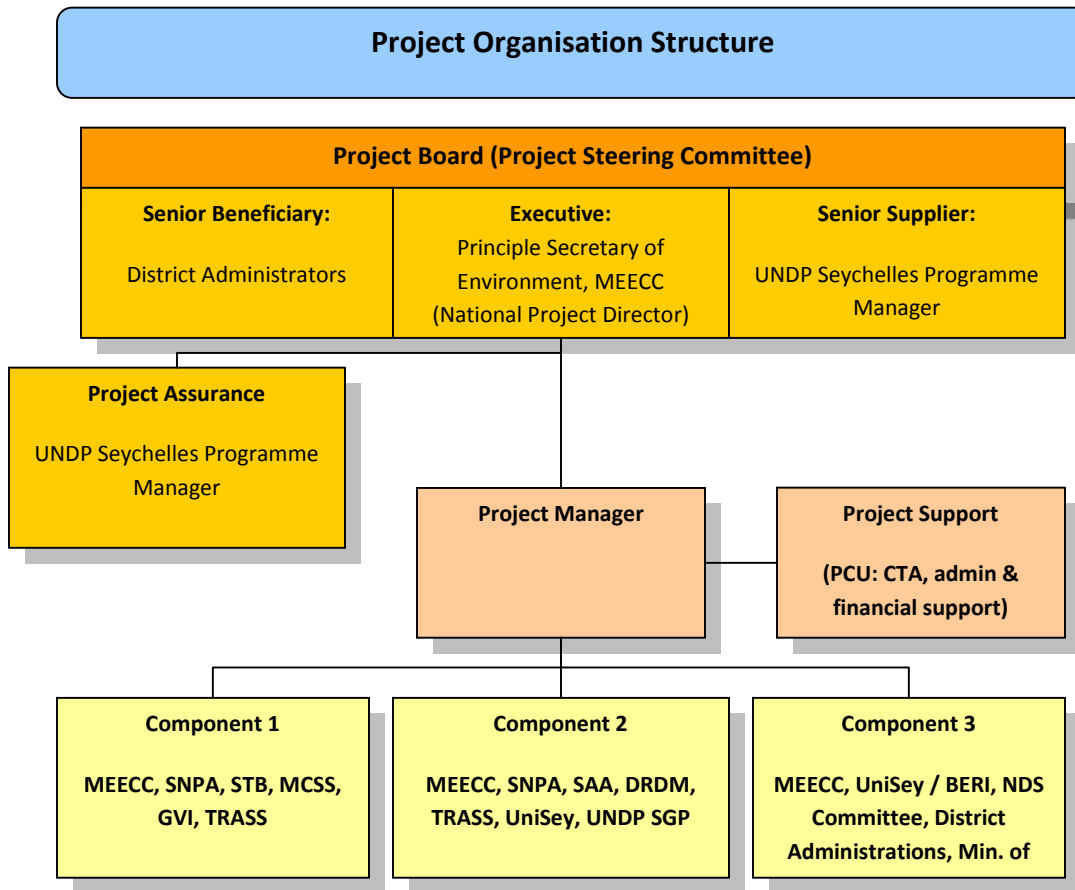
Low Value Grant Recipients: The project will channel GEF funds through select NGOs as Low Value Grant Recipients to support various small-scale activities related to agriculture, agroforestry, etc.

- The Local Food Producer's Association (LFPA) will receive funds to develop promotional materials / advertising for agrotourism; to support farmers interested in participating in organic certification system; to provide strategy, develop promotional materials and guide farmers in developing agrotourism; to develop materials and provide training on soil fertility management; to develop agroforestry training material and to carry out workshops and on-site demonstration activities for farmers; to carry out an assessment of sites for agroforestry; and to provide guidance on land preparation, make recommendations on species to be introduced, and oversee planting and maintenance of agroforestry trees / crops
- The Anse Boileau Farmers' Association will receive funds to support farmers interested in participating in organic certification systems
- The Bee Keeper's Association (BKA) will receive funding to provide technical guidance on beekeeping
- The Seychelles Farmers Association (SEYFA) will receive funds to provide strategy, develop promotional materials, and guide farmers in developing agrotourism; to develop materials and provide training on soil fertility management; and to develop agroforestry training material and to carry out workshops and on-site demonstration activities for farmers
- The Baie Ste Anne Farmers (BSAFA) will receive funds to develop a manual on handling of pesticides and fertilisers and to carry out stakeholder consultations / workshops to validate and disseminate the manual; and to develop a Standard Operating Procedure for responding to impacts from pesticides / fertilizers on water/soil quality and non-target organisms, and to carry out stakeholder consultations / workshops to validate and disseminate the SOP
- The Val d'Endor Farmers Association (VDD) will receive funds to develop a Standard Operating Procedure for responding to impacts from pesticides / fertilizers on water/soil quality and non-target organisms; to carry out stakeholder consultations / workshops to validate and disseminate the SOP; and to provide guidance on land preparation, make recommendations on species to be introduced, and oversee planting and maintenance of agroforestry trees / crops

Governance role for project target groups: To involve local communities in the decision-making process, direct project implementation, and M&E the project will establish / strengthen Watershed Committees in the project areas that will consists from representatives of the RPs, target communities, local governments, NGOs actively present in the project area. The Watershed Committees will have meetings at least once a year before the Project Board meeting to review the project progress under Component 2, extract key lessons, plan project activities, review community concerns and grievances and provide recommendations to the Project Board and PCU. The Watershed Committees will ensure coordination among all stakeholders and their involvement in the participatory project M&E and management under PMU and RPs' guidance. The Watershed Committees' recommendations will be reviewed and taken into consideration by the PB at its meetings as well as by the Project Coordination Unit (PCU). Members of the Watershed Committees will be selected at the Inception phase of the project. The locations of Watershed Committees' meetings will be determined during the project implementation in the project area.

Agreement on intellectual property rights and use of logo on the project’s deliverables and disclosure of information: In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy⁵⁰ and the GEF policy on public involvement⁵¹.

The project organisation structure is as follows:



VIII. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 31,178,860. This is financed through a GEF grant of USD 3,898,914, USD 75,000 in UNDP TRAC resources, and USD 27,204,946 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

⁵⁰ See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

⁵¹ See https://www.thegef.org/gef/policies_guidelines

Parallel co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

| Co-financing source | Co-financing type | Co-financing amount | Planned Activities / Outputs | Risks | Risk Mitigation Measures |
|---|-------------------|---------------------|--|--|--|
| Ministry of Environment, Energy and Climate Change (MEECC) | Grants | 3,778,857 | All project outputs; Project Management | Potential risk of full funding being unavailable because of changing government priorities | Co-financing will come from government recurrent expenditures and an already fully-funded project; the project steering committee will facilitate and ensure that co-financing commitments are not compromised |
| | In-kind | 57,857 | | | |
| Seychelles National Park Authority (SNPA) | Grants | 9,749,571 | Outcomes 1.1, 1.2, 2.1 and 2.2; Project Management | Same as above | Same as above |
| Seychelles Agricultural Agency (SAA) | Grants | 7,950,000 | Outcomes 2.2 and 2.3; Project Management | Same as above | Same as above |
| University of Seychelles (UniSey) | Grants | 601,429 | Outputs 2.1.4 and 3.1.1 | Potential risk of changes in UniSey programs | Most of the co-financing comes from on-going funded management activities |
| | In-kind | 278,571 | | | |
| United Nations Development Programme: EU GCCA+ project (Component B) | Grants | 853,000 | Outputs 1.1.3 and 2.1.4 | Limited risk as project funding is already secured | None necessary |
| United Nations Development Programme: COMESA project | Grants | 465,000 | Outputs 2.2.1, 2.2.2 and 2.3.1 | Same as above | Same as above |
| United Nations Development Programme: Adaptation Fund project on Coral Reef Restoration | Grants | 1,500,000 | Outcome 1.2 | Same as above | Same as above |
| United Nations Development Programme Country Office | Grants | 75,000 | Project Management | Limited risk | None necessary |
| | In-kind | 75,000 | | | |
| Marine Conservation Society Seychelles (MCSS) | Grants | 772,000 | Outputs 1.1.1, 1.2.2 and 1.3.1 | Limited risks as funds ensured by MCSS partners | None necessary |
| Terrestrial Restoration Action Society of Seychelles (TRASS) | Grants | 27,857 | Outcomes 2.1, 2.2 and 2.3 | Limited risk as large majority is volunteer labour or equipment already on hand | None necessary |
| | In-kind | 1,095,804 | | | |

Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF: a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.⁵² On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

Transfer or disposal of assets: In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file.

Financial completion: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final

⁵² See <https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx>

signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

IX. TOTAL BUDGET AND WORK PLAN

| | | | |
|---|--|----------------------------------|----------|
| Atlas ⁵³ Proposal or Award ID: | 00116471 | Atlas Primary Output Project ID: | 00113606 |
| Atlas Proposal or Award Title: | A Ridge to Reef Approach for the Integrated Management of Marine, Coastal and Terrestrial Ecosystems in the Seychelles | | |
| Atlas Business Unit | MUS10 | | |
| Atlas Primary Output Project Title | A Ridge to Reef Approach for the Integrated Management of Marine, Coastal and Terrestrial Ecosystems in the Seychelles | | |
| UNDP-GEF PIMS No. | 9431 | | |
| Implementing Partner | Ministry of Environment, Energy and Climate Change (MEECC) | | |

| GEF Component / Atlas Activity | Responsible Party (Atlas Impl. Agent) | Fund ID | Donor Name | Atlas Budget Code | ATLAS Budget Description | Amount Year 1 (USD) | Amount Year 2 (USD) | Amount Year 3 (USD) | Amount Year 4 (USD) | Amount Year 5 (USD) | Amount Year 6 (USD) | Total (USD) | Budget Note: |
|---|---------------------------------------|----------------|----------------|-------------------|------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|--------------|
| Component 1: Expansion of marine and terrestrial protected areas of the Seychelles' Inner Islands | MEECC | 62000 | GEF | 71300 | Local Consultants | 37,312 | 34,312 | 19,813 | 7,313 | 7,313 | 0 | 106,063 | 1 |
| | | | | 71400 | Contractual Services – Individuals | 34,285 | 34,286 | 34,286 | 34,286 | 0 | 0 | 137,143 | 2 |
| | | | | 72100 | Contractual Services - Companies | 144,486 | 179,486 | 179,486 | 118,152 | 92,116 | 92,117 | 805,843 | 3 |
| | | | | 72300 | Materials & Goods | 15,000 | 7,500 | 7,500 | 0 | 0 | 0 | 30,000 | 4 |
| | | | | 75700 | Training, Workshops | 10,267 | 10,267 | 6,666 | 0 | 0 | 0 | 27,200 | 5 |
| | | | | | Sub-total GEF | 241,350 | 265,851 | 247,751 | 159,751 | 99,429 | 92,117 | 1,106,249 | |
| | | | | | Total Outcome 1 | 241,350 | 265,851 | 247,751 | 159,751 | 99,429 | 92,117 | 1,106,249 | |
| Component 2: Strengthened management of upland KBAs and adjacent areas to enhance the flow of ecosystem services through the R2R approach | MEECC | 62000 | GEF | 71200 | International Consult. | 13,000 | 0 | 0 | 0 | 0 | 0 | 13,000 | 6 |
| | | | | 71300 | Local Consultants | 104,687 | 173,687 | 136,188 | 78,188 | 60,188 | 0 | 552,938 | 7 |
| | | | | 71600 | Travel | 7,700 | 0 | 0 | 0 | 0 | 0 | 7,700 | 8 |
| | | | | 72100 | Contractual Services - Companies | 113,548 | 227,299 | 217,299 | 182,299 | 96,986 | 78,236 | 915,667 | 9 |
| | | | | 72200 | Equipment and Furniture | 101,500 | 105,500 | 10,000 | 0 | 0 | 0 | 217,000 | 10 |
| | | | | 72300 | Materials & Goods | 13,500 | 20,000 | 7,500 | 0 | 0 | 0 | 41,000 | 11 |
| | | | | 72600 | Grants | 28,056 | 28,055 | 28,055 | 28,055 | 28,056 | 28,056 | 168,333 | 12 |
| | | | | 75700 | Training, Workshops | 17,000 | 60,000 | 10,000 | 0 | 0 | 0 | 87,000 | 13 |
| | Sub-total GEF | 398,991 | 614,541 | 409,042 | 288,542 | 185,230 | 106,292 | 2,002,638 | | | | | |
| | | | | | Total Outcome 2 | 398,991 | 614,541 | 409,042 | 288,542 | 185,230 | 106,292 | 2,002,638 | |

⁵³ See separate guidance on how to enter the TBWP into Atlas

| GEF Component / Atlas Activity | Responsible Party (Atlas Impl. Agent) | Fund ID | Donor Name | Atlas Budget Code | ATLAS Budget Description | Amount Year 1 (USD) | Amount Year 2 (USD) | Amount Year 3 (USD) | Amount Year 4 (USD) | Amount Year 5 (USD) | Amount Year 6 (USD) | Total (USD) | Budget Note: | |
|--|---------------------------------------|-----------------------------|---------------|------------------------|------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|--------------|----|
| Component 3: Promoting the 'Ridge to Reef' (R2R) approach through knowledge management, ecosystem health monitoring, and inter-sectoral coordination to foster partnerships in the Seychelles and knowledge-sharing among SIDS | MEECC | 62000 | GEF | 71300 | Local Consultants | 15,000 | 15,000 | 0 | 0 | 0 | 0 | 30,000 | 14 | |
| | | | | 72100 | Contractual Services - Companies | 43,333 | 55,833 | 23,833 | 11,333 | 1,334 | 1,334 | 137,000 | 15 | |
| | | | | 72200 | Equipment and Furniture | 18,000 | 0 | 0 | 0 | 0 | 0 | 18,000 | 16 | |
| | | | | 72300 | Materials & Goods | | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 15,000 | 17 | |
| | | | | | Sub-total GEF | 76,333 | 73,833 | 26,833 | 14,333 | 4,334 | 4,334 | 200,000 | | |
| | | | | Total Outcome 3 | 76,333 | 73,833 | 26,833 | 14,333 | 4,334 | 4,334 | 200,000 | | | |
| Component 4: Knowledge Management, M&E and Gender Mainstreaming | MEECC | 62000 | GEF | 71200 | International Consul. | 14,000 | 14,000 | 39,000 | 0 | 0 | 30,000 | 97,000 | 18 | |
| | | | | 71300 | Local Consultants | 4,000 | 4,000 | 8,000 | 8,000 | 4,000 | 4,000 | 32,000 | 19 | |
| | | | | 71400 | Contractual Services – Individuals | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 144,000 | 20 | |
| | | | | 71600 | Travel | 16,000 | 13,250 | 16,000 | 13,250 | 0 | 0 | 58,500 | 21 | |
| | | | | 72300 | Materials & Goods | 0 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 30,000 | 22 | |
| | | | | 74100 | Professional Services | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 42,000 | 23 | |
| | | | | 75700 | Training, Workshops | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 | 24 | |
| | | | | | Sub-total GEF | 75,000 | 68,250 | 100,000 | 58,250 | 41,000 | 71,000 | 413,500 | | |
| | Total Outcome 4 | 75,000 | 68,250 | 100,000 | 58,250 | 41,000 | 71,000 | 413,500 | | | | | | |
| Project Management | MEECC | 62000 | GEF | 71400 | Contractual Services – Individuals | 25,200 | 25,200 | 25,200 | 25,200 | 25,200 | 25,200 | 151,200 | 25 | |
| | | | | 72500 | Office Supplies | 12,664 | 12,663 | 0 | 0 | 0 | | 25,327 | 26 | |
| | | | | | Sub- total GEF PM | 37,864 | 37,863 | 25,200 | 25,200 | 25,200 | 25,200 | 176,527 | | |
| | | 04000 | UNDP | 71600 | Travel | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 60,000 | 27 |
| | | | | 72500 | Supplies | 3,000 | 3,000 | 3,000 | 2,000 | 2,000 | 2,000 | 15,000 | 28 | |
| | | UNDP TOTAL | | | | 13,000 | 13,000 | 13,000 | 12,000 | 12,000 | 12,000 | 75,000 | | |
| | | GEF PROJECT TOTAL | | | | 829,539 | 1,060,339 | 808,827 | 546,077 | 355,192 | 298,942 | 3,898,914 | | |
| | | TOTAL PROJECT BUDGET | | | | 842,539 | 1,073,339 | 821,827 | 558,077 | 367,192 | 310,942 | 3,973,914 | | |

Summary of Funds: ⁵⁴

| | Amount Year 1 | Amount Year 2 | Amount Year 3 | Amount Year 4 | Amount Year 5 | Amount Year 6 | Total |
|--|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| GEF | 829,539 | 1,060,339 | 808,827 | 546,077 | 355,192 | 298,942 | 3,898,914 |
| Ministry of Environment, Energy and Climate Change (MEECC) | 1,539,452 | 1,539,452 | 189,452 | 189,452 | 189,452 | 189,452 | 3,836,714 |
| Seychelles National Parks Authority (SNPA) | 1,624,929 | 1,624,929 | 1,624,929 | 1,624,929 | 1,624,929 | 1,624,929 | 9,749,571 |
| Seychelles Agricultural Agency (SAA) | 1,525,000 | 1,525,000 | 1,225,000 | 1,225,000 | 1,225,000 | 1,225,000 | 7,950,000 |
| University of Seychelles (UniSey) / Blue Economy Research Institute | 146,667 | 146,667 | 146,667 | 146,667 | 146,667 | 146,667 | 880,000 |
| UNDP | 1,283,000 | 430,000 | 430,000 | 275,000 | 275,000 | 275,000 | 2,968,000 |
| MCSS | 128,667 | 128,667 | 128,667 | 128,667 | 128,667 | 128,667 | 772,000 |
| TRASS | 187,277 | 187,277 | 187,277 | 187,277 | 187,277 | 187,277 | 1,123,661 |
| Total Co-financing | 6,434,991 | 5,581,991 | 3,931,991 | 3,776,991 | 3,776,991 | 3,776,991 | 27,279,946 |
| Total | 7,264,530 | 6,642,330 | 4,740,818 | 4,323,068 | 4,132,183 | 4,075,933 | 31,178,860 |

Budget Notes:

| Component 1 | |
|--------------------|---|
| 1 | National consultants for: Guidelines and awareness materials for yachts (2,000); Training manual for MPA rangers and SOP for three target MNPs (8,000); Scientific writing training; research agreement template for MNPs and guidelines for management of scientific data (5,500); manuals for coral reefs, seagrass, mangrove and wetlands ecosystems, and support for long-term coral reef monitoring (18,000); Preparation of photographic identification guides of plants and animals and integration of photo IDs on marine images database (11,000); oversee habitat mapping (15,000); KBA nomination files (10,000); long-term project technical advisor on forestry under Output 1.3.1 (36,563; approx. 112 days @ 325/day) |
| 2 | Contracted local labor to clear wetland and mangrove areas of invasive species and to plant mangrove seedlings under Output 1.2.3 (137,143) |
| 3 | Contract with Marine Conservation Society of Seychelles (project Responsible Party) to implement all project activities related to Turtle Temporal Protected Areas (339,200); contract with Seychelles National Park Authority (project Responsible Party) to implement MPA management activities under Output 1.2.1 (213,500) and biodiversity surveys and ecosystem monitoring of MPAs under Output 1.2.2 (68,000); and to oversee mangrove restoration activities under Output 1.2.3 (6,000); Contract with a local tourism company to prepare promotional materials on the Marine National Parks; produce a documentary about Curieuse, and establish (with SNPA) an underwater trail along the Port Launay reef under Output 1.2.1 (28,000); contract with a company to produce mangrove seedlings under Output 1.2.3 (32,143); contract with a company to implement coastal freshwater ecosystem management at the Port Launay MNP under Output 1.2.3 (54,000); contract with a |

⁵⁴ Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

| | |
|--------------------|---|
| | company to conduct on-site ground-truthing on habitats and biodiversity for KBA nomination files under Output 1.3.1 (65,000) |
| 4 | Purchase of multi-spectral satellite imagery (e.g. the Pléiades imagery & data) under Output 1.3.1 (15,000); educational materials / publications on KBAs under Output 1.3.1 (15,000) |
| 5 | Meeting costs for outreach to local landowners on KBA gazettement and management (7,200); training of KBA stakeholders in SFM, SLM, IAS removal, community co-management (20,000) |
| Component 2 | |
| 6 | Intl. Consultant to provide training in planning, coordination, monitoring and information management to support SFM and watershed management approaches under Output 2.1.2 (13,000) |
| 7 | National consultant to develop forest policy and forestry & environment legislation; to guide integration of Green Corridors and R2R approaches, including guidance on developing land and resource use categories and overseeing mapping exercise under Output 2.1.1 (63,000); national consultant to propose regulatory amendments to better conserve watersheds and wetland ecosystem services under Output 2.1.1 (21,000); national consultant to propose new Water Quality and Effluent Standards and Codes of Practice under Output 2.1.1 (8,000); national consultant to identify areas critical for supporting R2R approaches in watersheds; develop watershed management plans; and carry out training / education of watershed committee members under Output 2.1.2 (72,000); national consultant to carry out training of institutions and district emergency brigades in forest fire prevention and fire fighting under Output 2.1.3 (24,000); long-term project technical advisor on forestry in support of Outputs 2.1.1 - 2.1.4 (109,688; approx. 338 days @ 325/day); national consultant to propose measures to strengthen existing regulations on effluents from livestock operations and provide relevant training to improve enforcement capacities under Output 2.2.1 (22,000); national consultant to provide training and awareness building among animal husbandry operators and local farmers under Output 2.2.1 (15,000); national consultant to train farmers in SLM practices through a participatory hands-on approach with practical demonstration at demonstration farms under Output 2.2.2 (36,000); national consultant to provide training to lab technicians on soil testing under Output 2.2.2 (10,000); national consultant to train SAA staff on coordinating and disseminating technical information under Output 2.2.2 (10,000); national consultant to assess the viability of organic agroforestry and silvopastoral agroforestry systems under Output 2.3.1 (16,000); long-term project technical advisor on agriculture / agroforestry in support of Outputs 2.2.1, 2.2.2 and 2.3.1 (146,250; 450 days @ 325/day) |
| 8 | Travel costs for international consultant for SFM / watershed management training under Output 2.1.2 (Travel costs for consultant (7,700; 20 days @ 325/day plus 1,200 for plane ticket) |
| 9 | Contract with Seychelles Agricultural Agency (project Responsible Party) to assist farmers with business planning / market access under Output 2.2.1 and propose revisions to agricultural land leases and manage nurseries for agroforestry production under Output 2.3.1 (66,250); contract with Seychelles National Park Authority (project Responsible Party) to train local stakeholders in basic water control / storage works, IAS control, tree seedling production, reforestation, and BD-friendly SFM practices; to map and select sites for SFM activities; and to provide technical support for sustainable timber production and NTFPs (75,000); contract with BERI to assess existing freshwater ecosystem monitoring programs and capacities; develop data collection and sharing protocols; carry out a threats/impacts analysis; establish baseline data and indicators for monitoring; map watercourses from ridge to reef; characterize various habitat zones and undertake BD assessments; study the effects of introduced obstructions on waterways; monitor physical / chemical conditions in rivers and streams; monitor rivers and streams and make data available to policy makers; and do public education on aquatic ecosystems under Output 2.1.4 (205,000); contract with Company / NGO to select degraded sites in watershed areas, and develop and oversee implementation of IAS removal plans; forest tree seedling production; evaluate current land uses of farms to determine causes of deforestation and land degradation; select degraded sites in watershed areas, assess natural regeneration and need for gap planting, develop restoration plans for each watershed, and guide replanting; and guide silvicultural maintenance of replanted areas under Output 2.1.2; to produce seedlings and other materials for replanting on fire degraded slopes and carry out monitoring using field surveys and drones under Output 2.1.3; to develop and implement forest recovery monitoring plans for selected sites under Output 2.1.4; and to develop agroforestry training materials, carry out agroforestry training for farmers, assess sites for agroforestry, and oversee planting and maintenance of agroforestry trees / crops under Output 2.3.1(159,417); contract with company / organization for forest tree seedling production under Output 2.1.2 (30,000); contractors to undertake physical soil conservation and landslide prevention measures on farms in project sites e.g. engineering measures to prevent erosion, |

| | |
|--------------------|--|
| | flood control etc. under Output 2.2.1 (35,000); contracted local labor to carry out IAS removal (“under canopy thinning”) and reforestation under Output 2.1.2 (120,000; 2,000/ha @ 60 ha); contracted local labor to carry out tree planting on 100 hectares of currently deforested land under Output 2.1.2 (75,000; 750/ha @ 100 ha); contracted local labor to carry out silvicultural maintenance of replanted areas (additional tree planting, irrigation, IAS clearance, etc.) under Output 2.1.2 (25,000); contracted local labor for replanting and on-going maintenance of pilot plots on areas of fire-degraded land under Output 2.1.3 (50,000; 10 ha @ 5,000/ha); contracted local labor to support monitoring of forest recovery under Output 2.1.4 (5,000); contracted local labor to clear vegetation and to carry out physical measures to reduce erosion and biological measures such as the planting of shrubs and other species in agroforestry areas under Output 2.3.1 (70,000) |
| 10 | Equipment for fire monitoring / prevention under Output 2.1.3 (8,000); Basic equipment, tools and protection for fire fighting for district fire brigades under Output 2.1.3 (40,000); computer equipment for forest monitoring under Output 2.1.4 (6,000); water quality monitoring equipment and materials (for field and laboratory) for MEECC under Output 2.1.4 (35,000); basic equipment and materials to assist farmers in adopting SLM practices in agriculture under Output 2.2.1 (30,000); equipment for beekeeping under Output 2.2.1 (5,000); equipment / materials to implement a system to measure effluents from livestock operations under Output 2.2.1 (8,000); equipment and materials for pilot projects on animal effluent storage and treatment under Output 2.2.1 (40,000); equipment / materials to facilitate training of farmers at demonstration farms under Output 2.2.2 (30,000); equipment and materials for more advanced soil testing under Output 2.2.1 (15,000) |
| 11 | Purchase of satellite images, orthophotos, GIS data, etc. for assessing Green Corridors under Output 2.1.1 (15,000); educational materials and TV program on proposed amendments to water quality effluent standards and regulations under Output 2.1.1 (5,000); education and awareness materials on forest fire prevention under Output 2.1.3 (15,000); satellite and photo imagery to monitor deforestation in 4 target watersheds under Output 2.1.4 (3,000); GIS and other software to support forest monitoring under Output 2.1.4 (3,000) |
| 12 | The project will channel GEF funds through select NGOs as Low Value Grant Recipients to support various small-scale activities related to agriculture, agroforestry, etc. Under Output 2.2.1, the Local Food Producer's Association (LFPA) will receive funds to develop promotional materials / advertising for agrotourism (10,000), and the LFPA & Anse Boileau Farmers' Association will jointly receive funds to support farmers interested in participating in organic certification system (10,000); under Output 2.2.2, the Bee Keeper's Association (BKA) will receive funding to provide technical guidance on beekeeping (10,000); the Seychelles Farmers Association (SEYFA) and LFPA will jointly receive funds to provide strategy, develop promotional materials, and guide farmers in developing agrotourism (20,000) and to develop materials and provide training on soil fertility management (15,000); Baie Ste Anne Farmers (BSAFA) will receive funds to develop a manual on handling of pesticides and fertilisers and to carry out stakeholder consultations / workshops to validate and disseminate the manual (15,000); and the BSAFA and the Val d'Endor Farmers Association (VDD) will jointly receive funds to develop a Standard Operating Procedure for responding to impacts from pesticides / fertilizers on water/soil quality and non-target organisms, and to carry out stakeholder consultations / workshops to validate and disseminate the SOP (20,000); under Output 2.2.3, SEYFA and LFPA will receive funds to develop agroforestry training material and to carry out workshops and on-site demonstration activities for farmers (40,000); LFPA will receive funds to carry out an assessment of sites for agroforestry (5,000); and LFPA and VDD will jointly receive funds to provide guidance on land preparation, make recommendations on species to be introduced, and oversee planting and maintenance of agroforestry trees / crops (23,333) |
| 13 | Workshops to review the National Forest Policy and forest legislation under Output 2.1.1 (5,000); training meetings for DoE, SNPA, SAA and SPA staff in enforcement of new forestry / env. regulations under Output 2.1.1 (20,000); working meetings to develop Code of Practice and new standards on water quality under Output 2.1.1 (2,000); validation workshop on new codes of practice and standards on water quality under Output 2.1.1 (2,000); meeting / consultation costs for development of watershed management plans under Output 2.1.2 (8,000); training courses/workshops on institutional coordination for fire prevention under Output 2.1.3 (10,000); training courses on forest fire fighting for institutional partners under Output 2.1.3 (10,000); training courses / workshops in fire prevention, mitigation, fire fighting and post-fire recovery for district brigades under Output 2.1.3 (10,000); training in water quality monitoring (water and sediment analysis) for project partners under Output 2.1.4 (20,000) |
| Component 3 | |
| 14 | Consultant to review possible compensation mechanisms and provide recommendations; and determine if any other gaps or potential problems exist in the existing policy framework that might limit the application of R2R approaches; under Output 3.1.2 (30,000) |

| | |
|---------------------------|---|
| 15 | Contract with company to adapt App specifications and functionalities for use by the project; to develop processes for uploading project data to NISTI platform; and to train BERI and NISTI staff on data management under Output 3.1.1 (44,000); Contract with BERI to pilot the use of the NISTI platform with BERI under Output 3.1.1 (20,000); contract company to provide data storage under Output 3.1.1 (8,000); contract company to train farmers, farmer associations and landowners, as well as hotels and water bottling companies, in soil and water quality monitoring under Output 3.1.3 (25,000); Contract company (NGO) to develop and implement a communication and engagement strategy for Regional Councils, District Administrators; create a communication toolkit for Regional Councils and District Administration; and develop and implement a public awareness strategy on Ridge to Reef concepts under Output 3.1.4 (40,000) |
| 16 | Tablets for project partners to use for data collection / reporting under Output 3.1.1 (8,000); equipment for soil and water quality monitoring under Output 3.1.3 (10,000) |
| 17 | Education and outreach materials on R2R concepts and approaches under Output 3.1.4 (15,000) |
| Component 4 | |
| 18 | International consultant to lead activities to develop project information products, lessons learned and technical outputs and facilitate knowledge sharing with other SIDS in the Indian Ocean under Output 4.1.1 (12,000; 20 working days at 600/day); International consultant to develop the project M&E system, including measurements of project indicators under Output 4.1.2 (21,000; 35 working days at 600/day); International consultant to lead project gender mainstreaming activities under Output 4.1.3 (9,000; 15 working days at 600/day); International Consultant to carry out project Mid Term Review (25,000); International Consultant to carry out project Terminal Evaluation (30,000) |
| 19 | National consultant to support activities to develop project information products, lessons learned and technical outputs and facilitate knowledge sharing with other SIDS in the Indian Ocean under Output 4.1.1 (16,000; 40 working days at 400/day); national consultant to support project gender mainstreaming activities under Output 4.1.3 (16,000; 40 working days at 400/day); |
| 20 | Project Manager (144,000; full-time, fully paid out of the project at USD 2,000 per month X 72 months) |
| 21 | Travel costs for international consultant under Output 4.1.1 (7,250; DSA for 20 days at \$325/day) and airfare (2 trips at \$1,000 / trip); travel costs for project staff to participate at regional meetings and for government staff (primarily SNPA) to participate in exchanges on MPA management with the Maldives under Output 4.1.1 (35,000); Travel costs for international consultant under Output 4.1.2 (9,000; DSA for 20 days at \$350/day) and airfare (2 trips at \$1,000 / trip); Travel costs for international consultant under Output 4.1.3 (7,250; DSA for 15 days at \$350/day) and airfare (2 trips at \$1,000 / trip) |
| 22 | Publications / outreach materials and products on lessons learned and technical outputs of project under Output 4.1.1 (20,000); Publications / outreach materials and products on gender mainstreaming under Output 4.1.3 (10,000) |
| 23 | Annual project audits (42,000; 7,000/year for 6 years) |
| 24 | Project Inception Workshop (10,000) |
| Project Management | |
| 25 | The project team costs relate to 1) Project Manager (full-time on project; and 2) the PCU Coordinator, Finance Assistant and Administrative Assistant (all part-time on the project) see TOR in Annex E. This is lean project management structure that has been used in the Seychelles for 11 years. Technical Advisors are part of the project management team, but are specifically and entirely working on technical outputs of the project. |
| 26 | Office supplies and equipment for the project manager and long-term technical experts (25,328) |
| 27 | Travel cost related project implementation to PMU staff |
| 28 | Office supplies for the PMU staff |

X. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Seychelles and UNDP, signed in 1977. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by the Ministry of Tourism, Environment, and Hospitality (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

XI. RISK MANAGEMENT

Consistent with the Article III of the SBAA [*or the Supplemental Provisions to the Project Document*], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.

The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).

The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term “Project Document” as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

The Implementing Partner shall ensure that all of its obligations set forth under this section entitled “Risk Management” are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled “Risk Management Standard Clauses” are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

- A. Multi year Workplan
 - B. Monitoring Plan
 - C. Evaluation Plan
 - D. GEF Tracking Tool (s) at baseline
 - E. Terms of Reference for Project Board, Project Manager, Chief Technical Advisor and other positions as appropriate
 - F. UNDP Social and Environmental and Social Screening Template (SESP)
 - G. UNDP Project Quality Assurance Report
 - H. UNDP Risk Log
 - I. Results of the capacity assessment of the project implementing partner and HACT micro assessment
 - J. Any additional agreements (e.g. cost sharing agreements, project cooperation agreements signed with NGOs (where the NGO is designated as the “executing entity”), letters of financial commitment (co-financing letters), GEF OFP letter, LOA with the government in case DPCs)
 - K. Stakeholder Engagement and Communication Plan
 - L. Summary of Consultants and Contractual Services Financed by the Project for the First Two Years
 - M. Gender Analysis and Project Gender Mainstreaming Plan
 - N. UNDP Capacity Development Scorecard
 - O. Project Site Information
 - P. Consultation during project development
 - Q. Procurement Plan
 - R. Project Technical Information
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