



**United Nations Development Programme**

**Annotated Project Document template for projects**

**financed by the various GEF Trust Funds**

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| --- | --- | --- | --- |
| **Project title: Biodiversity protection through the Effective Management of the National Network of Protected Areas** | | | |
| **Country: Union of Comoros** | **Implementing Partner (GEF Executing Entity):** Ministry of Agriculture, Fisheries, Environment, Tourism, and Handicraft | | **Execution Modality**:  Full Country Office Support to NIM (NIM) |
| **Contributing Outcome (UNDAF):** Outcome 1 - By 2026, state and non-state actors, the Comorian population, especially the most vulnerable, will strengthen their resilience to climate change, natural disasters and crises and ensure a sustainable and integrated management of terrestrial and marine ecosystems as well as associated ecosystem goods and services, in a context of promoting sustainable habitat with a low environmental footprint*.* | | | |
| **UNDP Social and Environmental Screening Category:** Substantial | | **UNDP Gender Marker:** 2 | |
| **Atlas Award ID: 00127568** | | **Atlas Project/Output ID: 00136781** | |
| **UNDP-GEF PIMS ID number: 6257** | | **GEF Project ID number: 10351** | |
| **LPAC meeting date:** March 2022 | | | |
| **Last possible date to submit to GEF:** November 19, 2021 | | | |
| **Latest possible CEO endorsement date:** March 19, 2022 | | | |
| **Project duration in months:** 60 months | | | |
| **Planned start date:** June 30, 2022 (or earlier) | | **Planned end date:** June 30, 2027 | |
| **Expected date of Mid-Term Review:** June 30, 2025 | | **Expected date of Terminal evaluation:** March 30, 2027 | |
| **Brief project description:** Biodiversity in the Comoros is under severe threat from several factors, including conversion of natural forests for agriculture, unsustainable logging for construction and firewood, and unsustainable fishing techniques.The successful implementation of the project will strengthen the systemic, institutional*,* and individual capacities for the co-management of the protected area system to ensure the conservation and sustainable management of the biodiversity it harbours.The legal framework will be consolidated, including the law on protected areas, to increase the applicability and use of tools to prevent the adverse effects of potential development.Critical support will bemobilizedto supply and operationalize the Comoros Environmental Fund dedicated to the financing of protected areas systemin the medium and long-term.The partnerships of the new national parks agency with local communities, scientific institutions, NGOs*,* and other partners for the implementation of management plans will be consolidated and collaborations facilitated by the development of a consistent framework for the use of land and coastal areas and resources within protected areas.Targeted awareness and capacity building for local communities, the national parks agency, co-management committees and government partners will increase capacities to implement protected areas management and development plans and enhance understanding of the need to support them for their environmental, social, and economic values.The equitable sharing of the benefits through value chains based on the sustainable use of biodiversity developed in partnership with private entrepreneurs will provide incentives and support local communities’ livelihoods. | | | |
| **Financing Plan** | | | |
| GEF Trust Fund grant | | 4,024,479 USD | |
| UNDP TRAC resources | | 400,000 USD | |
| 1. **Total Budget administered by UNDP** | | **4,424,479 USD** | |
| **co-financiers that will deliver project results included in the project results framework (funds not administered through undp accounts)** | | | |
| General Directorate of Environment and Forests (Ministry of Agriculture, Fisheries, Environment, Tourism and Handicraft) | | 7,294,156 USD | |
| National Directorate of Agriculture and Livestock Strategy (MAFETH) | | 7,500,000 USD | |
| National Directorate of Tourism and Hospitality | | 500,000 USD | |
| National Directorate of Waste Management | | 250,000 USD | |
| CRDE Hamalengo Diboini | | 750,000 USD | |
| Dahari NGO | | 4,000,000 USD | |
| AIDE NGO | | 750,000 USD | |
| Banda Bitsi Association | | 500,000 USD | |
| Union of Chambers of Commerce, Industry and Agriculture | | 150,000 USD | |
| Eco-Massiwa | | 300,000 USD | |
| House of Civil Society Organizations (MOSC) | | 700,000 USD | |
| UMAMA Association | | 400,000 USD | |
| Regional Association for Forest Management and Development (ARAF) | | 300,000 USD | |
| Association for the Protection of the Gombessa | | 200,000 USD | |
| MAEECHA NGO | | 820,000 USD | |
| Ulanga Ngazidja | | 300,000 USD | |
| Women's Sustainable Development and Food Security Platform (FDDSA) | | 170,000 USD | |
| Mitsamiouli Commune | | 570,000 USD | |
| 1. **Total confirmed co-financing** | | **25,454,156** **USD** | |
| 1. **Grand-Total Project Financing (1)+(2)** | | **29,878,635** **USD** | |
|  | | | |

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| --- | --- | --- |
| **Signatures:** | | |
| **Signature:**  **Mr DHOIHIR DHOULKAMAL, Minister**  **Ministry of Foreign Affairs and International Cooperation in charge of the Diaspora** | **Agreed by Government Development Coordination Authority** | **Date/Month/Year:** |
| **Signature:**  **Mr HOUMED M’SAIDIÉ, Minister**  **Ministry of Agriculture, Fisheries, Environment, Tourism, and Handicraft** | **Agreed by Implementing Partner** | **Date/Month/Year:** |
| **Signature:**  **Mrs FENELLA FROST, Resident Representative at UNDP Comoros** | **Agreed by UNDP** | **Date/Month/Year:** |

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**List of Acronyms**

|  |  |
| --- | --- |
| AFD | French Development Agency |
| AIDE | Association of Intervention for the Development and the Environment |
| AIS | Alien Invasive Species |
| ANACEP | National Agency for Project Design and Execution |
| ANACM | National Agency of Civil Aviation and Meteorology |
| AND | National Development Army |
| ANPI | National Agency for Investment Promotion |
| ANR | Assisted Natural Regeneration |
| APG | Association for the Protection of the Gombessa |
| AUSAID | Australian Aid |
| BACOMAB | Banc d’Arguin Coastal and Marine Biodiversity trust fund |
| BIOPAMA | Biodiversity and Protected Areas Management programme |
| BPPS NCE | Bureau for Policy and Programme Support, Nature, Climate and Energy |
| CA | Executive Board (*Conseil d’Administration*) |
| CBO | Community-Based Organization |
| CD | Country Director |
| CITES | Convention on International Trade in Endangered Species |
| CNCSP | National Center for Fisheries Control and Surveillance |
| CNDRS | National Center for scientific documentation and research |
| CNP | National Planning Commission |
| COREMO | Coral Reef Monitoring |
| COSEP | Rescue and protection operations center |
| CRDE | Regional economic development center |
| DGEF | General Directorate of Environment and Forest |
| DGRH | Directorate General of Fishery Resources |
| DRR | Deputy resident representative |
| EIA | Environmental Impact Assessment |
| ESIA | Environmental and Social Impact Assessment |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| EU | European Union |
| Ex-ACT | Ex-Ante Carbone Balance Tool |
| FAO | Food and Agricultural Organization |
| FAPBM | Foundation for Protected Areas and Biodiversity of Madagascar |
| FCD | Fish concentrating device |
| FEC | Comoros Environmental Fund |
| FPRCI | Foundation for Parks and Reserves of Cote d’Ivoire |
| FSP | Full Sized Project |
| GBIF | Global Biodiversity Information Facility |
| GCF | Green Climate Fund |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GEFSEC | Global Environment Facility Secretariat |
| GIS | Geographical Information System |
| GNI | Gross National Income |
| GPS | Global Positioning System |
| GRM | Grievance Redress Mechanism |
| HACT | Harmonized approach to cash transfers |
| HDI | Human Development Index |
| IAS | Invasive Alien Species |
| IBA | Important Bird Areas |
| IGA | Income Generating Activity |
| INRAPE | National Institute for Research in agriculture, fisheries and the environment |
| IRRF | Integrated Results and Resources Framework |
| IUCN | International Union for Conservation of Nature |
| KWF | German Financial cooperation |
| LCE | Environmental Framework Law |
| MAFETH | Ministry of Agriculture, Fisheries, Environment, Tourism and Handicraft |
| M&E | Monitoring and Evaluation |
| METT | Management Effectiveness Tracking Tool for Protected areas |
| MPA | Marine Protected Area |
| NGO | Non-Governmental Organization |
| NP | National Parks |
| NTFP | Non-timber forest products |
| OCB | Community-based organization |
| OPACO | Employers' organization of the Comoros (*Organisation Patronale des Comores*) |
| PA | Protected Area |
| PAG | Development and Management Plan |
| PC | Project Coordinator |
| PES | Payment for ecosystem services |
| PFN | Country Focal Point |
| PIF | Project Identification Form |
| PIMS | Project Information Management System |
| PIR | GEF Project implementation Report |
| PCU | Project Coordination Unit |
| PNC | Comoros National Parks Agency (*Parcs Nationaux des Comores*) |
| PPG | Project Preparation Grant |
| PPP | Purchasing Power Parity |
| PWD | Persons with Disabilities |
| REED+ | Reducing Emissions from Deforestation and Forest Degradation |
| RR | Resident Representative |
| SCA2D | Accelerated growth and sustainable development strategy |
| SDGs | Sustainable Development Goals |
| SECU | Social and Environmental Compliance Review |
| SESA | Strategic Environmental and Social Assessments |
| SESP | Social and Environmental Screening Procedure |
| SGP | Small Grant Program |
| SIDS | Small Developing Islands States |
| SNAP | National system of protected areas |
| SONEDE | National water society |
| SONELEC | National electricity company |
| SRM | Stakeholder Response Mechanism |
| STAP | GEF Scientific Technical Advisory Program |
| SYNACO | National trade union |
| ToR | Terms of Reference |
| UCCIA | Union of Chambers of Commerce, Industry and Agriculture |
| UCEA | Union of Water Committees of Ndzuani |
| UCEM | Union of Water Committees of Mwali |
| UdC | University of Comoros |
| UNDP | United Nation Development Program |
| UNEP | United Nation Environmental Program |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNSDCF | United Nations Sustainable Development Cooperation Framework |
| WCMC | World Conservation Monitoring Centre |
| WIOMSA | Western Indian Ocean Marine Science Association |

# Development Challenge

1. The **Union of the Comoros** is a small island state of volcanic origin located off the eastern coast of Africa, in the North of the Mozambique Channel, in the South West Indian Ocean. The islands appeared at different geological periods and were never connected to each other (nor with the African continent or Madagascar), with the result that each island has distinct biophysical characteristics. Due to the volcanic origin of the archipelago, the continental shelf is very narrow and covers only 900 km² for the islands of Ngazidja, Ndzuani and Mwali, which that are isolated from each other by deep sea trenches. The land area of the three islands is 1,862 km2 (Ngazidja 1,148 km2, Ndzuani 424 km2, Mwali 290 km2) and the exclusive economic zone covers a total area of 160,000 km2. Located on the main Indian Ocean shipping route along the African coast used by supertankers, the islands occupy a strategic geopolitical position, but their coastal and marine areas are at risk of oil pollution. The topography is varied, including an active volcano in southern Ngazidja – Mont Karthala, which is the highest point of the islands at 2361m, Mont Ntringui in Ndzuani reaching 1595 m, while the maximum altitude in Mwali is 790 m. All islands have very fertile soils though fragile and highly vulnerable to erosion. Ndzuani has fertile clay-loam soils of basaltic origin and a rugged terrain. Mwali, the oldest of the three islands, has fertile clay-loam soils. Ngazidja, with permeable volcanic soils, has only one small crater lake and no permanent watercourse. Although the hydrographic network on Ndzuani and Mwali was initially relatively dense, it has considerably reduced, as many springs now dry up in the dry season due to the extensive deforestation that has taken place on the islands. Reduced water resources, in terms of both quality and quantity, is impacting on the irrigation potential for agriculture and food provision.
2. **Climate and climate change.** The Comoros have a humid subtropical climate, with a hot and humid season from November to May, and a cooler dry season, from May or June to October. Rainfall[[1]](#footnote-2) in the rainy season is 1296 mm in Ngazidja, 1926 mm in Ndzuani and 1263 mm in Mwali. In the dry season, Ngazidja gets about 211 mm, Ndzuani 462 mm and Mwali 275 mm. Over the last 40 years, the proportion of dry versus wet years has steadily increased, going from 20% dry years to 80% wet years for the decade 1971-1980 to 80% of dry years and 20% wet years for the decade 1991-2000. A decrease in rainfall of 30% and an increase in the annual average temperature of 0.9°C are reported for the last few years. The models predict an increase in the annual average temperature of 0.8 to 2.1°C by 2060, as well as increasing and intensifying risks associated with climate change, such as sea level rise, floods, droughts, and cyclones. Due to its location and topography, Comoros is among the most climate vulnerable countries in the world, and 54.2 percent of the population live in at-risk areas.
3. **Population and demographic pressure.** The population of Comoros is estimated at 869,595 in 2020, for a density of 467 inhabitants/km2, of whom 29.16% live in urban areas (2019 est.). The population of Comoros is characterized by its extreme youth, nearly 50% being under 15 years old for a median age of 20.4 years. High population pressure, combined with poor economic development and inappropriate land use planning and practices, have resulted in soil degradation and erosion, reduced productivity, and placed intense pressure on natural ecosystems, thus exacerbating the poverty of rural communities whose livelihoods depend on agriculture and natural resources.
4. **Socio-economy**[[2]](#footnote-3)**.** Gross domestic product (GDP) is 2.6 billion (2017 PPP$[[3]](#footnote-4)) and gross national income (GNI) per capita is $3,099 (2017 PPP$) (2,300 for women and 3,885 for men). Although classified as a lower middle-income country, the Comoros remains behind on many dimensions of development, with 37.3 of Comorians living in multidimensional poverty and 42.4% living below the national poverty line. The value of the Human Development Index (HDI[[4]](#footnote-5)) of 0.554 in 2019 (0.519 for women and 0.583 for men) ranks the country at 156th out of 189 countries. It is lower than the average for countries in the medium human development group (0.631), and higher than the average for countries in sub-Saharan Africa (0.547). The Gender Development Index, which measures inequalities in health, education, and access to economic resources between men and women is 0.891 for 2020.
5. Agriculture including fishing and livestock are the main activities of the rural population. Agriculture accounted for 47.7% of the country's GDP in 2017, employs 80% of the country's labour force, and constitutes a major part of exports. In 2019[[5]](#footnote-6), the cash crops accounted for over 67% of exports. Despite agriculture’s importance to the economy, the country imports roughly 70% of its food; rice, the main staple, and other dried vegetables account for more than 25% of imports. The economy of Comoros is hampered by a number of constraints, including *i*) the narrow base of export income that rests heavily on three cash crops, *ii*) the small size of domestic markets, the geographic dispersion of the islands, remoteness and poor links with regional and global export markets and inadequate transport links, *iii*) the small size of cultivable areas which constrains production capacity, prevents any economy of scale, and limits Comoros’ hold on markets and in the face of international competition, *iv*) the country's near total dependence on imports of petroleum products since 96% of electricity (2016 est.) is produced from fossil fuels while 4% comes from hydropower, *v*) insufficient capacities and low specialization of rural workers. These barriers lead to considerable extra costs in energy, infrastructure, transport, and supply of inputs.
6. The COVID-19 coronavirus pandemic hit the Comoros hard, as they were barely recovering from the passage of Cyclone Kenneth which hit them in April 2019. The gross domestic product (GDP) growth then fell from 3.6% in 2018 to 1.9% in 2019. While the spread of the virus in the Comoros seems to be contained so far, economic activity has strongly slowed, mainly affecting tourism and trade, and affected even more severely the Mwali Island which had to be put into full lockdown for a few weeks.

**Comoros Biodiversity**

1. The main species of flora and fauna found in each protected area are mentioned as part of the description of each national park in Annex 2.
2. Terrestrial biodiversity. The heterogeneous ecological conditions on each island, varying with altitude, climate and soil, have resulted in a variety of terrestrial ecosystems and a unique biodiversity on land and in the territorial waters. The country is included in the Madagascar and Indian Ocean Islands Hotspot, as defined by Conservation International.[[6]](#footnote-7) High rates of endemism are found for different groups of fauna and flora, including: 9 endemic reptiles[[7]](#footnote-8), mammals[[8]](#footnote-9), endemic invertebrates[[9]](#footnote-10), and an ever-increasing number of marine fish species. The bats of the Comoros are of particular interest, with three endemic giant fruit bat species, including the Comoros Rousette (*Rousettus obliviosus* **VU**[[10]](#footnote-11)) - a cave-dwelling bat, and the Livingstone's Flying Fox (*Pteropus livingstonii* **CR**) endemic to Mwali and Ndzuani islands and inhabiting the tropical forest above 200 m altitude. These fruit bats have limited distribution areas and are threatened by habitat loss due to deforestation and agricultural encroachment. The number of endemic bird species could be as high as 39 (Lagerqvist, 2012)[[11]](#footnote-12) and 34 endemic species are formally recognized, with all restricted-range species occurring in the little-remaining high-altitude forests and heathlands. Flora endemic to the Comoros include orchids*,*[[12]](#footnote-13) endemic palms*,*[[13]](#footnote-14)other endemic plants,[[14]](#footnote-15) and endemic and regionally endemic tree species[[15]](#footnote-16). Birdlife International has classified the Comoros archipelago as an endemic area for birdlife and gives it the highest priority level of “critical”, recognizing 4 Important Bird Areas (IBA)[[16]](#footnote-17) that contain globally threatened bird species and restricted-area species. The country has 3 Ramsar sites: Lake Dziani-Boundouni, Mont Karthala and Mont Ntringui[[17]](#footnote-18), all of which are now integrated in the national PA network. The **Mwali Biosphere Reserve, the** first biosphere reserve designated by UNESCO in the Comoros, was recognised in October 2020 for its exceptional biodiversity, marine and terrestrial, as well as for the efforts of the Comorian people and government in their endeavours to strengthen, conserve, and restore this biodiversity, while ensuring sustainable development of the communities. The Karthala Volcano and the Highlands of Ndzuani have been nominated to be included in the UNESCO World Heritage List.
3. Marine biodiversity: Several migratory species use Comorian waters as a breeding site. Two species of sea turtles, the green turtle (*Chelonia mydas* **EN**) and the critically endangered hawksbill turtle (*Eretmochelys imbricata* **CR**), frequent different sites around Mwali and Ngazidja but only breed on the beaches of Mohéli National Park, making it the most important nesting site in the Indian Ocean and the 10th in the world. There are also a number of marine mammals in Comorian waters: i) *Dugong dugon* (**VU**), observed around the Nioumachoi islets (Mwali) and possibly other islands, ii) more than 10 cetacean species[[18]](#footnote-19), and iii) dolphins[[19]](#footnote-20). A study[[20]](#footnote-21) underlines the waters around the Union of the Comoros is an important site for wintering humpback whales in the western Indian Ocean and for a wide variety of cetacean species. The African Coelacanth *Latimeria chalumnae* originally thought to be endemic to the Comoros and later found in deep-sea caves in other east-African coastal regions remains an emblematic species for the Comoros. Three endemic fish species recently identified in Comoros include the Combtooth Blenny *Mimoblennius cas*, the Moray Eel (*Gymnothorax hansi* **DD**) and a short-nosed Sole species (*Aseraggodes brevirostris* **DD**). Other fish species have been identified during demersal surveys, i.e. Comoro Catshark (*Scyliorhinus comoroensis* **DD**) (known from only one specimen observed 200-400m off Moroni) and the Comoros Electric Ray, *Torpedo* sp. (possibly needs genus revision as could be an endemic species to Ngazidja)[[21]](#footnote-22). A study of the marine biota carried out under the GEF-UNDP project 4950[[22]](#footnote-23) identified over 600 species at three coral-reef sites that had not yet been surveyed, including 141 coral species, 397 fish species, 78 species of algae, 16 echinoderms, 26 molluscs and 9 marine phanerogam species. Dive surveys at the basalt drop-off in the new Coelacanthe Marine Park showed not only the presence of emblematic species (such as the Coelacanth and various cetaceans), but also revealed a pristine healthy and unique community of sponges, fish, and hydrozoans thriving on the impressive basalt drop-off or underwater cliffs.
4. This rich terrestrial and marine biodiversity provides essential ecosystem services to the people of Comoros, especially to poor communities in rural areas, including providing food through agriculture, fishing, pastoralism and the collection of natural products, medicinal plants, fodder, firewood and timber, and tourist assets. Yet, it is threatened by a number of factors.

**Threats to biodiversity**

1. During the preparatory phase of the project, the main threats to biodiversity in each of the protected areas of Comoros were described and assessed with the participation of the staff responsible for their management. The exercise sought to provide sufficiently detailed information on the threats, and where possible on the stakeholders involved, to better understand the underlying issues and design solutions to be integrated into the project planning. The following table outlines the relative threat assessment in each national park. The most serious threats to biodiversity that are prevalent in all PAs are loss and degradation of natural habitats and storms and floods associated with climate change. Loss and degradation of natural habitats and resources is mainly driven by i) deforestation due to agricultural encroachment at the expense of natural forests, including to expand ylang-ylang plantations, and use of firewood for distillation of the flowers, ii) beach loss and degradation driven by the removal of sand and gravel for construction, which destroys nesting sites for sea turtles and increases the vulnerability of the coastline to erosion, and household waste dumped directly on beaches or transported by watercourses and coastal currents, iii) degradation and destruction of coral reefs driven by climate change and harmful fishing practices, iv) unsustainable resource exploitation, more specifically of fish resources, v) uncontrolled fires related to traditional practices for agriculture and livestock purposes, and vi) alien invasive species especially in terrestrial ecosystems. Detailed information on the threats to biodiversity affecting each National Park is provided in Annex 18.

**Table 1. Relative assessment of threats to biodiversity and habitats in the Comoros National Parks**

| **Threat Category** | | | **Priority** | Moheli | Karthala | Ntringui | Mitsam- Ndroudé | Coela- canthe | Shissi- wani |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Loss and degradation of natural habitat | | | 12 |  |  |  |  |  |  |
| Storms and floods | | | 12 |  |  |  |  |  |  |
| Logging and wood harvesting | | | 9 |  |  |  |  |  |  |
| Fires | | | 9 |  |  |  |  |  |  |
| Garbage and solid waste | | | 9 |  |  |  |  |  |  |
| Fishing and harvesting of aquatic resources | | | 8 |  |  |  |  |  |  |
| Houses and facilities | | | 6 |  |  |  |  |  |  |
| Alien invasive plants | | | 6 |  |  |  |  |  |  |
| Temperature extremes | | | 6 |  |  |  |  |  |  |
| Natural deterioration of important cultural sites | | | 6 |  |  |  |  |  |  |
| Roads and railways (including roadkill) | | | 5 |  |  |  |  |  |  |
| Cultivation of non-timber products | | | 4 |  |  |  |  |  |  |
| Volcanic Eruption | | | 4 |  |  |  |  |  |  |
| Earthquakes, tsunamis | | | 4 |  |  |  |  |  |  |
|  | assessed as level 1 threat |  | | | | | | | |
|  | assessed as level 2 threat |
|  | assessed as level 3 threat |
|  | threat not present |

**The national protected areas system**

1. To protect its unique natural heritage, the Government of the Comoros has initiated the creation of a network of protected areas since the late 1990s. The Presidential decree No. 01-053/CE created the first protected area, the Mohéli Marine Park, in April 2001. The park delineation was later modified in 2015 to encompass the ridge forests and the watershed where land use is affecting the coastal area of the park, which became the Mohéli National Park. This Park served as a model for the other protected areas that were created by building on the success of this initial experience, particularly with regard to the co-management approach, under which communities are involved in all aspects of park management. In December 2014, the Comorian government committed, through the Sydney Promise, to classify at least 25% of its land area and 10% of its marine waters as protected areas. This commitment was met with support from UNDP and GEF through the project PIMS 4950 to create a national system of terrestrial and marine protected areas, co-managed with local communities, expanding the protected terrestrial estate from 19,895 ha to 50,500 ha (27%) and its protected territorial waters from 366.75 Km² to 584.90 Km² (4.49%). This support enabled the development and adoption of a new legal framework (the Protected Areas Act) and establishing and operationalizing the Comoros National Parks Agency (an autonomous institution governed by the provisions on associations and recognized by the State to manage all protected areas). The institutional and legislative framework for the management of the protected areas system of the Comoros is presented in Annex 20. Ecological studies conducted in collaboration with the communities helped to define and validate the delineation of the national parks and their zoning.
2. The project intervention sites include the following national parks:

* Mohéli National Park
* Karthala National Park
* Coelacanth National Park
* Mitsamiouli-Ndroudé National Park
* Shissiwani National Park
* Mont Ntringui National Park

1. An overview of the national network of protected areas of the Comoros is provided in Annex 2, including a brief history of its establishment, the preferred mode of governance, i.e. participatory management with local communities, a detailed description of each National Park, as well as maps and georeferenced coordinates.
2. The cycle of biodiversity loss and environmental degradation and poverty. The loss of biodiversity and the environmental degradation, combined with the effects of climate change, worsen the state of poverty of the most vulnerable segments of the populations in rural areas, including in the country’s protected areas, and jeopardize the emergence of better and sustainable livelihoods for present and future generations, while degrading the precious but fragile assets on which the country is relying to develop and diversify its economy and meet its 2030 targets.
3. The long-term solution proposed in this project to address the drivers of biodiversity loss and degradation is to improve the effectiveness of the recently established protected areas system in order to ensure the preservation and integrity of the ecosystem services on which the country’s emergence and local people’s livelihoods depend.

***Barriers to implementing the long-term solution***

23. Barrier #1 – Inadequate systemic and institutional capacities for planning and implementing management interventions. The implementation of environmental management plans in Comoros remains limited mainly because they lack political support, have insufficient resources, have underdeveloped institutional capacities and tend to overlook the importance of cooperation at the local level. Economic development interests in various sectors, including tourism and infrastructure, tend to be given higher priority on the government agenda due to insufficient knowledge and understanding of the values of ecosystem services provided by protected areas, their vulnerability and the crucial importance of their preservation for the country's economic development.

1. The coordination of development interventions through various value chains and of ecosystem restoration interventions within protected areas by different development partners is hampered by the lack of a coherent, science-based framework to serve as a common reference and indicating priority areas and prescriptions for conservation, management and ecosystem restoration.
2. Lack of knowledge about the carbon stocks in the PA marine and terrestrial ecosystems as well as the options or opportunities to increase carbon sequestration and benefit from it on the carbon markets is also lacking. Carbon mapping is essential to better understand the potential for sequestration and ecosystem valuation through the carbon markets and provide additional arguments for protecting critical habitats, maintaining biodiversity and ecosystem services, while contributing to reduce emissions.
3. The absence of a sustainable financing mechanism to support the PA system is certainly the most critical barrier to the implementation of the long-term solution. The Comoros Environmental Fund (the FEC) was created to provide required financial resources to support the PA System and its Board of Directors has been established. Yet, efforts to mobilize an endowment fund have not been successful. A financial resource mobilization strategy was developed by a consulting firm but focused on one option involving the merging of the fund with the biodiversity conservation fund in Madagascar, which proved unfeasible after years of negotiations. Currently, Comoros PAs are underfunded and rely entirely on donor funding.
4. Gaps in the legislative framework include missing implementing texts that reduce the usefulness of the framework law on the environment for the protection of species and ecosystems in the country, including in protected areas, in particular the absence of sectoral documents to guide the performance of environmental and social impact studies. The application of some measures of the new law on the protected areas system may be hampered by imprecision in the responsibilities, criteria, and processes to be followed for decision-making. Land disputes between village communities within protected areas are linked to the absence of a text delimiting village or inter-community land.
5. A major obstacle to the management of terrestrial and marine protected areas in the Comoros and to the prevention of threats from areas adjacent to PAs is the lack of clarity regarding access to land and natural resources in the terrestrial environment and access and user rights in the marine environment, linked among other things to the absence of landmarks identifying the boundaries of the different zones defined within the PAs (e.g. zones of controlled use or occupation, conservation zones), and to the weakness of the implementation of land regulations. In terrestrial areas, the appropriation of land in the public domain through deforestation, and the lack of resolution of land disputes, are attributable in particular to the lack of clarity in the process for the recognition of land tenure due to overlapping civil, religious and customary rights in the Comoros. In seascapes, fisheries are open access. Fishing activities are regulated but enforcement is practically non-existent.
6. Land disputes exist within protected areas and the boundaries of village lands are not documented. The problem arises when the ownership of land falls under acquired rights which were not clearly defined, and which were not determined before the establishment of PAs. The law on protected areas (Article 21) states that: "Respect for the rights acquired by the populations concerned over access to natural resources ... may give rise to compensation in the event of a limitation provided for in the development plan". Article 2 of the village co-management agreement about the scope of the agreement refers to a map annexed to the agreement and specifying the boundaries and geographic coordinates of the areas used by the concerned community. However, these acquired rights and user rights have not been included nor mapped in the village co-management agreements. These should be specified (identified, framed, and quantified) as well as the mechanism (or those responsible) to ensure that communities comply with them. Inter-community disputes relating to the delimitation of contiguous terrestrial village lands are more frequent on the Ngazidja island. Also, the communes have been delineated within the framework of a project supported by the EU, but some problems related to the definition of communal land versus farmland remain.
7. Barrier #2 Limited capacity (i.e. individual skills and knowledge, equipment, database) to co-manage the National Parks (NPs) network, and protect marine and terrestrial biodiversity. The absence of a supporting database on the status of the biodiversity, the lack of updated data on the condition, distribution, and evolution of biodiversity and habitats in the NPs, and on the pressures that affect it, prevents appropriate decision-making regarding the design of management measures. The gaps are related to insufficient capacities to implement PA management plans including the elaboration and implementation of long-term ecological monitoring plans and collaborative surveillance plans. Despite sustained efforts for years to raise awareness among local communities, some unsustainable practices are still practiced in the NPs due to lack of coherent action plans targeting the various actors involved in the illegal use of resources, from collection to transportation, selling and purchasing. These may involve vulnerable people whose livelihoods, although based on illicit activities under the existing legal framework, are constrained by the creation of a new protected area and stronger enforcement of restrictions imposed on the use of resources, for example women who collect beach sand and net fishers. They can also involve well-organized actors within a structured value chain who know the illegality of this use of the resource, for example turtle poachers, loggers, owners of trucks carrying beach sand, sea cucumber collectors from Madagascar, to name a few.
8. Barrier #3 Lack of incentives for the conservation and sustainable management of natural resources for stakeholders and local communities and insufficient capacity to develop nature-based businesses that are sustainable, fair and profitable while contributing to alleviate pressures on biodiversity. The lack of alternative sustainable income generating activities (IGAs) is impeding full engagement of affected communities in NP co-management practices. Various value-chain studies have been carried out in the country, but few have been realised on the ground. Strengthening the enforcement of regulations regarding the use of resources may lead to imposing opportunity costs on vulnerable segments of the local communities where livelihoods are impacted by restrictions on natural resource use and inadequate provision of viable alternatives. To maintain the enthusiasm and secure the long-term commitment of local populations for biodiversity conservation and NP creation, communities need to be accompanied in the identification and development of public-private partnerships and businesses that will provide tangible and secure livelihood gains.
9. Barrier #4 Lack of adequate knowledge sharing and gender and Persons with Disabilities (PWD) inclusiveness. Insufficient outreach and management of knowledge regarding the unique biodiversity of the Comoros, the successful co-management arrangements and the alternative livelihood options available to communities impacted by the protection of natural resources through the creation of the NPs network. Whilst efforts have been made to share lessons learned and experiences gained, this needs to be further coordinated and strengthened to ensure that the new network of stakeholders is empowered to provide feedback to local, national, regional and international forums dedicated to the disciplines that will be addressed through enhanced management. The inadequate provision of complete and updated information available poses challenges in collaborative decision-making regarding management, adopting adaptive management approaches, sharing and scaling up successes and lessons learned from the numerous efforts of local, national and international actors in the biodiversity and environmental and natural resource management sectors across the country. Building capacity and sharing more systematically updated data among concerned stakeholders is essential for moving towards better environmental governance and sustainable management. Also, most of the available data and statistics are not disaggregated by gender and even less by PWD – although women are equitably represented in the co-management committees at the village and PA levels, they are underrepresented in the staff in charge of the management of individual PAs and in the National Agency for PA Management “Comoros Parks”. The lack of documentation and understanding of the issues related to the integration of PWDs prevents them from being really taken into account when designing development projects, including interventions to ensure that ecosystem services benefit equitably all segments of the population, and especially to the most vulnerable
10. Consistency with national priorities. The Project is consistent with, and contributes to the implementation of a number of national policies, strategies, and plans focused on conservation and sustainable development in the Comoros, including: the Government's strategic “*Plan Comores Émergent* *2030*” of which the blue economy is one of the 5 bases and includes the rational management of natural resources, the conservation of biodiversity and the enhancement of ecosystem services through concerted ecosystem management; the Comoros’s Protected Area Expansion Strategy (2017-2021)[[23]](#footnote-24); the National Biodiversity Strategy and Action Plan (2016) across all five strategic goals which are to (a) Reduce the root causes of biodiversity loss, (b) Reduce direct pressures on biological diversity and encourage sustainable use, (c) Safeguard ecosystems, species and genetic diversity, (d) Enhance the benefits for all derived from biodiversity and ecosystem services, and (e) ensure participatory planning, knowledge management and capacity building; the Accelerated growth and sustainable development strategy (SCA2D) 2018-2021 which one of the four objectives is to ensure the rational exploitation of natural resources, in compliance with the principles of sustainable development, while taking into account climate change; and the Tourist Sector Strategic Plan (2019-2035) which namely targets the development of PA-related ecotourism. The project is also consistent with the National Adaptation Programme of Action being implemented in the country.

# Strategy

1. The long-term solution proposed in this project to address the drivers of biodiversity loss and degradation is to improve the effectiveness of the protected areas system recently established in order to ensure the preservation and integrity of the ecosystem services on which the country’s emergence and local people’s livelihoods depend. The project will strive to implement this solution through better collaborative planning of land and resource use and ecosystem restoration within PAs, enabling a coherent mobilization of institutional, private and NGO partners around common objectives of conservation and sustainable development of resources, on the basis of updated knowledge and strengthened capacities of the actors involved in co-management, all supported by adequate, reliable and autonomous financial resources.
2. The project theory of change is based on the premise that increased ownership and understanding of the PA network by all concerned actors and tangible perception of the local, national and global benefits provided by the PA ecosystems, both in terms of biodiversity and socio-economics gains, will lead to stronger politic and financial commitment to support the PA system. The negotiation and establishment of mutually beneficial partnerships with government and scientific institutions and actors in the civil society, namely NGOs involved in environmental issues, will mobilize a whole network of experts to support the National Parks Agency and thus improve the relevance of the design of management plans for PAs and their resources and effectiveness and efficiency of their implementation through joint and concerted efforts, which will contribute to conserve the unique natural heritage of the Comoros. It is essential that the conservation and sustainable use schemes within PAs generate sufficient benefits at all levels, so that local communities perceive tangible interests resulting from the adoption of improved and sustainable practices, and so that the communal, regional and national authorities are motivated to provide the necessary political support and resource allocation for the implementation of management plans, as well as the technical staff to supervise and support local actors in the adoption of sustainable resource use plans as part of the nature-based value chains. Yet, this scheme could be compromised by the lack of financial resources to support the operations of the PA Agency and implementation of PA management plans, and ineffective legislative framework to protect PAs and their biodiversity. The mobilization of financial resources and the operationalization of the Comoros Environmental Fund and the consolidation of the existing legislative framework will help put in place the essential enabling conditions for this scheme to remain in place beyond project support. Equally, greater involvement of local communities, including women and PWDs, and more explicit recognition of their rights over the resources in the protected areas is key to achieving the project impacts and will be a cross-cutting element of the project interventions under each component. It is expected that improved conservation of biodiversity and ecosystem services within the national parks will generate enough benefits at all levels to ensure the sustainability and replication of this approach. The theory of change underlying the project design is illustrated on page 18.
3. Assumptions. Several assumptions were identified which condition the achievement of the results intended under each of the components:

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| Component 1 | The preservation of biodiversity and ecosystem services is a priority for national, island and local authorities who agree to support the development of the PA system in the country and the mobilization of required sustainable financing.  All stakeholders targeted by capacity development efforts commit to the capacity building objectives of the PA system  The global economy is recovering after the crisis caused by the pandemic due to Covid-19. |
| Component 2. | CRDEs and other nurseries have the capacity to produce the forest seedlings (native species) required for reforestation  Volumes of crushed volcanic sand are sufficient to meet construction needs, are available and accessible (in terms of cost) |
| Component 3 | Openness of stakeholders to an innovative business formula associating the private sector with local communities  All stakeholders respect the integrity of PAs and their resources  The environmental conditions remain within the normal variability ranges  Interest and pride of Comorian consumers in the quality of local products |
| Component 4 | Communes and traditional local authorities encourage women participation in consultation frameworks for NP and use of land and coastal areas and resources  The stakeholders targeted by the communication strategy have the technological means to access shared knowledge and information |

1. Baseline scenario. To reduce the pressures on biodiversity, the country has initiated the establishment of a system of protected areas. The GEF ID 5062 / UNDP PIMS 4950 project made it possible to set up a legal and strategic framework on PAs and increase the protected areas to 61,815 ha of terrestrial areas and 54,762 ha of marine areas within national parks (corresponding respectively to 25% of the land territory and 6% of the territorial waters), has set up a system of co-governance in which all stakeholders, including local communities, are effectively represented and take part in management decisions, established an agency responsible for the management of the PA network and has contributed to increase the capacities of stakeholders involved in the co-management of the PAs. In recent years, the surveys carried out in national parks have shown the stability of populations of Livingstone's Fruit Bat and of the three Otus species, allowed to increase knowledge on populations of species of global importance such as *Eulemur Mongoz* and whales and dolphins that frequent Comorian waters, and have shown an increase in the use of beaches and seagrass beds by sea turtles, a decrease in the poaching of marine turtles, and a decrease in the rate of deforestation within the protected areas.
2. With the support of its development partners, the country will implement a set of interventions aimed at improving natural resource management, knowledge management and poverty reduction in rural areas.
3. Reforestation interventions are planned as part of projects whose intervention areas include areas within PAs. The Resilience and Integrated Management of Watersheds Project (funded by GEF/UNEP, 2017-2020) carried out reforestation within the watersheds of the three islands. The GCF / UNDP Climate Resilient Water Supply Project in the Comoros (2021-2027) also includes watershed reforestation interventions to protect the water supply.
4. Interventions are planned to improve environmental knowledge management. Thus, the regional project 'Ecosystem-based Adaptation in the Indian Ocean' including the Comoros, (funded by GCF, 2021-2030) should allow the establishment of an ecosystem profile and support the implementation of ecosystem restoration actions by civil society and improve knowledge management for sustainability and replication. The regional DIDEM program (2021-2024, funded by FFEM and GEF) will be implemented in Shissiwani and Mohéli national parks to improve negotiation and decision-making capacities and the development of sustainable management policies for coastal and marine environments based on scientific knowledge.
5. Interventions will be implemented to improve governance and management of natural resources and fishing capacities and provide for improved protection of marine and coastal habitats. The 'Protected biodiversity and building resilience through effective management of the marine protected areas of the Comoros' project (funded by the Ocean'5 Fund, 2021-2023) implemented by the South African NGO WildOcean, CORDIO, the NP Agency of the Comoros, AIDE and UdC, plans to support and improve the management of marine protected areas and increase the total marine area under protection. The project 'Implementation of the strategic action program for the protection of the Western Indian Ocean from land-based sources and activities' of the WIOSAP regional program (UNEP, 2020-2023) implemented in the Shissiwani NP will help build the capacities of fishers to participate in the monitoring of coral reefs, seagrass beds and mangroves and to restore the islet of Selle. The SWIOFISH project (financed by the World Bank, 2018-2022) should allow local communities of MPAs to consolidate their participation in the co-management of fishery resources and improve the capacities of traditional fishermen through training in fishing techniques, management of fishery resources, and monitoring of co-management agreements.
6. Various projects will contribute to reducing rural poverty within the territories of the NPs by creating jobs, supporting agricultural production and tourism development, and building entrepreneurial capacities. The 'Support for the production and resilience of family farms' project (IFAD funded, 2017-2022) enabled vulnerable smallholder farmers to improve their agricultural production and income, as well as their capacity to cope with climate change. The 'Employment Facility' project (financed by AFD, 2020-2024) aims to improve the income of the rural population by reducing food dependence on imports, developing a sustainable professional activity, whether individual or salaried, and the establishment of a range of services in rural areas. The AFIDEV project (financed by AFD, 2021-2025) provides for the development of cash crop and market garden value chains in the NPs of Mohéli, Karthala and Mont Ntringui by relaunching sustainable production, improving income of farmers and sharing of benefits - especially for women and young people - from the main export and market gardening sectors. The Integrated Tourism Framework program (multi-donor trust fund, 2019-2023) whose implementation is planned in the Karthala and Mont Ntringui NPs aims to strengthen the capacities of local communities in microenterprise management and build community-managed ecotourism infrastructure. The “Financial Empowerment of Women” project (financed by the AfDB, 2020-2022) will be implemented in the Shissiwani and Coelacanth NPs with a view to promoting the socio-economic inclusion and entrepreneurship of women fishers and farmers. The FAO regional project 'Resilience of fishing communities' (funded by Japan, 2021-2024) aims to increase the sustainable production, marketing and productivity of small-scale fisheries, strengthen the coherence of policies and investment plans through dialogue in the fisheries sector, and promote the blue economy based on the sustainable use of marine resources and maritime transport. The project to set up a plastic waste recovery and buyback center in Mohéli (funded IOC UNDP, 2021-2023) must operationalize a financial mechanism to recover and buy back plastic waste from communities and recycle it in collaboration with the private sector.
7. However, all of these interventions will not be sufficient to reduce the pressures on biodiversity and the support of the GEF remains necessary to ensure the protection of biodiversity of global importance within the protected areas of the Comoros.
8. Indeed, without the intervention of the GEF, the survival of the system of protected areas set up and supported by a succession of projects is threatened by the absence of a sustainable funding mechanism dedicated to the system of protected areas and to biodiversity conservation. All of the projects that support local communities in rural areas and in protected areas will reduce poverty but will not specifically benefit communities within PAs that are affected by enforcement of PA regulations that restrict their access to natural resources and the practice of activities that have adverse effects on biodiversity. Despite previous and current interventions, the legal framework for the protection of the environment and specifically that of biodiversity is incomplete (missing implementing texts) and its scope is limited because it remains insufficiently known, which gives rise to inappropriate decisions inconsistent with the legal framework. Interventions to restore terrestrial ecosystems and improve the sustainability of fishing activities are limited to small areas, and without the consistency required to restore ecosystem functions. Reforestation is carried out without strategic reforestation planning that would restore critical habitats for biodiversity. The projects are located in too small a number of villages to have an impact on the conservation of biodiversity and intervene in areas which are not a priority for the preservation of biodiversity. Most of the projects aim to increase the income of fishermen by increasing the efficiency of fishing and do not include measures to avoid overexploitation of coastal resources.
9. The baseline scenario thus contains a set of gaps in the face of the challenge of conserving biodiversity of global importance in the Comoros: the absence of an operational mechanism for sustainable financing to support the conservation of marine and terrestrial biodiversity within the protected areas network; the gaps in the legal framework which limit its effective enforcement for the conservation of biodiversity; the absence of a planning framework (except on the island of Mwali where a development plan is being drawn up) to ensure the consistency of the interventions, resulting in a lack of synergy and coherence in the restoration actions to restore ecosystem functions and to restore critical habitats for biodiversity; gaps in capacity for biodiversity monitoring, surveillance in PAs, and communication to promote biodiversity and the benefits it provides at local and national levels; despite all the interventions of the partners, the country still does not have a georeferenced knowledge management system dedicated to PAs and biodiversity conservation; lack of knowledge about carbon sequestration capacities within marine and terrestrial ecosystems and how to benefit from them in carbon markets; poverty, lack of alternative livelihoods and inadequate capacity of local communities to benefit from ecosystem goods and services pushes them to pursue unsustainable uses; the vulnerability of women and PWDs in rural areas persists due to the difficulties in benefiting from the opportunities offered by the valuation of ecosystem goods and services provided by protected areas; the lack of visibility and ignorance of PAs and biodiversity at the national level hinders the mobilization of a support network and changes in the behavior of populations who do not know the value of the resources at their disposal.
10. The new GEF project for the protection of biodiversity through the effective management of the national network of protected areas will provide a framework that will improve the synergies within these investments and the coherence of interventions within the PA network to improve the positive effects on the conservation of globally important species and their critical habitats, and thus contribute to the achievement of the ambitions displayed by the government through its Emerging Comoros program. The successful implementation of the project will strengthen the systemic, institutional and individual capacities for the co-management of the protected area system in order to ensure the conservation and sustainable management of the biodiversity it harbours. The legal framework will be consolidated, including the law on protected areas, in order to increase the applicability and use of tools to prevent the negative effects of a potential development. Essential support will be mobilized to supply and operationalize the Comoros Environmental Fund dedicated to financing the protected areas system in the medium and long term. The partnerships of the new national parks agency with local communities, scientific institutions, NGOs and other partners for the implementation of management plans will be consolidated and collaborations facilitated by the development of a coherent framework for the use of land and coastal areas and resources within protected areas. Targeted awareness and capacity building for local communities, the national parks agency, co-management committees and government partners will increase the capacity to implement protected area management and development plans and improve understanding of the need to support them for their environmental, social and economic values. Equitable benefit sharing through value chains based on the sustainable use of biodiversity and developed in partnership with private entrepreneurs will provide incentives and support the livelihoods of local communities.

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**Project Impacts**

Increased representation of women in the governance of PAs: NP management staff 35%, PNC Agency: 35%, NP co-management committees: 50%, Village co-management committees: 50%

6,871 ha of forest area under restoration including 6,800 ha through ANR, 53 ha through reforestation, and 18 ha under pilot AIS control, thus preserving biodiversity and important ecosystem services

Increased management effectiveness over 116,577 ha of existing terrestrial and marine coastal protected areas

6,399 people, 50% of whom are women and 4% are PWD benefit from improved livelihoods through sustainable nature-based value chains related to PAs

4,768,755 tCO2eq of avoided greenhouse gas emissions through reduced deforestation and habitat restoration

Stabilization of 17,564 ha of primary and secondary forest, 197 ha of mangrove, 6030 ha of seagrass beds and 30,000 ha of coral reefs (of which 18,000 ha in good health) in the Comoros PA network

**Project Outcomes**

The preservation of biodiversity and ecosystem services is a priority for national, island and local authorities who agree to support the development of the PA system in the country and the mobilization of required sustainable financing

All stakeholders targeted by capacity development efforts commit to the capacity building objectives of the PA system

The global economy is recovering after the crisis caused by the pandemic due to Covid-19

Learning on biodiversity conservation for project stakeholders, Comoros and regional SIDS through effective knowledge sharing

Increased opportunities for women and PWDs to benefit from ecosystem goods and services in protected areas and to integrate nature-based value chains

New sources of income based on the sustainable valuation of ecosystem goods and services within PAs thanks to the partnership of private companies and local communities

Increased protection of endemic species and important habitats through increased management efficiency across the national network of PAs

Systemic, institutional, technical and operational capacities strengthened to manage the national network of protected areas

**Assumptions**

Communes and traditional local authorities encourage women participation in consultation frameworks for NP and use of land and coastal areas and resources

The stakeholders targeted by the communication strategy have the technological means to access shared knowledge and info

Openness of stakeholders to an innovative business formula associating the private sector with local communities

All stakeholders respect the integrity of PAs and their resources

The environmental conditions remain within the normal variability ranges

Interest and pride of Comorian consumers in the quality of local products

CRDEs and other nurseries have the capacity to produce the forest seedlings (native species) required for reforestation

Volumes of crushed volcanic sand are sufficient to meet construction needs, are available and accessible (in terms of cost)

Technical knowledge and lessons learned from the project translated into knowledge products and disseminated in the project sites, in the Comoros and among regional SIDS to strengthen the capacities of actors in biodiversity conservation

National ownership and pride in Comoros PAs through an increased perception of the richness and uniqueness of biodiversity and landscapes and the value of the ecosystem services they provide.

Support for the start-up of value chains

Marketing strategy linked to PAs, biodiversity protection and fair trade

Business capacities of enterprises for a sustainable expansion of value chains and increased incomes for local communities of PAs

Partnerships between community cooperatives and the private sector in value chains linked to PAs

Capacities of local communities to integrate into sustainable value chains linked to PAs

Feasibility of nature-based value chains to provide income to local communities and reduce pressures on biodiversity

Blue and green carbon stocks assessed and monitored through the network of APs

Effective community co-management models evaluated, adapted and applied within the PA network

Management tools and management plans for exploited terrestrial and marine species drafted, approved and applied in PAs

Biodiversity monitoring protocols developed and implemented including the operationalization of a national database on protected areas.

**Project Outputs**

Long-term institutional and private sector partnerships with the national PA system for the implementation of PA development and management plans

Investment framework and financing strategy to support the national PA system in the long term

Master plans within PAs to harmonize strategies in fisheries, agriculture, forestry, tourism with biodiversity conservation and reduce inter-community disputes

Strengthened capacities of the PNC Agency, DGEF and co-management committees to apply regulations and management systems relating to the PA network

Gender and PWD action plans implemented, monitored, evaluated, and adapted

**Component 3**

**Component 4**

**Component 1**

**Component 2**

Insufficient systemic and institutional capacity to plan and implement integrated land and coastal resource use

Lack of adequate knowledge sharing and gender and PWD inclusiveness

Lack of incentives for the conservation and sustainable management of natural resources for stakeholders, including local communities, and insufficient capacity to develop sustainable, fair and profitable nature-based businesses

**Barriers**

Limited capacities (skills, knowledge, equipment, database) to co-manage the PA network

To conserve the terrestrial and marine biodiversity of the Union of the Comoros by strengthening the effectiveness of the co-management of the new network of protected areas with local communities to support sustainable development

**Development Objective**

Loss and degradation of ecosystem services required to support the emergence of the country

Vulnerability to disasters linked to climate change

Unsustainable natural resource use practices and overexploitation

**Development issues**

Loss and degradation of natural habitats linked to environmental and anthropogenic factors

Vulnerability of local livelihoods based on natural resources

1. The **project objective** is to conserve the terrestrial and marine biodiversity of the Union of the Comoros by ensuring the effective co-management of the new network of protected areas with local communities to support sustainable development.
2. This will be achieved through four interlinked outcomes: strengthened institutions, governance and enabling legal framework, increased protection of biodiversity and habitats through improved management effectiveness across the PA network, new and improved livelihoods for PA local communities through partnerships with the private sector within sustainable nature-based value chains, and more effective knowledge sharing to support learning among stakeholders and increased opportunities for women and PWDs to benefit from ecosystem goods and services in PAs and to integrate nature-based value chains.
3. Project **component 1** will enable multi-stakeholders dialogue and collaboration around a common framework for the participatory design of a shared plan for the PA landscape that simultaneously addresses conservation and the socio-economic wellbeing of local communities living in the PAs, including through building sustainable nature-based value chains. The adoption of a concerted approach to develop land use plans for each PA to develop a common understanding of the conservation, restoration and sustainable use priorities where synergies and complementarities can take place for a more effective and efficient implementations of the PA management and development plans. Also, the effectiveness and sustainability of the PA co-management depend on the sustained availability of adequate financial resources to enable the recruitment of Comoros National Park (PNC) Agency staff, the implementation of PA management and development plans, and the support for the socio-economic development of local communities. This requires the operationalization of the Comorian Environment Fund (FEC) and the effective mobilization of various sources of funding.
4. Project **component 2** will focus on improving the effectiveness of the management of PAs, and supporting the restoration of terrestrial ecosystems through: putting in place a long-term ecological monitoring system including a database dedicated to PAs; developing sustainable use plans for the species supporting nature-based value chains (under component 3); assessing species conservation action plans; assessing and adapting various community co-management approaches implemented in Comoros; implementing action plans to reduce two key pressures on terrestrial and marine ecosystems, i.e. deforestation and removal of beach sand, through awareness and strengthened surveillance; supporting ecosystem restoration through assisted natural regeneration, reforestation, and pilot interventions to control terrestrial alien invasive species (AIS), following priority areas identified as part of the land-use planning for PAs (conducted under component 1); and assessing and monitoring blue and green carbon sequestration capacity in the PAs in order to raise financial resources from carbon markets based on the conservation and restoration of ecosystems.
5. Under **component 3**, the project will promote fair and equitable sharing of the benefits generated through the development or expansion of sustainable nature-based value chains as incentives for local communities to adopt alternative livelihood options and sustainable resource use practices, thus expecting to foster their appropriation of protected areas, respect for ecosystem integrity, and compliance with regulations. The project will support the incipient private sector for securing nature-based livelihoods for the local communities in the national parks through new or expanded more inclusive and equitable supply chains, based on trainings, market incentives, facilitation of access to finance and close support to actors in the value chains.
6. Project **component 4** will mainstream transversal issues of knowledge and inclusion into project outputs and outcomes. This will be achieved through i) implementing and assessing a Gender Action Plan and a PWD Action Plan (to be developed) based on all project outputs involving stakeholder’s participation (under components 1, 2, 3 and 4), ii) supporting the project collaborative learning and planning processes following an adaptive management approach, and iii) disseminating knowledge through experience-sharing among actors involved in PA co-management, and implementing targeted strategic communication and environmental education plans, namely with local schools.
7. *Global Environmental Benefits*. Given the loss of habitat and fragmentation taking place, all fauna and flora species and habitats need protection and strengthened management practices, making the Comoros a high priority for the conservation of biodiversity of global importance. The archipelago is located within one of the 36 global biodiversity hotspots recognized by Conservation International and in one of the 35 critical regions identified by the World Wildlife Fund ("Madagascar and the West of the Indian Ocean"). The project will contribute to global environmental benefits through the improved management of newly gazetted protected areas over 61,815 ha of terrestrial areas and 54,762 ha of marine areas in the Union of the Comoros. Five new PAs were created with the support of UNDP (GEF ID 5062 / UNDP PIMS 4950) and have provided for the conservation of globally important species, for example, marine turtles are returning to nest at beaches that have been included in marine parks (Bourjea *et al*, 2015). However, PA management skills are limited, and the project is designed to strengthen national capacity on essential scientific and governance issues. Improving sustainable land and coastal resource use practices for conservation of key species and ecosystems, together with providing sustainable, nature-based livelihood options, will assist Comoros to prevent the extinction of endangered and endemic species (including the endemic Livingstone’s Bat *Pteropus livingstonii*, and the many endemic birds living in the PA network). Also, the restoration of 6,871 ha of forests and reduced deforestation rate in terrestrial protected areas will lead to the sequestration and avoided emission of 4,768,755 metric tons of CO2e over 25 years. Establishing a range of partnerships with local communities, government, academic and research institutions, NGOs and the private sector to support the National PA Management Agency in the implementation of the NP management plans will ensure long-term socio-economic benefits based on the services provided by healthy ecosystems.
8. The Union of Comoros includes 3 Ramsar sites (Lake Dziani Boundouni, Mont Karthala and Mont Ntringui) and 4 Important Bird Areas (Mwali Highlands, Ndzuani Highlands, Mont Karthala and La Grille). The residual forests of Ndzuani are of high biodiversity interest given the number of endemic and endangered species, including the orchids and tree ferns, endemic threatened birds (such as the Comoro Founingo *Alectroenas sganzini*), and endemic large fruit bats. The Karthala National Park includes the quaternary volcano and is of global interest due to the rate of endemism, including the arborescent heather savanna of *Philippia* species, endangered bird species such as the Karthala Scops Owl (*Otus pauliani*), Karthala Flycatcher (*Humblotia flavirostris*) and the Karthala Zosterops (*Zosterops moroniensis*). The plant diversity of the islands includes the Madagascar Cycad (also called the Comoros Cycad *Cycas thouarsii*), the endemic Fig tree *Ficus tiliifolia* and the precious wood *Khaya comorensis*.
9. In terms of global marine environmental benefits, the newly created marine NPs include fringing coral reefs, seven species of mangrove, the most abundant being *Rhizophora mucronata* and *Avicennia marina* (120 ha of mangrove swamps across the 3 islands, 75% of which is on Mwali),[[24]](#footnote-25) and foraging grounds in the Bimbini area (Ndzuani island) for the Green Turtle *Chelonia mydas* and the dugong. Seagrass beds (8 species have been identified) are mainly found in Mohéli National Park (90%), with seagrass beds located within all MPAs of the network. Seagrass beds are important foraging grounds and their specific conservation is required. The Coelacanthe Marine National Park on Grande Comore is not only an important global coral reef and volcanic cave system, but is also an important area for the Long-billed Dolphin (*Stenella longirostris*), Bottlenose Dolphin (*Tursiops truncatus*) and the Spotted Dolphin (*Stenella attenuate*), and at least 12 whale species, including the humpback whale (*Megaptera novaengliae*), Orcas (*Orcinus orca*), the Dwarf Orca (*Feresa attenuata* – seen in large groups of up to 500 individuals), theSouthern Right Whale (*Eubalaena australis*) and Bryde's Whale (*Balaenoptera edeni*). The Coelacanth *Latimeria chalumnae* is of global interest as a ‘living fossil’ and is listed as Critically Endangered on the IUCN Red List. The number of marine fish in the coastal waters of the Comoros increases with each marine survey and this project will assist in raising awareness globally regarding the vulnerability and need for protection of a key biodiversity hotspot where species continue to be discovered.
10. *Relevance to GEF objectives*. The project is aligned specifically with the GEF Biodiversity Focal Area BD-2-7: Address direct drivers to protect habitats and species, and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate. The project will assist the Government of Comoros to improve its biodiversity policy planning and review and will include a degree of biodiversity mainstreaming through activities under Component 1 to create a multi-sectoral dialogue to ensure that any changes in landscape or seascape production practices are biodiversity-positive. The project is focused on improving management of the newly established Protected Area estate in the Comoros and, in this regard, is aligned with the GEF’s strategy and aim to strengthen individual and institutional capacities to manage protected areas such that they achieve their conservation objectives.
11. *Relevance to Sustainable Development Goals (SDGs)*. The project is part of UNDP’s efforts to support the progress of the Union of Comoros towards achieving its SDGs, and will contribute more specifically to the following ones: Goal 1 - End poverty in all its forms everywhere (1.4 Access to resources and 1.5 Reduction of vulnerability); Goal 5 - Gender equality and empowerment (5.5 Participation of women); Goal 6 - Sustainable management of water (6.6 Protection and restoration of ecosystems); Goal 8 - Sustained, inclusive and sustainable economic growth, productive employment and decent work for all (8.3 Micro and small enterprises, 8.4 Efficient use of resources); Goal 12 - Sustainable consumption and production (12.2 Sustainable management of natural resources, 12.8 Training and environmental information, 12b Sustainable tourism); Goal 13 - Combat climate change and its impacts (13.1 Resilience and adaptation); Goal 14 - Conserve and sustainably use marine resources (14.2 Marine and coastal ecosystems, 14.4 Fisheries regulations, 14.5 Preservation of marine areas, 14.7 Small Island States, 14b Preservation of artisanal fishing); and Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and halt biodiversity loss (15.1 Terrestrial ecosystems, 15.2 Forest management, 15.4 Mountain ecosystems, 15.5 Biodiversity and threatened species, 15.7 Poaching, 15.8 Invasive species, 15a Financing for biodiversity).

# Results and Partnerships

Expected Results

**COMPONENT 1: INSTITUTIONS AND GOVERNANCE SYSTEMS**

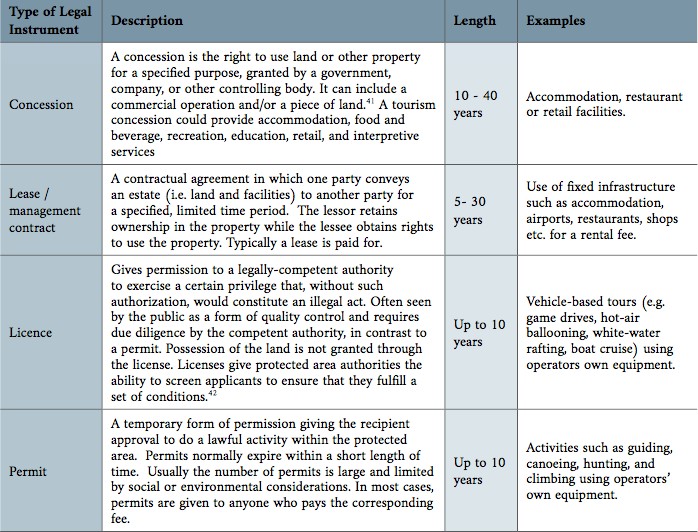
**Outcome 1:** Systemic, institutional, technical and operational capacities strengthened to manage the national protected area system

**Output 1.1** The capacity of the new PNC Agency (Comoros National Parks), the DGEF, and the co-management committees to implement and enforce laws, regulations, and management systems related to the PA network is strengthened.

*1.1.1 Improved legal and regulatory tools for biodiversity, sustainability of its use and the rights of local communities*

1. Under the supervision of the Project Coordinator (PC), the Project Coordination Unit (PCU) Environmental Legal Specialist will be responsible for facilitating the finalization of the legal and regulatory framework, including the legal framework for the operationalization of the Comorian Environmental Fund, including the law on foundations (in the context of Output 1.3), the required implementing legislation for the law on the National PA System, village co-management agreements, the missing implementing decrees for the Environmental Impact Assessment (EIA) of the Framework Law on the Environment (as presented in Annex 21 on gaps in the legal framework for protected areas and biodiversity conservation), and legislation to govern the development of tourism operations in protected areas (PAs) (discussed next). The implementing regulations proposed by the Legal Specialist will be discussed during a one-day workshop involving all the parties concerned with a view to their participatory validation.
2. Enabling legislative framework for tourism operations in protected areas. The relevant policy and legislative documents will be reviewed with respect to their implications for tourism planning and investment processes in the PA network. The review will be conducted in close cooperation with the National Direction of Tourism and include but not be limited to the Law on the National System of Protected Areas (2018), the Framework Law on Environment (1995), the Strategic Plan of Tourism Sector (2019-2035), the development and management plans of the Karthala, Coelacanthe, Mitsamiouli-Ndroudé, Mont Ntringui, Shissiwani and Mohéli National Parks, and the regional development plans and communal development plans that are relevant to PAs.
3. This review will also examine the current tourism licensing and business registration processes in Comoros, and also current practices and legislative framework (concession, leasing, licensing and permit systems) for current tourism operations in the protected areas (using the options in the table 2 to frame this analysis)[[25]](#footnote-26). The review will identify and document the status of institutions to support tourism businesses (e.g. chambers of commerce, destination management organizations, tourism associations), provide recommendations for institutional improvement relevant to Comoros, and to improve the transparency and accountability of procedures[[26]](#footnote-27). Based on the review, the preferred form of legal instrument will be discussed with the national institutions in charge of protected areas and of tourism, (using the model below)[[27]](#footnote-28) and recommendations will be formulated to develop the required legislative texts to enable tourism development related to the Comoros PA network.

**Table 2. Characteristics of legal instruments for tourism operations in protected areas**



*1.1.2 Raising awareness among all stakeholders about the newly established protected area system.*

1. Following the launch of the project, the project will organize targeted workshops on each of the islands to raise awareness of all stakeholders on the newly established PA system, including the new PA law, the 5 new PAs and the national PA system management agency. Awareness and information materials on the various issues will be prepared in advance by the Project Coordinator and the Legal Specialist, depending on the target audience. These workshops should allow for a better understanding of i) the implications in terms of access to and use of land and resources as well as ii) the roles and responsibilities conferred on the various institutions under the regulations governing biodiversity conservation.
2. Targeted workshops on each of the islands will convey relevant information to each of the stakeholder groups using the appropriate level of language. The targeted workshops will involve the following groups: 1) prefects, mayors and councilors in charge of land use planning and the environment; 2) technical directorates responsible for fisheries, the environment, forests, tourism, and land use planning, the Forestry and Coastal Zone Agency (for ecosystem restoration aspects), 3) NGOs, 4) private companies, 5) local communities of the PAs for which the project will bring together representatives of village committees by grouping 3 villages at a time to allow for fruitful exchanges. The project will therefore involve 6 workshops for Karthala NP, 5 workshops for Coelacanth NP, 3 workshops for Mitsamiouli-Ndroudé NP, 6 workshops for Moheli NP, 7 workshops for Ntringui NP, and 4 workshops for Shissiwani NP. *Conservateurs* and Community Mobilizers from each park, as well as the PC, will participate in each of these workshops.
3. Three awareness workshops (one per island) will be organized and facilitated by the PC and the Legal Specialist to introduce the PNC Agency and the Law on the PA system to relevant State institutions. Meetings of the Management of the PNC Agency with development partners will be held in Moroni in the first year to develop synergies and ensure that the PA system is taken into account in the planning of development assistance interventions.
4. The Communication and Knowledge Management (CKM) Officer will also prepare an information leaflet for wide distribution to the population, on the purpose of the law on the PA system, its rationale (why was it necessary for the country to have this law?), the broad outlines of its content, and how this law concerns the public in general. The content of the leaflet will be validated by the Legal Specialist and the PC.
5. The attribution of roles and responsibilities of the different institutions directly or indirectly involved in biodiversity conservation must be clarified to optimize their complementarities and synergies in order to improve the efficiency of the management of the PA system and also to avoid situations of conflict of authority related to the granting of authorizations for the use of resources, such as observed for the collection of beach sand and for the logging within protected areas. The PCU Legal Specialist will identify the legislative regulations that determine the roles of the various parties in order to prepare a proposal for sharing competencies and collaborations. This exercise will also identify all the stakeholders that need to be involved in each of the processes related to the planning, creation, and management of protected areas. The document will be shared with participants prior to the workshop.
6. The workshop to clarify the sharing of competences and collaborations to support the management of the PA system will involve the actors i) at the Union level, i.e., the Ministry of Agriculture, Fisheries, Environment, Tourism and Handicraft, the Directorate General of Environment and Forests (DGEF), the Directorate of Fisheries, the Directorate of Land Management, ii) at the Islands level, the Directorates in charge of the Environment, Fisheries and Forests, iii) the National Agency for Protected Areas and its Board of Directors, the co- management committees of each PA, the village co-management committees of each PA, iv) the Comoros Environmental Fund and its Board of Directors, v) the Office of Forests and Coastal Zones, vi) the Prefectures and Communes, vii) NGOs and environmental associations, and viii) the private sector. Stakeholders on each island will participate in the workshop virtually. Discussions will be based on a document that will have been previously shared with the participants. The Legal Specialist, the PC, the communications officer, the gender and PWD officer, the *Conservateurs* and the Community Mobilizers of each park will take part in this workshop.
7. Reflections will focus on responsibilities for the following processes: Setting strategic orientations; National PA system planning; Establishment of new PAs and/or modification of existing PAs; Legislative and regulatory tools, including establishment decrees, co-management agreements, management plans; Site and system-wide management, including enforcement of laws and regulations, EIAs, signage and PA monitoring; Staff training; Funding, FEC management, revenue allocation; Ecological and biodiversity monitoring within the PA and coordination of research addressing PA management needs; Database management and updating knowledge to support decision making by PA co-management committees; Strategic communication, promotion of PAs, information on PA regulations, environmental campaigns and events; Community support and development of IGAs reducing threats to PAs.

*1.1.3 Strengthened institutional capacity for inclusive and integrated land and resource use planning and management in PAs*

1. The project will support capacity building of staff of institutions involved in PA co-management, including the DGEF, the staff of the National PNC Agency including *Ecoguard*s, the PNC Agency National Board, NP co-management committees, to ensure inclusive and integrated planning and management of PA land and resources use, with a focus on biodiversity and ecosystem services such as blue and green carbon stocks and natural resources supporting the livelihoods of local communities.
2. *Understanding the ecosystem services provided by PAs*. A major aspect of capacity development will be to ensure understanding of the importance of the unique role of PAs by all stakeholders, with a focus on the main ecosystems of PAs: mangroves, forests, coral reefs, seagrass beds, and beaches, to conserve the globally important biodiversity endemic to Comoros, the interactions between species and between ecosystems. Such awareness raising activities will highlight the importance of preserving the integrity of PA territory to provide ecosystem goods and services to support both local livelihoods and the development of the country. Understanding the importance of preserving the integrity of ecosystems will also address the importance of reducing interactions between human systems and nature to reduce the potential risks of triggering pandemics.
3. The project will recruit plant and fisheries biologists to work with the CKM Officer under the supervision of the PC to develop documents outlining the key ecosystem services provided by PA ecosystems. These texts will provide content to be diagrammed for each of the ecosystems to allow visualization of the ecosystem services provided and the interactions between species and between ecosystems. These illustrations will be printed on posters and formulated in Comorian language to be accessible to local communities. A literature search will identify existing diagrams and adapt them to the Comorian reality as needed. The services of a graphic designer will support the preparation of the ecosystem services visualization tools.
4. *Training on the project's environmental and social management framework (ESMF*). An ESMF (Annex 10) was developed during PPG and is the foundation for the development of the project’s Environment and Social Management Plan (ESMP) and other specific or separate Management Plans that may be required (e.g. Livelihoods Plan, Displacement Plan). The project will develop these Plans during project inception and no project activities can commence until the Safeguards architecture is in place. During the start-up phase, training on the ESMF and the requirements of relevant UNDP social and environmental standards will be provided to all national stakeholders, with a particular focus on the public sector and local UNDP staff. In addition, the environmental and social management plans (comprising the overarching ESMP and related specific Management Plans) will also identify capacity building activities to ensure adequate capacity for implementation.
5. *Development of DGEF's capacities following the recommendations of the HACT micro-assessment*. The capacities to be strengthened in the DGEF were identified following the recommendations of the HACT micro-evaluation conducted in June 2020, specifically targeting the capacities of the DGEF for which the level of risk was deemed High in the micro-evaluation report. The project will address some of the recommendations, in complementarity with two other projects implemented by the UNDP (GCF ID FP094 UNDP PIMS 5740 and GEF ID 10261 UNDP PIMS 6400) which will take charge of the other recommendations. The project will recruit a specialized consulting firm to provide training to DGEF staff during the first year of the project and ensure local support during the project life on the following aspects:
   1. Accounting policies and procedures, including budget preparation, an administrative and accounting procedures manual, control over invoice processing, banking and cash transactions, personnel costs and budget monitoring.
   2. Program management, including planning, monitoring and evaluation of programs and projects, planning and monitoring of the Directorate's missions, including the Focal Points of the international conventions on the environment to which the country has acceded.
   3. Development and implementation of a risk management plan in the context of program management.
6. *PNC Agency*. The Agency's staff in charge of PA management has already benefited from numerous online training sessions, particularly the NP *Conservateurs*. However, these online trainings are not sufficiently supervised and there is still a need to provide local support on all PA management tools, especially for the key stages of planning, monitoring and evaluation. Additional training is required for NP *Conservateurs* in team management. The *Conservateur* of a PA is responsible, under the direct authority of the National Parks agency, for the implementation of the management and development plan of the PA, administrative management, technical and financial reporting, technical direction for the protection of biodiversity, including coordination of PA governance structures (PA and village management committees), cooperation with local populations, ecological monitoring and surveillance. The project will help improve the visibility of the Agency and understanding of its role as well as the importance of the agency and protected areas.
7. The Ecoguards will be trained to apply simple ecological and biodiversity monitoring protocols (developed under Output 2.1.2), including on GIS databases and use of a GPS, to enable them to carry out ecological monitoring autonomously according to protocols, routes, and schedules previously established with the NP *Conservateurs* and the PCU Monitoring and Evaluation Officer, and to record information into a database developed for this purpose. Their permanent presence in the field throughout the territory of the PAs allows them to contribute effectively to environmental and biodiversity monitoring on the basis of simple protocols during regular routines.
8. The swearing in of the NP Agency staff, including Conservateurs, Community Mobilization Specialists and Ecoguards, was scheduled for 2020 but could not take place due to the constraints of the pandemic. It was postponed to the first half of 2022. It will be organized in each park by the representative of the Ministry of Justice who will publicly swear in the eco-guards and other officers in the presence of local authorities (village heads, mayors, prefects, representative of villages and associations). This public event will make the park community aware of the additional role given to ecoguards and other Agency officers. The swearing-in will give them the status of "environmental police" whose role and mandate limits will be specified in an administrative note. Once sworn in, these agents will have the power to directly verbalize a person who has violated the law on PAs and to transmit the file directly to Justice. Until now, the ecoguards had to forward the file to the nearest police / gendarmerie station. The Justice Department has recommended that ecoguards receive safety training in connection with their swearing-in, which will also cover the limits of their mandate to environmental offenses, in order to ensure their safety in the performance of their duties. This training will be provided by the Ministry of Justice which has security trainers.
9. The project will also strengthen capacities and skills of ecoguards, PA managers and all staff engaged in or responsible for surveillance patrols to fight poaching effectively and safely, by developing collaboration with local communities and among PAs, for the establishment of an effective surveillance network and a rapid response strategy, improving knowledge of relevant laws, prosecution procedures (establishing reports of offenses and drafting of minutes), improving knowledge of research techniques and identification of poaching indices, adopting strategies adapted to the different threats so as not to put themselves in danger, and using GPS (guidance and navigation principles, data collection method). Capacity building in the fight against poaching will allow effective and safe actions to combat poaching, through the development of specific skills, the structuring of collaborations with local communities and among PAs for the establishment of an effective surveillance network and a rapid intervention strategy. Strengthening the skills of ecoguards and surveillance network collaborators must enable them to adopt strategies adapted to different situations so as not to put themselves in danger. To be effective and to guarantee their own safety, individually and as a team, all participants in the fight against poaching will benefit from structured training which includes knowledge and application of relevant laws, prosecution procedures (establishment of reports of offenses, and drafting of minutes), setting up of information networks, organization of surveillance patrols, research techniques and observation of poaching signs, anti-poaching techniques, and use of GPS (orientation and navigation principles, data collection method). Guidelines for the training of ecoguards and PA managers involved in anti-poaching have been developed by the International Ranger Federation and its partners (Southern African Wildlife College, PAMS Foundation, WWF, African Parks Network, The Thin Green Line Foundation)[[28]](#footnote-29) and are available online. This publication presents international standards of good practice to help improve the standards of effectiveness of the tactics and strategies employed by rangers in the field and increase their level of security in the context of their work in PAs, in the face of armed poachers who illegally exploit flora and fauna species. The training will be provided by a national consultant with practical experience.
10. The recently established Board of Directors of the PA Management Agency is not yet operational due to delays caused by the pandemic crisis. The Board of Directors, chaired by the Director of the DGEF, has yet to be established. Support to the Agency's Board of Directors will include clarification of the Board's role in relation to the management of the system and training of Board members to strengthen their understanding of (i) the concept of PAs, (ii) the role of the PNC Agency, (iii) the specific mandate of the Board of Directors, particularly in terms of mobilizing funding, (iv) evaluation of the effectiveness of PA management, and (v) mechanisms for mobilizing funding, such as REDD+, payments for ecosystem services (PES).
11. The project also includes training for co-management committees. The members of these committees are people who come from different backgrounds and have different knowledge bases. The trainings will aim to strengthen their understanding of the PA concept, planning, monitoring, and participatory evaluation in order to empower them to fully play their role in PA co-management. The trainings will also aim to strengthen their understanding of governance, administrative, financial, and ecological management of PAs so that members are better able to make informed decisions.

***1.1.4*** *Recognition and consolidation of the effective involvement of men and women of local communities in the governance of protected areas.*

1. Local communities are active and responsive in the NPs. Overall, 75% of arrests are attributable to their interventions. They readily mobilize themselves and their participation is strong in all events and chores relating to the environment. Committees comprising representatives of all stakeholders in each park have been set up to ensure co-management and are operational. In addition, at the initiative of local populations, village "friends of the park" committees have been formed so that each village can give its opinion on how to support the park. These committees function very well and meet quarterly with the support of the *Conservateur*, for whom it is easier to mobilize village structures that have already been formed to carry out community actions. However, this invaluable collaboration is threatened by poverty, lack of decent livelihoods, and insufficient understanding of the tangible benefits of PA ecosystems. Voluntary adherence to PA protection values must be encouraged with preferential positioning in project support for income-generating activities, especially in ecotourism tours, or local communities risk disengagement. Such a withdrawal of support forfeits years of investment and trust takes a long time to be restored. By improving the capacity of local communities and the transparency of decision-making processes regarding the management of PAs and the biodiversity they harbor, the project will improve governance and the equity of benefit sharing, thus contributing to reducing the poverty of the most vulnerable who are most hardly hit by the COVID pandemic.
2. Strengthening the involvement of local communities in the governance of protected areas will involve:
3. Explicit recognition of the rights and benefits of community men and women to natural resources within protected areas and their integration into revised co-management agreements. This recognition will involve discussions and negotiations conducted by Community Mobilizers supported by Ecoguards and under the supervision of the Legal Specialist, during visits to each village. The tours will take place in two stages to initiate the discussions and negotiations, and then to validate the results.
4. The establishment of grievance redress mechanisms for each park, including informing local communities and other stakeholders about the mechanism, under the supervision of the Legal Specialist. Grievance resolution mechanisms will be established for each park intended for local communities and any other concerned parties. A register or "grievance log" will be available at the park office for anyone to record their grievances about the PA, its resources, interventions and the staff of the National Park Agency. Community Mobilizers will inform communities and other stakeholders of the mechanism for registering, forwarding, evaluating and resolving grievances. Quarterly summary reports will be prepared for systematic communication at co-management committee meetings and to identify solutions that will then be proposed to the parties involved.
5. Increased presence and visibility of the park management team in the field and increased frequency of contact with local communities. In order to respond to the desire of local communities to increase contact with PA officers, the project will include this dimension in the job descriptions of *Conservateurs,* Community Mobilizers and Ecoguards, who must constitute a permanent team that is present, visible, active and accessible in the park.
6. Encouraging exchange processes between village co-managers of the same park leading to the development of charters in support of the park's objectives. Community Mobilizers will be able to initiate these exchanges with the support of the leaders of each community. The project will encourage the local populations of each park to hold days of solidarity between co-managers of the same park. Such meetings, called "Park Day," in which all villages participate, are currently taking place and are an opportunity to exchange ideas, exhibit the products of the villages, share concerns as well as successful experiences, and strengthen cohesion between villages that often do not know each other, and thus constitute the "park family.” By allowing the search for and emergence of solutions applicable beyond the individual villages and coherent at the park level, these exchanges have led to "*charters*"for villages of a same park including the vision and commitments of the villagers with respect to themselves, their new values, and their aspirations. For example, following a beach clean-up in the Mitsamiouli-Ndroudé park, an informal resolution was taken by the villages involved. Initiated by the youth, it was supported by the mayor. Three months later, although no contract was signed, the beaches of the villages of Ndroudé and Mitsamiouli remained clean.

*1.1.5 Strengthening the applicability of the regulatory provisions regarding Environmental Impact Assessments.*

1. The project will recruit an International Consultant[[29]](#footnote-30) with expertise in social and environmental impact assessments in the region (and preferably in Comoros) to work with the PCU Legal Specialist and under the supervision of the PC, to support the Government in:
2. the development of sector-specific guidelines for various types of projects to guide future impact assessments,
3. the integration and management of a public consultation process (which may involve a posting in the public square of each village) to allow those affected or potentially affected by a project subjected to an impact assessment to express their concerns regarding the potential impacts described or not described in the EIA.
4. The project will advocate with authorities on the usefulness of EIAs to improve the sustainability of projects and increase the transparency of development decisions. By clarifying the relationships between ecosystems, communities and the local economy, and identifying environmental and social issues in advance, adverse impacts can be prevented, mitigated or compensated for. In turn, environmental benefits as well as human health, economic and social benefits can be optimized.
5. In the context of the project, the usefulness of the impact assessments will be to encourage (i) reflection in parallel with the processes of planning land use within the PAs and restoration activities, and the processes of developing management plans for the natural resources used in the value chains, (ii) prior reflection on the various potential environmental and socioeconomic impacts related to interventions in the development of income-generating activities for local communities or to management interventions within protected areas.
6. The development of sectoral guidelines can benefit from the "Sectoral Tool for the Identification of Environmental Effects and Mitigation Measures" accompanying the "Guide for the Conduct of Impact Assessments" developed within the framework of the CBO project[[30]](#footnote-31) implemented by UNDP from 2007 to 2010. The simplified tool is applicable to the following types of interventions: building construction, rural roads, forestry, crop production, irrigation, water supply, livestock.

**Output 1.2** Master plans for terrestrial and marine areas within PAs harmonize relevant sectoral plans and strategies (fisheries, agriculture, forestry, tourism) with biodiversity and ecosystem service conservation priorities, and reduce inter-community disputes.

*1.2.1 Delimitation and mapping of village terroirs within protected areas and demarcation of the boundaries of terrestrial protected areas with the participation of local communities*

1. The Project will contribute to clarify the issue of land tenure, particularly to ascertain the extent of community land ownership, or village terroirs, within the newly created National Parks (Karthala, Mitsamiouli-Ndroudé, Coelacanthe, Mont Ntringui and Shissiwani). This will enable the National Park management agency to capture accurately tenure and community engagement issues in the management of national parks and to address land tenure issues in the review of the national policy and strategy on protected areas, in the revision of park management and development plans, and for all community engagement activities.
2. With the support of the GIS Officer, and under the supervision of the park *Conservateur*s and PC, a field mission will be undertaken by the Ecoguards accompanied by representatives of the local communities to record the coordinates of the boundaries of the village terroirs. Any existing or potential dispute regarding the boundaries of the terroirs will be documented as well as the disputed areas. The nature of the dispute, the concerned areas, community or members of the communities, will be identified and areas georeferenced. GPS coordinates will be used to produce large-scale maps that will be used to carry out participatory validations of the delineation of the village terroirs, including disputed areas, with concerned local communities. No physical demarcation will be carried out but rather, at the request of village communities, the georeferenced coordinates of the boundaries of the PAs, their various zones and *terroirs*, once validated, will be translated into their own reference system, the "*lieux-dits*", which will be integrated in the PA management and development plans.
3. The documentation of land tenure issues will not result in any physical displacement in any area, nor in disputed areas, e.g. the delineation of villages and their land will in no way lead to the expulsion of those who illegally occupy an area or in areas where more than one group claims land rights. While it is possible that the project will not have the means and the time to resolve all the disputes identified, this exercise will at least provide a basis for reflection so that all the parties concerned work on a common and updated basis with the Agency of PAs and communes to jointly resolve land disputes.

*1.2.2**Annual production of georeferenced maps of each national park*

1. Georeferenced maps integrating updated and reliable information on biodiversity will be produced to allow the annual evaluation of the implementation of the Development and Management Plans (PAGs) of the National Parks (NPs) and to support decision making for their update. These maps will be produced by Ecoguards specialized in GIS under the supervision of the GIS Officer and the PC of the Project Coordination Unit (PCU), and will illustrate the following information: i) the distribution of priority biodiversity and habitats for wildlife and plant biodiversity of global and national importance (based on existing data); ii) the condition of the ecosystems indicating the factors of degradation (integrating the results of the forest inventories); iii) Existing structures such as roads and trails; iv) The delineation of village lands including spaces dedicated to housing and agricultural and livestock activities, based on the results of sub-outputs 1.2.1 and 1.2.3.

*1.2.3 Collaborative planning of land, coastal and marine areas, and resource use.*

1. The project will support collaborative land use, coastal marine and resource planning within the protected areas of Ndzuani (Mont Ntringui NP and Shissiwani NP) and Ngazidja (Karthala NP, Coelacanth NP, Mitsamiouli-Ndroudé NP). The island of Mwali, including the Mohéli NP, already has a land use plan. Five workshops (one per NP) will bring together stakeholders to identify competing interests, discuss the benefits of different land, marine and resource uses, and develop a consensus on which uses maximize overall benefits. Planning will involve all stakeholders (land, coastal and resource users, administrative authorities, scientific institutions, environmental NGOs, and regional economic development centers (CRDEs) to identify i) priority areas for strict conservation of biodiversity, ii) priority areas for preservation of blue and green carbon stocks, iii) priority areas for forest and mangrove restoration through assisted natural regeneration (ANR), reforestation, or control of invasive alien species (IAS), iv) plans (and achievements) for the rehabilitation of degraded watersheds developed as part of the GEF-UNDP “Resilience and integrated watershed management project”, v) priority areas with resources to support nature-based livelihoods for PA local communities; and vi) areas for tourism activities and infrastructure managed by local communities and private partners through tourism concessions and other types of agreements. Land and resource use planning and monitoring within PAs will be harmonized with other relevant jurisdictions such as fisheries, tourism, agriculture, and land use planning through these integrated land and resource use plans, formal collaborative agreements with the National Parks Agency, and the joint signing of agreements for co-management of resources in these sectors (sub-output 1.2.4). The integrated planning of land, coastal areas, and associated resources and a better institutional coordination of interventions within PAs will contribute to rationalize land and resource uses, increase their sustainability, and reduce the risk of excessive infringement on wildlife habitats, which is potentially be related to increased risk of transmitting viruses leading to zoonoses.
2. These plans will be developed by integrating updated and reliable information used in the framework of sub-output 1.2.2 (distribution of biodiversity, condition of ecosystems, degradation factors, existing structures, roads and trails), the delineation of village lands including areas dedicated to housing and agricultural and livestock activities carried out in the framework of sub-output 1.2.1, forest inventories and data on the carbon sequestration capacity of terrestrial and coastal ecosystems (output 2.4), and the identification of resource harvesting sites used for value chains (sub-output 2.2.2). They will help refine the delineation of different areas within PAs including i) priority habitats for faunal and floral biodiversity of global and national importance; ii) priority areas for the preservation of blue and green carbon stocks; iii) priority areas for the restoration of forests and mangroves through assisted natural regeneration (ANR), reforestation, or control of invasive alien species (IAS); and iv) priority areas for supporting nature-based livelihoods for the benefit of local communities in PAs.
3. Considerations for selecting priority sites, including for pilot operations carried out under the project include: Abundance of native vegetation patches, High endemicity levels, High species diversity, Presence of threatened species, Low or moderate status of invasion of the site (for assisted natural regeneration or reforestation), Large site with low edge/interior ratio with potential for expansion or connectivity, Provision of key ecosystem services, Good accessibility, High potential for multiple benefits. As part of this planning, the possibility of including specific areas allocated for tourism activities and infrastructure managed by local communities and private partners (through concession agreements and other types of agreements) will be considered. Such participatory planning can help manage disputes, resolve tensions between conflicting uses, and promote more efficient and effective use of land, marine areas and their natural resources. By examining different potential uses and the benefits derived from them in an integrated manner, planning should identify the best trade-off among different land, marine and resource use options and link social and economic development with environmental protection and enhancement.
4. The Strategic Environmental and Social Assessments (SESAs) required in the project's Environmental and Social Management Framework (Annex 10) will be conducted in parallel with the planning exercise for each of the new protected areas under the supervision of the Monitoring, Evaluation and Safeguards Officer, and will be contracted to a national consulting firm hired for this purpose. The process will be undertaken such that these steps will progress as part of the land use plan preparation and feed into each other in an iterative manner. Each SESA may engage different stakeholders and address topics or potential conflicts that are specific to the national park. If access to natural resource restrictions were found to be a significant issue, then the SESA process will include a Process Framework, which is a description of the participatory processes by which potentially displaced persons will participate in determining potential access restrictions, mutually acceptable levels of resource use, identification of potential impacts, and management arrangements. It will outline eligibility criteria for measures to assist affected persons in improving and restoring livelihoods where affected, manage conflicts and grievances, arrange for participatory implementation and monitoring, and specify the necessary budget. The Process Framework will be part of the land use plans and could be developed through the SESA process. The NP Management Plans will incorporate the requirements of the Land use Plans, including the Process Frameworks.

*1.2.4 Collaborative Institutional arrangements for resource co-management*

1. Collaboration agreements will be established between the National Parks Agency, the National Environment Directorate, and the National Directorates of the fisheries, agriculture, tourism, land use planning sectors, and the National Office of Forests and Coastal Zones, in order to harmonize the management and monitoring of land, coastal areas and resources use within the PAs (as defined in the plans developed under sub-output 1.2.3) with the jurisdictions relevant to these sectors and harmonize the management of resources under the jurisdiction of these different institutions.
2. Preliminary consultations on each island by the Legal Specialist, the PC and the NP *Conservateurs* will allow for discussion of resource co-management agreements and promote a common understanding of the resource co-management concept. Based on these consultations, the Legal Specialist will propose a model co-management agreement and will formulate drafts of the agreements, ensuring consistency with national legislation. These drafts will be discussed during a workshop with the National Directors, the PC and the Legal Specialist and a consensus will be reached on the wording in accordance with the legislative provisions in force. The PC and the Legal Specialist will then meet with stakeholders and *Conservateurs* on each island to explain the content of the agreements and their implementation.

**Output 1.3**An investment framework and financing strategy is developed and implemented to support the long-term management of the PA system

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| The financial situation of the PA system is still very precarious and constitutes the main challenge for the future of the Comoros PA system. The legal framework is not sufficiently developed to ensure the generation of revenues, such as taxes, entrance fees and other environmental taxes. National parks have identified and assessed their financial needs to ensure their effective management but have not developed business plans and no consolidated business plan for the PA system has been developed. Tourism related to PAs, which should contribute to generating funding in PAs, is only beginning to develop and is not contributing to PA funding. The process of creating an environmental fund for the Comoros (the FEC), which began several years ago, encountered a succession of dead ends, in particular the decision of the Madagascan FAPBM to refuse to merge the two funds for the management of an amount earmarked for the Comoros PAs, after feasibility studies and negotiations that lasted more than two years, and the partial and then total withdrawal of the allocation of 1.5 million euros pledged by a donor. |

1. The leadership of the Government authorities is essential for the success of initiatives planned as part of this product. The incumbent Minister of Environment, Fisheries, Agriculture, Tourism and Handicraft, Mr Houmed M’Saidie, confirmed his commitment to all the components of the project, and in particular for the implementation of the interventions planned under Product 1.3 for the operationalization and mobilization of financial resources for the Comoros Environment Fund (see letter in Annex 24).
2. To guide and support the Government through the steps required for the actual mobilization of resources for the FEC, the project has provided significant resources to recruit an international consultant expert in conservation financing, as well as 3 national experts in finance and to allow for international and regional travel (COVID permitting) to conclude agreements with donors on the basis of previously concluded negotiations. These experts will join the FEC Board, the FEC Director, and the Chief of staff of the Ministry of Finance to set up a Task Force that will implement the activities planned to develop and implement an investment framework and financing strategy to support the management of the PA network in the long term.

*1.3.1 Enabling Legislative Framework for FEC and Resource Mobilization*

1. Law on Foundations. The project will support the finalization and submission of the Law on Foundations to the Council of Ministers for approval, transmission to the Parliament for adoption upon the favorable opinion of the Finance Committee, registration with the Ministry of Interior, preparation of the decree of recognition of public utility by the PCU Legal Specialist, submission to the Council of Ministers and advocacy for approval.
2. Foundation establishment endowment. Securing an endowment from founding institutions, such as the Government and UNDP, is required to enable the establishment of the Foundation and advocacy will be provided by the PC and the FEC Director. Once the Foundation Law is passed and the core endowment is granted, the FEC Director and the Legal Specialist can initiate the process of transitioning the FEC into a foundation. The PCU Legal Specialist will support the FEC Director in revising the FEC's bylaws as a foundation, including selection criteria for the FEC's Board of Directors as a foundation, to be incorporated into the Foundation's bylaws.

*1.3.2 FEC Strategic Planning, including a business plan for the protected areas system*

1. The international conservation finance expert will support the FEC's strategic planning to diversify, multiply and increase the realistic sources of funding, composed of investments (donations) and recurrent revenues, in order to avoid relying on a single source or mechanism of funding. This planning will build on and complement the resource mobilization strategy developed under PIMS 4950, based on the review of the various options included in Output 1.3 and in which the Government has confirmed its interest. The *Task Force* will conduct a detailed analysis of the feasibility and resource mobilization potential of each of the identified options.
2. The FEC's mission and strategic priorities will be subject to a broadly participatory validation. The FEC strategic plan will be drafted by the FEC Director with the support of the international consultant. This strategic plan will be presented during a workshop gathering the FEC Director and Board of Directors, the Board of Directors of the PA Management Agency, the Director of the DGEF, a representative of the Ministry of Finance, the six NPs' *Conservateurs* and interested institutions, including development partners.
3. Development of a business plan for the PA system. This planning will be based on a consolidated business plan for the PA system (designed for a 15-year horizon with annual updates. The development of the plan (and its annual revision) will be carried out by the PC, supported locally by the NP *Conservateurs* and remotely by the international consultant, based on the PA management plans which include action plans with budgets.

*1.3.3 Strategy to mobilize financial resources from international donors and through the establishment of new financial mechanisms for conservation*

1. Under PIMS 4950, UNDP funded the development of a Resource Mobilization Strategy that identified potential sources of funding and partners to be approached. The feasibility of these options, including an analysis of the partners' programs and priorities, must be assessed before the Government's interest in promoting new financial mechanisms can be confirmed. The assessment of the feasibility of the various options remains the responsibility of the FEC Director and the members of the Task Force, including the international conservation finance expert. The conservation finance expert will oversee the assessment of the feasibility of the options and provide advice on the steps to be taken, the chances of success and the amounts that can be mobilized through the identified steps. The Project Coordinator, the PCU Legal Specialist and the National Park *Conservateur*s will also be actively involved in this work.

*a)**External resources*

1. External resource mobilization options to be evaluated include:

* Assessment of the feasibility of a "debt-for-nature swap" process: the bilateral public debt was 41.9 billion Comorian francs at the end of June 2020 (US$99,318,587), of which 58.6% was owed to Saudi Arabia and 38.7% to India.
* Solicitations conducted by the FEC Director in close collaboration with the task force and under the authority of the Government, with relevant donors and foundations, including Arab partner States of Comoros with local representation, the Islamic Development Bank, the African Development Bank, the European Union (local representation), the Indian Ocean Commission (local representation), the German Financial Cooperation (KfW), the Islamic Bank of Abu Dhabi, AUSAID (embassy in Mauritius), the LGT Venture Philantropy Foundation, the Packard Foundation, the MacArthur Foundation, the Moore Foundation, the Global Fund for Coral Reefs, and other development partners of the Comoros, including Japan (representation in Madagascar), China (local representation), the United States (representation in Madagascar), and the Albert II of Monaco Foundation. The solicitation process will be preceded by documentation of the donors' programs and priorities, their relationship with Comoros and their preferred areas of support. The solicitation process will be supported by documents promoting the Comoros PA network.

*b)**Internal resources*

1. Resources that are internal or can be mobilized at the national level on a recurrent basis include government contributions, taxes and fees, PA user fees, and payments for ecosystem services (PES).
2. Government contributions Advocacy will be conducted by the PC and the PCU Legal Specialist with MAFETH and the Ministry of Finance to ensure the allocation of resources from the Government of the Union of the Comoros dedicated to the protected area system in accordance with the Government's commitment in the NP creation decrees which provide for the allocation of a monthly subsidy of 8 million KMF (approximately $20,000).
3. Taxes and Fees A national tax specialist will be hired to guide and advise the FEC Director and the task force in assessing the feasibility and cost-effectiveness of the various options. The feasibility assessment will include, but not be limited to, an assessment of the interest of the relevant authorities, the estimated costs of implementation and management, and the estimated potential revenues. The tax options being considered are:

* Green taxes imposed on international arrivals and overnight stays in tourist accommodations (tax rate scenarios based on arrivals and overnight stays);
* Fees for commercial water use in springs within National Park watersheds (an alternative to implementing a payment for ecosystem services system - fees for commercial water use);
* Fees for the operation of towers installed within the PAs by the telecommunication companies Comores Telecom and Telma[[31]](#footnote-32);
* Fees to be paid by the National Electricity Company as Biodiversity offset within Karthala NP related to the planned development of infrastructure and the construction of a road for geothermal electricity production (to compensate for a possible permanent loss of vegetation and habitat fragmentation within the forest areas posing a constraint to the movement of species);
* Fees for the (ongoing) commercial exploitation of water (SONEDE and bottling companies) in springs fed within the PAs' watersheds.

1. Harmonized Fees for the use of PAs across the PAs network. Such fees may include access fees, diving fees, guiding fees, transport fees, private concessions. It is difficult to envisage the levying of access fees in a context where villages are integrated into parks, which implies high traffic and several access routes. The FEC Director will work closely with the PC and the NP *Conservateurs,* and will benefit from the advice of the conservation finance expert, to explore the feasibility of these different types of fees, the procedures of collection (by whom, for what, on what tariff basis) and to define the rules of income sharing between the service providers, the local communities, the concerned protected areas, and the FEC.
2. The imposition of PA user fees and their management should be harmonized between villages within the same PA and across the network to ensure equitable sharing of PA benefits and to avoid inequalities (e.g. in terms of tourist attractions and promotion) being the source of inter-community disputes. Once defined, the procedures for the collection, management and use of PA user fees will be integrated into the Manuals of procedure of each park.
3. The feasibility study will be based on the documentation of the fees currently charged by members of the local communities providing services, procedures of collection and revenue sharing. The results of the study will include a proposal for harmonizing costs and revenue sharing modalities and rules with the PA accounts and will consider the need for solidarity with villages that have fewer tourism assets. The feasibility study will be carried out by the community mobilisers with the support of the *Conservateurs* and under the supervision of the PC, according to the following steps i) documentation of the current situation in each of the national parks, ii) sharing of documents to identify differences and commonalities between villages and between parks, iii) sharing of the analysis of the advantages and disadvantages of the different options in online workshops, iv) formulation and clarification of proposals to be discussed and consolidated in workshops on each island with representatives of village committees and co-management committees as well as PNC Agency staff, to move towards a consensus in each island, and eventually propose a harmonized solution at the network level. The Gender and PWD Officer will ensure that all reflections take into account gender specificity and the share of benefits that women derive through the imposition of fees at the local community level.
4. Payments for Ecosystem Services (PES) A regional consultant with expertise in environmental finance will be recruited to support the Ministry (MAFETH) and the PNC Agency in assessing the feasibility of implementing PES related to carbon or water, and advise them on the steps required to implement this mechanism, including:

* The assessment of the possibility of getting access to green carbon markets based on the estimated carbon sequestration capacity of natural forests (Output 2.4) in order to generate recurrent revenues for the FEC;
* The assessment of the possibility of getting access to blue carbon markets through the Global Fund for Coral Reefs based on the estimated carbon sequestration capacity of mangroves, coral reefs and seagrass beds (Output 2.4) with a view to generating recurrent revenues for the FEC;
* The assessment of the possibility of implementing a PES scheme linked to commercial water exploitation in springs within PA catchments (alternative option to commercial water exploitation fees). A payment for ecosystem services scheme must meet the following criteria: (i) voluntary, (ii) conditional transactions between (iii) at least one seller and (iv) one buyer (v) on a well-defined Ecosystem Service, or land use that can secure that service.

*1.3.4 Operationalization of the FEC and fundraising*

1. The operationalization of the FEC will be conducted by the Conservation Finance Officer recruited as part of the PCU with the support of the international conservation finance expert, and in close collaboration with the FEC Board of Directors. This will be achieved through the implementation of the revised FEC strategic plan and teamwork with relevant members of government, based on a detailed work plan for the FEC Board of Directors with a timetable, budget, and specifying the responsibilities of all parties involved. This stage will also include the drafting of the Manual of administrative and financial procedures, and its submission for validation.

*1.3.5**Development and implementation of the FEC communication strategy*

1. The development of the FEC's communication strategy will be carried out by the CKM Officer, in collaboration with the FEC Director and Board, and the Gender and PWD Officer, and will include the identification of the target audience and the messages adapted to each audience, including communities and local authorities, government representatives, development partners and potential donors.
2. An advocacy document will be prepared by the CKM Officer, with the collaboration of the FEC Director and the PC, to promote the Comoros protected area network. The content will be adapted according to the purpose of the communication and the target audience of the message. The Gender and PWD Officer will ensure that the communication strategy specifically targets women and PWD for any information that concerns them. In all versions, the document will emphasize:

* the wealth of biodiversity of global and national importance and the landscapes preserved thanks to PAs, the social and economic benefits provided by ecosystem services, but also the issues and challenges specific to Comoros that conservation stakeholders are facing;
* the system put in place to ensure the conservation of this biodiversity through its protection and sustainable management in collaboration with village communities, including the protected area network, the law on the protected area system, the strategy for the protected area network, and the National Agency for Protected Area Management;
* the FEC, its financial and conservation objectives, governance, management (Board and Management Team) and allocation rules.

*1.3.6 Capacity development of the Board of Directors and the FEC Management on resource mobilization approaches and strategies*

1. Capacity development of the FEC Board and Director will be provided by the conservation finance expert during his missions to Comoros, and through sustained distance coaching. Specific training needs for the FEC Director and Board will be identified in the first year of the project following the advice of the expert and may include stand-alone online training and webinars[[32]](#footnote-33), and face-to-face training.
2. The continuous training of the FEC Board and Director will also be achieved through their active participation in support and experience sharing networks with other environmental funds established in Africa, including the Foundation for Protected Areas and Biodiversity of Madagascar (FAPBM), the Foundation for Parks and Reserves of Côte d'Ivoire (FPRCI), the Banc d'Arguin and Coastal and Marine Biodiversity Trust Fund (BACOMAB), and membership of the African Consortium of Environmental Funds[[33]](#footnote-34) and the Conservation Finance Alliance*[[34]](#footnote-35)*.

**Output 1.4** Strengthened participation of institutional partners and the private sector in supporting the national PA system and the implementation of PA development and management plans through the establishment of long-term partnerships

*1.4.1 Long-term partnership agreements between national and international institutions and the PNC Agency*

1. Long-term partnership agreements between national and international institutions and the PNC Agency, based on mutual benefit, will mobilize a network of experts to support the planning and implementation of PA development and management plans. Such agreements have already been signed between the Agency and Dahari (for the monitoring of Livingstone’s fruit bat, sustainable natural resource management and livelihood support to local communities in the Ntringui NP), AIDE (for the monitoring of marine biodiversity and related training for Ecoguards) and Banda Bitsi (namely for mangrove and beach clean-up and ecotourism development), and others that have been established for a single PA, could be revised, when deemed relevant by both parties, to cover all PAs, such as the one with the NGO Maeecha. The identification and development of these agreements will be carried out by the PC, supported locally by the NP *Conservateurs*. Agreements will be developed with the following institutions and NGOs and actors, without necessarily being limited to them, the University of Comoros (UdC), National Centre for Scientific Documentation and Research (CNDRS), National Institute for Research in Agriculture, Fisheries and the Environment (INRAPE), Kelonia, NGOs (Blue Ventures, *Maeecha*, *Plateforme Femmes et Sécurité Alimentaire*, *APG*, *Deux Mains*, *Ulanga* *Ngazidja*, *Comoflora*, *Les Amis de Nyoumbadju*), relevant private sector actors, law enforcement agencies, and regional scientific institutions. Strengthening these institutional partnerships will also increase the capacity to mobilize a wide variety of actors around common issues such as reducing the vulnerability of the country and its population to the risks of a possible pandemic.
2. Such agreements, in the form of a contract or letter of agreement, should include the identification of common objectives, a plan and timetable for intervention, reference to the expected outcomes and indicators identified in the National Parks' Development and Management Plans (PAGs), clear roles and responsibilities, and the budgetary means available. To be successful and sustainable, these partnerships should include these key principles: i) open and regular communication between partners, ii) commonly agreed and clearly formulated objectives of the partnership, iii) mutual understanding of each partner's contributions and expectations of the joint agreement, and iv) equitable and fair sharing of benefits for both parties based on previously negotiated rules to be included in a formal agreement.
3. A preliminary identification of institutional collaboration axes (to be completed in the project) includes the following:

* UdC for training in PA management,
* UdC /Herbier des Comores for the monitoring of plant biodiversity,
* CNDRS for the monitoring of terrestrial fauna and IAS control in terrestrial ecosystems,
* Blue Ventures/Dahari to support the development of marine resource co-management agreements with local communities
* Maeecha to support school-based interventions
* the private sector to support the development of IGAs for local communities,
* the Gendarmerie, Police, National Coast Guard and National Development Army to support surveillance and enforcement activities in PAs.

1. The project will also support the development of agreements with academic and research institutions in the South-Western Indian Ocean for the sharing of knowledge on issues of common interest and the harmonization of conservation efforts for migratory species such as marine turtles and dugongs.
2. The partnership between the protected areas and the GEF Small Grants Program (SGP) should be revised in order to adjust to the new orientations of the national protected areas system and to ensure that the interventions supported are in line with the management and development plans of the new national parks. According to an agreement within the UNDP Country Office program, 80% of the funding for this program should be invested in PAs. However, this contribution must be evaluated, including the identification and project submission process and the composition of the steering committee, in order to renew the partnership between the SGP and the PA management agency so that the projects address the needs and priorities of PAs and villages. The project will support an assessment of the impacts of SGP funding in all PA villages, not limited to villages with more visibility, and will advocate for the integration of the PNC Agency as a member of the steering committee to ensure consideration of the NP development and management plans in the development and selection of community projects.

**Component 2.** **Capacity building to improve co-management of the national PA network at site level**

**Outcome 2** Increased protection of important endemic species and habitats through improved management across the national PA network

**Output 2.1** Protocols for biodiversity monitoring and data collection are developed and implemented, including the operationalization of a national biodiversity database.

*2.1.1 Operational database dedicated to the PA system*

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| An information system for monitoring, analysis, mapping and knowledge dissemination is needed to enable adaptive management of the entire PA network and individual sites. The PIMS 4950 project has strengthened the DGEF GIS office to support the Comoros PAs, including field equipment, computer hardware and software needed to collect, input and process geo-referenced data, and report results. The GIS office has an Ebee drone that can accurately determine the coverage of different ecosystems, but its usefulness is limited, namely in forest areas due to navigation constraints, and the fact that without specific equipment, its use is limited to making photography and very short films. Each national park is equipped with the necessary computer hardware and software for data entry. Ecoguards specialized in GIS have been trained in GIS and data integration and are able to produce habitat maps. Data are collected as part of the ecological monitoring program conducted by Ecoguards under the supervision of the *Conservateur* of each national park or by partners. However, the data has yet to be gathered in a unified and coherent database, collected in all national parks, and secured within a permanent structure. Data are currently entered in independent files and monitoring data on corals, seagrass and sea turtles are recorded in regional databases. |

1. The project will recruit an international consultant with regional experience and expertise in the design and management of data systems to support the design of an information system, develop the architecture of the database and ensure its operationalization with the support of the GIS Officer of the Project Coordination Unit (PCU), formulate recommendations on the responsibility for its management and on the financing of its operation and updating to ensure its sustainability, and provide the necessary training of the staff of the PAs’ Agency for its use.
2. The database should allow geo-referenced data obtained from ecological monitoring in each park to be recorded locally (in each park), analyzed and mapped, and integrated at the network level, in order to provide information to stakeholders to assess the effectiveness of PA management and improve planning at the individual PA and network levels. A first mission will allow to meet the staff of the PNC Agency and other institutions that have data, and better understand the needs and architecture to be developed. The regional consultant will meet with partners from other national institutions to assess the interest and feasibility of integrating their environmental and biodiversity data into the database. Institutions with databases relevant to PA management include *l'Herbier des Comores* (University of Comoros), CNDRS, COSEP (climate hazard data), AIDE (which feeds the COREMO database on coral reefs), the Directorate of Meteorology, the Directorate of Land Management, and Dahari in Ndzuani. The Gender and PWD Officer will ensure that all stakeholder information is disaggregated by gender and PWD. The development of the database architecture and the preparation of the trainings will be completed remotely with the assistance of the GIS Officer. A second mission will complete the operationalization of the database, present its structure during a workshop in Moroni, and train the staff of the PNC Agency, particularly the Ecoguards and *Conservateurs*, in its use.
3. The **information system** to support of the management of PAs will include i) links to existing databases (Web, GIS, maps, etc.), ii) updated environmental statistics, iii) databases to monitor system-wide indicators of biodiversity and ecosystem services in national parks, including those identified in the PA Management Effectiveness Tool (METT) for each PA; iv) geo-referenced databases and maps on key issues for the planning process, including maps of the protected area boundaries, areas vulnerable to climate and other environmental hazards (volcanism, floods, sea level rise, etc.), forest degradation due to various pressures, and other critical issues.
4. This system will provide information to guide the work in components 2 (priority areas for restoration) and 3 (areas for sustainable resource use and for ecotourism activities) and will also serve to collect information required to monitoring and evaluation of project implementation.
5. The GIS-PAs database will include data from the following categories: administrative subdivisions (communes and prefectures), villages and village lands, road infrastructure and main trails, the area of main ecosystems, distribution and abundance of biodiversity, delimitation of PAs, land status (public, private and community domains) and localization of land disputes, localization of main pressures and threats on biodiversity, cultural, historical and ecotourism sites. New categories of data will be added as needed for PA management. The GIS database will be updated on an ongoing basis with ecological monitoring and other data from other categories to support the assessment and adaptive management planning process for PAs - both at the site and national levels.
6. Once the database is operational, the project will support (i) the gathering of data that have been saved in regional databases, and (ii) negotiations with partners involved in PAs to share raw data (rather than analyzed and published data) within the database. Partnership agreements and authorizations to access PAs given by the DGEF with the aim to carry out interventions will have to include conditions relating to the sharing of collected data.
7. The creation of this database will include a protocol specifying the conditions of access and use to ensure that strategic or sensitive data is protected and shared with appropriate users. Existing data on individual PA network sites will also be integrated into appropriate global and regional databases to make them accessible to all types of users.

*2.1.2**Protocols for long-term ecological monitoring to support adaptative management of PAs at individual sites and across the network*

*a. Development of the monitoring program and tools*

1. Indicators. In addition to the indicators identified in the strategic results framework for monitoring progress towards project objectives and outcomes and the indicators identified in the PA Management Effectiveness Tool (METT), the Monitoring manager will consult the PC, the C*onservateurs* and the Community Mobilizers to identify indicators for long-term monitoring of biodiversity, ecosystem services and the major threats affecting them. The indicators may be specific to each PA, depending on their specific conservation objectives, or be common to the entire network. The monitoring program will also include socio-economic indicators and perception indicators for the local communities to evaluate the impact of the PAs on their quality of life.
2. Practical tools for identifying the main species of fauna and flora. Monographs have been published on the fauna and flora of Comoros and are excellent references, including the Atlas of Amphibians and Terrestrial Reptiles (2019), the Atlas of Breeding Birds of Grande Comore, Moheli and Anjouan (2008), the Flora of Madagascar and Comoros (Vascular Plants - volumes published from 1936 to 1990), the Entomological Fauna of the Comoros Archipelago (1978). Identification charts have been developed for quick identification of the main bird and reptile species. Databases include the birds of the Comoros (e.g. Avibase, a computer system on all bird species of the world, which includes records of 168 species in the Comoros[[35]](#footnote-36) including a photographic database and songs for each species, or PlantNet which can be used with a cell phone). The project will recruit a national consultant specializing in biology to identify existing tools in collaboration with CNDRS and UdC and support the development of complementary field guides (from existing literature) for endemic trees and fauna, corals, major fish species, seagrasses, and mangrove species. These guides may take the form of booklets or laminated plates for use in the field to facilitate the identification of biodiversity in PAs, for participants in the monitoring program, and also for visitors to PAs who may purchase them at PA offices. The field guides will be printed locally.
3. Monitoring program and protocols. The project will support the development of an integrated monitoring program for the PA complexes including indicators, appropriate methodologies for measuring each indicator (what, how, where, how often, by whom, and recording), and the establishment of permanent stations, transects, and routes for monitoring. Protocols for monitoring coral reefs, mangroves, seagrass beds, Livingstone's fruit bats (Mwali and Ndzuani), Otus, mongoz lemur (Ndzuani), and marine turtles are already available and in use. The methodology has already been identified to measure the PA management effectiveness indicators identified in the Management and Development Plans (PAGs) and the Protected Area Management Effectiveness Tool (METT[[36]](#footnote-37)), and the indicators of the project's Strategic Results Framework. The biologist will work with the *Conservateurs* to design protocols for monitoring whales (which are currently subject to opportunistic observations), birds, reptiles and amphibians, and fish. Fish surveys will include fishery statistics, baseline surveys, and the development of a monitoring system integrated with ecological monitoring, in the different habitats: reefs, sea grass beds, and demersal species. Regular ecological monitoring inventories will include indicator species of the state of the forest: the Karthala flycatcher and the Comoros pigeon. A specific inventory targeting dugongs will be carried out at the scale of the three islands with the help of a drone to consolidate or invalidate the anecdotal information on their presence. For whales, a team of more than 20 fishers in each village of Coelacanth NP has been trained to approach and photo-identify whales.
4. The integrated program will be consolidated by the Monitoring and Evaluation Officer of the PCU on the basis of the biologist’s work with the support of Park *Conservateurs*, scientists within the partner institutions (UdC, CNDRS, INRAPE) and NGOs/national associations involved in biodiversity monitoring (AIDE, Dahari, Comoflora). The project will take into account existing ecological monitoring programs to complement and standardize them across the protected area network to ensure adequate coverage of biodiversity and pressure factors.
5. Monitoring the impacts of tourism and the use of valued natural resources in value chains. With the support of the *Conservateurs* and the PC, sensitive or vulnerable resources will be identified for each NP (including cultural assets and biodiversity) and closely monitored in areas open to tourism, as part of the NP monitoring plan. Monitoring of the impacts of tourism on resources will be carried out by Ecoguards based on simple indicators such as the presence of broken corals, garbage on tourist beaches and in tourist circuits. The results will be disseminated to the entities involved in the management of the system and can be used to regulate access to NPs and specific sites within the PAs, or to reinforce the application or modify the regulations concerning the activities and behavior of tourists. Indicators of the condition of the valued resources in the value chains will be identified with the support of the biologist in charge of evaluating the capacity of the resources to support exploitation and to provide training on sustainable harvesting methods. Monitoring the impacts of the use of resources that support value chains is an important aspect of promoting the empowerment of beneficiaries involved in value chains. This monitoring will be carried out by the local communities with the support of the Ecoguards on the basis of simple indicators which will have been identified by the plant biologist or the fishery biologist and will provide the data required to modulate the use of resources in a given site or, if necessary, to put an end to it.

*b. Implementation of the long-term ecological monitoring system*

1. Collaborative agreements and coordination for ecological monitoring. A consultation platform between the PNC Agency and institutional partners will be established to coordinate the necessary knowledge to improve PAs management as well as the interests and expertise of researchers and students from academic and research institutions. Effective partnerships for resource monitoring and research will be established on the basis of mutually beneficial agreements. These partnership agreements, like any authorization for research within the PA, should include specific provisions for sharing the knowledge and data generated in the process. When possible, monitoring activities will be combined with regular monitoring routines conducted by PA Ecoguards. The GEF will finance regular ecological monitoring of the sites through this project, until such time as the necessary funding becomes available, including through the establishment of partnerships to provide these services. Collaboration and coordination agreements for ecological monitoring (UdC, CNDRS, INRAPE, environmental NGOs) will be integrated into the institutional partnership agreements concluded under the output 1.4.
2. Training. Practical training on the execution of ecological and biodiversity monitoring protocols, including monitoring of threats to biodiversity, will be offered *in situ* to Ecoguards by experts from UdC, CNDRS and environmental NGOs in their own fields of expertise, including for marine biodiversity, a 4-day training for 12 Ecoguards (4 per park for Coelacanthe, Mitsamiouli-Ndroudé and Shissiwani parks) by AIDE, and for terrestrial biodiversity, the training of 12 Ecoguards (4 per park for Mont Ntringui, Karthala, Mohéli parks) by Dahari. Training for *Conservateurs* and Ecoguards includes training in the use of the database under the output 2.1.1. Also, all security personnel who will be engaged in the project, namely the Ecoguards engaged in monitoring (Activity 2.1.2), will be trained on and commit to a Code of Conduct prepared for the project and reflecting SES requirements.
3. Permanent sampling stations. Except for the monitoring of reefs and seagrass beds, for which permanent stations have been set up for several years, C*onservateurs* supported by Ecoguards will determine the location of permanent stations, transects and scientific plots using GPS coordinates to monitor mangroves, primary and secondary forests, areas restored by assisted natural regeneration (ANR) and reforestation, plots restored by invasive alien species (IAS) control, and any other inventory circuit, in order to monitor the effectiveness of conservation and restoration interventions. Numbered plaques will be installed to serve as markers and facilitate the positioning of field survey circuits in the terrestrial environment. Such positioning markers are already installed in the marine environment.
4. Reference values. From the start of the project, under the supervision of the Monitoring and Evaluation Officer with the collaboration of the *Conservateurs*, the Ecoguards will be responsible for determining the missing baseline values for the indicators of the project's strategic results framework.
5. Data security. Data will be recorded in the PA database by the PA management teams and integrated at the network level, to be used periodically to calculate statistics, produce graphs and maps for individual PAs and at the network level, in order to monitor and evaluate the effectiveness of management measures in achieving PA and network level conservation objectives. The database will be housed at the DGEF initially, and eventually transferred to the MAFETH GIS department when it is set up.

*2.1.3**Updating, dissemination and sharing of data on PAs and biodiversity in Comoros with global and regional databases*

1. During the course of the project, the GIS Officer will be responsible for updating, disseminating and sharing data on PAs and biodiversity in Comoros with the IUCN World Commission on Protected Areas database, the Global Biodiversity Information Facility (GBIF), the East African Regional Observatory for Biodiversity and Protected Areas, established at the East African Community Secretariat (Tanzania) with the support of the BIOPAMA program, to provide decision support for protected areas and biodiversity management, and any other databases related to international environmental conventions and global organizations such as the Alliance for Zero Extinction and Birdlife International.

**Output 2.2** Management tools (including management plans for key terrestrial and marine species used) are drafted, approved and implemented in the PAs

*2.2.1 Conservation Action Plans evaluated, revised and implemented*

1. Action plans were developed, and their implementation initiated for the Livingstone fruit bat and marine turtles under the project "Biodiversity Conservation and Sustainable Development in the Comoros" UNDP/GEF COI/97/G32/A/1G/99 implemented from 1998 to 2002. Monitoring protocols and agreements were subsequently adapted according to the actors involved, particularly for fruit bats in Mwali and Ndzuani (Brent Sewall with Action Comores, and Dahari). Monitoring of marine turtles was conducted primarily in Moheli National Park. The conservation approach for the fruit bats targets the preservation of roosting sites (roosting trees) through agreements with farmers not to cut trees. However, logging is still occurring in Ouallah (on Mwali Island), which has resulted in the displacement of a few roosting sites and a reduction in the number of suitable roosting trees. The defection of farmers is linked to unfulfilled promises of support for the development of IGAs. It is therefore essential to review these action plans, their implementation and their results based on time-series data analysis, in order to assess and adapt conservation strategies and integrate them into the management plans of the parks where these species occur. The evaluation and formulation of recommendations to be integrated into the PA management plans must be participatory and include the actors involved in the implementation of the conservation action plans since their development, i.e., local communities, the NGOs Action Comores and Dahari, and the PNC Agency staff.
2. The project will recruit a national consultant specialized in biology to carry out a compilation of knowledge and population trends for Livingstone's fruit bats and marine turtles. The compilation will be based on existing monitoring data available from partners such as Dahari, Action Comores and the Moheli National Park, as well as on data published in scientific publications, thesis and dissertations. A synthesis will be written to highlight the interventions carried out and their results (i.e. the evolution of the numbers according to the inventories) and distributed to the concerned parties to serve as a basis for discussion for virtual workshops on each species. These workshops will make it possible to formulate recommendations and to propose new orientations and conservation measures, which will then be integrated into the parks’ management plans by the C*onservateurs*.
3. The evaluation of the marine turtle conservation action plan will allow for the integration of appropriate conservation measures into the marine parks' Development and Management Plans, but also to integrate research efforts at the regional level for these species. A virtual workshop involving stakeholders at the national level, the project coordinator, marine park *Conservateurs,* community associations involved in turtle conservation, and representatives of the Kelonia Research Center (Reunion Island) will allow for exchanges on ongoing research activities on turtle populations in Comorian waters in order to identify avenues of collaboration so that all Comorian marine protected areas can actively integrate research and conservation efforts on regional scale.
4. Based on the results of the assessment of the presence of dugongs in the marine protected area network (output 2.1. 2), the marine park C*onservateurs,* under the coordination of the PC, will contact institutions and projects involved in dugong conservation in the Western Indian Ocean, including the Marine Nature Park of Mayotte, Madagascar[[37]](#footnote-38), the Western Indian Ocean Marine Science Association (WIOMSA[[38]](#footnote-39)) project on dugong conservation to seek partners for dugong studies[[39]](#footnote-40), assist in the identification of knowledge gaps to ensure the conservation of this species, and integrate dugong conservation efforts on a regional scale. Resources are budgeted for two people to attend two regional turtle and dugong meetings.

*2.2.2 Plans for the sustainable use of species targeted for the development of value chains*

1. The project will support the development of sustainable management plans for marine and terrestrial species whose use will support the development of nature-based value chains under Component 3. The development and implementation of these plans is of greatest importance to ensure the sustainability of the resources in the natural environment and consequently of the livelihoods based on their use. It will involve relevant stakeholders, including resource users, the Directorate of Fisheries, the Directorate of Environment and Forests, the Office of Forests and Coastal Zones, the C*onservateurs,* Community Mobilizers and Ecoguards of the PNC Agency, and the PCU Monitoring-Evaluation/Safeguards Officer. Specific management plans will be integrated into PA development and management plans and ecological monitoring protocols. The development of the sustainable use plans will follow the guidelines formulated in the FairWild Foundation[[40]](#footnote-41) documents and will be based on the following steps:

i) The identification of harvesting sites will be entrusted to national consultants, including a biologist specialized in flora and a fisheries biologist. This work will be carried out in parallel with activities planned under Output 3.1.1 (feasibility studies for livelihood options) based on studies of species distribution within village lands and PA ecosystems and studies to assess sustainable harvest levels. In each park, potential sites and interested communities will have been previously identified with the support of village co-management committees and Community Mobilizers under Component 3, based on needs defined by private sector partners. The identified harvesting sites will be delimited, georeferenced and mapped by Ecoguards with GIS expertise.

ii) Yield and regeneration studies will serve to understand how much of the target resource (fish) or desired plant part is produced under normal conditions, the time required for harvested parts to regenerate, for seedlings to replace harvested individual plants and size-classes, or for new size classes to replace catches, and how productivity and regeneration vary across the collection area. The studies will document how much of the target species can be harvested or fished each season without damaging the long-term sustainability of the target species. These assessments will involve some field work in the first year, in addition to a desk review of the current scientific understanding of the species’ biology and regeneration capacity, and will take into account potential climate change impacts. For low-risk plants, the work involved should not be extensive.

iii) The support to the local communities will include training on sustainable harvesting in the natural environment (harvesting techniques, quantities, frequency, period determined on the basis of the studies carried out previously) according to FairWild[[41]](#footnote-42) standards and their participation in the monitoring of the quantities harvested, the evaluation of the condition of the exploited populations, and decision-making regarding any required adjustment to harvest or catch levels. These trainings will be developed and provided on site by the biologists specialized in flora and fishing who will ensure a follow-up of these trainings after 6 months to ensure the good understanding of the shared concepts. The Ecoguards and Mobilizers of the relevant parks will also participate in these trainings in order to ensure an adequate supervision of the local communities on a continuous basis.

iv) Assessment of harvest or capture impacts. The implementation of a monitoring of the status of the populations or stands used will allow to evaluate the impact of the harvests or captures on the condition of the species used and to adjust the harvesting levels or sites. The monitoring will be carried out by resource users supervised by Ecoguards (who will have received training) using data collection forms (prepared by biologists) following a data collection schedule.

v) Integration of species management plans into park development and management plans and ecological monitoring protocols will be ensured by Park *Conservateurs*.

vi) Scoped environmental and social impact assessments will be conducted for the five management plans for the major terrestrial and marine species or groups of species in the PAs to assess all risks identified in the SESP (including gender aspects) and any additional associated risks identified during the assessment. These studies will be conducted by the M&E Officer with support from the management staff of each park. The Gender and PWD Officer will ensure that the social impact assessment includes impacts specifically affecting women and PWD.

*2.2.3 Restoration of terrestrial and coastal ecosystems*

1. Restoration of terrestrial and coastal ecosystems will be carried out in accordance with optimal land use plans (Outcome 1.2.3) to restore the sustainability of ecosystem goods and services provided by PAs and thus increase the country's resilience to climate-related disasters and post-COVID recovery.
2. The project will contract the task of developing protocols for terrestrial ecosystem restoration to UdC under a service contract. Ecosystem restoration will be planned on the basis of the inventory of the forest under Output 2.4.1 The objective of the restoration, the intervention approach and the criteria for evaluating successful restoration will be identified in partnership with the PA Management Agency staff and will have to be consistent with the conservation and management objectives identified in the relevant Development and Management Plans.
3. Restoration planning will consider areas sensitive to IAS invasion, habitats disturbed by trail opening, wastelands, and stream banks. Also, sea level rise and coastal erosion are among the greatest threats affecting huge areas and resulting in coastline retreat and loss of critical habitat for marine turtles. Mitigating this risk requires the preservation of coral reefs, seagrass beds, and mangroves and the restoration of beach top vegetation.
4. A choice of species for reforestation or enrichment of habitats under natural regeneration will be proposed according to the environmental parameters of the sites, favoring species resilient to the climate, and taking care to avoid any IAS. Seedlings should come from the same region in order to favor their adaptation to local conditions. The restoration plan will identify the resources needed and available and will include a monitoring/evaluation plan.
5. To the extent possible, the restoration of forest and coastal ecosystems (mangroves) will be carried out by assisted natural regeneration, and by reforestation in more degraded forest ecosystems, consistent with the planning carried out under Output 1.2.3, in order to restore the sustainability of the ecosystem goods and services provided by PAs. Assisted natural regeneration (ANR) will be preferred over other approaches to restore forest habitats as it has been shown that ANR significantly reduces the cost of restoration. Spontaneous and assisted natural regeneration in tropical regions are more effective than tree planting at achieving the recovery of biodiversity and forest structure and could help save 50 to 95% of the cost of forest restoration. Furthermore, it has been shown that natural regeneration can restore forest cover on its own within a few years. Adaptability to changing climatic conditions will be taken into account to guide the selection of native species and seed sources should enrichment planting be needed to enhance the diversity of seedlings.

b) The restoration plan will be implemented, and its effectiveness evaluated by the PA Management Agency's field teams, including Ecoguards, under the coordination of each of the NP *Conservateurs.* The project will provide the necessary small equipment and materials, including fencing where required to control pressure factors for areas restored by assisted natural regeneration, seedlings of native species, and protection for seedlings. The implementation of the plans will include close monitoring of the restoration sites based on indicators to assess the effectiveness of the interventions and to intervene quickly to adjust the restoration.

*2.2.4 Invasive Alien Species Management-Pilot interventions*

1. Biological invasions are the second leading cause of biodiversity loss worldwide and have particularly significant impacts in SIDS. Although the issue has been the subject of non-exhaustive studies and inventories for the past 20 years in Comoros, the country has not yet developed a national strategy and action plan, and the capacity to plan and implement control interventions still needs to be strengthened. Control of some invasive alien plant species such as the Chinese Guava (*Psidium cattleianum*) is often achieved by harvesting them for charcoal. However, without any control or treatment of the stumps, this logging encourages regrowth and exacerbates the problem. The project will build on the IAS inventories that were recently conducted as part of the Invaz'Iles project to plan and conduct pilot interventions in priority sites within the PAs' natural forests. The project's pilot actions will target terrestrial plant IAS since these are the types of IAS for which baseline knowledge is available. Monitoring in the pilot intervention plots and in control plots and evaluation of effectiveness and costs (financial and human resources) will help inform the formulation of a national action plan.
2. Pilot operations to control invasive alien species. The project's contribution will be to recruit an international consultant with expertise in IAS management in the southwest Indian Ocean to raise awareness of institutions in charge of PAs (National Parks Agency) and forests (DGEF and Office of Forests and Coastal Areas), institutions involved in IAS management, including CNDRS and UdC, and environmental NGOs, including Dahari and Comoflora, to the issues of IAS management, restoration and control, and to develop their capacities to plan and implement IAS control interventions on the ground and to monitor and evaluate them. Project support will include training in the identification of invasive alien fauna and flora species using educational materials and direct field observation.
3. The consultant will provide hands-on training to the Ecoguards on the various IAS control techniques and specifically on the use of herbicides in combination with IAS cutting. The expert will provide instructions on how the chemical can be used, to control which IAS target, and the protocol and safety equipment required. Team leaders will be designated to oversee field operations including the application of this technique and appropriate protective equipment, masks and gloves, will be provided and their routine use monitored. Before recommending the use of any herbicide, the expert will have to ensure that the chemical is classified for use in Comoros, in accordance with the Comoros Plant Protection Law (Law N°06-010/AU of 2 December 2006 on plant- protection in Comoros).
4. The training will be supported by practical guides adapted to the situation of Comoros and translated into French, based on existing guides that have been developed for countries in the region whose climate, ecosystems and IAS are comparable to those of Comoros.
5. Planning for pilot IAS control operations will include the selection of priority species (IAS) and sites for Karthala, Moheli and Mont Ntringui National Parks, based on the inventory and identification of priority areas for invasive alien species control under Output 1.2.3, and targeting invasive alien species with a high level of invasibility (5) as defined by the Invaz’lles project and severely affected patches[[42]](#footnote-43) within the forest ecosystem. Once these pilot sites have been properly defined, they will be subject to a social and environmental review process to determine any additional assessment and management measures that could be warranted, as required by the project’s social and environmental management framework.

*2.2.5 Action plans to address deforestation and removal of beach material implemented, monitored and evaluated*

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| The marketing of illegally cut timber in Comorian forests involves the participation of several actors who constitute a real value chain including loggers, transporters, local authorities, retailers and buyers. The cut wood is sawn on site and then transported with the help of family members or transporters to the point of sale in the capital. Sometimes the wood is cut on demand and delivered directly to the buyer or delivered to retailers who sell the local wood conspicuously in stalls adjacent to those selling imported wood. Comoros wood is a high-density, high-quality forest wood that is easily differentiated from softwood, which is imported mainly from Madagascar and is less suitable as timber.  The law[[43]](#footnote-44) prohibits the transport, sale, and purchase of timber from the primary forests of the Comoros, which are concentrated within the PAs. Loggers are well aware of the illegality of their activity, as they often operate at night, in low-exposure areas, and flee when they approach people who might witness their activities. It is less certain, however, that other actors in the chain are also aware of the illegality of transporting and selling timber from PAs. When buying illegal timber, buyers create profitable markets for illegal loggers and undermine efforts to enforce environmental legislation in Comoros. |

1. Information and raising awareness on the provisions of the PA law and the Framework Law on the Environment concerning the prohibitions of wood cutting in virgin and secondary forests of the PAs and the collection of sand from beaches. The CKM Officer will organize and participate in an intensive awareness campaign, spread over a period of one year, targeting all actors involved in (i) illegal logging of timber from PAs, including loggers, transporters, local authorities, retailers, and buyers, and (ii) sand collection, including collectors (by truck) and buyers. The campaign may include strong messages about the harmful effects of illegal logging and beach sand collection and their consequences to be aired on national radio and television (as part of an annual agreement with the national broadcaster), as well as in print media. These messages will be relayed to local communities by Ecoguards.
2. According to the principle of collaborative management, surveillance is first and foremost a matter of self-regulation mechanisms within communities, in accordance with the rules set out in the co-management agreements that have been drawn up with their participation. In this regard, the main role of the Ecoguards will be to inform and recall the zoning of PAs and the rules that apply to them to members of local communities and to give warnings to offenders. The surveillance program will be adjusted as needed to focus on areas where more serious threats to biodiversity will be reported. Clear guidelines and procedures for enforcing regulations will be identified and communicated to all stakeholders involved in surveillance and enforcement of regulations for all PAs. These guidelines and procedures will include stringent rules on the violation of human rights to prevent any community member, ecoguard or police directly or indirectly involved in surveillance activities under the project from being implicated in a case of violence against vulnerable local populations. All security personnel who will be engaged in the project, namely the Ecoguards and police officers, will be trained on and commit to a Code of Conduct prepared for the project and reflecting UNDP’s Social and Environmental Standards requirements. The Code of Conduct will be prepared by the M&E and Safeguards Officer of the Project Coordination Unit (PCU). All cases of illegal actions and/or derogations from the rules of the PA will be communicated immediately - insofar as the safety of community members, Ecoguards or police is not threatened - noted and recorded. Local community members will be invited to participate in these tours on a voluntary basis. In addition, training will be provided to ensure the security of Ecoguards and of all actors involved in surveillance and enforcement in the face of potential retaliation from illicit resource users (under sub-output 1.1.3).
3. In collaboration with the Director of the DGEF, the PC, the PCU Legal Specialist and the NP *Conservateurs*, the project will support the organization of workshop on each island to debate the issues of bans on logging and removal of shoreline material and related legislative provisions with local authorities, prefectures, communes and the Domain Department. Each of these workshops will lead to the signing of minutes attesting to the presence of the participants and their commitment to the PA Management Agency and the Government to support the application of the provisions of the law.
4. As a result of the workshops, which will have helped develop a common understanding of national law enforcement, the PC, the PCU Legal Specialist and the *Conservateurs* will secure the cooperation of the police to implement unannounced controls (with barriers) on the roads by which timber from a NP is evacuated for transport to points of sale or to customers, as well as the routes used by trucks transporting coastal materials (sand and gravel), in order to intercept them. Such interceptions are possible and will be effective since the road network for product evacuation is limited. The Ecoguards present in the field will be able to contribute to the application of the control measures by noting the registration number of the trucks and communicating it to the police, who will apprehend the driver, issue an official report and transmit it to the Justice. The dedicated PA prosecutor will be involved in this process to ensure the follow-up of legal proceedings. Events will be recorded and communicated to the PNC Agency, which will review this strategy on a bi-annual basis with the parties involved and make recommendations to adapt it.
5. Reinstatement of timber cutting fees. The project will examine the possibility of reinstating the requirement for loggers to get the right to cut timber. This stumpage fee (which was previously applied) would be obtained from the PNC Agency for one tree outside of natural forests under conditions to be determined (e.g., payment of a fee for cutting timber and planting and maintenance of 20 trees for each tree cut, seedlings provided by the Agency). A preliminary working session involving the PC, the PCU's Legal Specialist, agents from the DGEF and the Office of Forests and Coastal Areas will make it possible to discuss the terms and conditions (including the collection and destination of fees collected, the control system) and the responsibilities related to the implementation of such a measure, taking into account the provision of Article 62 of the law on the PA system, which specifies that the harvesting of fauna or flora is prohibited without authorization from the Agency. Under the scenario envisaged, the right to cut would be provided by the C*onservateur,* after verification of the tree to be cut by an Ecoguard. The logger would be accompanied by an Ecoguard who would be responsible for certifying the identification and location of the tree to be cut to ensure that the cutting takes place outside of sensitive areas and natural forests, managed watersheds and slopes. The project will support the training of Ecoguards to empower them to properly fulfill this role as part of their surveillance of responsibilities.
6. Integration of forest trees in agroforestry systems. The project will encourage the integration of native forest trees into farmers’ plots to meet, at least partially, future needs for hardwood from sustainably managed sources. Ecoguards experienced in the installation of greenhouses and mastering propagation techniques will be in charge of setting up a nursery on each of the islands in the terrestrial PAs (land is available) and supervising the propagation of forest and fruit species, so as not to depend on the CRDEs, which are in great demand. The forests, which favors their adaptation to local conditions. The communication officer will be responsible for raising awareness of local communities on all the productive benefits (timber and firewood, food and fodder production) provided in the short, medium and long term by agroforestry, but also all the other ecological services provided by trees (e.g., habitat for biodiversity, carbon sequestration, soil improvement and retention, and increased infiltration of rainwater, etc.). This awareness activity on the importance of trees will be recurrent every year, during the Arbor Day and the Environment Day.
7. Another key element of the action plan to counter the removal of coastal sand and gravel, support for the development of IGAs specifically targeting women involved in this activity in Shissiwani, Mitsamiouli-Ndroudé and Coelacanth NPs, will be implemented under Component 3. It is nevertheless mentioned here as an integral part of the action plan. The women are already aware of the harmful effects of this activity and are willing to stop it, provided they have support to develop alternative IGAs. The Community Mobilizers in these NPs will consult with the women to find out their interests and inform them of the options supported by the project. In particular, the project will facilitate exchanges with groups that have partnered to clean up the beaches and provide food services and shelters for family beach activities.

**Output 2.3**Effective community-based co-management models and partnerships are identified, documented, evaluated, adapted and applied at specific sites within the PA network

*2.3.1 Documentation of the different community management models implemented in Comoros*

1. The Community Mobilizers, with the participation of the *Conservateurs,* from the Mohéli, Karthala, Coelacanthe, Mitsamiouli-Ndroudé, Mont Ntringui and Shissiwani NPs will be responsible for documenting the models of community co-management that have been developed in their parks, to describe how communities have been involved in the conservation of resources and the environment in their areas, even before the establishment of protected areas. The description may include the form of these partnerships to ensure co-management, including aspects of governance in general and particularly related to targeted natural resources, investments, benefits, benefit sharing and contribution to park management whether as active contributions or sharing their revenues. Information will be collected from the community groups involved. The Community Mobilizers will work together (remotely) to prepare a synthesis that will highlight the socio-economic and environmental benefits and costs associated with each management approach developed on the three islands, in preparation for a workshop to conduct a participatory evaluation of the models.
2. Several community management models have evolved over the years, at the initiative of communities that have become aware of the environmental issues in their environment and through various interventions that have taken place over the past thirty years. The few models outlined below will be completed by the PNC Agency team with the support of the village co-management committees in order to cover all community experiences.

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| **Itsamia**: The entire community of Itsamia in Mwali has embraced the sea turtles that frequent their beaches for nesting and has decided that their future lies in protecting the sea turtle. Community members have developed community lodging facilities with revenues going to the village, in addition to jobs for maintenance. The revenue is used to support community infrastructure development such as schools and water supply.  ***Trou du prophète*:** The community of Mitsamiouli in Ngazidja has focused on ecotourism and beach recreation and has consequently decided to make the shore clean and attractive and to set up ten rustic accommodation structures for rent to generate income. Support from UNDP-GEF Project 4950 supported the purchase of a motorboat and snorkeling equipment that are rented to national tourists who want to go to the sea. The revenues are managed by the village's environmental association to support community projects such as water supply, the rehabilitation of alleys, and the repair of mosques.  **Bimbini**: Community actions in favor of the environment in the village of Bimbini in Ndzuani are mainly attributable to two women's groups, the OPAS association, which provides leadership in raising awareness of environmental issues in the village and promoting ecotourism, and the NGO UMAMA, which brings together women mobilized to clean up the mangroves that are affected by waste transported by a river. Support from the UNDP-GEF 4950 project has enabled the acquisition of a motorized boat and snorkeling equipment that are rented to national tourists who want to go to sea and the revenues are managed by the village environmental association. The OPAS association has "merged" with Shissiwani Park since its inception. Despite the efforts of the communities, waste management remains a problem. No accommodation facilities have been set up despite commitments from the SGP program.  **Ouallah**: This model focused on ecotourism through the construction of community bungalows under the UNDP-GEF G32 project and the development of trails for the observation of Livingstone's fruit bats around Ouallah village in Mwali. This initiative was led by a single individual whose interests eventually diverged, leading to the abandonment of the project by the community who followed the individual rather than the initiative. This same person decided how to use the income from the rental of the bungalows, which led to conflicts over the use of the funds.  **Vassi:** A fisheries resource management model, well established in Madagascar by Blue Venture, has been implemented in partnership with the NGO Dahari in the fishing villages of the Vassi region in Ndzuani. This model focuses on a single fishery resource, octopus, whose management is based on the delimitation of a space dedicated to a community and the closure of the fishing area for a period determined according to the octopus' biological cycle. The development and adoption of this management is based on the information provided by the communities and their understanding of the effect of the measure. Having seen the beneficial effects of the temporary closure of the fishery, the communities have embraced the measure and replicated it several times in the same year. The benefits materialize when the fishery reopens and accrue to each woman fisher. There is therefore no equitable sharing of benefits with those who have made the effort to protect the resource by respecting the closure of the fishery. This problem could be solved by creating a cooperative and pooling the benefits. |

*2.3.2 Participatory assessment of community-based management models*

1. The synthesis developed by the Community Mobilizers under the supervision of the *Conservateurs* and the PC will serve as the basis for the participatory assessment of the various community management approaches in three workshops with agency staff from each of the parks, NP and village co-management committees, NGOs, technical departments, and other relevant local and administrative actors on each of the islands. The gender and PWD focal point will ensure that the evaluation of community-based management models incorporates the perspective of women's and PWD participation and specifically assesses their share of the benefits. The workshop will result in recommendations that will be incorporated into the Development and Management Plans (PAGs) during their periodic review. The workshop report including the recommendations will be drafted by the Community Mobilizers under the supervision of the *Conservateurs* who will be responsible for their integration into the PAGs.

*2.3.3* *Sharing of the recommendations with members of village committees and initiating the implementation of adapted community-based resource co-management approaches within the PAs*

1. Community Mobilizers will visit each village community in the NPs to present the workshop recommendations to the village co-management committees and discuss their applicability to one or more resources used by the community. These discussions will initiate the adaptation of the recommended approaches to the resources used by the community. The results will be integrated as part of the resource management plans and in the National Park management and development plans.

**Output 2.4**Blue and green carbon stocks assessed and monitored across the PA network

*2.4.1 Inventory and baseline mapping of coastal terrestrial and marine ecosystems and assessment of their carbon sequestration capacity*

1. In order to link the assessment of the carbon stocks of forests, mangroves and seagrass beds to blue carbon and green carbon mechanisms, the project provides for the awarding of service contracts to the University of Comoros and the NGO AIDE to update the inventories of terrestrial (forests) and coastal marine ecosystems (coral reefs, seagrass beds and mangroves) of Ngazidja and Ndzuani, and to assess their carbon sequestration capacity. Such studies have already been completed for the island of Mwali with the support of the Association Deux Mains. Field work will be supported by the PCU GIS Officer and Ecoguards who will be trained to effectively contribute to the inventory and assessment work under the supervision of UdC and AIDE staff. The contracts will specify that all data will be recorded in the PA database and will remain the property of the PNC Agency and the DGEF.
2. Although there is no REDD+ mechanism established at the national level, these data will provide a baseline for assessing the potential benefits that the country could gain by accessing carbon markets, and possibly trading carbon credits on international markets or through innovative blended financing mechanisms such as the Global Coral Reef Fund. Consideration will be given to the institutions and capacities required to monitor marine and terrestrial carbon stocks, in the event that a mechanism is established which focuses on blue and green carbon emission reductions related to ecosystem conservation and restoration.

**Component 3. Community Livelihoods Within The National Protected Area Network**

**Outcome 3.** **Through capacity building and partnership directly or within value chains, private businesses and local communities generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs.**

**Output 3.1** **Nature-based value chains with real potential for consolidation or sustainable expansion based on a partnership between the private sector and local communities, meeting a strong local market demand, are assessed and selected to provide increased incomes to local community members and contribute directly to biodiversity protection**

*3.1.1 Feasibility studies of value chain options based on ecosystem services in protected areas*

1. To identify value chain options, the project will adopt a strategy focusing on products: *i*) based on ecosystem goods and services provided by PAs, *ii*) accessible to local populations, *iii*) for which there is a strong or growing demand in the local market - based on the experience of the project development team – or that meet the needs of a clientele whose recurring return to the Comoros is foreseeable (the diaspora), *iv*) to which private sector actors are already committed and interested in engaging with local PA communities to expand the value chain, and *v*) whose use offers prospects of providing livelihood activities to a high number of beneficiaries within the local communities. This strategy is designed, among other things, to respond to the risks associated with the COVID-19 pandemic, which is likely to limit international tourist visits to Comoros for some time. The private sector businesses identified showed a real interest in becoming involved in the project following this approach during preliminary interviews during project preparation.
2. Each of the options identified will be subject to feasibility studies based on the assessment of the potential of the natural resources to support the income-generating activities carried out under Output 2.2.2 (Sustainable use plans for target species for value chain development), including technical feasibility, market, and economic viability studies, potential climate change impacts, in addition to the impact assessments required under the environmental and social management framework (ESMF) of the project. Promoting the sustainable use of natural resources and of ecosystems will contribute to post-COVID economic recovery and ecological resilience. The Sustainable Livelihoods Officer under the supervision of the PC and with the support of the *Conservateurs* will be responsible for preparing the TORs for all studies, including technical feasibility and impact assessments. Simplified market studies will be conducted for each of the options to reduce uncertainties and risks and to better understand the chances of success before raising the expectations of local communities and engaging them in these activities. Feasibility studies should in particular take into account the impact of the certification process on the price structure of products or services (as determined under activity 3.4.1). These market studies should be based on existing and recent data, supplemented as needed by additional field research. At a minimum, the studies should include an analysis of the supply of these products locally and in the rest of the country, and an analysis of the demand for them through a national and sub-regional market survey.
3. In accordance with the requirements of the project's ESMF, an appropriately scoped environmental and social impact assessment (ESIA) will be conducted for the five management plans for the key terrestrial and marine species in the PAs (as part of the sub-output 2.2.2) to assess all risks identified in the Social and Environmental Screening Procedure (SESP) (including gender aspects) and any additional associated risks that are identified during the assessment. In addition, a scoped ESIA will also be undertaken during the preparation of the feasibility studies for developing or expanding nature-based value chains and an environmental and social management plan (ESMP) developed accordingly. Service contracts will be awarded to local consulting firms (options a and b could be entrusted to the Tourist Office; options c, d, e, to Comoflora; option f to AIDE) to carry out 6 (six) environmental and social impact studies (ESIA) and 6 technical feasibility studies to be conducted in parallel, including economic viability, on the basis of the prior assessments of the biological potential carried out under component 2 (2.2.2). Based on the findings of the ESIA, an overarching project-level ESMP will be developed and implemented. The ESMP will provide a set of avoidance, mitigation, monitoring and institutional measures – as well as actions needed to implement these measures – to achieve the desired social and environmental sustainability outcomes. The measures will be adopted and integrated into the project activities, monitoring and reporting framework and budget, and captured in a revised SESP for the project. Based on the findings of the ESIA, the ESMP may include a Cultural Heritage Management Plan and/or a Livelihoods Action Plan. The output of the ESIA will be an ESIA report (following an indicative outline provided in Annex ‎9.3 of the ESMF) and an ESMP (following an indicative outline provided in Annex 9.4 of the ESMF). The ESMP will define desired social and environmental management outcomes and specify social and environmental indicators, targets, or acceptance (threshold) criteria to monitor ESMP implementation and assess effectiveness. It will also provide estimates of the human and financial resources required for implementation and monitoring and identify organizational structure and processes for implementation.
4. The feasibility and impact studies will review the following options:

a. Networks of ecotourism villages within the PAs on the islands of Ngazidja and Ndzuani offering homestay services in village settings and catering services promoting Comorian flavors and gastronomy, traditional living arts (including songs, tales, dances) and accompanying services (eco-guides, porters), in connection with ecotourism or nature observation tours (birds, whales, lemurs, fruit bats, orchids, turtle nest protection, etc.), including emblematic landscapes (e.g. Nioumachoi islets, Karthala crater, Salt Lake, Lake Dzialandzé, etc.) and cultural sites. The project will support the promotion of these tourist offers to hotels, since the latter deplore the lack of structured tourist activities linked to national parks to offer their customers. These networks would be developed in partnership with the private business EcoMassiwa.

b. Community-based initiatives offering access to clean beaches, rustic reception facilities and picnic facilities for family beach tourism for a small fee. These networks would be developed in partnership with the individuals or small groups of individuals leading these initiatives. They have been developed in Mwali around the beaches of Sambia, Bangacharini, Ouenefou, Méa, Nkandzoni, Ouallah2 and Ouallah1; in Ndzuani around the beaches of Ilot de la Selle and Milembeni; in Ngazidja around the beaches of Chindini, Malé, Maloudja, Galawa, Trou du prophète and Ndroudé. Community-maintained beaches that are known to be clean are more popular on weekends. Community members who maintain the beaches have taken the initiative to offer meals, set up refreshment stands, and erect huts or rustic shelters with coconut wood to accommodate family tourism, which has become very popular, especially during times of pandemic. In order to reward the village communities that have adhered to the objectives of the PAs by maintaining the beaches, the project will provide training in sanitation, hygiene and catering to community members who have invested in these activities.

c. Development of networks (cooperatives) of moringa harvesters. These networks would be developed in partnership with the private business Comoros Moringa. The project would facilitate the integration of moringa into agroforestry systems and home gardens through the production of seedlings in nurseries, the identification of needs for expansion of the private partner's facilities to absorb the products harvested by the cooperatives, and support to facilitate the necessary investments.

d. Development of a network (cooperative) of harvesters of medicinal and aromatic plants from forests and natural environments and of producers of Comorian spices, including turmeric, cardamom, black pepper, and chili peppers, to improve their harvesting, processing and marketing. These networks would be developed in partnership with the private business Massala Délices. The project will seek support from the Comoros Women's Entrepreneurship Directorate. This value chain will be developed following a preliminary assessment of the quantities that can be sustainably exploited or cultivated and would involve improving harvesting capacities to ensure the preservation of medicinal and aromatic plants in the natural environment, following the guidelines of the international NGO FairWild, and for the processing of the plants according to the needs of the private enterprise, including drying, milling and packaging. The project will provide support for marketing on an island or national scale, including the acquisition of basic infrastructure and equipment for appropriate packaging and labeling.

e. Development of networks (cooperatives) of harvesters of aromatic plants and other raw materials (castor and coconut) to supply a castor and coconut oil-based cosmetics and body care business as well as small essential oil production businesses. These networks would be developed in partnership with the private business Maya Beauté et Cosmétiques (Noor brand). The project will seek to integrate small businesses that distill and bottle essential oils into the value chain in order to add value to essential oils in the production of massage oils and perfumes.

f. Development of networks connecting fishers with restaurateurs and hoteliers to ensure the supply of the latter with quality, predictable and timely products, in particular demersal fish, lobsters, crayfish, octopus and mangrove crabs, guaranteeing increased and predictable income to fishers on the basis of prices negotiated for all fishers (via the unions), and based on sustainable fishing. These networks would be developed in partnership with networks of private hotel and restaurant businesses on each island, including in Ngazidja: Al-Camar Lodge, Moina Liza, Maloudja, Trou du Prophète, Domaine du Lac Salé, Tropical Island, Kaliptus , Golden Tulip, Karthala Hotel; in Mwali: Itsamia community bungalows, Hotel Laka Lodge, Vanilla Lodge, Wallah2 community bungalows, Les Abou, Le Cocotier, Relais Singani; in Ndzuani: Moya beach, Le sultan, Hotel Karama, Hotel Al Amal, Papillon, Johanna Hotel, Le refuge, Le Bléché, Océanis Hotel. The private partners (restaurateurs and hotels) will be invited to join a group that will commit to buy fishery products at a fair price (based on prior negotiations conducted by the fishers' unions) from fishers who, for their part, will have committed to selling fishery products caught according to sustainable fishing practices (fishing gear and catch levels). These commitments will give them access to a simple platform (a private group on one of the major social media) through which supply and demand can meet, thus facilitating a predictable supply of the private sector with fresh products from sustainable fisheries in a protected area (which they can use to market and/or label their services) and that meet their needs, and allowing fishers to adjust their fishing effort to predictable demand, to sell their whole catch at an acceptable price, and thus make each fishing trip profitable. Currently, these transactions are individual and unreliable. Restaurant owners have no guarantee of supply and must invest significant time tracking fishers to find fish products. The supply of products, such as lobsters and crabs, depends on a non-selective and high fishing effort (hand fishing snorkeling) and therefore unsustainable.

*3.1.2 Synthesis of the conclusions of the impact and feasibility studies presented to the PA management agency, local communities and targeted private parties*

1. The PCU Sustainable Livelihoods Officer, supported by the PC, *Conservateurs* and Community Mobilizers of each of the parks involved, will organize 6 workshops on each island to bring together the main parties involved in the proposed value chains and present to them the findings and recommendations of the feasibility and impact studies to ensure a common understanding of their implications for the engagement of each party and realistic expectations in terms of socio-economic benefits. It is expected that at the end of these workshops, private and community partners will confirm their interest in and commitment to the value chains supported by the project.

**Output 3.2**: **Building the capacity of local community members to provide goods and services that meet the needs and standards required for integration into sustainable PA-related value chains through an entrepreneurial approach.**

*3.2.1 Establishment or consolidation of community cooperatives and development of members' capacities through local support in microfinance, savings and credit, investment, risk management and micro-entrepreneurship*

1. *Identification of priority beneficiaries.* In line with the principles of providing support to the most vulnerable, promoting gender equality and women's empowerment, and not doing conservation at the expense of the poorest, the PNC Agency's Community Mobilizers will, with the support of traditional and local authorities and village co-management committees, identify the segments of the population that are most likely to be negatively affected by the project's interventions, particularly through loss or reduced access to resources by strengthening the enforcement of regulations within the protected areas. It is also important that voluntary adherence to the values of protected areas be rewarded by a privileged position in the project support for income-generating activities, particularly in ecotourism tours, otherwise local communities may become disengaged. Such a withdrawal of support would undo years of investment in community outreach, and trust takes time to rebuild.
2. *Securing access to and sustainability of resources that support value chains.* Under sub-output 1.2.3, the project will support the identification and delineation of areas where the sustainable use of natural resources by local communities will be allowed under the conditions specified in the sustainable management plans that will have been developed under sub-output 2.2.2, in order to secure access to resources for members of the cooperatives.
3. *Support to women and men interested in getting involved in value chains to structure themselves through the establishment of operational cooperatives.* Project support will include prior information given to women and men on cooperative principles, the obligations and benefits of cooperative associations and their members, and the process of setting up a cooperative as prescribed by the Comorian law. In the event that community members (possibly men and women fishers) are reluctant to join such a structure, information and support will also be provided on the formation of joint liability solidarity groups. Preliminary information and awareness sessions will be conducted by a local consultancy firm which will be recruited through a competitive examination as part of a service contract with the collaboration of the Community Mobilizers of the PNC Agency, in order to allow women and men to confirm their interest in joining a cooperative (or a joint liability solidarity group) by clearly understanding their interests and commitments. The project will support women and men who have confirmed their interest in getting involved in the formation of a cooperative, through the steps required to establish a cooperative, the establishment of statutes and rules of procedure, the organization and functioning of the cooperative including financial management and individual membership in the cooperative.
4. A service contract will be awarded to a local consultancy firm which will be recruited through a competitive examination to provide training (in year 2) and close support (years 3 to 5) in credit and savings, risk management, microfinance and micro-entrepreneurship to the members of 18 cooperatives and, where applicable, to joint liability solidarity groups, throughout the development of their partnership with private enterprises. The PCU Gender and PWD Officer will identify and remove obstacles or constraints specific to women and PWD to enable full participation of women and PWDs. The project will also seek the support of national institutions to support these trainings, namely the Chamber of Commerce and the Directorate of Women's Entrepreneurship which act as business incubators. The SANDUK (network of microfinance institutions) which are present in all villages will also be solicited as proximity institutions to support close supervision of the members of the cooperatives on issues of credit and savings as a risk management strategy, with the support of the IGAs Officer of the PCU.

*3.2.2 Training of cooperative members, including women and PWD, to enable them to offer quality products and services and integrate value chains*

1. The capacity of cooperative members, including women, PWD and men, will be strengthened through technical training to enable them to offer quality products and services and to integrate the selected value chains after feasibility studies, to ensure the sustainability of the resources exploited, to ensure product quality that meets the needs of private sector partners and the standards of the targeted markets and the certification sought, and to improve the profitability of the value chains. The sustainability of local community benefits will depend in large part on the commitment of cooperatives to ensure product quality, as well as the prevention of potential adverse effects of value chain expansion on the biological resources being harvested or on the environment being used. Also, building the entrepreneurial capacities of vulnerable women, while securing their access to resources, will contribute to increase their resilience and post-COVID economic recovery.
2. Under the supervision and coordination of the PCU's IGAs Officer, training will be provided on the basis of training plans and material (practical guides) developed with the collaboration of the relevant technical departments and competent actors in the targeted areas. The trainings will target plant harvesters, fishers and communities involved in ecotourism.
3. *Medicinal and aromatic plant harvesters*. Training will be provided to improve the capacities of medicinal and aromatic plant harvesters on cultivation, sustainable harvesting practices to optimize plant regeneration and ensure the preservation of stands in the natural environment following the guidelines of the international NGO FairWild, plant drying, packaging and labeling of products to ensure their traceability for certification, and any other plant processing required according to the needs of the private partners. The trainings will be planned in collaboration with the PCU's IGAs Officer and the private sector partners in order to clearly identify their needs and requirements for the processing and packaging of products. A national consultant in plant biology will use the tools developed by FairWild to prepare the didactic material, deliver the trainings to 40 to 50 villages and follow-up to ensure the assimilation of the transmitted skills and concepts.
4. *Women and men fishers*. In order to encourage fishers to abandon unsustainable fishing techniques, including fishing nets which use is prohibited in marine PAs, the project will support capacity building of men and women fishers on i) new, more sustainable and profitable fishing techniques, i.e., longline and fish aggregating devices (FADs), including the manufacture, installation and maintenance of fishing gear, and ii) conservation and sustainable management of targeted fishery resources, i.e., demersal fish, rock lobsters, mangrove crabs, and crayfish, based on an understanding of the life cycle of the resources, including the establishment of rest periods through temporary closures, (following the approach adopted for octopus), the establishment of permanent reserves, the respect of a minimum catch size, the discarding of egg-bearing females, and the use of fishing gear such as traps that allow for a more selective, sustainable and profitable fishery, while requiring less effort. The risk that the use of new fishing gear such as longlines becomes widespread to the point of creating unsustainable pressure on fishery resources or ghost gear will be minimized by the fact that the use of this gear requires resources and a mastery of techniques that limit its propagation, unlike nets that can be handcrafted on site. To further reduce the risks of a negative impact on targeted resources and on all marine biodiversity due to the introduction of these new gear, the project will support (i) the formation of fishers' groups in each MPA; (ii) the development and provision of training courses on fishing techniques for fishers' groups; (iii) the development and adoption of an eco-responsibility charter by fishers in order to provide a framework for the new fishing techniques; (iv) an environmental awareness program on the risks of unsustainable fishing, including the abandonment of fishing gear at sea. The project will support the training of fishers' groups to manage the operation, ensuring the monitoring and evaluation of catches and the modulation of fishing effort. Training in the making, installation, maintenance, and safe and sustainable use of pots, FADs made of natural material, and longlines will be developed in association with the Directorate General of Fisheries Resources (DGRH) and the Anjouan Fishing School with the collaboration of the PC and will be provided to several villages grouped together (2 to 3 villages at a time) by the local staff of the Regional Fisheries Directorate.
5. Longlines: The DGRH has already provided training on the use of longline to move fishing effort away from the reef fringe as these gears are typically used at depths of 30 to 100 m and target resources that are not usually accessed by traditional fishers. This truly cost-effective technique requires less effort than using a single line. Although the fishing technique has been demonstrated in an EU-supported project, Comorian fishers do not have access to longlines. The training provided to fishers will include the making of 50 to 100 meter longlines using locally available material, except for swivels which can be easily found in the region. A local longline ($150) can be made at a quarter of the cost of an imported longline ($600).
6. Fish aggregating devices (FADs): Previous experiences with the installation of FADs in Comoros have not been successful, as imported FADs have proven to be unsustainable and too expensive. The project will promote the making of FADs with local materials that are easy to find and repair. The cost of making a FAD from natural material is $480 (KMF 200,000) while that of an imported FAD is in the order of $ 7,200 to $ 12,000 (3 to 5 million KMF). The DGRH has already provided training in this area and will be solicited to support the project to train women to make and repair local FADs.
7. Revitalization of fishers' unions. The need to revitalize young people and encourage them to mobilize is all the more important as financial support from the diaspora is starting to decline. The role played by the CRDEs in stimulating agricultural activity could be transposed to fishing by the Comoros fishers’ unions at the national and island levels. The project will provide support to the unions to play the role for which they were set up, in addition to being responsible for safety issues and training. It will be necessary to understand why the unions no longer play this role and are not operational. Although fishers pay fishing fees (license - fishers card - registration of fishing gear) which provide income to the unions, resources remain too limited.
8. *Community-based ecotourism*. A service contract will be awarded to the Tourism Office to plan and deliver training on sanitary practices for ecotourism catering and accommodation, including training in food safety, hygiene and catering to community members involved in village homestay and catering services promoting Comorian flavors and gastronomy, and support services as eco-guides and porters. The local staff of the Tourism Office will be solicited to follow up training with the village cooperatives

**Output 3.3** **Mutually beneficial partnerships between local producer/harvesters/fishers’ cooperatives (both men and women) and private sector actors are developed with the support of local Mayors and the PNC Agency to support the growth of selected value chains (based on feasibility studies) and reduce threats to ecosystems in PAs**

*3.3.1 Identification of private businesses and community cooperatives and confirmation of their interest and commitment to the project's objectives*

1. Under the supervision of the PC and with the support of the *Conservateurs*, the PCU Sustainable Livelihoods Officer will tour the NPs to complete the census of private enterprises and community cooperatives, and confirm their interest and commitment to the objectives pursued by the project concerning the sustainability of the use of natural resources in the PAs, the multiplication of increased sources of income for village communities in the PAs and the strengthening of the capacities of private partners as a factor of sustainability (based on the conclusions of the studies conducted under 3.1.1).

*3.3.2 Identification and implementation of partnership agreements that guarantee tangible and optimized benefits to community cooperative partners in value chains*

1. As part of its service contract and with the support of the PCU's IGAs Officer, a local consulting firm will provide close support to establish, strengthen and formalize linkages between local community cooperatives and the emerging private sector for the development of products and services to integrate emerging value chains (moringa, community-based ecotourism, essential oils, skin care oils, medicinal and aromatic plants, local spices from forests, and fishery products from traditional sustainable fisheries). The selected local consulting firm will assist stakeholders in each of the value chains to negotiate and develop long-term, mutually beneficial "win-win" partnership agreements between local community cooperatives, the emerging private sector, local authorities (communes), and the PNC Agency. These agreements should provide a framework for the development of value chains that guarantee a fair share of tangible benefits to partner communities.
2. The commitment confirmed during the PCU IGAs Officer's visit will lead to the establishment of partnerships between the private sector and communities, with the support of local authorities and the PNC Agency, to foster sustainable nature-based development through commercial investments focused on processing, marketing and retailing of value-added natural products (or services). The commitment will be confirmed by the signing of a partnership agreement by stakeholders, including community cooperatives, private sector partners, *Conservateurs* of NPs and Mayors. The PCU Legal Specialist will have previously formulated a partnership agreement template.
3. These agreements will have to be consistent with the National Parks' Development and Management Plans and include a reference to the expected outcomes and indicators identified therein. The role of the PNC Agency in the negotiation and monitoring of these agreements, particularly through the support provided by the Community Mobilizers of each park, will be to safeguard the preservation of resources, to monitor the impact of resource use, to respect the interests of the local communities of the parks and to ensure that they are not prejudiced and that they reap the benefits.

**Output 3.4 Strengthening business capacities of the private enterprises whose operations are linked to PA resources, in order to ensure the sustainable expansion of value chains that have a high potential to provide increased incomes for local community members and contribute directly to biodiversity protection**

*3.4.1 Support to businesses in designing their business model involving partnership with cooperatives in local communities*

1. Under the supervision of the PC and with the support of the PCU's IGAs Officer, a local consulting firm will provide expertise and close support to each business in designing or adapting their business model to determine how the business can create value, generate profits and ensure its sustainability, and to develop their business plan that will describe how to achieve this. Business models (see guidance in Annex 22) should incorporate the maximization of benefits to local communities through benefit-sharing rules for activities within PAs so that the benefits derived from these value chains provide adequate incentives for local communities to comply with PA regulations. The models will namely examine the impact of the certification of the products or services on market access and on the price for the end client and the willingness of clients to pay a price premium, is any, for certified products. These models should also include a contribution to the financing of PAs based on user-pay principles.

**Output 3.5 Development of a marketing strategy –for all products developed in connection with PAs– focused on biodiversity protection, fair trade, and branding related to PAs**

*3.5.1 Development of a marketing strategy including a national certification and labeling system for products attesting to the sustainable use of natural resources, the principles and requirements of fair trade and the origin of PA products.*

1. The PCU IGAs Officer will work closely with the private sector partners to develop a marketing strategy for all products from the value chains related to Comoros National Parks ecosystem products and services, including specific variations for individual products. The development of the strategy will include, but not necessarily be limited to, the following elements:
2. Designing a branding for Comoros national park products that meets the following three criteria: products that guarantee superior quality for consumers, decent livelihoods for producers, and preservation of the environment.
3. Identification of national and international markets (especially for moringa and ecotourism tours) to be targeted for each value chain (local, supermarkets on the islands of Ngazidja and Ndzuani, and shops on the three islands).
4. Improved packaging to ensure better preservation and attractive presentation of products and labeling that reflects the certification criteria for certified products. This aspect will be developed in collaboration with the PCU CKM Officer.
5. Development of the marketing strategy and promotion of products and services meeting the 3 criteria for all value chains by the CKM Officer.
6. Implementation of a product certification mechanism to ensure compliance with the 3 criteria, including:
   1. Setting up of an independent national certification committee to be formalized by the signing of a ministerial decree. A preliminary proposal for the composition of this committee includes: the PNC Agency, the DGRH, the DGEF, the Tourism Directorate, the National Fishers Union, the Platform *Femmes Entreprenantes Comores* (Association). This committee will be responsible for verifying the conformity of the products and services of the community cooperatives with the certification criteria and for granting the certifications, to be re-evaluated annually. The PC will contact the heads of the institutions to introduce the initiative and verify their interest in getting involved and will work with the Sustainable Livelihoods Officer to develop the terms of reference of the committee and its mode of operation. Through the collaboration with the Directorates of Environment, Fisheries and Tourism, the National Fishers Union and the Platform *Femmes* *Entreprenantes*, the project will be able to identify and reach all potential actors who may have an interest in getting involved in such value chains. The PCU Legal Specialist will ensure the preparation and submission of the decree. To increase the chances that the process will be sustained beyond the duration of the project, the actors involved should strive to keep certification costs as low as possible.
   2. The institutional collaboration of INRAPE, UdC, DGEF, DGRH, and the PNC Agency, to agree on the interpretation of the certification criteria and their application to the different products.
   3. Support cooperatives in the preparation of files to be submitted to the evaluation committee and the preparation of evidence for its visit. The IGAs Officer will develop a guide and a template for the preparation of the files to be validated by the PC, the *Conservateurs* and the committee, and will provide training to the cooperatives of each NP. The Community Mobilizers will provide close support to the cooperatives in their NP for the annual renewals.
   4. The operationalization of the committee will include the review of the files submitted by the cooperatives and annual on-site verification visits to meet and interview the enterprises and complete the assessments. The IGAs Officer will accompany the committee members and will be supported on site by the Community Mobilizer of the relevant park.
   5. The successful verification process will lead to the issuance of annual certificates that will allow private individuals, cooperatives, producers and fishers to use the logo. The IGAs Officer will develop a model certificate (with logo) to be adapted according to the value chain.

*3.5.2 Raising public awareness of the "Comoros National Parks Products" branding*

1. The PCU CKM Officer will be responsible for promoting a branding that ensures high quality for consumers, decent livelihoods for producers, and preservation of the environment, through traditional media, product promotion events, and educational programs for high school students. This promotion will include (a) the preparation of media kits presenting the new national certification, its criteria, and associated benefits for local communities in the NPs and for biodiversity and the environment, and possibly the presentation of the certification logo, (b) the launch of a national contest to design a logo illustrating the 3 criteria for certification of Comoros National Parks products for which a prize will be awarded, (c) the launching of a drawing contest among secondary school classes in the villages of each park to design logos for the parks in the national network, for which six prizes will be awarded; and (d) the organization of annual fairs starting in the first year on each of the islands to promote the "Products of the Comoros National Parks”. Awareness campaigns on the “National Parks of the Comoros” certification should capture the attention of potential actors and arouse their interest in getting involved in the development of value chains in collaboration with local communities and based on ecosystems goods and services in National Parks.

**Output 3.6 Support for the start-up of value chains**

*3.6.1 Support for the expansion of value chains to create IGAs for the benefit of local communities in PAs*

1. *Facilitation of the conditions for granting credit at reduced or zero rates for private businesses* through negotiations with financial institutions, supervising loans and making them conditional on criteria of sustainability, equity and their origin in the Comoros' PAs. The selected local consulting firm will support negotiations with SANDUKs to facilitate the granting of loans to cooperatives or to joint liability groups, or to support the establishment of tontines based on solidarity groups and focused on investment and profit making as a medium and long-term risk reduction strategy. Community Mobilizers and relevant CRDEs will be involved in the training sessions so that they can relay the concept of risk management through savings and credit.
2. The project will facilitate the establishment of a partnership with a locally represented microfinance institution, to support the development of financial products and services adapted to the needs of cooperatives to facilitate the acquisition of equipment and the management of value chain revenues. This institution will ideally train cooperative members and guide them through the process of obtaining and managing a microcredit, including its repayment.
3. *Provision of tools and small equipment to cooperatives in local communities.* Under the direct supervision of the PCU Sustainable Livelihoods Officer and support from relevant advisors (e.g. private sector partners or Fisheries officers), the project will identify and provide required tools, small equipment, and other required inputs to help women, men and PWD within cooperatives to adopt sustainable resource use practices, such as fishing gear (pots) or parts for making it (longlines and traditional fish aggregating devices), or small equipment for initial processing of plants (e.g. cleaning, drying), packaging and labeling of products. The GPWD Officer will ensure that women and PWDs have equitable access to these tools equipment and that these are adapted to their needs.

*3.6.2 Mentoring and support for new businesses and community partners*

Close support for the value chains provided by the PCU's IGAs Officer, the Community Mobilizers of the PA management agency and by the selected local consulting firm during the first years of operation to ensure the follow-up and integration of the training provided, including the management of microcredits, sustainable practices for the use of natural resources, and the monitoring and evaluation of exploited resources.

**Component 4: knowledge management, m&e, and achieving gender and disability equity through empowerment**

**Outcome 4: Effective knowledge sharing supports learning among project stakeholders and in the Comoros and regional small developing island states (SIDS)**

**Outcome 5: Increased opportunities for women and people with disabilities (PWD) to benefit from ecosystem goods and services in the protected areas (PAs) and to integrate nature-based value chains that are linked to the PAs**

1. This component will be the lever on which the project will build to expand and replicate the interventions and impacts across the PA network, based on the learnings in pilot sites and individual PAs and their dissemination across the network, the country and among SIDS of the region, and to increase the effective integration of women and PWD in the management of PAs and equity in the sharing of the benefits they provide. The knowledge supporting biodiversity conservation and ecosystem services in the PAs will be collected and managed via the monitoring systems implemented under the project’s other components, specifically with regard to monitoring implementation of the PA land use master plan (product 1.2) and restoration plan (product 1.2.3), monitoring grievances filed by stakeholders (product 1.1.4), estimating carbon stocks (product 2.4.1), and monitoring biodiversity in the PAs (product 2.1.2). This component will draw on data collected by these systems, disaggregated by gender and disability status, to develop gender- and disability-sensitive knowledge products. The project will also communicate and disseminate lessons and experiences from the PAs to encourage and support the large-scale adoption of conservation, sustainable use and biodiversity measures and of sustainable fishing and collection practices. Monitoring and evaluation (M&E) of progress compared to expected results and products will make it possible to integrate the information generated and to adopt an adaptive management approach to ensure that the project’s goals and objectives are achieved.

**Output 4.1 The technical knowledge and lessons learned from the project’s experiences are compiled, evaluated and translated into knowledge products. They will be used to increase the effectiveness of project implementation and will be disseminated locally (among the project sites), across the Comoros and among regional SIDS to strengthen the capacity of all actors involved in biodiversity conservation.**

*4.1.1**Participatory M&E and learning system developed and implemented to enable adaptive project management*

1. Monitoring systems will be put in place to learn lessons from the approach to co-manage PAs and their resources, and from the biodiversity conservation interventions implemented by the project, and to measure progress achieved made through management and conservation measures.
2. Monitoring and assessment of project implementation and progress will be conducted in accordance with GEF and UNDP guidelines and with the M&E plan described in Section VII of this project document. The plan’s key tasks involve: an inception workshop; annual monitoring of the project results framework; annual project implementation reports; annual audits; ongoing monitoring of social and environmental risks; ongoing monitoring of the stakeholder mobilization plan and the gender equity action plan; project steering committee meetings; meetings of the landscape co-governance mechanism; UNDP-GEF team supervision missions; GEF-7 mid-term and end-of-project baseline indicator updates; independent mid-term review; and the independent final evaluation.

*4.1.2**Compilation of knowledge products, lessons and good practices identified under the project and production of communication materials*

1. Relevant experiences and lessons will be identified annually as part of the annual review and will be used internally to inform the project management team, relevant departments in the Ministry of Agriculture, Fisheries, Environment, Tourism, and Handicraft (MAFETH), male and female beneficiaries at the local level, and the other stakeholders about project progress. The lessons learned will be incorporated into the adaptative management process and the necessary adjustments will be made to the project design, if necessary. The lessons learned and good practices in the area of shared management of PAs and resources - including assisted natural regeneration to restore forest ecosystems, reforestation and control of alien invasive species, and integration of the gender dimension and PWD - will be identified systematically by the project coordinator, the M&E expert, the project steering committee and the key stakeholders (in particular, the members of the local community participating in the project). This will be part of the annual participatory project review process. The project’s communication/knowledge management expert will assemble the lessons learned and develop knowledge products for specific audiences.
2. With the cooperation of the institutions concerned by the various topics (for example, the National Centre for Documentation and Scientific Research for alien invasive species, the General Directorate for the Environment and Forests for general restoration activities and the National Tourism Agency for ecotourism), the project will support the compilation of knowledge products to help maintain the ongoing development of the institutional and private sectors. The project will contribute to developing study programmes and training materials in areas related to PA management, including ecosystem restoration operations and development of partnerships between local community groups and the private sector to support value chain development based on ecosystem goods and services, including ecotourism development. These documents will incorporate the lessons learned from the project and will be shared with the University of the Comoros to support the PA management training programme.
3. The project will help to develop original knowledge on issues that are new and/or specific to Comoros, including techniques to restore forest ecosystems, control of alien invasive species, partnerships between local communities and the private sector within value chains based on the sustainable use of natural resources from the PAs (non-timber forest projects (NTFP) and fishing products), the development of a type of ecotourism that focuses simultaneously on biodiversity, local communities and their culture, and PA landscapes to guarantee benefits to local communities, including women and PWD, and the effective engagement of local communities in co-managing the PAs and their resources, to name a few. Knowledge on these issues and any subject for which new knowledge may be considered relevant and useful will be presented as: i) technical files for members of the agency, the institutions and partners/project working in the Comoros, regional economic development centres (CRDEs), and technical services involved in forestry, fishing and tourism; and ii) in simplified and practical form, in accessible language and translated into Comorian, for beneficiaries within the village communities. Case studies and thematic reports will be developed for the national and regional technical staff of the MAFETH, CRDEs, fisher and producer associations, civil society organizations and environmental NGOs. They will be disseminated electronically and in print, depending on the recipient. Other topics may require more in-depth analysis, such as issues related to gender and PWD integration (addressed under product 4.1).
4. Knowledge will be disseminated primarily through technical learning briefs, radio broadcasts, a web platform, national television and exchange visits with local communities involved in project activities.

*4.1.3**Support for experience sharing among National Protected Areas Agency staff and among PA co-management village committees*

1. The project will support better communication and exchange of experiences among the individual management teams of the PNC Agency through social media. It will create a public (or closed) social media discussion group to disseminate news about the PAs and host informal or guided exchanges based on current events, issues affecting one or several parks, and any topic relevant to the PAs and their local communities. While agency members may express themselves freely through this medium, the communication/knowledge management officer will define the purpose of these group exchanges and rules to ensure that the publications are aligned and relevant to the purpose. The expert will also moderate the group. As needed, this person will seek contributions from the teams to ensure that the content is refreshed and updated so that the site remains current, provides insight into the agency’s work network-wide, and contributes to team cohesion and mutual capacity building, although the teams are dispersed across three islands.
2. In addition to these virtual exchanges, the park *Conservateurs* on each island will plan annual visits for the management teams (community mobilizers and ecoguards). These visits may focus on specific topics or management issues. This will enable participants to share experiences and identify and examine the relevance of solutions developed in response to common challenges, specifically threats to biodiversity, ecological monitoring, surveillance, and the effective participation of local communities in planning decisions and monitoring, surveillance and restoration.

**Output 4.2 Ownership of and national pride in the Comoros’ PAs through increased public understanding of the wealth and unique nature of the biodiversity and landscapes and the importance of the ecosystem services they provide**

*4.2.1**Development and implementation of a targeted strategic communication plan for the project and the PNC Agency*

1. Developing a strategic communication plan involves defining the communication objectives and target audiences, identifying the content to be disseminated and the means of communication suited to the target audiences, and preparing an implementation plan (including the responsible actors, a schedule, budget and partnerships).
2. The CKM officer will develop and coordinate implementation of a strategic communication plan for the PA network, pursuing the information, education and communication objectives. Those objectives will include: i) raising awareness of the importance and value of biodiversity and ecosystem services that the PAs provide and creating national pride in the collective wealth that the PA network represents; ii) strengthening ownership of the PAs within the local communities who live in them; iii) developing links between the local communities and other parties involved in managing the PAs through the national system; iv) promoting cooperation in and commitment to the PA management system; v) disseminating information about the project; and raising awareness among local communities on the relationship between the health of ecosystems and biodiversity and public health. Implementation of this plan is integrated as a set of targeted activities within each component.
3. Communication and information dissemination will also help to improve project effectiveness and efficiency, specifically by improving coordination among implementation partners and between local and national levels and by helping to develop a shared understanding of project objectives and action programme.
4. The knowledge that local village communities developed about the national parks, the other administrative partners and civil society during the PIMS 4950 project and prior projects (such as the community-based organizations project targeting the local communities of the future protected areas, and the G32 project, which created the Comoros’ first protected area) will guide development of the targeted communication and awareness-raising strategy and will help to develop knowledge products adapted to this audience. Communication materials from other relevant projects will be reviewed to determine whether they can be used/adapted to materials for this project. Communication will be key in maintaining local communities’ motivation to remain actively involved in planning and implementing PA management. The participatory evaluation of the project’s impacts involving the target beneficiaries will be integral to the communication strategy.
5. The communication plan will include:

* Carrying out a national and local communication campaign that will seek to:
  + improve the perception of the general public, national and local authorities, and village communities within the national parks regarding conservation and PAs by demonstrating the benefits of PAs within and beyond their boundaries and their contribution to the local communities’ socioeconomic well-being and the national economy, particularly by reducing the risks of natural disasters, using televised and broadcast documentaries (Output 1.1.2);
  + raise awareness of the PAs network set up in recent years, including the new areas co-managed with local communities, the PAs’ management agency (Comoros National Parks), and the national protected areas act (Output 1.1.2);
* Disseminating project implementation information on an ongoing basis to encourage local stakeholders to participate by developing a shared understanding of the project’s objectives and issues and improving the coordination between the projects and the partners’ interventions;
* Renewing partnerships with the media, including the print press, national television and environmental associations, to disseminate content on the project, biodiversity and the PAs, and preparing background materials as resources for theme-based articles or articles on the project;
* Developing media products for radio broadcast and social media with the help of community groups and NGOs involved in environmental education, such as Ulanga and Maeecha, to ensure that the products are relevant to community stakeholders; and,
* Organizing fairs and participating in environmental events (for example, Earth Day and World Turtle Day), ensuring that biodiversity conservation, the protected areas and the PAs management agency gain strong visibility.

1. The messages will emphasize the importance of the national parks, their diversity, and the ecosystem goods and services that they provide benefiting the daily lives of local communities, as well as the parks’ vulnerability to human and climate pressures and the precarious nature of their services. The messages will also emphasize the connection between project activities and the direct and indirect improvement of communities’ quality of life and livelihoods.
2. The information will be presented in printed form, including brochures, posters and banners in French and Comorian, targeting school audiences, local communities, and the general public, and in short videos and documentaries in clear language using local expressions. The messages on biodiversity and ecosystems must be hard-hitting and illustrate both their vulnerability and the consequences, for the entire country, of their degradation and loss, as well as their beauty, uniqueness, and usefulness. All these products will help to raise awareness among authorities and communities about the importance of preserving biodiversity and ecosystems, create ownership of the project’s proposals, create awareness among all stakeholders of the concept of sustainable use of natural resources and responsible consumption, and promote the “*Parcs Nationaux des Comores*” brand. They will also help to encourage compliance with national regulations that protect the environment and biodiversity. To promote the widespread dissemination and adoption of successful practices developed in the project and to promote products from equitable value chains and the sustainable management of natural resources extracted from the PAs, the project will organize fairs, visits between communities and sharing of experiences and information, including lessons learned from appropriate approaches to ensure that women and vulnerable groups benefit from them.
3. Information on project activities will be posted on a Facebook page and a website for the project’s partners and the general public. A Facebook page dedicated to the project will be created and updated continuously to disseminate information on activities and special environment- and biodiversity-related events and to raise public and community awareness about the issues the project addresses. The communities and/or the NGOs will help share the knowledge and lessons learned in coordination with the project’s communication/knowledge management expert.

*4.2.2**Implementation of awareness campaigns and targeted environmental education programmes*

1. The knowledge products will include information for school-age children on the importance of becoming involved in biodiversity conservation in the Union of the Comoros and, particularly, in the country’s national parks. These products will be distributed first to schools in communities located in the national parks. If public health conditions allow, theme-based guided visits may also be organized. The awareness-raising campaigns will include the active participation of the national PNC Agency in environmental days (for example, Earth Day and World Turtle Day) and other sustainable development-related events in the PA communities (for example, reopening of the fisheries after temporary closures). These campaigns will create opportunities to integrate the risks and issues related to COVID-19 into the project's communication and knowledge management plans.
2. In partnership with the NGO Maeecha, the PNC Agency has committed to incorporating an environmentally- and biodiversity-sensitive approach in primary education and to teach students to adopt eco-responsible and environmentally friendly approaches and their importance for public health. The project will support continuation of the eco-school caravan programme, established in 2019 to provide environmental education at schools in the village communities within the Comoros’ PAs.
3. The project will launch a drawing competition for high school students to develop six logos identifying each PA, associated with the current logo of the Comoros national parks. A competition will also be launched to design a logo for the new national certification programme for products from sustainable and equitable development of the PAs’ natural resources. The contest will be publicized in the national media and on social networks. The authors of the winning drawings will receive a prize.

**Output 5.1 Gender and PWD action plans are implemented, monitored and evaluated**

1. In addition to experiencing insidious forms of discrimination in accessing the resources they need to ensure their socioeconomic development, women and PWD are disadvantaged in accessing support services. Indeed, microcredit services, extension services and the provision of inputs and seeds generally address the needs of male heads of household.
2. The project will work to address the constraints that specifically affect persons experiencing inequality based on gender or disability by designing and implementing action plans that promote gender equity and inclusion for PWD. Implementation and monitoring of these action plans will help to ensure that women and PWD are consulted and integrated systematically in planning interventions, particularly those that could improve their ability to benefit from the sustainability of natural resources and ecosystem services and to reduce the constraints they face in engaging in decent work.

*5.1.1**Gender and PWD action plans are developed and implemented*

1. Gender equity action plan: This action plan was drafted during project development. It is based on the gender analysis and is provided in Annex 11 of the project document. The plan breaks the project results down into concrete, gender-related results and activities to ensure that they are well integrated into the annual workplan and budget. Under the supervision of the gender/PWD officer, the project will take account of the gender issue by collecting data, disaggregated by gender, in the baseline surveys and by monitoring the gender-sensitive indicators to assess the specific impact of the project on women.
2. PWD inclusion action plan: PWD were not addressed in a preliminary analysis to identify specific constraints they face in participating in project interventions and benefiting from the results. The gender/PWD officer will thus conduct a survey when the project launches to document this issue, working with PWD in the villages within the PAs, the ‘Friends of the Parks’ village committees, village authorities and the park management agency’s community mobilizers. An action plan will be developed, using the same structure as the gender equity action plan, to incorporate concrete solutions into the project’s implementation plan.
3. Through these action plans, the project will seek to strengthen the participation of women and PWD by: i) adopting a communication approach targeting them to ensure that the messages reach them and that their concerns and priorities are heard and taken into account; ii) consulting with them to identify ways to facilitate their participation, specifically by planning activities based on their availability (particularly for the women) and encouraging local actions to limit the need to travel; iii) involving them in all local planning and implementation stages in determining the location and choice of agroforestry system species, identifying tasks and techniques adapted to women and PWD, and addressing their needs and interests within the value chains; iv) involving them in the design, dissemination and, where appropriate, marketing of products from these value chains; v) developing training programmes that target the specific activities of women and PWD and by encouraging them to participate in new activities; and vi) facilitating their access to local credit institutions to finance their activities. The project will pay particular attention to securing women’s access and rights to resources and land, specifically for women-headed households.

*5.1.2 Gender and PWD action plans are evaluated and adapted*

1. Assessment of the impacts of the implementation of the gender and PWD action plans: Evaluating the project’s contribution to improving benefits for women and PWD linked to improved management of the PAs and their resources by integrating an approach that is sensitive to women and to PWDs will require further analytical thinking, such as evaluating the impact of the project on the obstacles to be overcome at all levels, ranging from the perceptions of women and PWDs regarding their empowerment, to improving the benefits linked to sustainable development of biodiversity products and ecosystem services, constraints of access to means of production, including land, marine areas and microcredit, and political and legislative frameworks and their local implementation.

This would involve evaluating the project’s impact on the barriers to be removed at all levels, from perceptions of women and PWD as they become empowered to improving the benefits of sustainable development of the biodiversity products and ecosystem services, removing constraints to accessing means of production, including land, marine areas and microcredit, and political and legislative frameworks and their local application.

1. The issues will be documented based on the systematic monitoring of the participation of women and PWD in project activities and the evaluation of the project’s impacts on them. Indicators disaggregated by gender and disability status, together with socioeconomic surveys, will be used. The gender/PWD officer will plan and carry out this evaluation at mid-term and in the last year of project implementation (before the terminal evaluation). This officer will work closely with the monitoring/evaluation and safeguards officer, with contributions from the staff of the PNC Agency (specifically, the community mobilizers and the officer responsible for income-generating activities, who have worked closely with the local communities). The use of gender- and disability-sensitive indicators, backed by statistics and facts, will help to highlight the barriers that women and PWD must overcome to participate actively in the project and to design corrective actions given significant constraints. The surveys will evaluate the extent to which the project’s approaches to gender and PWD integration helped improve living conditions for the women, their families and PWD and how support for women and PWD helped improve environmental sustainability within the national park landscapes. They will also be used to develop specific recommendations. Groups of women will help to share and analyse the lessons learned and the experiences with gender integration. The results of such an analysis, conducted in collaboration with the gender/PWD expert and the communication/knowledge management expert, will target academic and administrative audiences and other development projects underway in the country. They will be disseminated in electronic and printed form. A simplified version that responds to cultural sensitivities will be prepared for rural populations. It will underscore all the benefits of gender integration in the context of sustainable environmental development and through the empowerment of women and PWD.

Partnerships:

1. Establishing sustainable and mutually beneficial partnerships is the essential key to effective management of protected areas in the Comoros. The project will contribute to strengthening partnerships with all stakeholders to support its implementation but above all, to support the operation of the National Parks Agency in achieving its objective of conserving the biodiversity of the Comoros for the benefit of the entire population.
2. The partnerships essential to the implementation of the project and the achievement of its development results are mainly those that the project will establish with the beneficiaries and stakeholders targeted by the interventions and all other partnerships with development actors working in the field of development mainly at national level, but also regional: (i) local communities, i.e. populations of the villages within PAs; (ii) local authorities at island and commune levels; (iii) State actors (ministries in charge of environment, fisheries, tourism, finance, and land use planning) and their decentralized structures where needed; (iv) civil society (producer associations, user groups, NGOs) and academic and scientific institutions; (v) and the private sector (nature-based enterprises, restaurant and hotel owners). The effective involvement of local communities in the governance of protected areas will be recognized and strengthened through interventions under the sub-output 1.1.4 and successful community co-management partnership models will be adapted to other sites within the network under output 2.3. Collaborative institutional arrangements will be established between relevant directorates and offices (fisheries, agriculture, tourism, forests, coastal areas and land use planning) and the PNC Agency to ensure that natural resource management complies with relevant regulations under the sub-output 1.2.4, and long-term partnerships will be established or expanded with other research and academic institutions, environmental and development NGOs to provide the required expertise to support the implementation of the management and development plans across the network, under the output 1.4. Furthermore, the interventions under Output 3.3 will enable mutually beneficial partnerships to be established between local producer / gatherer / fishers’ cooperatives and private businesses to support the growth of nature-based value chains that will help reduce pressures on biodiversity.
3. The project will also work with partners to achieve results through their interventions. The following table briefly maps what other initiatives are doing to address the development challenge addressed by this project and their specific contributions to the results of this project.

**Table 3. Contributions from other projects and interventions to the achievement of project results**

| **Project / Objective** | **Donor / Implementation Partner** | **Period and site of intervention related to the project** | **Complementarities** |
| --- | --- | --- | --- |
| **DIDEM** / Develop capacities for decision-making and policy development for the sustainable management of coastal and marine environments based on scientific knowledge | FFEM, IRD, UNEP, CRDI | 2021-2023 Shissiwani and Mohéli National Parks | Support for science-decision making dialogue (by-output 1.1.3)  Integration of scientific knowledge into marine area management decision-making (sub-outputs 1.2.3, 2.1.2, 2.2.1, 2.2.2) Dissemination of scientific knowledge (components 2 and 4) |
| **SWIOFISH 2** / Improving the management of priority fisheries at regional, national and community levels | World Bank - IOC / DGRH (MAFETH) | 2018-2023 Mitsamiouli-Ndroudé National Park | Sharing of experiences, information exchange system for deterring and preventing illegal fishing (Outputs 2.1, 4.1) fisheries monitoring missions (Output 2.1), blue economy in the context of climate change (Output 2.4) |
| Protecting biodiversity and building resilience through effective management of the marine protected areas of the Comoros / Support and improve the effective implementation of three coastal MPAs and improve the management of the Mohéli MPA | Oceans5 / WILDOCEAN / PNC Agency, CORDIO, IRD, UdC, AIDE | 2021-2026 Mitsamiouli-Ndroudé, Coelacanthe, Shissiwani and Mohéli National Parks | Capacity development for the PNC Agency and UdC for biodiversity monitoring and knowledge of priority ecosystems and species (sub-outputs 1.1.3, 2.1.2), data analysis and database management (sub-output 2.1.1), Biodiversity Monitoring Training Centre (including material and equipment) in Mohéli NP to serve all MPAs (sub-output 2.1.2), Rapid surveys and updating of marine biodiversity inventories and maps of each MPA (sub-outputs 2.1.2, 2.1.3, 2.4.1), Monitoring program for adaptive management of coral reefs, fisheries, turtles, mangroves and seagrass beds (sub-outputs 2.1.2, 2.1.3), Assessments of NP’s management effectiveness with the managers of two MPAs and development of annual action plans and work plans for each site (sub-output 2.2.1), Support village committees on compliance and co-management issues (sub-output 1.1.4, output 2.3). |
| **Ecosystem-based Adaptation in the Indian Ocean** | GCF / DGEF /MAFETH | 2021-2030 Karthala National Park | Ecosystem profile and support for the implementation of ecosystem-based actions by civil society (output 1.2) (ii) Knowledge management for sustainability and replication (output 4.2). |
| **Climate-resilient water supply in Comoros** / Strengthen the climate resilience of drinking and irrigation water in 15 of the most vulnerable areas to the risks related to climate change in the Union of the Comoros | GCF /UNDP /DGEF /MAFETH | 2019-2027 Karthala, Coelacanthe, Mont-Ntringui and Moheli National Parks | Development of source water protection areas (sub-output 2.2.3) |
| **WIOSAP –** Implementation of the strategic action programme for the protection of the Western Indian Ocean from land-based sources and activities | UNEP / Nairobi Convention / DGEF | 2020-2022  Shissiwani National Park | Training of fishers in monitoring reefs and mangroves (sub-output 2.1.2), reforestation of the Ilot de la Selle (sub-output 2.2.3) |
| **AFIDEV Project /** Improve cash and vegetable crops through agroecological production systems, their added value, and strengthen the dialogue between the different actors in the value chains. | AFD | 2020-2024 Mohéli, Karthala and Mont Ntringui National Parks | Development of sustainable livelihoods for local communities (Outcome 3) |
| **Comoros integrated tourism framework project /** Supporting communities in the development of ecotourism in the Comoros | AFD | 2019-2023 Karthala and Mont Ntringui National Parks | Construction of 2 ecotourism bungalows and training local communities in the management and administration of a microenterprise (sub-output 3.2.1). |
| **Resilience and integrated watershed management project** / Stemming watershed degradation exacerbated by climate change on the three islands | GEF/ UNEP | 2017-2022 Mohéli, Karthala and Mont Ntringui National Parks | Planning areas to restore (Outputs 1.2 and 2.2) rehabilitation of degraded watersheds in particular through reforestation, conservation of species and control of erosion (Output 2.2) |
| **Geothermal Project** / Develop a power plant powered by geothermal resources and reduce GHG emissions | New Zealand Government, UNDP-Comoros, African Union (Geothermal Risk Mitigation Facility) | 2019-2024  Karthala National Park | Legislative framework for the development and exploitation of renewable energies (sub-output 1.1.1) Potential partner for the mobilization of recurring financial resources for the Comoros Environmental Fund (Output 1.3) |
| **Women's financial empowerment** / Develop IGAs, limit losses and ensure food security | GEF/ UNEP UNDP /AfDB | 2021-2022 Cœlacanthe, Shissiwani and Mont Ntringui National Parks | Promotion of the socio-economic inclusion and entrepreneurship of the women of the regions of the Mont-Ntringui, Shissiwani, and Coelacanthe national parks, and capacity building in management of associative activities (outputs 3.6 and 4.1) including women involved in the selling and processing of fishery products. |
| **Establishment of the plastic waste recovery and redemption centre in Mohéli** /Reduce the volume of waste that pollute the oceans and areas of ecological interest and create sustainable economic activities through waste recovery for the benefit of the communities of the Mohéli Biosphere Reserve. | UNDP/ Ocean Innovation Challenge | 2021-2022 Mohéli National Park | Restoration of coastal marine ecosystems (output 2.2) and development of sustainable IGAs helping to reduce pressures on ecosystems and biodiversity (Outcome 3) |
| **Resilience of Fishing Communities/** Increase the resilience of fishing communities in coral reefs in Kenya, Madagascar, Comoros, Mauritius and Seychelles | Japan Government / FAO | Mitsamiouli-Ndroudé, Coelacanthe, Shissiwani and Mohéli National Parks 2021-2024 | Increasing sustainable production and marketing of small-scale fisheries, dialogue to strengthen the coherence of fisheries and environment sector policies and strategies to encourage sustainable investment, promotion of blue economy (sub-outputs 1.2.3, 1.2.4, output 2.2, outcome 3). |

Risks*:*

1. An analysis conducted during the project development phase via UNDP’s Social and Environmental Screening Procedure (SESP) (Annex 5) identified potential social and environmental risks associated with project activities including, in particular, enforcement of regulations governing protected areas (PAs), master planning for terrestrial and marine areas within PAs, preparing and implementing management plans for key terrestrial and marine species, supporting community livelihoods based on the use of natural resources and engagement of private sector entities, and possible human rights violations related to project efforts to reduce illegal wildlife trade and poaching. This screening resulted in an overall social and environmental risk categorization of “Substantial” for the Project. In addition, a COVID risk and opportunity analysis was conducted, and an action plan developed to address COVID-related risks (Annex 7) and a climate risk assessment (Annex 13) was carried out which identified project interventions that will contribute to reduce risks and vulnerabilities to climate change.
2. An ESMF has been developed based on this project risk categorization to specify the additional assessments of potential impacts and development of risk management measures to be undertaken by the Project Coordination Unit, in line with UNDP’s Social and Environmental Standards. The following assessments were included in project interventions and will be undertaken during the inception phase:
3. Scoped strategic social and environmental assessment (SESA) for the Master Plans for terrestrial and marine areas within PAs (Output 1.2);
4. Scoped ESIA for the management plans for key terrestrial and marine species (Output 2.2) and the feasibility studies for developing or expanding nature-based value chains (Sub-output 3.1.1), based on which, preparing scoped Environmental and Social Management Plans, for avoiding, and where avoidance is not possible, reducing, mitigating, and managing adverse impacts, which may include a Livelihoods Restoration Plan.
5. The CO used the UNDP Private Sector Risk Assessment Tool to evaluate whether or not UNDP should pursue a partnership with the following private businesses: EcoMassiwa, Comoros Moringa, Massala Délices, Maya Beauté et Cosmétiques. The findings of the assessment indicate that the practices of these companies comply with UNDP environmental, social and governance standards and that a partnership with these companies under the project does not present significant risks. Should additional private businesses be identified as partners during project implementation, the UNDP Private Sector Risk Assessment Tool will be applied to those entities as well.
6. A Grievance Redress Mechanism (GRM) will be established at the start of the project implementation for each national park and local communities will be duly informed about the procedure to address griefs (Output 1.1, sub-output 1.1.4). A full description of the GRM procedure is provided under section 6 of the ESMF. Project activities will not proceed until the project GRM is operational.
7. Furthermore, the following table specifies additional key risks that can threaten the achievement of results through the chosen strategy and the measures to mitigate them.

**Table 4. Project risks and mitigation measures**

| **IDENTIFIED RISKS AND CATEGORY** | **IMPACT** | **LIKELIHOOD** | **RISK ASSESSMENT** | **MITIGATION MEASURES** |
| --- | --- | --- | --- | --- |
| FINANCIAL  The lack of reliable financial flows for the PA system compromises the effectiveness of PA management beyond the duration of the project intervention | High | Likely | **High** | The financial requirements analysis conducted in the PIMS 4950 project to cover the recurrent costs of the management and development plans for all 6 protected areas in Comoros estimated the requirements at $1.3 million per year. UNDP recognizes that addressing the goal of financial sustainability at the level of the PA system is important, but that it takes time, and that the approach should preferably be systemic in scope.  The project will take a concerted approach to mobilizing resources from a variety of sources, including broadening the base of donors and partners supporting the PA system, and involving the private sector. To this end, an investment framework and financing strategy will be developed and implemented to support the management of the national PA system (Output 1.3). The project will put in place an enabling legislative framework for the FEC and resource mobilization (sub-output 1.3.1) and mobilize all necessary internal and external financial resources (sub-output 1.3.3) and carry out the necessary fundraising to establish a trust fund the revenues of which can cover the recurrent costs of the proper functioning of all protected areas in Comoros. The support will also include capacity building for the Board of Directors and the FEC Management on resource mobilization approaches and strategies (sub-output 1.3.6).  The risk is manageable given the government's recent commitment, as stated in the protected areas establishment orders, to contribute to the funding of protected areas on an ongoing basis, which represents a contribution of $1,170,731 over the life of the project. However, the current COVID environment and subsequent economic impacts may make fundraising for the FEC more difficult than anticipated. |
| SOCIAL AND ENVIRONMENTAL  Land disputes between individuals in the same village and between contiguous villages within protected areas could be an obstacle to effective management of protected areas and the adoption of new and sustainable resource use practices. | High | Likely | **High** | Addressing land tenure at the regulatory level may require solutions at the systemic level that go beyond the objectives for which the project is designed. However, Project Sub-output 1.2.1 is designed to document and map the delineation of village lands within protected areas and the demarcation of protected area boundaries with the participation of local communities. The project will contribute to clarifying the land tenure issue, particularly to know the extent of community land ownership, or village lands, within the newly created National Parks (Karthala, Mitsamiouli-Ndroudé, Cœlacanthe, Mont Ntringui and Shissiwani). Thus, national park management plans will integrate land issues into the review of park policy and strategy and into the revision of park management plans and all community engagement activities, in order to accurately capture land and community engagement issues in national park management. Any areas of dispute will be documented (nature of the dispute, parties involved) geo-referenced and mapped to serve as a common reference for the parties involved and a mechanism will be proposed to assist communities in resolving the dispute.  All appropriate safeguards will be applied to ensure that consultations with affected stakeholders take place prior to any decisions on land use changes and that no involuntary resettlement of resident populations takes place as part of the project. |
| POLICY  To achieve the ambitions of the Emerging Comoros 2030 Plan, government and local authorities prioritize short-term gains over the long-term intangible benefits of conservation when faced with scarce economic opportunities and invest heavily in development and resource exploitation without applying sustainable development requirements and create undue pressure on land, water and remaining natural forest resources. | High | Likely | **High** | Component 1 of the project includes several interventions highlighting the importance of preserving biodiversity and ecosystem services for the country's development and economy. The interventions planned under Component 4 on communication and knowledge sharing will ensure wide dissemination of this information to raise awareness of these issues among a broad audience.  Following the launch of the project, an awareness campaign will be conducted among all stakeholders on the newly established PA system, including the new law on protected areas, the 5 new PAs and the national agency for the management of the protected area system, with the objective of understanding (i) the implications in terms of access to and use of land and resources and (ii) the roles and responsibilities conferred on the various institutions under the regulations governing biodiversity conservation, in order to optimize their complementarities and synergies in the effective management of the PA system (sub-output 1.1.2). The project will support the implementation of a strategic plan for communication and awareness raising on the ecosystem goods and services provided by PAs, the PA Law, the new PA management agency, the concept of sustainable use of natural resources and responsible consumption and promotion of PA labels in Comoros, biodiversity, and the ecosystem value of parks (sub-output 4.3.1). |
| ENVIRONMENTAL  Climatic risks and natural disasters: Due to its geographical location, fragile soils and volcanic activity (for Ngazidja), Comoros is prone to cyclones, heavy rains, landslides, habitat disturbances and floods. | High | Likely | **High** | This risk will be mitigated by reducing threats to forest ecosystems and reducing overall pressures in order to reduce the vulnerability of protected areas to climate change and increase resilience to the effects of climate change. Climate change is a slow-acting risk, and is constantly monitored in Comoros, including monitoring the health of coral reefs, seagrass beds, and mangroves; monitoring forest cover; and monitoring emblematic and endemic terrestrial wildlife. The project will put in place management plans based on the monitoring of all the resources valued within the framework of the value chains in order to be able to adjust the levels of use, or even to put an end to it, in order not to increase their vulnerability to climate risks and thus affect the long-term survival of natural populations. In addition, a specific climate risk assessment (Annex 13) was carried out which identifies project interventions that will contribute to reduce risks and vulnerabilities to climate change. |
| STRATEGIC  Potential conflict of interests and related damage to UNDP’s reputation due to blood relationship between the Director of the Implementing Partner (DGEF) and the Head of the UNDP Programme Unit. | Medium | Certain | **High** | To manage this risk, all UNDP-funded projects executed by DGEF will be supervised directly by the UNDP Deputy Resident Representative. |
| SOCIAL  Infringement of civil rights by police and ecoguards:Poorly trained ecoguards may not conduct their tasks properly and inadvertently infringe on civil rights of the community. | High | Moderately Likely | **Medium** | The project includes a training program for the ecoguards (Activity 2.1.2), that will focus on human rights training, a system of monitoring and compliance and a grievance redress mechanism (GRM) that is available to all community members. In addition, a Code of Conduct will be developed on which both the ecoguards and police officers involved in law enforcement (Activity 2.2.6) within the PAs will be trained. |
| OTHER  Gas development, including studies involving drilling and gas development, pose varying degrees of threats to cetaceans, sea turtles and fish. Potential oil spills increase pollution risks to the marine environment and coastal habitats | High | Moderately Likely | **Medium** | The country is developing its gas potential. Seismic studies have been carried out and have identified 40 blocks that could be exploited. The exploitation contracts established with companies include an exploratory drilling phase to determine the existence of hydrocarbons in the Comorian territory. This phase was planned between 2021 and 2023 but has been postponed to between 2023 and 2025 due to the health situation related to COVID.  Gas drilling and exploitation operations will result in intense traffic of large vessels and increase the risk of collision with cetaceans. In addition, the risk of oil spills can lead to marine and coastal pollution and threaten all marine and coastal biodiversity.  To mitigate this risk, the government has prohibited all drilling below 8,000 square kilometers. In addition, the protected areas agency will advocate to be an integral part of the institutions that will review the environmental impact assessments done on the 40 blocks likely to be drilled. At the same time, the national protected areas agency will develop guidelines for drilling and gas operations to avoid or mitigate their impacts on the environment and biodiversity. These guidelines may include the delineation of navigational corridors and speed limits to reduce the risk of affecting cetacean populations that frequent the area likely to be affected, and the adoption of procedures requiring continuous visual monitoring and the requirement to cease all movement when a cetacean is sighted within a given radius of the vessel. |
| ENVIRONMENTAL  Marine and terrestrial ecosystems are not sufficiently resilient and their biological and physical integrity is gradually being compromised by the effects of global and regional climate change. | Medium | Likely | **Medium** | Management of the national protected area system will seek to control major pressures on biodiversity and harmonize the management of important biodiversity resources within PAs with that of the surrounding ecosystems in order to reduce the negative impacts of activities that take place outside PAs.  Improving the health of seagrass beds, coral reefs, mangroves, forests and associated biodiversity by reducing pressures will boost their resilience to climate change-induced stresses such as coral bleaching. |
| INSTITUTIONAL  There is insufficient institutional capacity to co-manage the PA system. | Medium | Moderately likely | **Low** | The project aims to improve the capacity of stakeholders in the co-management of all protected areas in Comoros, including institutions such as the Agency for the Management of Protected Areas, the General Directorate of Environment and Forests, the co-management committees of each national park and the village co-management committees of national parks.  In accordance with Article 53 of Law No. 18-005/AU of December 05, 2018 on the national system of protected areas of the Comoros relating to the management delegation, the agency called 'Comoros National Parks' has as its essential mission: to manage protected areas in accordance with the provisions of the law on protected areas; to ensure regulatory control within protected areas; to develop and implement the development and management plans of protected areas. Furthermore, the national protected area system has established 56 village co-management committees for protected areas and 6 site co-management committees. All of these PA governance bodies constitute a network of actors capable of participating in the PA co-management process promoted in Comoros.  The project will develop formal collaboration agreements for the co-management of resources, established between the National Parks Agency, the National Directorate of the Environment, and the National Directorates of the fisheries, agriculture, tourism, land use planning, and the National Office of Forestry and Coastal Zones sectors, in order to harmonize land use, coastal and resource planning within the PAs with the jurisdictions relevant to these sectors (sub-output 1.2.4). |
| STRATEGIC  The socio-economic context is unstable and does not favor the emergence of environmental awareness among the population, who are not willing to change their behaviors and unsustainable uses of natural resources. | Medium | Moderately likely | **Low** | The project will continue to raise awareness among local communities on the benefits associated with biodiversity conservation and ecosystem services through environmental education and will provide demonstration and training on new sustainable resource use practices and associated benefits (Sub-outputs 4.3.1 and 4.3.2). It will support the development of a livelihoods program based on the sustainable use of ecosystem services provided by PAs (component 3). |
| SOCIAL AND ENVIRONMENTAL  3rd or further waves of COVID-19, especially with the threat of the new delta variant that is already affecting countries in the region. The government could therefore adopt restrictive measures that will affect project implementation | Medium | Moderately likely | **Low** | The capacity building of communities and the development of partnerships with the private sector (component 3) will generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs, which will contribute to the economic recovery of communities affected by COVID-19 while strengthening the ecological resilience of the country.  In addition, the co-management committees of the national parks with the support of community mobilisers are important actors in the implementation of the risk communication and community engagement plan for the COVID-19 response. The ecoguards, particularly those assigned to the coastal villages, will support the efforts of the police to strengthen the control and surveillance system along the coasts to limit the spread of the virus across the islands in the country.  Furthermore, a specific COVID risk and opportunity analysis was conducted, and an action plan developed to address COVID-related risks (Annex 7). |

Stakeholder engagement and south-south cooperation:

1. Stakeholder engagement plan: A project stakeholder engagement plan is included in Annex 9 and includes information summarizing the PPG participatory process. A list of people consulted during project development is also available. The successful implementation of the project will largely depend on the effective communication and coordination with the multiple project stakeholders and the implementation of mechanisms to ensure these stakeholders’ participation. The project will work with key national and regional State actors including the Ministries in charge of environment, agriculture, fisheries and tourism. At the local level, the most relevant stakeholders are the local communities and natural resource users who will be involved in the co-management of the national parks and their resources and in livelihood development based on natural resource exploitation, the staff of the National Parks Agency, including Conservateurs, Community Mobilizers and Ecoguards. Under component 1, especially for the operationalization and mobilization of resource for the FEC, the project will work with national authorities and national finance experts to assess the feasibility of various financing schemes. Throughout components 2, 3, 4, the environmental NGOs and associations such as AIDE, Dahari, Ulanga Ngazidja, Association for the Protection of the Gombessa, ARAF, Maeecha, Banda Bitsi, and Eco-Massiwa, engaged in biodiversity conservation, natural resource management, ecosystem restoration and in the development of livelihood for communities, will be involved to provide support in their own field of expertise including ecological monitoring, development and implementation of management plans and participatory management of conservation areas, and development of value chains. The project will also work with scientific institutions such as the UoC, CNDRS and INRAPE to support capacity building for the staff of the PNC Agency, PA master plans development, biodiversity monitoring, carbon stocks assessments, and ecosystem restoration through the control of IAS. Partnerships between the private sector and community cooperatives are key for all activities under the 3rd component for the development of sustainable nature-based value chains.
2. Gender equality and Women’s Empowerment: According to the UNDP Gender Marker Rating, the project is categorized as GEN2: gender equality as a significant objective. During the PPG, a gender analysis and a detailed Gender Action Plan (included as Annex 11) were developed to ensure gender mainstreaming in the project; specific gender-disaggregated indicators have been identified for monitoring and a gender specialist will be part of the Project Coordination Unit (PCU) to facilitate improvements to gender equality and women’s empowerment.
3. The gender analysis has concluded that i) while the legal background for gender equality and women's empowerment is in place, women in the Comoros continue to face discrimination, specifically with regards to their participation in the political, social and economic spheres, and that mainstreaming gender into project activities must support this; ii) due to the cultural values and traditional roles and responsibilities of women and men, the project must adopt an approach sensitive to these specificities to avoid aggravating tensions within households; and iii) the project should help address the lack of knowledge and data on the links between gender and biodiversity in the Comoros in order to be able to design gender responsive interventions.
4. The project includes specific actions to alleviate these constraints and promote specific support for women through all the interventions in the intervention sites, and to encourage their active involvement in participatory decision-making processes. It will support the development of value chains based on the exploitation of plant and fish resources that will specifically target women’s participation. Their increased presence in the participatory structures for the co-management of PAs will also promote gender mainstreaming in the development and implementation of PA development and management plans. The main actions will focus on: i) women participation in decision-making on the use of land and resources; ii) contribution to a better knowledge and integration of the concept of gender and development in the Protected Areas landscapes; (iii) empowering women and improving their capacity to integrate or to develop viable enterprises; iv) the empowerment of women in the management of natural resources to support the development of sustainable and profitable value chains. The project will contribute to gender equality through i) improving women’s access to and control over natural resources through their participation to the planning of land and coastal areas in the newly established NPs which will identify areas for the use of local communities to exploit natural resources that support value chains developed with private partners, ii) improving women’s participation and decision making regarding the management of these resources, and iii) generating socio-economic benefits specifically for vulnerable women who are likely to be affected by the strengthened enforcement of regulations in the national parks.
5. South-South and Triangular Cooperation. The project will promote south-south cooperation with the other countries in the region that are implementing similar initiatives, including managing a network of marine and terrestrial PAs, biodiversity monitoring and research for conservation, and setting up and operating an environmental trust fund. This will be achieved, namely

* through direct contacts between the staff of the National Parks Agency with other institutions involved in conservation and protected areas and biodiversity research and monitoring,
* through the active participation of the Board and Director of the Comoros Environmental Fund (FEC) in experience sharing networks with other environmental funds established in Africa, including the FAPBM in Madagascar, the FPRCI of Côte d'Ivoire, the BACOMAB in Mauritania, and through a membership in the African Consortium of Environmental Funds and the Conservation Finance Alliance,
* and through exchanges with the Country Offices and UNDP's Regional Service Centre for Africa. Technically qualified staff and groups of experts in the issues addressed by the project from these countries will have many opportunities to exchange experiences and knowledge.

1. Finally, successful experiences will have a prominent place in the lessons learned that would be disseminated to ensure their widespread adoption and replication in other countries in the region, including throughglobal ongoing South-South and global platforms, such as Africa Solutions Platform, the UN South-South Galaxy knowledge sharing platform and PANORAMA[[44]](#footnote-45). In addition, to bring the voice of Comoros to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on biodiversity conservation and monitoring, protected areas co-management with local communities, and environmental trust funds. The project will furthermore provide opportunities for regional cooperation with neighbouring countries that are conducting research to support conservation, especially for marine turtles and dugongs*.*

Innovativeness, Sustainability and Potential for Scaling Up:

1. **Innovation**. This project adopts innovative approaches in the Comorian context for the following aspects: i) establishing business partnerships between local community cooperatives and the private sector to develop or expand nature-based value chains that have a potential to provide sustainable livelihoods to local communities, ii) developing a national certification system for products developed through value chains that are sustainable, equitable and related to the national protected areas, iii) assessing blue and green carbon stocks in the protected areas ecosystems, which is still new in Comoros and has yet to be integrated into systems to access carbon markets, iv) the systematic use of drones for long-term ecological monitoring of ecosystems and biodiversity and to support surveillance and fight against poaching is new in the Comoros and greatly increases the potential and scope of research to support the development of protected areas, and v) the different resource mobilization approaches that will be explored in the project represent potential for innovation at the national level, e.g. payments for ecosystem services, blue and green carbon, and green taxes.
2. **Environmental sustainability** will be ensured through strengthening capacities at all levels, including the government and PNC Agency, in biodiversity conservation planning, implementation and assessment, data collection and management, and monitoring/evaluation protocols and practices; through strengthening PA co-management effectiveness in all NPs; through the development of alternative sustainable and profitable livelihoods to encourage local communities to abandon unsustainable practices harmful to biodiversity and ecosystems; through strengthening surveillance and enforcement of regulations targeting structured illegal practices; through developing management plans for key terrestrial and marine species used in value chains which implementation will involve the monitoring of exploited stands or populations to ensure their preservation.
3. **Financial sustainability** will be ensured by operationalizing the Comoros environmental fund and by mobilizing the necessary financial resources so that the national system of protected areas can rely on a diversified and autonomous financing mechanism and to reduce its dependence on external sources of financing, and through developing partnerships between local cooperatives and private businesses which operations are based on resource and ecosystem use in the national parks, supported by capacity building in business planning, entrepreneurship and risk management, and providing local support for starting-up the new businesses. Financial sustainability will also be improved through the development of a business plan for the PA system, as part of the PA management and development plans. It will be essential that the various land and resource uses within the protected areas generate sufficient benefits at all levels for local communities to perceive tangible, short- and medium-term interests resulting from the adoption of improved and sustainable practices.
4. **Social sustainability** will be supported by several elements, starting with the formal recognition of local communities’ rights, benefits and contributions in their co-management agreements with the PNC Agency (beyond roles and responsibilities) and of the village boundaries within PAs in order to secure the terroirs. The project will also support effective participatory processes with a focus on gender and PWD integration involving local users, technical services and authorities at all levels, for assessments, negotiations, decision-making, implementation, monitoring and evaluations, including extensive involvement of stakeholders at all levels for the participatory land and resource use planning. It is expected that local actors will have better ownership of the decisions and planning made through a transparent and participatory approach. Greater involvement of local communities and equity of revenue and benefit sharing from biodiversity conservation and sustainable management of natural resources and ecosystem services will be cross-cutting elements of interventions, especially under components 1 and 3. Namely, for improving PA management effectiveness, the project will support the collaborative management approach through recognizing local communities rights and benefits regarding PAs and their resources, and developing capacities of both the PNC Agency and local communities to consolidate trust between PA institutions and local communities, ensure their effective involvement and enhance their perception of the benefits resulting from the ecosystem services provided by PAs. Furthermore, social sustainability will be improved through developing equitable partnership agreements with private entrepreneurs to develop sustainable value chains based on natural resources within the PAs to ensure a fair and equitable sharing of the benefits generated among all stakeholders which will serve as an incentive to adopt and maintain sustainable land and resource use practices. Sustainability of the training programmes will be supported through the systematic capturing, analysis, and dissemination of the technical documentation, experiences and learnings, and integration of training material into the curricula of academic institutions.
5. Potential for scaling up. The project includes the elements needed for scaling-up its outputs and outcomes, first across the national parks and within the country, and potentially in other countries with similar issues and context. Replication elements include i) developing participatory land- and coastal use plans that will provide commonly agreed frameworks to coordinate the conservation and restoration interventions of all current and potential partners within the national protected areas (output 1.2), protocols for the monitoring of biodiversity that enable of communities and other stakeholders to participate (output 2.1), and management plans for natural resources that support value chains (output 2.2), ii) conducting a participatory assessment of community-based co-management models to provide a set of participatory management approaches that could be adapted and applied in other sites, iii) involving all actors in decision-making, planning, monitoring, evaluating and learning, iv) building capacities at all levels to ensure effective participation and implementation of interventions by all stakeholders, including women and PWD, v) strengthening capacities of the staff of the PNC Agency including Community Mobilizers and Ecoguards to provide support and supervision to local communities and develop new value chains or expand existing ones, vi) documenting all interventions, their implementation, results and lessons learned, including interventions targeting women and PWD, so that they can be easily shared with local partners and disseminated regionally for replication in other sites (outputs 4.1 and 5.1) and vii) develop and implement a national certification system for PA products developed through sustainable and equitable value chains which, through monitoring of implementation and results, will provide learnings to be shared as knowledge products for their potential application to other products that meet the same criteria.

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# Project Results Framework

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| **The project will contribute to the following Sustainable Development Goals:** Goal 1 – *End poverty in all its forms everywhere (1.4 Access to resources and 1.5 Reduction of vulnerability); Goal 5 – Gender equality and empowerment (5.5 Participation of women); Goal 6 –Sustainable management of water (6.6 Protection and restoration of ecosystems); Goal 8 – Sustained, inclusive and sustainable economic growth, productive employment and decent work for all (8.3 Micro and small enterprises, 8.4 Efficient use of resources); Goal 12 - Sustainable consumption and production (12.2 Sustainable management of natural resources, 12.8 Training and environmental information, 12b Sustainable tourism); Goal 13 – Combat climate change and its impacts (13.1 Resilience and adaptation); Goal 14 – Conserve and sustainably use marine resources (14.2 Marine and coastal ecosystems, 14.4 Fisheries regulations, 14.5 Preservation of marine areas, 14.7 Small Island States, 14b Preservation of artisanal fishing); and Goal 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and halt biodiversity loss (15.1 Terrestrial ecosystems, 15.2 Forest management, 15.4 Mountain ecosystems, 15.5 Biodiversity and threatened species, 15.7 Poaching, 15.8 Invasive species, 15a Financing for biodiversity).* |
| **This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:** *Outcome 1 - By 2026, state and non-state actors, the Comorian population, especially the most vulnerable, will strengthen their resilience to climate change, natural disasters and crises and ensure a sustainable and integrated management of terrestrial and marine ecosystems as well as associated ecosystem goods and services, in a context of promoting sustainable habitat with a low environmental footprint.* |
| **This project will be linked to the following results of the UNDP strategic plan:** Output 1.4.1.2: Natural resources managed under a regime of sustainable use, conservation, access and benefit-sharing |

|  | **Objective and outcome indicators** | **Baseline** | **Mid-term target** | **End of project target** |
| --- | --- | --- | --- | --- |
| **Project Objective:** Conserve the terrestrial and marine biodiversity of the Union of the Comoros by strengthening the effectiveness of the co-management of the new network of protected areas with local communities to support sustainable development. | *Mandatory indicator 1:*  Number of direct beneficiaries, disaggregated by sex and PWD, benefiting from project interventions, through i) livelihoods created or improved based on the sustainable development of natural resources and ecosystem services within protected areas, ii) the development of their capacities to actively participate in the co-management of protected areas and the valuation of the ecosystem goods and services they provide (institutional, community and private sector actors). (**GEF-7 Core indicator #11**) | 0 | i) IGA development beneficiaries: 6399 (*on the basis of 5.4 persons per household*), including 50% of women and 4% of PWD ii) Beneficiaries of trainings: total of 2049 of which 40% women and 2% PWD, including:  60 members of the PNC Agency + 264 members of park co-management committees and 1680 members of village committees + 10 DGEF officers + 35 people in the private sector | IGA development beneficiaries: 6399 (*on the basis of 5.4 persons per household*), including 50% of women and 4% of PWD ii) Beneficiaries of trainings: total of 2049 of which 40% women and 2% PWD, including:  60 members of the PNC Agency + 264 members of park co-management committees and 1680 members of village committees + 10 DGEF officers + 35 people in the private sector |
| *Mandatory indicator 2* (*from the IRRF – 1.4.1.2b*):  Area of existing protected areas with improved management (hectares)  a) Area of terrestrial protected areas with improved management efficiency (**GEF-7 Core indicator 1.2**) as shown by the evolution of the METT scores of the Karthala, Mont Ntringui and Mohéli National Parks (land portion)  *b)* Area of marine coastal protected areas with improved management efficiency (**GEF-7 Core indicator 2.2**) as shown by the evolution of the METT scores of the Cœlacanthe, Mitsamiouli-Ndroudé, Shissiwani and Mohéli National Parks (marine portion) | 0 ha  a) 0 from baseline METT values  Mohéli: 59 Karthala: 53 Mont Ntringui: 47  b) 0 from baseline METT values Mohéli: 59 Cœlacanthe: 43 Mitsamiouli-Ndroudé: 40  Shissiwani: 53 | n.a. | 116,577 ha  a) 61,815  b)54,762 |
| *Indicator 3:*  Net loss of ecosystem area in primary and secondary forests, mangroves, coral reefs and seagrass beds within the national park network (*Indicator* *1.1.1 of UNDP Country Programme)* | Forest cover of 17,564.9 ha including 14,291.8 ha of primary forest [[45]](#footnote-46) and 3273.1 ha of secondary forest  Mangrove cover: 197.25 ha  Seagrass beds cover: 6030 ha  Coral reef cover: 30,000 ha of which 18,000 ha in good health) (2020 values) | No net loss | No net loss |
| *Mandatory indicator4:*  GHG emissions avoided through restoration of forests and reducing the rate of deforestation in protected areas.  **(GEF-7 Core indicator 6 – Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent)** | 0 | n.a. | 4,768,755 tCO2eq of GHGs corresponding to a reduction in the deforestation rate over 17,564[[46]](#footnote-47) ha and natural habitat restoration over 6,871 ha, including 6,800 through ANR and 53 ha through reforestation |
| **Component 1.** | **Institutions and governance systems** | | | |
| **Outcome 1.** Systemic, institutional, technical and operational capacities strengthened to ensure effective management of the national network of protected areas | *Indicator 5:*  PA co-management capacities:  a) Evolution of the institutional capacities of the NP Agency and the DGEF, as measured by the UNDP scorecard on capacity development for GEF projects: 1: Mobilization capacities 2: Capacity to generate, access and use information and knowledge 3: Capacity to develop strategies, policies and laws 4: Capacities for management and implementation 5: Monitoring and evaluation capacities  b) Evolution of the capacities of National Parks Co-Management Committees and Village Committees to contribute to the planning of the management of national parks, to its implementation and to the evaluation of its effectiveness  c) Evolution of the capacity of the Board of Directors of the Comoros National Parks Agency and of the FEC to fulfill their mandate | a) DGEF:  1: 89% 2: 67% 3: 78% 4: 67% 5: 50%  NP Agency:  1: 56% 2: 53% 3: 56% 4: 67% 5: 33%  b) t.b.d. during the 1st year of the project  c) t.b.d. during the 1st year of the project | n.a. | a) DGEF:  1: 89% 2: 80% 3: 89% 4: 83% 5: 67%  NP Agency:  1: 78% 2: 80% 3: 67% 4: 83% 5: 67%  b) t.b.d. during the 1st year of the project, according to the reference value  c) t.b.d. during the 1st year of the project, according to the reference value |
|
| *Indicator 6:*  Evolution of funding dedicated to the management of the PA system measured by the following elements:  a) Estimated annual financial gap to support the PA system under a basic PA management scenario (USD) | a) 1,281,759 USD | a) The gap is reduced by approx. 10% by project mid-term | a) The gap is reduced by approx. 40% by the end of the project |
| b) Evaluation scores of the funding system for the following components:  i) Legislative and institutional frameworks ii) Business plans and tools for cost-effective management iii) Income generation tools by PAs | i) 42% ii) 36% iii) 23% | n.a. | i) 50% ii) 65% iii) 30% |
| c) Funds mobilized as an endowment for the Comoros Environmental Fund for protected areas (in connection with UNSDCF Indicator 1.7) | c) 0 USD | c) 1,000,000 USD | c) 5,000,000 USD |
| Outputs to achieve Outcome 1 | **Output 1.1** The capacity of the new PNC Agency (Comoros National Parks), the DGEF, and the co-management committees to implement and enforce laws, regulations, and management systems related to the PA network is strengthened.  **Output 1.2** Master plans for terrestrial and marine areas within PAs harmonize relevant sectoral plans and strategies (fisheries, agriculture, forestry, tourism) with biodiversity and ecosystem service conservation priorities, and reduce inter-community disputes.  **Output 1.3** An investment framework and financing strategy is developed and implementedto support the long-term management of the PA system  **Output 1.4** Strengthened participation of institutional partners and the private sector in supporting the national PA system and the implementation of PA development and management plans through the establishment of long-term partnerships | | | |
| **Component** **2.** | **Capacities for co-management of the national PAs network at site level** | | | |
| **Outcome 2** Increased protection of endemic and key species and habitats through improved management effectiveness across the national PA Network | *Indicator 7:*  Area (hectares) of forest ecosystems restored in terrestrial PAs (**GEF-7 Core indicator 3.2**) through: i) assisted natural regeneration (ANR) ii) reforestation with native species iii) control of invasive alien species (IAS) for the following NP a) Karthala  b) Mont Ntringui c) Mohéli | Total: 29.6 ha  a) Karthala i) 0 ii) 15.6 ha iii) 0  b) Mont Ntringui i) 0 ii) 9.5 ha iii) 0  c) Mohéli i) 0 ii) 4.5 ha iii) 0 | Total: 6860 ha  a) Karthala i) 3000 ha ii) 25 ha iii) 6 ha  b) Mont Ntringui i) 800 ha ii) 11 ha iii) 6  c) Mohéli i) 3000 ha ii) 6 ha iii) 6 ha | Total: 6871 ha  a) Karthala i) 3000 ha ii) 30 ha iii) 6 ha  b) Mont Ntringui i) 800 ha ii) 15 ha iii) 6 ha  c) Mohéli i) 3000 ha ii) 8 ha iii) 6 ha |
|
| *Indicator 8:*  Number of beaches subjected to sand exploitation in MPAs and total annual volume of sand extracted from beaches and evacuated by truck for the following National Parks a) Mitsamiouli-Ndroudé b) Cœlacanthe c) Shissiwani d) Mohéli | a) Mitsamiouli -Ndroudé: 4 beaches, 800 m3 b) Coelacanthe: 3 beaches, 480 m3 c) Shissiwani: 15 beaches, 2880 m3 d) Mohéli: 5 beaches, volume t.b.d. | a) 2 beaches, 400 m3 b) 1 beach, 200 m3  c) 8 beaches, 1640 m3 d) 3 beaches, volume t.b.d. | a) 0 beach, no extraction b) 0 beach, no extraction c) 2 beaches, 400 m3 d) 1 beach, 200 m3 |
|
| Outputs to achieve Outcome 2 | **Output 2.1** Protocols for biodiversity monitoring and data collection are developed and applied, including the operationalization of a national database on biodiversity.  **Output 2.2** Management tools (including management plans for key terrestrial and marine species used) are drafted, approved and implemented in the PAs  **Output 2.3**Effective community-based co-management models and partnerships are identified, documented, evaluated, adapted and applied at specific sites within the PA network  **Output 2.4**Blue and green carbon stocks assessed and monitored across the PA network | | | |
| **Component 3.** | **Community livelihoods within the national protected area network** | | | |
| **Outcome 3.** Through capacity building and partnership, directly or within value chains, private companies and local communities generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs | *Indicator 9:*  Number of beneficiaries within local communities in national parks, disaggregated by gender and disability status (PWD), who report at least a 25% increase in baseline incomes from adoption of sustainable livelihood options, thanks to new partnerships established with private companies that promote ecosystem goods and services within PAs, including fishers on foot, with cloth, with nets, beach sand collectors, and farmers practicing cultivation in the forest, for the following value chains: a) moringa b) aromatic and medicinal plants c) ‘clean beaches’ d) ecotourism e) fishers using longlines, fish concentrating devices (FCD), and those fishing for lobster, mangrove crab, crayfish, and octopus | 0 | n.a.  (preliminary stages of consultation, establishment of cooperatives, training, assessment of resources and of the viability of enterprises in partnership with local communities, including scoped EIAs) | 1,185 beneficiaries incl. 54% of women, 1,8% PWD and 12% youth overall report at least a 25% increase in baseline incomes from adoption of sustainable livelihood options a) 100 women collecting moringa, incl. 10% PWD b) 100 women collecting aromatic and medicinal plants c) 70 young men and 30 young women for ‘clean beaches, incl. 10 PWD d) 30 men and 270 women in ecotourism activities e) 485 men and women fishers in networks with restaurants and hotels, incl.:  Longline: 150 men FCD: 200 men lobster: 30 men mangrove crab: 30 women  crayfish: 15 men, 15 women  octopus: 45 women |
|
| *Indicator 10:*  Condition of populations or stands of natural resources which are subject to sustainable development by local communities in project intervention sites within PAs, including medicinal and aromatic plants in the natural environment, moringa, demersal fish, lobsters, crayfish, octopus and mangrove crabs | t.b.d. during the 1st year of the project under Output 2.2, Sub-output 2.2.2.  (will include:  - extent and density of plant stands in the exploited patches - catch per unit of fishing effort for aquatic resources in target fishing areas) | Maintenance or improvement of the condition of plant or aquatic resource populations | Maintenance or improvement of the condition of plant or fish resource populations |
|
| *Indicator 11:*  Number of partnerships between local cooperatives and private companies for the development and certification of value chains based on ecosystem goods and services provided by PAs and integrating biodiversity conservation and fair-trade principles, including a) actors who already intend to engage in environment sustainable and fair-trade practices, and b) actors whose interest has been raised through information and awareness campaigns as part of the project.  (a - Private: EcoMassiwa, private individuals involved in clean beaches, Comoros Moringa, Massala Délices, Maya Beauté et cosmétiques, network of hotels and restaurants) | a) 0  b) 0 | a) 5  b) 5 | a) 5  b) 5 |
|
| Outputs to achieve Outcome 3 | **Output 3.1** Nature-based value chains with real potential for consolidation or sustainable expansion based on a partnership between the private sector and local communities, responding to a strong local market demand, are assessed and selected to provide increased incomes for local community members and contribute directly to the protection of biodiversity  **Output 3.2**: Strengthened capacities of local community members to provide goods and services that meet the needs and standards required for integration into sustainable PA-related value chains, by taking an entrepreneurial approach  **Output 3.3** Mutually beneficial partnerships between local producers / gatherers / fishers’ cooperatives (men and women) and private sector actors are developed with the support of the Mayors and the PNC Agency to support the growth of the selected value chains and develop equitable partnership agreements (based on the feasibility studies carried out) that contribute directly to the reduction of threats to ecosystems within PAs  **Output 3.4** Strengthened business capacities of private enterprises whose operations are linked to PAs, to ensure sustainable expansion of value chains that have a high potential to provide increased incomes for local community members and contribute directly to biodiversity protection  **Output 3.5**Development of a marketing strategy –for all products developed in relation to PAs –focused on biodiversity protection, fair trade, and a branding in relation to PAs  **Output 3.6** Support for the start-up of value chains | | | |
| **Component 4.** | **Knowledge management, M&E, and gender and people with disabilities (PWD) equity** | | | |
| **Outcome 4**  Effective knowledge sharing supports learning across project stakeholders, Comoros and regional SIDS | *Indicator 12:*  Number of village communities within national parks where members seek project support or apply knowledge and solutions shared through the project, outside targeted intervention sites or pilot sites (total of 74 villages in PAs) | 0 | 10 | 20 |
| Outputs to achieve Outcome 4 | **Output 4.1** Technical knowledge and lessons learned from project experiences are compiled and evaluated to increase the effectiveness of project implementation and translated into knowledge products and disseminated within project sites, across Comoros, and among regional SIDS to strengthen the capacities of all biodiversity conservation stakeholders  **Output 4.2** National ownership and pride in the Comoros PAs through increased public perception of the richness and uniqueness of the biodiversity and landscapes and the value of the ecosystem services they provide | | | |
| **Outcome 5**  Increased opportunities for women and PWD to benefit from ecosystem goods and services in PAs and to integrate nature-based value chains linked to PAs | *Indicator 13:*  Representation (%) of women in the co-governance system of national parks participating in decision-making processes relating to management planning and development of park land and coastal marine areas and resource uses: - PA management staff - National Agency for PA Management members (60-member association) - National Parks Co-management committees - Village co-management committees | PA management staff: 27% (17% of *Conservateurs*, 25% of community mobilizers and 28% of ecogards) National Agency for PA Management: 23 % National Parks Co-management committees: 50% Village co-management committees: 50% | n.a. | PA management staff: 35% National Agency for PA Management: 35% National Parks Co-management committees: 50% Village co-management committees: 50% |
| Output to achieve Outcome 5 | **Output 5.1** Gender and PWD action plans are implemented, monitored and evaluated | | | |

# Monitoring and Evaluation (M&E) Plan

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex 4 details the roles, responsibilities, and frequency of monitoring project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](http://www.undp.org/content/undp/en/home/operations/accountability/programme_and_operationspoliciesandprocedures.html) and [UNDP Evaluation Policy](http://www.undp.org/content/undp/en/home/operations/accountability/evaluation/evaluation_policyofundp.html). The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the [GEF Monitoring Policy](https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-C.56-03%2C%20Policy%20on%20Monitoring.pdf) and the [GEF Evaluation Policy](https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C56_02_GEF_Evaluation_Policy_May_2019_0.pdf) and other [relevant GEF policies](https://www.thegef.org/documents/policies-guidelines)[[47]](#footnote-48). The costed M&E plan included below, and the Monitoring plan in Annex 4, will guide the GEF-specific M&E activities to be undertaken by this project.

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.

**Additional GEF monitoring and reporting requirements:**

Inception Workshop and Report: A project inception workshop will be held within 60 days of project CEO endorsement, with the aim to:

1. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
2. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
3. Review the results framework and monitoring plan.
4. 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 and other stakeholders in project-level M&E.
5. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
6. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
7. Plan and schedule Project Board meetings and finalize the first-year annual work plan.
8. Formally launch the Project.

GEF Project Implementation Report (PIR):

The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. 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 quality rating of the previous year’s PIR will be used to inform the preparation of the subsequent PIR.

GEF Core Indicators: The GEF Core indicators included as Annex 24 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF [website](https://www.thegef.org/sites/default/files/documents/Results_Guidelines.pdf). The required Protected Area Management Effectiveness Tracking Tool (METTs) have been prepared and the scores included in the GEF Core Indicators.

*Independent Mid-term Review (MTR):* The terms of reference, the review process and the final MTR report will follow the standard templates and guidance for GEF-financed projects available on the [UNDP Evaluation Resource Center](http://web.undp.org/evaluation/guidance.shtml#gef) (ERC).

The evaluation will be ‘independent, impartial and rigorous’. The evaluators 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. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by April 2025. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report’s completion.

Terminal Evaluation (TE):An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the [UNDP Evaluation Resource Center](http://web.undp.org/evaluation/guidance.shtml#gef).

The evaluation will be ‘independent, impartial and rigorous’. The evaluators 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. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by January 2027. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report’s completion.

Final Report: The project’s terminal GEF 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.

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[[48]](#footnote-49) and the GEF policy on public involvement[[49]](#footnote-50).

| **Monitoring and Evaluation Plan and Budget:**  This M&E plan and budget provides a breakdown of costs for M&E activities to be led by the Project Management Unit during project implementation. These costs are included in Component 4 of the Results Framework and TBWP. For ease of reporting M&E costs, please include all costs reported in the M&E plan under the one technical component. The oversight and participation of the UNDP Country Office/Regional technical advisors/HQ Units are not included as these are covered by the GEF Fee. | | |
| --- | --- | --- |
| **GEF M&E requirements** | **Indicative costs (US$)** | **Time frame** |
| **Inception Workshops** (one per island) | 15,000 | Within 60 days of CEO endorsement of this project. |
| **Inception Report** | None | Within 90 days of CEO endorsement of this project. |
| **M&E of GEF core indicators and project results framework** (incl. contributions of the PC/PA Expert, Conservateurs, Ecoguards, M&E-Safeguards Officer, and travel costs) | 82,015 | Annually, before the PIR, and at midterm and end of project. |
| **GEF Project Implementation Report (PIR)** | None | Annually typically between June-August |
| **Monitoring of the Environmental and Social Management Framework** | Included in budget (Salary of the M&E-Safeguards Officer) | On-going |
| **Supervision missions** | None | Annually |
| **Independent Mid-term Review (MTR)** | 39,003 | June 30 2025 |
| **Independent Terminal Evaluation (TE)** | 39,003 | March 30 2027 |
| **Translation of progress (PIRs) and evaluation reports (MTR and TE)** | 14,000 | Annually, and in iune 2025 and March 2027 |
| **Subtotal indicative COST (GEF)** | 189,021 |  |
| **PCU Travel for documenting indicators of the PRF (TRAC co-financing)** | 4,000 | Annually |
| **TOTAL indicative costs (GEF + TRAC)** | 193,021 |  |

# Governance and Management Arrangements

The project is Full CO Support to NIM modality and therefore all grant funds for the four project components (Components 1, 2, 3 and 4) will be managed by UNDP, in accordance with Full CO Support to NIM requirements. The DGEF was HACT micro-assessed in 2020, which resulted in an overall rating of High Risk. In light of this High Risk rating, and in line with UNDP’s Policy and Operations Policies and Procedures (POPP) to provide Full Country Office Support to National Implementation Modality (NIM), the Government of the Union of Comoros (through MAFE and DGEF) has requested UNDP to provide execution support for the following services for this project. The arrangement was also approved by GEF Secretariat.

* + Financial management: payment processing, issuing checks, creating vendor forms and managing vendor profiles;
  + Staff selection and recruitment and recurring personnel management services;
  + Recruitment of national and international consultants;
  + Procurement of goods and services;
  + Administration and logistics;
  + Information and technology;
  + Travel management.

A Letter of Agreement (LOA) has been signed between the Government and UNDP to confirm the above arrangement (Annex 29).

The capacities of DGEF will be HACT micro-assessed in due course during project implementation.

**Section 1. General roles and responsibilities of the project’s governance mechanism**

Implementing Partner: The Implementing Partner for this project is the Ministry of Agriculture, Fisheries, Environment. Tourism and Handicraft, which delegates its implementing role for this project to the General Directorate of Environment and Forests. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

MAFETH, as the GEF Executing Agency, will work in close collaboration with UNDP to manage project planning and approval of project budgets, and ensure full Government ownership of project implementation. The Project Management Unit and consultants will be physically located in the offices of MAFETH/DGEF and operate under their supervision. MAFETH, as the Implementing Partner, will hold control over planning and approval of project budgets. They will also be responsible for the quality of results produced by consultants and institutions/vendors implementing project activities.

The Implementing Partner is responsible for executing this project. Specific tasks include:

* Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. 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 and generated by the project supports national systems;
* Risk management as outlined in this Project Document;
* Providing adequate premises for the Project Coordination Unit within the Government premises;
* Financial management, including overseeing financial expenditures against project budgets and approving project budget;
* 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.

Responsible Parties:

The following responsible parties and their expected roles have been identified as part of the project preparation activities. It should be noted that the responsible parties will not be part of the project steering committee to avoid a conflict of interest. Potential contractual arrangements will be assessed and prepared in line with UNDP’s POPP.

* The University of the Comoros (UdC) through the Comoros Herbarium Department specializes in the assessment and mapping of terrestrial biodiversity. A Service Contract will be signed and implemented with the UdC to (i) carry out baseline inventories and mapping of terrestrial ecosystems and assess their capacity to sequester green carbon; and (ii) develop protocols for the restoration of terrestrial and coastal ecosystems.
* The Association of Intervention for Development and Environment (AIDE) is an NGO established in 1998 and specializes in monitoring of marine biodiversity in the Comoros. It is designated by the country as a national focal point for coral reef monitoring. A Service Contract will be signed and implemented to (i) train Ecoguards in monitoring protocols for coral reefs, seagrass beds and mangroves; and (ii) carry out the inventory and baseline mapping of marine ecosystems and the assessment of their blue carbon sequestration capacity.
* DAHARI is an NGO specializing in monitoring terrestrial biodiversity, agroecology and supporting farmers for the adoption of sustainable practices compatible with biodiversity. A Service Contract will be signed and implemented for (i) training ecoguards in the application of long-term ecological monitoring protocols in primary and secondary forests.

Project stakeholders and target groups:

The project stakeholders, their interests and their role in the implementation of the project were identified as part of its preparation, and a plan for their mobilization was developed (Annex 9). Stakeholders include the following groups:

1. The populations of the villages located within the protected areas will be the main beneficiaries of the project on all the components and more particularly for the support for the development of IGAs within value chains in partnership with the private sector. They are the most likely to be directly and indirectly involved in on-site interventions and affected by them in their access to natural resources and for their livelihoods. These vulnerable populations include in particular the users of natural resources within PAs (pastoralists, loggers, charcoal makers, fishers, women and young sand collectors and firewood collectors, women fishing on foot, ylang-ylang distillers, collectors and sellers of marine biodiversity products).
2. Another beneficiary group of the project is private companies using natural products from protected areas. They will be supported by training and entrepreneurial support for the establishment or expansion of sustainable and profitable value chains in partnership with community cooperatives, or by facilitating their partnership (hoteliers and restaurateurs) with fishers practicing sustainable fishing.
3. The institutions directly involved in the co-management of protected areas are the Ministry in charge of the Environment, the General and Regional Directorates in charge of the Environment, the National Agency for the Management of National Parks, the National Parks' Co-management Committees and the National Parks' Village Committees are key stakeholders in project implementation and will also benefit from capacity building to improve the effectiveness of co-management processes. The National Parks Agency will play an essential role, both as beneficiary of the capacity building for the management of protected areas and as an actor at site level via the management units of each of the national parks for the implementation of PA management activities and support to local communities. Each individual park management unit includes a *Conservateur*, a Community Mobilizer and a team of ten to twelve Ecoguards.
4. Other island and local government institutions in connection with PAs, including the Directorates of Agriculture, Fisheries, Tourism, the Land service, the CRDEs concerned, the institutions of Justice, town halls and prefectures, academic and scientific institutions (UdC, CNDRS, INRAPE) and the security forces are a key group whose skills will be sought to support the implementation of interventions in each of the project components. The Finance Department will be closely associated with all activities carried out for the operationalization of the Comoros Environmental Fund and the mobilization of financial resources (Output 1.3).
5. Local associations and NGOs involved in environmental protection represent a group of stakeholders whose support will be requested to provide training to local communities, private partners, and staff of the PNC Agency, and to raise awareness of the country's population with regard to various issues addressed by the project, particularly the importance of protecting biodiversity in a national park system to provide a set of ecosystem services for the benefit of all, and to promote sustainable and equitable products from the National Parks of the Comoros.
6. The project will also seek the support of the media, community opinion leaders including village chiefs, notables, religious leaders, and the diaspora to support the implementation of interventions with local communities and the public in general.

The project will ensure a meaningful, effective and informed participation of these stakeholders in the planning and implementation activities of NP management plans, land and coastal area management plans within NPs, and management plans for the natural resources used by local communities for their livelihoods. The effective participation of the various stakeholders will be the responsibility of the Project Coordinator following the guidelines provided in the stakeholder mobilization plan (Annex 9) which identifies the expected participation of stakeholders for all project activities. The Gender and PWD Officer will particularly ensure that relevant information reaches women and PVH and to put in place favorable conditions for their active participation in the various activities that concern them. The project provides for training and support for local communities by PN Agency staff, in particular Community Mobilizers, to promote the effectiveness of participatory processes, particularly through structures such as village committees and parks co-management committees. Participation will also be encouraged by a targeted communication strategy to keep all the actors concerned informed of the planned activities on an ongoing basis under the responsibility of the CKM Officer, supported by the staff of the PN Agency who will see to relay information to local communities and other local partners.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. The UNDP GEF Executive Coordinator, in consultation with UNDP office and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project. UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

A strict firewall will be maintained between the delivery of project oversight and quality assurance performed by UNDP and charged to the GEF Fee and any support to project execution performed by UNDP (as requested by and agreed to by both the Implementing Partner and GEF) and may be charged to the GEF project management costs (only if approved by GEF). The segregation of functions and firewall provisions for UNDP in this case is described in the next section.

**Section 2: Project governance structure:**

**Implementation Partner**

National Directorate of Environment and Forests

**Project Steering Committee**

**Development partner**

UNDP Resident Representative (RR)

**Project Executive**

MAFETH

**Beneficiary Representatives**

(National parks local communities, National Parks Agency, DGEF, private sector)

**UNDP Project Assurance**

UNDP Country Office, Programme Focal point (cannot be same team/person as those providing oversight or support to NIM or supporting RR on Project Board (could be, EFP, governance focal point)

**Project Support**

Project Coordination Unit (Project Coordinator/PA Expert, Administrative and Financial Assistant, M&E/Safeguards Officer, Communication/ Knowledge Management Officer, Gender and PWD Officer, Environmental Legal Specialist, GIS Officer, Conservation Finance Expert, Sustainable Livelihoods Officer)

**Project organisation structure**

Karthala NP management unit

Shissiwani NP management unit

Mohéli NP management unit

Coelacanthe NP management unit

Mitsamiouli-Ndroudé NP management unit

Mont Ntringui NP management unit

Comoros National Parks Agency

**Responsible Parties**

University of Comoros, AIDE, DAHARI

The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP’s Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attend Project Board meetings as a non-voting member.

**UNDP project support**: The Implementing Partner and GEF OFP have requested UNDP to provide support services in the amount of **USD$ 232,587** for the full duration of the project, and for the cost of these services to be charged to the project budget. The execution support services have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached to this Project Document. The capacities of DGEF will be HACT micro-assessed in due course during project implementation.

To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

**Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:**

As noted in the [Minimum Fiduciary Standards for GEF Partner Agencies](https://www.thegef.org/sites/default/files/documents/gef_minimum_fiduciary_standards_partner_agencies_2019.pdf), in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP’s implementation oversight role in the project – as represented in the project board and via the project assurance function – is performed by identified staff in UNDP Comoros’ Sustainable Development Unit, specifically: Programme Analyst in charge of Environment/ Disaster Risk Reduction, the Programme Management Support, the M&E Specialist, and the Gender Expert. The Programme Management Support Unit is specifically responsible for quality assurance of the implementation of project activities in line with UNDP rule and regulations and GEF policies.

UNDP’s execution role in the project (as requested by the implementing partner and approved by the GEF) is performed by Human Resources, Procurement, and Finance staff in the Operations Unit.

**Section 4: Roles and Responsibilities of the Project Organization Structure:**

1. **Project Board:** All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

1. **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the [“Provide Oversight”](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Implement_Provide%20Oversight.docx&action=default) section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
2. **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner(as explained in the [“Manage Change”](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Implement_Manage%20Change.docx&action=default) section of the POPP).

**Requirements to serve on the Project Board**:

* Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
* Meet annually; at least once.
* Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
* Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
* Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

**Responsibilities of the Project Board**:

* Consensus decision making:
  + The project board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
  + Review project performance based on monitoring, evaluation, and reporting, including progress reports, risk logs and the combined delivery report;
  + The project board is responsible for making management decisions by consensus.
  + 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 consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed*.*
* Oversee project execution:
  + Agree on project manager’s tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager’s tolerances are exceeded.
  + Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
  + Address any high-level project issues as raised by the project manager and project assurance;
  + Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
  + Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
  + Track and monitor co-financed activities and realisation of co-financing amounts of this project.
  + Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
  + Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.
* Risk Management:
  + Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
  + Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project’s area of influence that have implications for the project.
  + Address project-level grievances.
* Coordination:
  + Ensure coordination between various donor and government-funded projects and programmes.
  + Ensure coordination with various government agencies and their participation in project activities.

**Composition of the Project Board**: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive is: the Permanent Secretary of the Ministry of Agriculture, Fisheries, Environment, Tourism, and Handicraft.
2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representatives are:

* 6 representatives (one per national park) of village NP co-management committees as representatives of local communities
* 1 representative of the fishers' union, 1 representative of users of aromatic and medicinal plants, 1 representative involved in ecotourism, 3 representatives of environmental NGOs (one per island), as representatives of users of natural resources in parks,
* The director of the National Parks Agency,
* National Directors in Environment, Tourism, Fisheries, Agriculture, Finance, and Land use Planning and Regional Directors in Environment,
* The Secretary General of the Union of Chambers of Commerce, Industry and Agriculture to represent private entrepreneurs involved in value chains based on resources from protected areas

1. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partners are:

* UNDP Resident Representative in the Union of the Comoros.
* Director of the French Development Agency in the Union of the Comoros
* National CBD Focal Point and National GEF Focal Point

1. **Project Assurance:** Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution.

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP’s project assurance role across the project may encompass activities happening at several levels (e.g., global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function in the project management support unit (PMSU) is Ms. Anliyat Mze Ahmed, Programme Analyst in charge of Environment/ Disaster Risk Reduction in the Sustainable Development Unit. She is responsible for quality assurance over the implementation of project activities in line with UNDP rules and regulations and GEF policies. She is also responsible for ensuring the sound financial management of the project.

1. **Project Management – Execution of the Project:** The Project Manager (PM) (called Project Coordinator in this project) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representative attending board meetings is the Project Manager/National Coordinator who will be recruited from the start of the project.

**Composition of the Project Coordination Unit (PCU)**

The Project Coordination Unit includes the following roles: Project Coordinator/PA Expert, Administrative and Financial Assistant, Monitoring & Evaluation and Safeguards Officer, Communication/Knowledge Management Officer, Gender and PWD Officer, part-time (50%) Environmental Legal Specialist, part-time (50%) GIS Officer, Conservation Finance Expert, and Sustainable Livelihoods Officer. Detailed staff and consultant TORs are provided in Annex 8.

The role and responsibilities of the PCU as a team will include participatory preparation of project work plans in line with the Project Document, managing and implementing day-to-day project operations in each area of intervention while ensuring adherence to the project's work plans, making sure all stakeholders are aware of activities, tasks and deadlines that they are responsible for or in which they are involved, maintaining close communications with partners to foster synergies among interventions in PAs, and monitoring and assessing results to ensure that overall interventions effectively enable progress towards project’s intended results.

In addition to coordination/management functions, the Project Coordinator will assume technical functions as a PA Expert in all components. The Project Coordinator/PA Expert will work closely with an experienced Administrative and Financial Assistant with solid capacities to support overall management. The Environmental Legal Specialist (part-time) will be responsible for developing implementing texts and providing legal advice as part of various outputs mostly under the first component. The Gender & PWD Officer will be responsible for overseeing gender and PWD integration in all project components and monitoring the implementation of the action plans related to gender and to PWD. The Communication and Knowledge Management Officer will be responsible for the development and implementation of the project communication strategy in support of all components and in the coordination of the development and dissemination of knowledge products from the project experience. The Conservation Finance Officer will have the overall responsibility for setting up and operationalizing the FEC and mobilizing financial resources at national and international levels in close collaboration with the FEC Board and relevant actors in the Government, in line with the outline provided under Output 1.3. The GIS Officerwill have the overall responsibility for setting up a database connecting all PAs with the support of a database expert and for training PA management units, for coordinating activities related to delineation (of PAs and various zones within), for producing georeferenced maps needed for various decision-making and management purposes with PA stakeholders including local communities, for technical supervision of the updating, dissemination and sharing of data on PAs and biodiversity in the Comoros. The M&E/Safeguards Officerwill have the overall responsibility for implementation of the Project M&E Plan, including documenting PRF indicators in collaboration with other project staff, overseeing the development of the project ESMP in the 1st year of the project and supervising its implementation, including EIA and SESA, continuous monitoring of environmental and social risks, and reporting as part of the annual review processes. The Sustainable Livelihoods Officer will have the overall responsibility of coordinating interventions to support the development of sustainable livelihoods for local communities through nature-based enterprises and fair partnerships with the emerging private sector, including technical feasibility studies for the development of value chains, establishment of community cooperatives and strengthening of their capacities, and development of a marketing strategy including a national certification system.

At site level, the PCU will be supported by the national parks management units. The management units of the new NPs each include a *Conservateur*, a Community Mobilizer and ten (10) ecoguards. The Mohéli National Park Management Unit (supported by the French Development Agency) includes a director, an administrative and financial manager, a management assistant, seven officers, five rangers, and 14 ecoguards. The *Conservateurs* in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui, and Shissiwani NPs, and the Director of the Mohéli NP (the latter under French Development Agency co-financing) will be responsible for coordinating, supervising, and providing technical inputs under various outputs under each component, in accordance with their coordination role for the implementation of the PA management plan. The Community mobilizers in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks will be responsible for supervising and supporting the communication and consultation with local communities, will help educate, inform and support them, especially for their consultation on the recognition of their rights and benefits related to PAs, will support and encourage the involvement of local communities in the implementation of annual monitoring and surveillance activities as part of each park management plan, and will provide continued local support to members of local communities benefiting from IGAs (component 3). Under the direct authority of each PA *Conservateur*, Ecoguards are responsible for informing and raising awareness of local communities and visitors on the PA regulations, the importance of biodiversity and the impacts of harmful activities, and for supporting them in their co-management role; they are responsible for ecological monitoring on the basis of established protocols and the recording of data, and monitoring, including the communication of any incident likely to affect the PA and its resources and to verbalize offenders for any infringement committed in the PA and the preparation of reports.

**Project extensions:** The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs in excess of the CO’s Agency fee specified in the DOA during the extension period must be covered by non-GEF resources.

# Financial Planning and Management

The total cost of the project is USD 29,878,635. This is financed through a GEF grant of USD 4,024,479 administered by UNDP, USD 400,000 in cash co-financing to be administered by UNDP, and USD 25,454,156 in other co-financing. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Confirmed Co-financing: The actual realization of each co-financing commitment will be monitored in the annual PIR to ensure it materializes as envisioned and assessed during the mid-term review and terminal evaluation process and will be reported to the GEF. In order to ensure follow-up, it will be tabled at each meeting of the Project Steering Committee on the basis of the reports provided by all the co-financing partners. All project activities included in the project results framework that will be delivered by co-financing partners (even if the funds do not pass through UNDP accounts) must comply with UNDP’s social and environmental standards. Co-financing will be used for the following project activities/outputs:

**Table 5. Co-financing and contributions to the project**

| **Co-financing source** | **Co-financ. type** | **Co-financ. amount (USD)** | **Planned Co-financing Activities/Outputs** | **Risks** | **Risk Mitigation Measures** |
| --- | --- | --- | --- | --- | --- |
| UNDP | Grant | 400,000 | Training for the DGEF addressing recommendations of the HACT assessment (Output 1.1); Payment to cover the costs to operationalize the FEC (Output 1.3) in year 1 under an agreement between UNDP and the FEC Director; Health coverage insurance for project staff over the project duration; Purchase of vehicles including one 4x4 vehicle and 40 motorcycles for Ecoguards | Low | n.a. |
| General Directorate of Environment and Forests (MAFETH) | Public Investment and Recurrent Expenditures  6,794,156 as Public Investment 500,000 as Recurrent Expenditures | 7,294,156 | Climate informed water resources and watershed management integrating climate risks, supporting the implementation of sub-outputs 2.2.3 (on restoration of terrestrial ecosystems) and 2.2.5 (on the implementation of actions plans to address deforestation and removal of shore material); Contribution to the management of the ecosystems of the Shissiwani NP (project sub-outputs 1.1.3 on strengthening institutional capacity for integrated use of coastal areas and resources, and 2.2.3 on the restoration of coastal ecosystems; DGEF's support to women's empowerment in the Mont-Ntringui, Shissiwani and Coelacanthe National Parks (Output 5.1 on the development, implementation, assessment and adaptation of gender action plans); Involvement of DGEF staff in capacity building activities to strengthen individual and institutional capacities to implement and enforce laws, regulations and support the PA management system (Output 1.1) and to develop master plans for terrestrial and marine coastal areas within protected areas that are consistent with sectoral plans and strategies (Output 1.2) | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| National Directorate of Agriculture and Livestock Strategy (MAFETH) | Public Investment | 7,500,000 | Strengthening the institutional framework for agricultural and tourism value chains, development of water- and wood-efficient ovens for the distillation of ylang-ylang to reduce water overuse and deforestation, restoration of rural roads to facilitate market access, promoting supporting start-ups in fisheries and tourism, supporting Output 2.2 (strengthened management in PAs including an action plan to counter deforestation) and Outcome 3 (strengthening capacities and partnership of local communities and private enterprises through nature-based value chains, including ecotourism); improving the resilience of local communities' livelihoods through the adoption of climate-smart farming practices, contributing to improving community livelihoods within the national protected area network (Outcome 3); restoration of terrestrial ecosystems through reforestation, data collection and management contributing to Output 2.2. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| National Directorate of Tourism and Hospitality | Public Investment | 500,000 | Building ecotourism reception facilities related to protected areas thus contributing to Outcome 3 related to improving community livelihoods within the national protected area network, including through the development of ecotourism in partnership with the private sector. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| National Directorate of Waste Management | Public Investment | 250,000 | Development of a regulatory framework and involvement of stakeholders for waste management, development of waste management tools in PET[[50]](#footnote-51) and aluminum, contributing to the Outputs 2.2 on the restoration of terrestrial and coastal ecosystems, and 3.6 related to the development of value chains. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| CRDE Hamalengo Diboini | In-kind | 750,000 | Contribution to restoration of terrestrial ecosystems through reforestation, data collection and management, actions to counter deforestation, and training of ecoguards for the construction of greenhouses, and village communities in techniques of multiplication and maintenance of plants and greenhouses (Output 2.2). | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. An active collaboration between this CRDE and the PNC Agency in Ngazidja is providing mutual support for reforestation activities. This partnership will be formalized as part of Output 1.4. |
| Dahari NGO | In-kind | 4,000,000 | Restoration and management of the Moya Forest in the Ntringui NP (Output 2.2); Restoration and management of marine resources in the Vouani area in the Shissiwani NP (in partnership through investments via Blue Ventures) (Outputs 2.2 and 2.3); Monitoring and conservation of the Livingstone’s fruit bat through investments via Bat Conservation International (Output 2.1) | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. A long-term partnership agreement was signed between Dahari and the PNC Agency which further confirms its effective contribution to the project. |
| AIDE NGO | In-kind and Recurrent Expenditures  500,000 as In-kind, 250,000 Recurrent Expenditures | 750,000 | Annual monitoring of coral reefs (contributing to Output 2.1 on biodiversity monitoring), active participation to the negotiations of agreements for the co-management of marine resources in marine protected areas (contributing to project sub-output 1.2.4) and raising awareness of communities living along marine protected areas and contributing to project Output 4.2 on environmental awareness and education. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. AIDE has been a partner of PNM from the very beginning, especially in coral reef monitoring, which is also carried out in all other marine sites and has provided extensive training to PN Agency staff. A long-term partnership agreement was signed between AIDE and the PNC Agency which further confirms its effective contribution to the project. |
| Banda Bitsi Association | In-kind and Recurrent Expenditures  300,000 as In-kind, 200,000 Recurrent Expenditures | 500,000 | Waste management and capturing the value of waste contributing to strengthening co-management local communities’ capacities (Output 3.2); Development of ecotourism in mangrove areas, beaches, and cultural and ecological sites (Output 3.2); Restoration of mangroves, forests and beaches on a continuous basis (Outputs 1.2 and 2.2); Establishment of a tree nursery for reforestation (Output 2.2) | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. A long-term partnership agreement was signed between Banda Bitsi and the PNC Agency which further confirms its effective contribution to the project. |
| Union of Chambers of Commerce, Industry and Agriculture | In-kind | 150,000 | Contributions to the development of value chains and support to women and rural entrepreneurship, investments related to the creation and promotion of small and medium enterprises, support for exports, improving the business climate, development of commercial, industrial, craft, agricultural and fishing, professional organizations, and cooperatives through training, study trips, seminars, conferences, and statistical monitoring, thus contributing to Outcome 3 on strengthening capacities and partnership of local communities and private enterprises through nature-based value chains, and Output 5.1 on the implementation, monitoring and assessment of the project gender action plan. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. The partnership agreement signed with the UNDP Comoros to support the development of small and medium-sized enterprises in the country guarantees its contribution to the project. |
| Eco-Massiwa | In-kind | 300,000 | Active participation in the development of ecotourism linked to the National Parks of the Comoros as an initiator of the development of ecotourism circuits in protected areas, in planning and conducting field trips and environmental education with tourists, including an active participation to all activities planned under outputs 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6 leading to the strengthening of the community ecotourism value chain in the Comoros National Parks and to the sub-output 4.2.2 (environmental education). | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. Already all its commercial activities have been linked to PAs since 2017, when it was created with the support of the PIMS 4950 project which supports its effective contribution to the project. A long-term partnership agreement with the PAs Agency will be signed as part of Output 1.4 which will further support its effective contribution to the project. |
| House of Civil Society Organizations (MOSC) | In-kind | 700,000 | Provision of training on integrated ocean management, waste management, environmental law, and sustainable development; development of awareness tools; and enhancement of national heritage; thus contributing to implement Sub-outputs 1.1.2 (raising local communities' awareness), 2.2.2 (sustainable management of species and ecosystems) and 4.2.2 and 4.3.2 (developing awareness tools and training of the actors of the co-management of the protected areas); support for the management of ecotourism projects contributing to Output 3.2 on capacity building for members of local communities); support for fisheries infrastructure and for the production and diversification of local communities livelihoods contributing to Output 3.6 on livelihoods. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| UMAMA Association | In-kind and Recurrent Expenditures  50,000 as In-kind 350,000 Recurrent Expenditures | 400,000 | Active participation in all management activities of marine and coastal ecosystems of MPAs, in particular in Shissiwani NP; contribution to capacity development to improve the co-management of the national network of protected areas at site level (Sub-outputs 2.2.2) and promotion of ecotourism in PAs (Output 3.5).  In kind contribution represents the assignment of UMAMA building, including equipment and furniture, to the Shissiwani NP. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. UMAMA has played an active role to address local environmental issues for 25 years, has been a leading promoter of the establishment of the park and is since a member of the park co-management committee, which supports its effective contribution to the project. Furthermore, UMAMA has signed an agreement to make their premises and equipment available to the Shissiwani NP staff. |
| Regional Association for Forest Management and Development (ARAF) | In-kind | 300,000 | Raising awareness and training of the farmers of the Mont-Ntringui NP and restoration of degraded forest areas, thus contributing to project sub-outputs 1.1.2 (raising awareness of stakeholders on the newly established PA system, 2.2.3 (restoration of terrestrial ecosystems) and 4.3.1 (implementation of a strategic communication plan for the PNC Agency). | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| Association for the Protection of the Gombessa (APG) | In-kind | 200,000 | Through a collaboration agreement with the Coelacanth NP, APG actively participates in monitoring activities (Output 2.1) and contributes to raising local communities’ awareness on marine and coastal conservation issues (Output 4.2). In kind contribution represents the assignment of APG building (including equipment and furniture) to the Coelacanth NP. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. APG has been the main promoter of the establishment of the Coelacanthe NP and is since a member of the park co-management committee, which supports its effective contribution to the project. Furthermore, APG has signed an agreement to make their premises and equipment available to the Coelacanthe NP staff. |
| MAEECHA NGO | In-kind | 820,000 | Environmental education programs for local communities to encourage them to become more involved in environmental issues (contributing to Output 1.1), establishment of ecotourism infrastructure and training provided to local communities in catering, accommodation, visitor reception, and maintenance of facilities (contributing to Output 3.5), support for the establishment of an eco-school program in high schools (contributing to Output 4.2 on awareness of PAs) | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. MAEECHA has been working in partnership with the NP Mitsamiouli-Ndroudé on a continuous basis since 2019. A long-term agreement with the PAs Agency will allow this partnership to be extended to all NPs and will further confirm MAEECHA's contribution to the project. |
| Ulanga Ngazidja | In-kind and Recurrent Expenditures  100,000 as In-kind 200,000 Recurrent Expenditures | 300,000 | Contribution to strengthening capacities and entrepreneurship skills of local communities (contributing to sub-output 3.2.1 as regards capacity development for members of local communities), support for the development of ecotourism (contributing to sub-outputs 3.2.2 and 3.3.2), and environmental education and awareness among local communities (contributing to sub-output 4.2.2 on the implementation of awareness campaigns and targeted environmental education). | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. ULANGA is a proactive partner in all the interventions of the PNC Agency in the PAs in Ngazidja and is a member of the 3 NPs co-management committees in Ngazidja, which supports its effective contribution to the project. |
| Women's Sustainable Development and Food Security Platform (FDDSA) | In-kind and Recurrent Expenditures  50,000 as In-kind 120,000 Recurrent Expenditures | 170,000 | Awareness and environmental education activities in the Coelacanthe NP to support mangrove restoration and regular beach cleaning in the Coelacanthe and Mitsamiouli-Ndroudé NPs thus contributing to Output 4.2 on environmental awareness campaigns and education programmes; providing continuous training on environmental management to women fishers and farmers thus contributing to implement the sub-output 2.2.2 on the implementation of sustainable use plans for targeted species. | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. This association, established in 2015, is very proactive in all initiatives within the Ministry relating to ecosystem restoration and conservation. This involvement guarantees its contribution to the project. |
| Mitsamiouli Commune | Public Investment (through the Association Deux-Mains) | 570,000 | Collection and sorting of household waste contributing to the restoration of terrestrial ecosystems (Output 2.2) and support for the start-up of value chains (Output 3.6); and to the implementation of the action plan to counter the removal of shore materials (Sub-output 2.2.5) contributing to the restoration of terrestrial and marine ecosystems (Sub-output 2.2.3) | Low | The PC will monitor and report annually on project co-financing contributions to the Project Steering Committee. |
| **Total confirmed co-financing** | | **25,854,156** |  | | |
| **Grand Total Project Financing** | | **29,878,635** |  | | |

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/CTA and UNDP Country Office will seek the approval of the BPPS/GEF team to ensure accurate reporting to the GEF:

a) Budget re-allocations among components in the project budget with amounts involving 10% of the total project grant or more;

b) Introduction of new budget items 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).

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

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. **Operational closure must happen with 3 months after posting the TE report to the UNDP ERC**. 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 Implementing Partner and other parties of the project, UNDP 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[[51]](#footnote-52). The transfer should be done before Project Management Unit complete their assignments.

Financial completion (closure): 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 6 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 signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/GEF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.

# Total Budget and Work Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Budget and Work Plan** | | | |
| Atlas Award ID: | 00127568 | Atlas Output Project ID: | 00136781 |
| Atlas Proposal or Award Title: | Protection de la biodiversité grâce à la gestion efficace du réseau national des aires protégées des Comores | | |
| Atlas Business Unit | COM10 | | |
| Atlas Primary Output Project Title | Protection de la biodiversité grâce à la gestion efficace du réseau national des aires protégées des Comores | | |
| UNDP-GEF PIMS No. | 6257 | | |
| Implementing Partner | Ministry of Agriculture, Fisheries, Environment, Tourism, and Handicraft | | |

| **GEF Component/ Atlas Activity** | **Responsible Party (Atlas Implement. Agent)** | **Fund ID** | **Donor Name** | **Atlas Budget Account Code** | **ATLAS Budget Description** | **Amount Year 1 (USD)** | **Amount Year 2 (USD)** | **Amount Year 3 (USD)** | **Amount Year 4 (USD))** | **Amount Year 5 (USD)** | **Total (USD)** | **Budget Note** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COMPONENT / OUTCOME 1: Institutions and governance systems** | **MAFETH** | **62000** | **GEF** | 71200 | International Cons | 36100 | 24900 | 0 | 0 | 0 | **61000** | *1* |
| 71300 | Local Consultants | 6000 | 0 | 12500 | 0 | 0 | **18500** | *2* |
| 71800 | Contr. serv. Ind. | 129975 | 94350 | 93228 | 47530 | 47530 | **412613** | *3* |
| 71600 | Travel | 11182 | 26130 | 9126 | 1722 | 1722 | **49882** | *4* |
| 73400 | Rent.Maint Equip | 5000 | 5000 | 5000 | 5000 | 5000 | **25000** | *5* |
| 72100 | Contr. serv. cies | 0 | 0 | 25000 | 0 | 0 | **25000** | *6* |
| 72800 | Info Tech Equip | 8025 | 2400 | 2400 | 2400 | 2400 | **17625** | *7* |
| 74200 | Aud. print prod. | 4000 | 0 | 6400 | 0 | 0 | **10400** | *8* |
| 75700 | Train worksh conf | 45500 | 6500 | 43550 | 0 | 0 | **95550** | *9* |
|  | **Sub-total Outcome 1** | **245782** | **159280** | **197204** | **56652** | **56652** | **715570** |  |
| **UNDP** | **4000** | **TRAC** | 71400 | Contr. serv. Ind. | 44565 | 4000 | 4000 | 4000 | 4000 | **60565** | *10* |
|  | **Sub-total Outcome 1** | **44565** | **4000** | **4000** | **4000** | **4000** | **60565** |  |
|  |  |  |  | **Total Outcome 1** | **290347** | **163280** | **201204** | **60652** | **60652** | **776135** |  |
| **COMPONENT / OUTCOME 2: Capacities for co-management of the national PAs network at site level** | **MAFETH** | **62000** | **GEF** | 71200 | International Cons | 0 | 21000 | 0 | 0 | 0 | **21000** | *11* |
| 71300 | Local Consultants | 9300 | 21000 | 6000 | 0 | 0 | **36300** | *12* |
| 71800 | Contr. serv. Ind. | 252495 | 217283 | 228980 | 174710 | 174710 | **1048178** | *13* |
| 71600 | Travel | 12263 | 16532 | 0 | 2400 | 2400 | **33595** | *14* |
| 73400 | Rent.Maint Equip | 5000 | 5000 | 5000 | 5000 | 5000 | **25000** | *15* |
| 72100 | Contr. serv. cies | 139100 | 0 | 0 | 0 | 0 | **139100** | *16* |
| 72200 | Equip. Furniture | 25500 | 20500 | 8000 | 8000 | 8000 | **70000** | *17* |
| 72800 | Info. Tech. Equip | 35725 | 2400 | 2400 | 2400 | 2400 | **45325** | *18* |
| 74200 | Aud. print prod. | 5100 | 0 | 0 | 0 | 0 | **5100** | *19* |
| 75700 | Train. worksh conf | 4500 | 6000 | 45200 | 0 | 0 | **55700** | *20* |
|  | **Sub-total Outcome 2** | **488983** | **309715** | **295580** | **192510** | **192510** | **1479298** |  |
| **UNDP** | **4000** | **TRAC** | 71600 | Travel | 52500 | 0 | 0 | 0 | 0 | **52500** | *21* |
|  | **Sub-total Outcome 2** | **52500** | **0** | **0** | **0** | **0** | **52500** |  |
|  |  |  |  | **Total Outcome 2** | **541483** | **309715** | **295580** | **192510** | **192510** | **1531798** |  |
| **COMPONENT / OUTCOME 3: Community livelihoods within the national protected area network** | **MAFETH** | **62000** | **GEF** | 71300 | Local Consultants | 0 | 15000 | 15000 | 0 | 0 | **30000** | *22* |
| 71800 | Serv. Contract. Ind. | 4119 | 109736 | 53677 | 38222 | 38222 | **243976** | *23* |
| 71600 | Travel | 1855 | 13106 | 10642 | 2290 | 2290 | **30183** | *24* |
| 73400 | Rent.Maint Equip | 5000 | 5000 | 5000 | 5000 | 5000 | **25000** | *25* |
| 72100 | Contr serv cies | 0 | 218000 | 25000 | 25000 | 25000 | **293000** | *26* |
| 72200 | Equip. Furniture | 1594 | 251592 | 1592 | 1592 | 1592 | **257962** | *27* |
| 72800 | Info Tech Equip | 8025 | 2400 | 2400 | 2400 | 2400 | **17625** | *28* |
| 74200 | Aud print prod | 0 | 300 | 0 | 0 | 0 | **300** | *29* |
| 74500 | Incidental exp | 0 | 0 | 1400 | 0 | 0 | **1400** | *30* |
| 75700 | Train worksh conf | 6000 | 18200 | 6000 | 0 | 6000 | **36200** | *31* |
|  | **Sub-total Outcome 3** | **26593** | **633334** | **120711** | **74504** | **80504** | **935646** |  |
| **UNDP** | **4000** | **TRAC** | 71600 | Travel | 17500 | 0 | 0 | 0 | 0 | **17500** | *32* |
|  | **Sub-total Outcome 3** | **17500** | **0** | **0** | **0** | **0** | **17500** |  |
|  |  |  |  | **Total Outcome 3** | **44093** | **633334** | **120711** | **774504** | **80504** | **953146** |  |
| **COMPONENT / OUTCOME 4: Knowledge management, M&E, and gender and people with disabilities (PWD) equity** | **MAFETH** | **62000** | **GEF** | 71300 | Local Consultants | 2000 | 0 | 0 | 0 | 0 | **2000** | *33* |
| 71800 | Contr. Serv. Ind. | 70066 | 70066 | 70066 | 70066 | 70066 | **350330** | *34* |
| 71600 | Travel | 6182 | 3435 | 6182 | 3435 | 3435 | **22669** | *35* |
| 72800 | Info Tech Equip | 8025 | 2400 | 2400 | 2400 | 2400 | **17625** | *36* |
| 73400 | Rent.Maint Equip | 5000 | 5000 | 5000 | 5000 | 5000 | **25000** | *37* |
| 74200 | Audio. print prod. | 8480 | 0 | 19200 | 0 | 3000 | **30680** | *38* |
| 75700 | Train worksh conf | 13000 | 13000 | 13000 | 13000 | 13000 | **65000** | *39* |
|  | **Sub-total KM & Gender GEF** | **112753** | **93901** | **115848** | **93901** | **96901** | **513304** |  |
| **UNDP** | **4000** | **TRAC** | 71600 | Travel | 6448 | 6600 | 6600 | 6600 | 6600 | **32848** | *40* |
|  | **Sub-total KM & Gender UNDP** | **6448** | **6600** | **6600** | **6600** | **6600** | **32848** |  |
| **MAFETH** | **6200** | **GEF** | 71200 | Internat Cons | 0 | 0 | 35000 | **0** | 35000 | **70000** | *41* |
| 71300 | Local Consultants | 0 | 0 | 3000 | **0** | 3000 | **6000** | *42* |
| 71800 | Contr. Serv. Ind. | 14507 | 14507 | 14507 | 14507 | 14507 | **72535** | *43* |
| 71600 | Travel | 3160 | 1580 | 2583 | 1580 | 2583 | **11486** | *44* |
| 74100 | Profession. Serv. | 2000 | 2000 | 4000 | 2000 | 4000 | **14000** | *45* |
| 75700 | Train worksh conf | 15000 | 0 | 0 | 0 | 0 | **15000** | *46* |
|  | **Sub-total GEF M&E** | **34667** | **18087** | **59090** | **18087** | **59090** | **189021** |  |
| **UNDP** | **4000** | **TRAC** | 71600 | Travel | 800 | 800 | 800 | 800 | 800 | **4000** | *47* |
|  | **Sub-total UNDP M&E** | **800** | **800** | **800** | **800** | **800** | **4000** |  |
|  |  |  |  | **Total M&E** | **35467** | **18887** | **59890** | **18887** | **59890** | **193021** |  |
|  |  |  |  | **Total Comp 4** | **154668** | **119388** | **182338** | **119388** | **163391** | **739173** |  |
| **PROJECT MANAGEMENT UNIT** | **MAFETH** | **62000** | **GEF** | 71800 | Serv. Contr. Ind. | 29760 | 29760 | 29760 | 29760 | 29760 | **148800** | *48* |
| 72200 | Equip. Furniture | 2568 | 2568 | 2568 | 2568 | 2568 | **12840** | *49* |
| 74100 | Profess. Serv | 0 | 7500 | 7500 | 7500 | 7500 | **30000** | *50* |
|  | **Sub-total PMU** | 32328 | 39828 | 39828 | 39828 | 39828 | **191640** |  |
| **UNDP** | **4000** | **TRAC** | 75100 | Direct Proj Costs | 46587 | 46500 | 46500 | 46500 | 46500 | **232587** | *51* |
|  |  |  |  | **Total Management** | **78915** | **86328** | **86328** | **86328** | **86328** | **424227** |  |
| **Total GEF** | | | | | | **941106** | **1254145** | **828261** | **475482** | **525485** | **4024479** |  |
| **Total TRAC** | | | | | | **168400** | **57900** | **57900** | **57900** | **57900** | **400000** |  |
|  |  |  |  | **TOTAL PROJECT** | | **1109506** | **1312045** | **886161** | **533382** | **583385** | **4424479** |  |

**Budget notes**

| ***#*** | | **Comments** | |
| --- | --- | --- | --- |
| **Component 1** | | | |
| ***1*** | | a. Regional Consultant Expert in Environmental and Social Impact Assessments in charge of elaborating sectoral guidelines for ESIAs and propose modalities for the inclusion of a public consultation process, including at the village level, draft the relevant implementing texts in close collaboration with the project Environmental Legal Specialist (1.1.5) and provide trainings on Strategic Environmental and Social Assessment and Social and Environmental Screening Procedure to national stakeholders $300 per day for 20 days in year 1. Total $6,000  b. International consultant Expert in conservation finance: Providing support to the Government for the strategic planning of the FEC, assessing the feasibility of a debt-for-nature swap, and contribute to build the capacities of the FEC Director, in mobilizing resources for the FEC and support the Project Coordinator (PC) for the development of the PA System Business Plan (43 days in year 1; 27 days in year 2) (1.3.2 and 1.3.3) for a total of 70 days @ $700 daily rate. Total $49,000)  c. Regional consultant Expert in environmental financeto assist and advise the MAFETH Ministry and the PNC Agency in the process to access carbon markets through the conservation and restoration of marine and terrestrial PA ecosystems (Output 1.3.3). 20 days including a 10-day mission. Daily rate $300 in year 2. Total $6,000  **Total: $61,000** | |
| **2** | | a. Marine biologistto support the understanding of the importance of biodiversity and ecosystem services through the development of documents and diagrams documenting the various services provided by the main ecosystems of PAs (1.1.3) 60 days @ $100 per day in year 3. Total $6,000  b. Flora biologistto support the understanding of the importance of biodiversity and ecosystem services through the development of documents and diagrams documenting the services provided by the main ecosystems of PAs (1.1.3) 60 days @ $100 per day in year 3. Total $6,000  c. Graphic designerto design 10 posters with diagrams illustrating the services provided by the main ecosystems of PAs to support the understanding of the importance of biodiversity and ecosystem services (1.1.3) $30 per day over 10 days in year 3. Total: $300  d. Tax specialist to oversee the feasibility assessment for various tax schemes and guide the steps to establish the selected taxes to contribute to the financing of the protected areas system (Output 1.3.3). 60 days @ $100 in year 1. Total 6,000$  e. Translator to translate awareness material into Comorian (1.1.3) @ $40 per day over 5 days in year 3. Total $200.  **Total: $18,500** | |
| ***3*** | | **Project** **coordinator / PA Expert** (20% of time for the component) responsible for coordinating, supervising, and providing inputs to activities leading to various outputs under the component, including: Responsible for the development of the business plan of the PA system and its annual update (1.3.2) 14 days per year in years 1 to 5; Ensure the participation of the FEC in support networks and contribution to the sharing of experience with other institutions in the region and in Africa (1.3.6) 3 day per year in years 1 to 5; Responsible for defining, negotiating, and concluding long-term partnership agreements between national and international institutions and the PNC Agency (1.4.1) 15 days per year in years 1 to 3; Overseeing development of stakeholders’ awareness on the new national parks, the law on PAs and the PA management agency and their implications in terms of land and resource use and preparing and leading targeted workshops to clarify stakeholders role related to PA management (1.1.2) 10 days in year 1; Coordinate and oversee the consultation by the regional consultant in charge of elaborating sectoral guidelines for EIAs and defining the modalities for the inclusion of a public consultation process, including at the village level (1.1.5) 5 days in year 1; Overseeing the delineation of village boundaries, ensuring that it follows a fully participatory and sensitive approach, especially in the identification of disputed areas, and building of landmarks for the demarcation of PA boundaries with the participation of local communities (1.2.1) 5 days in year 1; Ensures the advocacy for the securing of endowments from founding institutions for the FEC (1.3.1) 5 days in year 1; Overseeing the development and implementation of the communication strategy of the FEC including the preparation of an advocacy document for the Comoros protected areas network (1.3.5) 5 days in year 1; Overseeing and coordinating the process for the explicit recognition of local communities’ rights and benefits regarding natural resources in protected areas and their integration into co-management agreements, implementation of grievance resolution mechanisms in each of the parks, increasing the visibility of the PA management team (1.1.4) 5 days in year 1; Supervision of the establishment of the FEC and participation in all procedures concerning fundraising, including advocacy for the allocation of Government resources dedicated to the protected area system (Output 1.3) 10 days in year 1 and 10 days in year 2; Oversee and coordinate targeted activities to support understanding of the importance of biodiversity and ecosystem services provided by the main ecosystems of PAs, translated and adapted for local community’s audience (1.1.3) 10 days in year 3; Prepare, oversee and coordinate six workshops (1 per PA) for the collaborative land use planning, negotiating competing interests, and refining the zoning of each protected area (1.2.3), and the 6 half-day workshops targeting local communities (1 per PA) for the validation of areas for the controlled use of natural resources within PAs in connection with nature-based value chains (1.2.3) 27 days in year 3; Coordinating and participating to all discussions related to the concept of resource co-management involving local communities (1.2.4) (8 days in year 3).  Total of 230 days @ $100 per day. **Total** $23,000 | |
| **Environmental Legal Specialist** (94% of time for the component) responsible for developing implementing texts and providing legal advice as part of various outputs under the component, including: Developing stakeholders’ awareness on the new national parks, the law on PAs and the PA management agency and their implications in terms of land and resource use and contributing to targeted workshops to clarify stakeholders role related to PA management (1.1.2) (20 days in years 1 and 2);  Draft TORs for the regional consultant in charge of elaborating sectoral guidelines for EIAs and oversee the work and define the modalities for the inclusion of a public consultation process, including at the village level, and draft the relevant implementing texts (1.1.5) (30 days in year 1); To provide legal advice relating to the feasibility assessment for various tax schemes and for the establishment of selected taxes (Output 1.3.3) 30 days in years 1 and 2; Responsible for overseeing legislative aspects of the partnership agreements between national and international institutions and the PNC Agency (1.4.1) 15 days in year 2; Support for financial mobilization for the FEC (output 1.3) 50 days in years 1 and 2 and 34 days in year 3; Ensures the development of an enabling legislative framework for the FEC and for the mobilization of resources in collaboration with the Executive Director of the FEC (1.3.1) 50 days in years 1 and 2; To provide legal advice relating to the strategic planning of the FEC and the harmonization of costs of PAs across the network (1.3.2) 10 days in year 1 and 10 days in year 3; To develop implementing texts for the Law on Protected Areas (1.1.1) 60 days in year 2; To lead the process for the explicit recognition of local communities’ rights and benefits regarding natural resources in protected areas and their integration into co-management agreements, implementation of grievance resolution mechanisms in each of the parks (1.1.4) 30 days in year 1; Provide support to ensure the consistency of the planning carried out during the workshops for the collaborative land use planning, and zoning of each protected area with the jurisdictions of other sectors (including fishing, tourism, forestry, land use planning) through negotiations with institutional stakeholders and with local resource users (1.2.3) (30 days in year 3); Provide support on legal aspects to ensure the harmonization of resource co-management agreements within PAs with sectoral jurisdictions and for the development of the legislative framework for the establishment of tourist concessions within PAs (1.2.4) 50 days in year 3.  Total of 569 days @ $32 per day. **Total** $18,208. | |
| **Gender & PWD Officer** (8% of time for the component) responsible for overseeing gender and PWD integration in all project components and monitoring the implementation of the action plans related to gender and to PWD, including: Ensuring women and PWD are adequately targeted through activities to develop stakeholders’ awareness on the new national parks, the law on PAs and the PA management agency and their implications in terms of land and resource use, and contributing to workshops to clarify stakeholders role -including women and PWD- related to PA management (1.1.2) 20 days in year 1; Document gender and PWD issues as part of the social feasibility assessment with PA local communities to harmonize PA fees across the network (1.3.2) 20 days in year 1; To ensure that the communication strategy for the FEC specifically targets women and PWDs for any information that concerns them (1.3.5) 10 days in year 1; Ensuring women and PWD are adequately consulted for the recognition of local communities’ rights and benefits related to PAs and that they are integrated in the exchange process between village co-managers of the same park leading to the development of village charters in support of the park (1.1.4) 10 days in year 2; Contribute to the development of documents and diagrams documenting the various services provided by the main ecosystems of PAs by highlighting specificities related to gender and PWDs (1.1.3) 10 days in year 3; Contribution to participatory land-use planning workshops to ensure women’ and PWD’s interests are adequately addressed (1.2.3) 10 days in year 3; Ensuring women’s and PWD’s interests are integrated into the development of resource co-management agreements within PAs, especially the agreements related to the natural resources supporting value chains (1.2.4) 20 days in year 3.  Total of 100 days @ $32 per day. **Total** $3200. | |
| **Communication and Knowledge Management Officer** (11% of time for the component) responsible for the development and implementation of the project communication strategy in support of all components, including: Contribute to stakeholders’ awareness on the new national parks, the law on PAs and the PA management agency and their implications in terms of land and resource use by developing information leaflets for the population on the law on protected areas, its raison d'être and its implications and contributing to targeted workshops (1.1.2) 40 days in year 1; Responsible for the development and implementation of the communication strategy of the FEC including the preparation of an advocacy document for the Comoros protected areas network (1.3.5) 75 days in year 1; Support the understanding of the importance of biodiversity and ecosystem services through the development and use of documents and diagrams documenting the various services provided by the main ecosystems of PAs, translated and adapted for local communities audience (1.1.3) 20 days in year 3.  Total of 135 days @ $43 per day. **Total** $5805. | |
| ***Conservateurs*** (5) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (25% of time for the component) responsible for coordinating, supervising, and providing inputs at PA sites to activities leading to various outputs under the component, including: Participate in the development of the business plan of the PA system and its annual update (1.3.2) 7 days per year in years 1 to 5; Support the development of long-term partnership agreements between national and international institutions and the PNC Agency (1.4.1) 25 days in year 1; Contribute to workshops for stakeholders’ awareness on the new national parks, the law on PAs and the PA management agency and their implications in terms of land and resource use through several workshops with various groups of stakeholders, including local communities, and contributing to targeted workshops to clarify stakeholders role related to PA management (1.1.2) 36 days in year 1; Contribute to the consultation by the regional consultant for the elaboration of sectoral guidelines for EIAs and for defining modalities for the inclusion of a public consultation process, including at the village level (1.1.5) 5 days in year 1; Oversee and coordinate the work of ecoguards for the delineation of village boundaries, ensuring that it follows a fully participatory and sensitive approach, especially in the identification of disputed areas, and planning the work with local communities to build landmarks for the demarcation of PA boundaries (1.2.1) 5 days in year 1; Support and coordination of the collection of data to support the work of GIS-trained ecoguards for the annual production of georeferenced maps on biodiversity to support the adaptive co-management of the park (1.2.2) 10 days per year in years 1 to 5; Contribute to advocacy for securing endowments from founding institutions for the FEC (1.3.1) 5 days in year 1; Contribute to the process for the explicit recognition of local communities’ rights and benefits regarding natural resources in protected areas and their integration into co-management agreements, implementation of grievance resolution mechanisms in each of the parks, increasing the visibility of the PA management team (1.1.4) 20 days in year 2; Coordinate targeted activities at each of the protected areas to support understanding of the importance of biodiversity and ecosystem services provided by the main ecosystems of PAs, translated and adapted for local communities audience (1.1.3) 7 days in year 3; Ensure the local coordination of the 1-day workshops (1 per PA) for the collaborative land use planning, negotiating competing interests, and refining the zoning of each protected area (1.2.3), and the half-day workshops targeting local communities (1 per PA) for the validation of areas for the controlled use of natural resources within PAs in connection with nature-based value chains (1.2.3) 25 days in year 3; Participating to all discussions related to the concept of resource co-management involving local communities in PAs (1.2.4) 30 days in year 3.  Total of 250 days for 5 *Conservateurs* @ $55 per day per *Conservateur*. **Total** $68,750. | |
| **Community mobilizers** (5) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (8% of time for the component) to supervise and support the communication and consultation with local communities, to help educate, inform and support them, especially for their consultation on the recognition of their rights and benefits related to PAs, to support and encourage the involvement of local communities in the implementation of annual monitoring and surveillance activities as part of the park management plans, and to provide continued local support to members of local communities benefiting from IGAs (component 3), including : Supervise and support the communication and consultation with local communities, to help educate, inform and support them, especially for to contribute to local workshops to inform local communities of the newly established PA system including the 5 new national parks, the law on PAs, and the National Agency for the management of the PA network (1.1.2) 30 days in year 1; Consult local communities on the recognition of their rights and benefits related to PAs and support the exchange process between village co-managers of the same park leading to the development of village charters in support of the park (1.1.4) 20 days in year 2; Social feasibility assessment with the local communities of each PA with a view to harmonizing the costs of using PAs across the network (1.3.2) 40 days in year 3.  Total of 90 days for 5 community mobilizers @ $43 per day per mobilizer. **Total** $19,350. | |
| **Ecoguards** (60 in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks)  to tour all villages and initiate discussions with local communities about the recognition of their rights and benefits relating to PAs, to produce georeferenced maps from the results of annual monitoring (1.2.2) 30 days in year 2; Carry out the georeferenced delineation of all the villages and their terroirs within the PAs and a validation tour of all villages with the resulting maps (1.2.1) 60 days in year 1;  Annual production of georeferenced maps for each of the national parks integrating updated data on biodiversity by ecoguards trained in GIS to support the adaptive co-management of the national parks (1.2.2) 20 days per year in years 1 to 5.  Total of 190 days for 60 ecoguards @ $15 per day per ecoguard. **Total** $171,000. | |
| **GIS Officer** (57% of time for the component). Train ecoguards and coordinate the delineation of village boundaries, including the identification of disputed areas, supervising data collection and entry by ecoguards and producing village and PA maps to be validated with local communities, and planning the work with local communities to build landmarks for the demarcation of PA boundaries in collaboration with Park *Conservateur*s (1.2.1) 80 days in year 1; Coordinate and supervise the annual production of georeferenced maps for each of the national parks integrating updated data on biodiversity by ecoguards trained in GIS to support the adaptive co-management of the national parks (1.2.2) 40 days per year in years 1 to 5; Prepare workshops and provide all baseline values and maps to enable the participatory land use planning through six 1-day workshops (1 per PA) to negotiate competing interests and refine the zoning of each protected area (1.2.3) and six half-day workshops (1 per PA) to carry out a participatory validation with local communities of areas for the controlled use of natural resources within PAs in connection with nature-based value chains (1.2.3) 60 days in year 3.  Total of 340 days @ $32 per day. **Total** $10,880. | |
| **Sustainable Livelihoods Officer** (4% of time for the component) Participate to the workshops for the collaborative land use planning, negotiating competing interests, and refining the zoning of each protected area (1.2.3) 20 days in year 3; Contribute to the development of resource co-management agreements within PAs consistent with sectoral jurisdictions, especially the agreements related to the natural resources supporting value chains (1.2.4) 30 days in year 3.  Total of 50 days @ $43 per day. **Total $2150**. | |
| **M&E/Safeguards Officer** (8% of time for the component) Supervision and support to a national consulting firm recruited to carry out a strategic environmental and social assessment, in parallel with the concerted planning of the zoning of protected areas (1.2.3) 90 days in year 3.  Total of 90 days @ $43 per day. **Total $3,870**. | |
| **Conservation Finance Officer**. Overall responsibility for setting up the FEC and mobilizing financial resources at national and international levels (Output 1.3) @ $21,600 per year for years 2 to 5.  **Total $86,400** | |
|  | | **Total budget line 3: $412,613** | |
| ***4*** | | a) Travel costs for the PC and CKM Officer to support activities under output 1.1.4, including a yearly 6-day mission to meet with local communities in each Park (local airline ticket to Mwali @ $200 and to Ndzuani @$235 each, and 6-day local DSA @ $71 for 2 persons for a total of $1722 every year for years 1 to 5. Total $8,610.  b) Travel costs for the Regional Consultant in charge of elaborating sectoral guidelines for EIAs under output 1.1.5, including a 10-day mission to Comoros (regional airline ticket to Moroni @ $700 and DSA @ $226 for 10 days in year 1. Total $2960.  c) Inter-island travel to Moroni and per diem for 3 *Conservateur*s (2 Ndzuani tickets @ $ 235 and 1 Mwali ticket @ $ 200, Moroni DSA 2 days @ $ 95for 3 people) to participate in the FEC strategic planning workshop (1.3.2) in year 1. Total $ 1,240;  d) Travel costs for the (IC) conservation finance expert for a 10-day mission to Comoros to meet and work with all relevant stakeholders concerned with the establishment of the FEC to support the PA system and support the development of the FEC strategic plan (1.3.2 and 1.3.3) in year 1. International air ticket @ $3000, DSA for 10 days @ $226 in year 1. Total $5,260.  e) Travel costs for the Regional Consultant for a 10-day mission to Comoros advise the MAFETH Ministry and the PNC Agency in the process to access carbon markets (Output 1.3.3) Regional air ticket @ $700, DSA 10 days @ $226 in year 2. Total $2,960;  f) Travel costs for a 3-day mission for the PC to conclude long-term partnership agreements with national institutions and NGOs (1.4.1) Air ticket to Ndzuani @ $235 and 3-day DSA @ $71 in year 2. Total $448;  g) A 24-day mission for 2 people (may include trips to Madagascar, Saudi Arabia and Dubai to conclude agreements with donors on the basis of previously agreed negotiations (1.3.3) International air tickets for 2 people @ $3000, DSA for 2 people for 25 days @ $ 300 in year 2. Total: $ 21,000  h) Travel costs for the PC, M&E Safeguards Officer and GIS Officer to attend workshops in Mwali and Ndzuani for the collaborative land use planning, negotiating competing interests, and refining the zoning of each protected area (1.2.3) Local airline tickets for 3 persons to Mwali @ $200 and to Ndzuani @$235 each, and 5-day local DSA @ $71 for 3 persons in year 3. Total $2,370  i) Travel costs for the PC to attend the island workshops on harmonization of PA fees across the network (1.3.2) Air tickets to Ndzuani @ $235 and Mwali @ $200, 5-day DSA @ $71 in year 3. Total $790  j) Travel costs for the PC and GIS Officer to attend workshops in Mwali and Ndzuani with local communities for the validation of areas for the controlled use of natural resources within PAs in connection with nature-based value chains (1.2.3) Local airline tickets for 2 persons to Mwali @ $200 and to Ndzuani @$235 each, and 6-day local DSA @ $71 for 2 persons in year 3. Total $1722  k) Travel costs for the PC and the Environmental Legal Specialist to attend fifteen (15) local meetings with the stakeholders of each PA to explain and discuss the content of natural resource co-management agreements in PAs (1.2.4) Local airline tickets for 2 persons to Mwali @ $200 and to Ndzuani @$235, and 6-day local DSA @ $71 for 2 persons in year 3. Total $1722**.**  l) Provision for travel costs for SESA consultations on PA master plans @ $800 in year 1. Total $800  **Total: $49,882** | |
| ***5*** | | Lump sum (cost split among the 4 components or 25% per component) for fuel purchase@ $4000 and maintenance@ $1000 of the Project's vehicle per year, to be used for field missions (consultants and project staff) and for PA motorcycles for the travel of ecoguards and community mobilizers @ $5,000 per year. **Total: $25,000** | |
| ***6*** | | Recruitment of a national consulting firm to carry out scoped strategic social and environmental assessments and, if required, prepare a Process Framework based on SESAs findings, in parallel with the development of land use planning for the 5 newly established National Parks (1.2.3), under the oversight and coordination of the M&E and Safeguards Officer in year 3 @ $25,000. **Total $25,000** | |
| ***7*** | | a) Computer equipment for the project staff (cost split among the 4 components or 25% per component), including 7 Laptops @ $1500, 5 desktop computers @ $2000 (one per park office), 1 Multifunction printer @ $2000 in year 1. Total: $5,625  b) Internet subscription for 6 offices of the National Parks Agency (cost split among the 4 components or 25% per component) to enable project implementation, online training and group sessions @ 400$/year/office. Total: $12,000  **Total: $17,625** | |
| ***8*** | | a) Printing 2000 information leaflets for the population on the new national parks, the law on protected areas, its raison d’être and its implications, and the national agency for the management of the PA network, @ $2 per leaflet (1.1.2) in year 1. Total $4000.  b) Printing 30 posters with diagrams illustrating the services provided by the main ecosystems of PAs to support the understanding of the importance of biodiversity and ecosystem services (1.1.3) @ $200 per poster in year 3. Total $6000.  c) Print material related to SESA on master plans $400 in year 3. Total $400.  **Total: $10,400** | |
| ***9*** | | a) Workshop to validate implementing texts for the Law on Protected Areas (1.1.1) biodiversity conservation and sustainable use, and local community rights for 40 people @ 1500$ in year 2. Total1500$  b) Targeted awareness-raising workshops for all stakeholders on the recently established protected areas system, including the new law on protected areas, the 5 new PAs and the national agency for the management of the protected areas network (1.1.2). 35 workshops for 30 people bringing together 3 villages at a time, including local authorities @ $700 per workshop + 3 workshops for 50 people with national institutions, one per island @ $1000 + 1 workshop for 50 people to clarify the division of powers and responsibilities and collaborations for PA management @ $1000 in year 1. Total $28,500.  c) Six 1-day workshops (1 per PA) for collaborative land use planning and refining the zoning of each protected area for 30 people each (1.2.3) @ $ 1500 in year 3. Total $ 9000.  d) Six half-day workshops (1 per PA) targeting local communities’ stakeholders for the validation of areas for the controlled use of natural resources within PAs in connection with nature-based value chains (1.2.3) @ $700 per workshop in year 3. Total $4,200  e) One-day workshop to build consensus with relevant Directorates, Park *Conservateurs* and project staff on the issues related to the concept of resource co-management involving local communities in PAs (1.2.4) @ $350 in year 3. Total $350  f) Fifteen (15) local meetings in year 3 for 50 people with the stakeholders of each PA to explain and discuss the content of natural resource co-management agreements in PAs (1.2.4) @ $2,000 per workshop. Total $30,000.  g) One half-day workshop for 50 people @$1000 for the strategic planning of the FEC (1.3.2), including the FEC board, the PNC Agency board, the 6 *Conservateurs*, the DGEF, representatives of the Finance Ministry and other concerned institutions, in year 1. Total $1000  h) Three (3) one-day workshops (1 per island) for 50 people @$2000/ workshop, including representatives of village committees, co-management committees and PNC Agency staff to review proposals by community mobilizers on the harmonization of fees for using PAs through the network (1.3.2) in year 1. Total $6,000  i) Thirty (30) days of FEC Resource Mobilization Task Force meetings @ $500 each. Total: $15,000  **Total: $95,550** | |
| ***10*** | | a) Training for the DGEF based on the recommendations of the HACT assessment @ $14,565 in year1, and close support @ $4000 in years 2 to 5. Total $30,565.  b) Payment to cover the costs of operationalizing the FEC (output 1.3) in year 1 under an agreement between the UNDP and the FEC Board. Total $30,000  **Total: $60,565** | |
| **Component 2** | | | |
| ***11*** | | a) International Consultantwith expertise in the control of invasive alien species in the Indian Ocean, to support pilot interventions for the management of invasive alien species including planning pilot operations in the field, adapting practical guides, and training ecoguards to carry out pilot interventions for the management of invasive alien species and (2.2.4). 30 days @ $700 in year 2 including a mission to Comoros. Total $21,000  **Total: $21,000** | |
| ***12*** | | a) National consultant Fauna biologist. Preparation (data collection and literature review) and facilitation of online workshops for the participatory evaluation of the results of the conservation action plans developed for Livingstone’s Fruit Bat and marine turtles and formulation of recommendations, to be validated by the participants and shared with the *Conservateurs* for their integration into the PA management plans and coordination of initiatives with the *Conservateurs* to integrate regional research projects on marine turtles and dugong (2.2.1). 60 days @ $100 per day in year 3. Total $6,000.  b) National consultants – flora and fishery biologists (2) to support the development of sustainable use plans for species (plants and fish) supporting value chains including the identification of collection/fishing sites, assessment of sustainable collection/fishing levels, implementation of a participatory system to monitor the condition of the populations or stands under use, and training local community members on sustainable use practices and monitoring (2.2.2). 100 days for each consultant in year 2 @ $100/day. Total $20,000  c) National consultantBiology expert to develop practical tools for identifying the main species of flora and fauna and elaborate comprehensive protocols to monitor key biodiversity in PAs (2.1.2) 60 days @ $100/day in year 1. Total $6,000  d) National Translation Consultantfor the translation practical guides on the control of IAS (2.2.4) in French and Comorian in year 2. Total $1000  e) National consultant database expert to develop the architecture of the database dedicated to PAs, integrating data shared by other institutions, and train PA staff to use it, including 2 missions to Comoros to meet with staff of the PNC Agency and better understand needs and architecture to be developed, work remotely with the local support of a junior GIS officer to develop the architecture and prepare trainings, and to implement the database and train the staff of the PNC Agency in the use of this database (2.1.1). Total of 33 days in year 1 at a daily rate of $100. Total $3,300.  **Total: $36,300** | |
| ***13*** | | **Project coordinator/ PA Expert** (17% of time for the component) responsible for coordinating, supervising, and providing inputs to activities leading to various outputs under the component, including: Oversee the dissemination and sharing of data on PAs and biodiversity in the Comoros (2.1.3) 1 day per year in years 1 to 3 and 6 days in years 4 and 5; Coordination for the development and implementation of protocols for the restoration of terrestrial ecosystems by the teams of the Karthala and Mont Ntringui National Parks (2.2.3) 4 days in year 2 and 2 days in years 3 to 5; Participation in the two missions of the database expert, in the identification of the database contents, and in training on its use (2.1.1) 20 days in the first year; Oversee and contribute to the development of a long-term ecological monitoring program to support the adaptive management of PAs, the selection of indicators, the development of practical identification tools for the main species of flora and fauna, and elaboration of comprehensive monitoring protocols (2.1.2) 50 days in year 1; Coordination and supervision of the contracts to carry out the inventory and reference mapping of terrestrial and marine coastal ecosystems and the assessment of their carbon sequestration capacity by the University of Comoros and NGO AIDE (2.4.1) 10 days in year 1; To oversee and coordinate the development of sustainable use plans for species (plants and fish) supporting value chains (2.2.2) 20 days in year 2; Oversight of the mission and training for the control of IAS (2.2.4) 5 days in year 2; Oversight of the elaboration, implementation, monitoring and assessment of action plans to counter deforestation and to counter the removal of sand from beaches including the participation to island workshops on the legal prohibition of logging and sand removal (2.2.5) 30 days in year 2; Coordination of the preparation of the evaluation of community management models (2.3.1) 5 days in year 2; Supervision of the participatory evaluation of conservation action plans (2.2.1) 10 days in year 3; Supervision of the preparation, participation and reporting on the community management models assessment workshop (2.3.2) 10 days in year 3; Coordination and supervision of the trainings for village communities based on the recommendations of the workshop for the participatory evaluation of community management models (2.3.3) 5 days in year 3.  Total of 190 days @ $100 per day. **Total** $19,000 | |
| **Environmental** **Legal Specialist** (3% of time for the component) responsible for developing implementing texts and providing legal advice as part of various outputs under the component, including: Preparation and facilitation of island workshops on the legal provisions relating to logging and beach sand removal (2.2.5). 14 days in year 2.  Total of 14 days @ $32 per day. **Total** $448. | |
| **Gender & PWD Officer** (3% of time for the component) responsible for overseeing gender and PWD integration in all project components and monitoring the implementation of the action plans related to gender and to PWD, including: Responsible for ensuring that all stakeholder information in PA databases is disaggregated by gender and PWD and documented (2.1.1). 10 days in 1st year; Assessment of social impacts specifically affecting women and PWDs in collaboration with the Monitoring-Evaluation-Safeguarding Officer as part of environmental and social impact studies for all value chains based on plant and wildlife species and on the ecotourism in PAs as part of support to IGAs (2.2.2) 20 days in year 1; Contribution to the evaluation of community management models from the perspective of women's and PWD’s participation and of their share of the benefits (2.3.2) 10 days in year 3.  Total of 40 days @ $32 per day. **Total** $1280. | |
| **Communication and Knowledge Management Officer** (6% of time for the component) responsible for the development and implementation of the project communication strategy in support of all components, including: Responsible for preparing awareness material, for organizing the information and awareness campaign for all actors involved in illegal logging and illegal sand collection through the media (2.2.5). 30 days in year 1 and 10 days per year in years 2 to 5.  Total of 70 days @ $43 per day. **Total** $3010. | |
| ***Conservateurs*** (5) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (40% of time for the component) responsible for coordinating, supervising, and providing inputs at PA sites to activities leading to various outputs under the component, including: Collaboration to the updating, dissemination and sharing of data on PAs and biodiversity in the Comoros (2.1.3) 6 days per year in years 1 to 5; Support to the performance of ESIAs for all value chains based on plant and fish species in PAs, coordination with the private sector to better understand their needs, and site-level coordination for the development of sustainable use plans for species (plants and fish) supporting value chains (2.2.2) 45 days in years 1 and 2; Coordination and supervision of the terrestrial ecosystem restoration program (2.2.3) 5 days per year in years 2 to 5 for the 2 *Conservateurs* of the Karthala and Mont Ntringui National Parks; Local coordination of the elaboration, implementation, monitoring and assessment of action plans to counter deforestation and to counter the removal of sand from beaches including the participation to island workshops on the legal prohibition of logging and sand removal (2.2.5) 20 days in years 2 to 5; Coordination of on-site operations for the control of invasive alien species, subsequent maintenance, and annual monitoring (2.2.4) 12 days in years 2 to 5; Collaborate to the development of a long-term ecological monitoring program to support the adaptive management of PAs, the selection of indicators, the development of practical identification tools for the main species of flora and fauna, elaboration of comprehensive monitoring protocols, and coordinate the determination of reference values for the indicators of the strategic results framework of the project (2.1.2) 50 days in year 1; On-site coordination and support to inventory and reference mapping of terrestrial and marine coastal ecosystems and the assessment of their carbon sequestration capacity (2.4.1) 20 days in year 1; Participation in the two missions of the database expert, in the identification of the database contents, and in training on its use (2.1.1) 20 days in the first year; Participation in the evaluation of community management models (2.3.1) 10 days in year 2; Integration of recommendations from the assessment of conservation action plans into the PA management plans, collecting and sharing data on dugongs in Comoros and proactively initiating contacts to integrate regional research projects on marine turtles and dugongs (2.2.1) 50 days in years 3 to 5; Local supervision of the community management models assessment workshop and integration of workshop recommendations in the Park Management Plans (2.3.2) 15 days in year 3; On-site coordination of the trainings for village communities based on the recommendations of the workshop for the participatory evaluation of community management models (2.3.3) 12 days in year 3.  Total of 525 days for 5 *Conservateurs* and 20 days for 2 *Conservateurs* @ $55 per day per person. **Total** $146,575. | |
| **Community mobilizers** (5) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (25% of time for the component) to supervise and support the communication and consultation with local communities, to help educate, inform and support them, especially to support and encourage the involvement of local communities in the implementation of annual monitoring, surveillance, and restoration activities as part of the park management plans (years 2 to 5), including Information and awareness of local stakeholders involved in illegal logging, relaying messages with local communities, and supporting the development of IGAs targeting women involved in the removal of beach sand: 10 days per year in years 1 to 5; Contribute to the development of a long-term ecological monitoring program to support the adaptive management of PAs, including the selection of indicators (2.1.2) 10 days in year 1; Identification of potential sites for collecting natural resources to support value chains, with the collaboration of village co-management committees and support to local community members for the monitoring of resources used in the value chains (2.2.2) 70 days in year 1; Preparation of evaluation of community management models including documentation of costs and benefits associated with each model in different parks (2.3.1) 30 days in year 2; Support preparation of participatory evaluation workshops of the results of conservation action plans developed for Livingstone's Fruit Bat and marine turtles: 30 days in year 3; Preparation, participation and reporting on the community management models assessment workshop including recommendations (2.3.2) 10 days in year 3; Responsible for the preparation and for providing trainings to local community members based on the recommendations of the workshop for the participatory evaluation of community management models (2.3.3) 95 days in year 3.  Total of 295 days for 5 community mobilizers @ $43 per day per mobilizer. **Total** $63,425. | |
| **Ecoguards** (60) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks to carry out monitoring and surveillance activities, collect field information, provide labor for restoration actions in forest ecosystems, including: Implementation of the long-term ecological monitoring program to support the adaptive management of PAs, including the determination of reference values for the indicators of the strategic results framework of the project (2.1.2) 60 days per year in years 1 to 5; Responsible for the updating of data on PAs and biodiversity in each national park (2.1.3) 15 days per year in years 1 to 5; Information and awareness of local stakeholders and the local communities involved in illegal logging, surveillance tasks, construction of greenhouses, development of nurseries and cultivation of seedlings (2.2.5) 15 days per year in years 1 to 5; Delimitation of natural resource collection sites (GPS coordinates and mapping), oversight and support to local community members for the monitoring of resources used in the value chains (2.2.2) 40 days in year 2 and 20 days in years 3 to 5; Implementation of the restoration program (2.2.3) 30 days in years 2 to 5; Implementation of pilot interventions for the control of invasive alien species, maintenance, and monitoring of the results (2.2.4) 18 days in year 2 and 9 days in years 3 to 5; Contribution to fieldwork related to the inventory and mapping of terrestrial and marine coastal ecosystems and to the assessment of their carbon sequestration capacity (2.4.1) 90 days in year 1; Contribute to collect data on turtles and dugongs (2.2.1) 20 days in year 3.  Total of 825 days for 60 ecoguards @ $15 per day per ecoguard. **Total** $742,500. | |
| **GIS Officer.** Technical supervision of the updating, dissemination and sharing of data on PAs and biodiversity in the Comoros (2.1.3) 30 days per year in years 1 to 5; Providing support to the database expert, in the preparation of the two missions, the development of the database and the preparation of the training for PNC Agency staff (2.1.1) 50 days in year 1; Collaboration in field work related to the inventory and mapping of terrestrial and marine coastal ecosystems (2.4.1) 60 days in year 1.  Total of 260 days @ $32 per day. **Total** $8320. | |
| **Sustainable Livelihoods Officer** (2% of time for the component) Contribute to the development of a long-term ecological monitoring program to support the adaptive management of PAs, namely to the selection of indicators (2.1.2) 20 days in year 1.  Total of 20 days @ $43 per day. **Total** $860. | |
| **M&E/Safeguards Officer** (10% of time for the component) Supervision of the determination of the reference values for the indicators of the project strategic results framework with the collaboration of the ecoguards, 20 days in year 1; Plan, coordinate and provide support to the performance of scoped environmental and social impact assessments (ESIAs) for all value chains using plant and fish species in PAs (2.2.2) 100 days in year 1.  Total of 120 days @ $ 43 per day. **Total** $5160. | |
|  | | **Drivers** (3) to support all field operations related to the management of PAs and ensure the transport of the equipment necessary for the restoration of ecosystems, the delimitation of PAs, the marking of transects for monitoring biodiversity and, as needed, to support surveillance operations @ $13 daily rate.  Total of $9,360 per year in years 1 to 5 (based on a total of 240 working days per year for each driver). **Total** $46,800 | |
| **Speedboat drivers** (2 part-time) to support all operations at sea related to the management of MPAs and ensure the transport of staff and of the equipment necessary for the delimitation of MPAs, the monitoring of biodiversity and to support surveillance operations @ $9 daily rate.  Total of $2160 per year in years 1 to 5 (based on a total of 120 working days per year for each driver). **Total** $10,800 | |
|  | | **Total budget line 13: $1,048,178** | |
| ***14*** | | a) Travel costs of the Regional Consultant to meet PNC Agency staff and other institutions that have databases relevant to PA management, better understand the needs and architecture to be developed (8-day mission 1 to Ngazidja, Mwali and Ndzuani), and to ensure the operationalization of the database and the training of the staff of the PNC Agency - ecoguards and *conservateur*s - in the use of this database (5-day mission 2 to Moroni) in year 1 (2.1.1). Two (2) regional airline tickets @ $700, one (1) airline ticket to Ndzuani @ $235 and to Mwali @ $200, DSA @ $226 for a total of 13 days. Total $ 4,773.  b) Travel costsof national GIS officer on a 5-day mission with the database expert (2.1.1) including airline tickets to Ndzuani @ $235 and to Mwali @ $200 and DSA for 5 days in year 1 @ $71. Total $790.  c) Travel costs for 12 PA staff attending the training on the database in Moroni (2.1.1) including 3 *Conservateurs* and 9 ecoguards from Ndzuani and Mwali. Airline tickets for 8 people from Ndzuani @ $235 and 4 people from Mwali @ $200 and 3-day Moroni DSA @ $95 for 12 people in year 1. Total $6,100.  d) Travel costs for national flora and fishery biologists for 4 inter-island missions each to identify collection/fishing sites, assess sustainable collection/fishing levels, implement a participatory system to monitor the condition of the populations or stands under use, and train local community members on sustainable use practices and monitoring (2.2.2) in year 2. Four (4) local air tickets to Ndzuani @ $235 and to Mwali @$200 and DSAs @ $71 for 34 days, for 2 people, in year 2. Total $8,308.  e) Provision for travel costs for EIA consultations on key species management plans @ $600 in year 2. Total $600.  f) Travelcosts for the IAS Technical expert (IC) to support pilot interventions for the management of invasive alien species (2.2.4): International air ticket @ $1,500, local air tickets to Ndzuani @ $235 and to Mwali @ $200 and DSA for 12 days in year 2 @ $226 (Moroni) and 8 days @ $142 (region). Total $ 5,783.  g) Travel costs for 3 people (DGEF Director, Project Coordinator and Legal Specialist) to participate in the island workshops on the prohibition of logging and beach sand removal (2.2.5). Local air tickets to Ndzuani @ $235 and to Mwali @ $200 and local 4-day DSA @ $142 for the DGEF Director and $71 for 2 people in year 2. Total $2,441  h) Travel costs for project staff to attend 2 regional symposiums on marine turtles and dugongs (2.2.1). Regional air tickets @ $700, 5-day DSA @ $300 and $200 registration fees for 2 events in years 4 and 5. Total $4,800.  **Total: $33,595** | |
| ***15*** | | Lump sum (cost split among the 4 components or 25% per component) for fuel purchase@ $4000 and maintenance@ $1000 of the Project Coordination Unit's vehicle per year, to be used for field missions (consultants and project staff) and for PA motorcycles for the travel of ecoguards and community mobilizers @ $5,000 per year. **Total: $25,000** | |
| ***16*** | | a) Service contract to AIDE to provide training for ecoguards on protocolsto monitor marine ecosystems and species for 12 ecoguards (4 ecoguards each in Coelacanth, Mitsamiouli-Ndroudé and Shissiwani national parks) by the NGO AIDE (2.1.2). Lump sum including travel costs to Ndzuani in year 1 @ $2,600. Total $2,600;  b) Service contract to DAHARI to provide training for ecoguards on protocolsto monitor b) terrestrial ecosystems and species for 16 ecoguards in Ngazidja and Mwali by the NGO Dahari (2.1.2). Lump sum including travel costs to Ngazidja and Mwali for 2 people in year 1 @ $4,500. Total$4,500.  c)Service contractto the University of the Comoros to carry out the inventory and reference mapping of terrestrial ecosystems, the assessment of their carbon sequestration capacity, and train and supervise ecoguards to carry out related field work (2.4.1) @ $50,000 in year 1.Total$50,000  d) Service contract to the NGO AIDE to carry out the inventory and reference mapping of marine coastal ecosystems, the assessment of their carbon sequestration capacity, and train and supervise ecoguards to carry out related field work (2.4.1) @ $50,000 in year 1. Total$50,000  e) Service contract to a national consulting firm with ESIA expertise to carry out a scoped ESIA on the sustainable use plans developed for species or species groups supporting value chains, i.e. rock lobster, octopus, mangrove crab, crayfish, demersal fish, aromatic plants, medicinal plants and moringa and prepare an Environmental and Social Management Plan based on ESIA findings as per requirements in the ESMF (2.2.2) in year 1 @ $32,000. Total$32,000  **Total: $139,100** | |
| ***17*** | | a) Equipment for monitoring: 100 marine buoys (2.1.2) @ $10 in year 1; 100 positioning reference plates in a terrestrial environment (2.1.2) @ $2 each; 32 snorkeling equipment (2.1.2) @$150 each; 20 decameters @ $50 each (2.1.2); 7 terrestrial cameras with telephoto lens (2.1.2) @ $1,500 each in year 1. Total $17,500  b) Material for the restoration program implemented by the teams of the Karthala and Mont Ntringui National Parks. Small equipment, materials, fences, seedlings of native species, and protection for seedlings (2.2.3). $8,000$ per year for 2 parks in years 1 to 5. Total $40,000  c) Nursery equipment including recycled plastic bags ($2,000), small equipment ($3000), construction of 3 greenhouses (one per island) @ $2,500 in year 2(output 2.2.5). Total $12,500  **Total: $70,000** | |
| ***18*** | | a) Drone equipped for forest field conditions, and for taking georeferenced images: DJI M600 RTK drone integrated with a yellow Scan LiDAR system and equipped with a Zenmuse XT2 FLIR camera (Drone @ $4000, Zenmuse Camera @ $9000, LiDAR @ $10,000) (2.1.2) Total $23,000 in year 1.  b) Drone (not equipped) to support surveillance and monitoring in Ndzuani NPs (2.1.2) @ $4,000 in year 1. Total $4,000.  c) Two replacement battery packs @ $350 (2.1.2). Total $700 in year 1.  d) Computer equipment for the project staff (cost split among the 4 components or 25% per component), including 7 Laptops @ $1500, 5 desktop computers @ $2000 (one per park office), 1 Multifunction printer @ $2000 in year 1. Total: $5,625  e) Internet subscription for 6 offices of the National Parks Agency (cost split among the 4 components or 25% per component) to enable project implementation, online trainings and group sessions @ 400$/year/office. Total: $12,000  **Total $45,325** | |
| ***19*** | | a) 300 plasticized copies for identification boards (2.1.2) @ $16/board in year 1.  b) Print material related to ESIA on species sustainable use plans: $300 in year 1.  **Total $5,100** | |
| ***20*** | | a) Three-day workshop for 40 people led by the Database Expert to explain the structure of the database and provide training on its use (2.1.1). 3-day workshop @ $1,500 per day in year 1. Total $4,500.  b)Workshops (3) to discuss issues of logging and sand collection with local authorities and administration (2.2.5). 3 one-day workshops (1 /island) for 50 people @ $2000 in year 2. Total $6,000  c) Community management models assessment workshop through one-day workshops on each island connected by videoconference and involving staff of the PNC Agency, NGOs, technical Directions and other relevant stakeholders (2.3.2). 3 workshops for 50 people @ $2000 in year 3. Total $6000  d)Trainings provided to 30 people in 56 village communities based on the recommendations of the workshop (under 2.3.2) for the participatory evaluation of community management models (2.3.3). 56 one-day trainings for 30 people @ $ 700 / training session in year 3. Total $39,200  **Total: $55,700** | |
| ***21*** | | Purchase of a 4x4 vehicle @ $35,000 and 14 motorcycles for Ecoguards @ 1250$/moto in year 1. **Total** **52,500$** | |
| **Component 3** | | |
| ***22*** | | National plant biology specialistto provide trainings in sustainable harvest of plants following the Fair Wild principles and using their tools, across 40 to 50 villages on the 3 islands (3.2.2). Preparation and provision of 15 trainings for 50 people in years 2 and 3, totaling 30 trainings@ $1000. **Total $30,000.** |
| ***23*** | | **Project coordinator/PA expert** (20% of time for the component) responsible for coordinating, supervising, and providing inputs to activities leading to various outputs under the component, including: Overseeing project interventions to raise public awareness of the brand image of Comoros National Park Products (3.5.2) 3 days per year in years 1 to 3 and 8 days in years 4 and 5; Support to the identification of private enterprises and community cooperatives in Ndzuani and Mwali (3.3.1) 5 days in year 1; Coordination and oversight of the development of a marketing strategy including a national certification system and product labeling (3.5.1) 35 days in year 2 and 30 days in year 3; Collaboration in training provided by Fisheries staff on the manufacture, installation, use, and maintenance of traps, longlines and Fish Aggregating Devices made of natural material (3.2.2) 15 days in years 2 and 3; Oversee and coordinate inputs for the establishment or consolidation of cooperatives and to their continuous training (3.2.1) 12 days in year 2 and 6 days in years 3 to 5; Overseeing and support to new businesses and community partners (3.6.2) 4 days in year 2 and 2 days in years 3 to 5; Coordination and supervision of technical feasibility and scoped ESIA studies (including economic viability) (3.1.1) 40 days in year 2; Coordination and participation in workshops on the conclusions of Environmental and Social Impact Studies and Feasibility Studies (3.1.2) 20 days in year 2; Supervision of the identification of the necessary processes ensuring tangible and optimized benefits to the partner communities of the value chains, 5 days in year 2; Supervision and support to the development or adaptation of the economic model and business plan of each micro-enterprise by a local consulting firm (3.4.1) 5 days in year 2; Coordination and supervision of the project interventions for the expansion of value chains to create IGAs for PAs local communities (3.6.1) 15 days in year 2.  Total of 250 days @ $100 per day. **Total** $25,000 |
| **Environmental** **Legal Specialist** (3% of time for the component) responsible for developing implementing texts and providing legal advice as part of various outputs under the component, including: Oversee legislative aspects related to the establishment or consolidation of cooperatives and their training in microfinance and micro-entrepreneurship (3.2.1) 8 days in year 2; Establishment of a certification committee to be formalized by a ministerial decree (3.5.1) 10 days in year 2.  Total of 18 days @ $32 per day. **Total** $576. |
| **Gender & PWD Officer** (6% of time for the component) responsible for overseeing gender and PWD integration in all project components and monitoring the implementation of the action plans related to gender and to PWD, including : Contribution to the scoped ESIA studies on the 6 value chains options through the documentation of Gender- and PWD-related issues (3.1.1) 20 days in year 2; Contribution to the identification of the necessary processes ensuring tangible and optimized benefits for women and PWDs in value chain partner communities (3.3.2) 5 days in year 2; Contribution to the project interventions for the expansion of value chains to create IGAs for local communities through ensuring that the specific financing and equipment needs of women and PWDs are adequately addressed 15 days in year 2; Identify and remove barriers and constraints specific to women and to PWD to enable their full participation in value chains and access to a fair share of the revenues (3.2.1) 10 days in year 3; Contribution to the support provided to new businesses and community partners to ensure that the needs of women and PWDs are adequately addressed (3.6.2) 8 days in year 2 and 4 days in years 3 to 5. Total of 70 days @ $32 per day. **Total** $2,240 |
| **Communication and Knowledge Management Officer** (14% of time for the component) responsible for the development and implementation of the project communication strategy in support of all components, including: Responsible for coordinating interventions to raise public awareness of the brand image of “Product from the National Parks of the Comoros” including annual fairs and logo design competitions in schools (3.5.2) 28 days per year in years 1 to 5; Responsible for the development of a marketing strategy in close collaboration with the Sustainable Livelihoods Officer including the establishment of a national certification system and product labeling, and for the development of a promotional strategy based on the criteria of sustainability, equity and origin of National Parks for all value chains (3.5.1) 30 days in year 2.  Total of 170 days @ $43 per day. **Total** $7310. |
| ***Conservateurs*** (5) of the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (15% of time for the component) responsible for coordinating, supervising, and providing inputs at PA sites to activities leading to various outputs under the component, including: Supervision and local support to the technical feasibility and scoped ESIAs for the six IGAs options (3.1.1) 25 days in year 2; Participation in workshops on the conclusions of ESIAs and Feasibility Studies and follow-up (3.1.2) 20 days in year 2; Provide on-site coordination and contribute to the establishment or consolidation of cooperatives and to their training and continuous support (3.2.1) 5 days in years 2 to 5; On-site coordination and support to training of cooperatives on sustainable practices to offer quality products and services and integrate the selected value chains in years 2 and 3 (3.2.2) 15 days in year 2 and 10 days in year 3; Provide on-site support to the organization of annual fairs and logo design competitions (3.5.2) 3 days per year in years 1 to 5; Overseeing and on-site support to new businesses and community partners (3.6.2) 30 days in year 2 and 14 days in years 3 to 5.  Total of 177 days for 5 *Conservateurs* @ $55 per day. **Total** $48,675. |
| **Community mobilizers** (5) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (45% of time for the component) : Participation in the preparation of workshops on the conclusions of ESIAs and Feasibility Studies to ensure their accessibility to local communities (3.1.2) 20 days in year 2; Contribute to the establishment or consolidation of cooperatives and to their training and continuous support (3.2.1) 45 days in years 2 to 5; Support cooperatives for their adoption of sustainable practices to offer quality products and services and integrate the selected value chains in year 3 (3.2.2) 15 days; Local participation in the identification of the necessary processes ensuring tangible and optimized benefits to the partner communities of the value chains (3.3.2) 5 days in year 2; Providing continued and close support to local communities for their integration in the value chains (3.2.1, 3.3.2, 3.6.2) 60 days in year 2 and 30 days in years 3 to 5; Raising awareness on the new label among local communities: “Product from the National Parks of the Comoros” (3.5.2 – 10 days per year in years 3 to 5); Annual support to cooperatives for the preparation of submissions for national certification of products (3.5.1) 35 days in year 2 and 20 days in years 3 to 5.  Total of 495 days for 5 community mobilizers @ $43 per day per mobilizer. **Total** $106,425. |
|  | | **Sustainable Livelihoods Officer** (94% of time for the component) : Preparation of TORs for technical feasibility studies and coordination and support for their performance (3.1.1) 110 days in year 2; Preparation of the synthesis of the conclusions of ESIA and feasibility studies and facilitation of workshops for each of the value chains on the 3 islands (3.1.2) 60 days in year 2; Setting up new community cooperatives or consolidating existing ones, identifying training needs for cooperative members involved in each value chains and supporting a local consulting firm in achieving its contract (3.2.1) 60 days in years 2 to 5; Coordination of training provided to cooperatives on sustainable practices to offer quality products and services and integrate the selected value chains in years 2 and 3 (3.2.2) 40 days in years 2 and 3; Identification of private enterprises and community cooperatives in each island and confirmation of their interest and commitment to the objectives pursued by the project, 30 days in year 1; Coordination with the local consulting firm and participation in the identification of the necessary processes ensuring tangible and optimized benefits to the partner communities of the value chains (3.3.2) 30 days in year 2; Coordination with the local consulting firm and participation in the development or adaptation of the economic model and business plan of each micro-enterprise (3.4.1) 40 days in year 2; Responsible for the development of a marketing strategy in close collaboration with the CKM Officer, including the identification of markets, establishment of a national certification system, and training cooperatives for the preparation of files to be submitted for product certification (3.5.1) 80 days in year 2 and 80 days in year 3; Coordination of the project interventions for the expansion of value chains to create IGAs for PAs local communities (3.6.1) 25 days in years 2 to 5; Coaching and support to new businesses and community partners (3.6.2) 70 days per year in years 2 to 5.  Total of 1130 days @ $43 per day. **Total** $48,590. |
| **M&E/Safeguards Officer** (10% of time for the component) Preparation of TORs and supervision of the performance of scoped environmental and social impact studies for the 6 value chain options (3.1.1) 120 days in year 2.  Total of 120 days @ $43 per day. **Total** $5,160. |
|  | | **Total budget line 23: $243,976** |
| ***24*** | | a) Travel costs for the participation of the Project Coordinator and the Sustainable Livelihoods Officer in the workshops on the conclusions of ESIA and Feasibility Studies (3.1.2). Air tickets to Ndzuani @ $235 and to Mwali @ $200 and 12-day DSAs @ $71 for 2 persons in year 2. Total $2,574  b) Travel costs of the plant biologist to provide trainings in sustainable plants harvesting in years 2 and 3, including visits to private companies and their facilities (3.2.2). Local air tickets to Ndzuani @ $235 and to Mwali @ $200 and DSA for 15 days @ $71 in years 2 and 3. Total $ 3,000  c) Travel costs for the training of fishers by a Fisheries Officer in collaboration with the Project Coordinator on the making, installation, use, and maintenance of traps, longlines and Fish Aggregating Devices made of natural material (3.2.2). Air tickets to Ndzuani @ $235 and to Mwali @ $200 and DSA for 24 days @ $71 for Project Coordinator and Fisheries Officer in years 2 and 3. Total $8,556  d) Travel costs for the training of village cooperatives provided by 2 officers of the Tourism Office on sanitary practices for catering and ecotourism accommodation in years 2 and 3 (3.2.2). Air tickets to Ndzuani @ $235 and to Mwali @ $200 and DSA for 12 days @ $71 for 2 people in years 2 and 3. Total $ 5,148.  e) Travel costs of the Sustainable Livelihoods Officer for the identification of private enterprises and community cooperatives in Ndzuani and Mwali in year 1. Local air ticket to Ndzuani @ $235 and to Mwali @ $200 and DSA for 20 days @ $71. Total $ 1,855  f) Travel costs for the Sustainable Livelihoods Officer and the CKM Officer to train cooperatives to prepare files to be submitted to the evaluation committee for certification (3.5.1). Air tickets to Ndzuani @ $235 and to Mwali @ $200 and 5-day DSA @ $71 for 2 people in year 2. Total $1,580  g) Mission for 2 members of the certification committee for the annual verification visits to micro-enterprises with a view to certification (3.5.1). Air tickets to Ndzuani @ $235 and to Mwali @ $200 and 10-day DSA @ $71 for 2 people in years 3 to 5. Total $6,870  h): Provision for travel costs for EIA consultations on 6 value chains @ $600 in year 3  **Total: $30,183** |
| ***25*** | | Lump sum (cost split among the 4 components or 25% per component) for fuel purchase@ $4000 and maintenance@ $1000 of the Project Coordination Unit's vehicle per year, to be used for field missions (consultants and project staff) and for PA motorcycles for the travel of ecoguards and community mobilizers @ $5,000 per year. **Total: $25,000** |
| ***26*** | | a) Service contracts with local consulting firms to carry out an environmental and social impact study (ESIA) on the 6 value chain options and 6 technical feasibility studies to be conducted in parallel, including economic viability, on the basis of the prior assessments of the biological potential carried out under component 2, and prepare an Environmental and Social Management Plan based on ESIA findings (3.1.1): 6 feasibility studies @ $10,000 and a scoped ESIA @ $18,000 in year 2. Total $78,000.  b) Service Contract with a local consulting firm to provide training (in year 2) and close support (in years 3 to 5) in credit and savings, risk management, microfinance, and micro-entrepreneurship to the members of 18 cooperatives throughout the development of their partnership with the private enterprise (3.2.1). $100,000 in year 2 to provide trainings and $25,000 per year in years 3 to 5 to provide continuous and close support to cooperative members. Total $175,000  c) Service contractwith a local consulting firm to provide close support for the identification of the necessary processes ensuring tangible and optimized benefits to the partner communities of the value chains, including women and PWDs and to develop or adapt the economic model and business plan of each micro-enterprise involving a partnership with cooperatives within local communities (3.4.1) in year 2. Total $30,000.  d) Service contract with a local consulting firm to support and supervise negotiations with financial institutions (MECK and SANDUK) concerning the granting of reduced or zero rate credit for private companies involved in sustainable value chains (3.6.1) in the year 2. Total $10,000.  **Total: $293,000** |
| ***27*** | | a) Provision of tools and small equipment to help farmers/ fishers/ plant harvester cooperatives involved in 6 value chains to collect or process their products (material to assemble fish concentrating devices and longlines, for making pots and traps, ice and coolers for fish, small equipment for sustainable plant collection, trays and sheds for drying herbs, and material for packaging and delivering them safely to private partners) (3.6.1). Provision of material and small equipment up to $250,000 for all value chains in year 2. Total $250,000.  b) Office supplies. $1594 in year 1 and $1592 in years 2 to 5. Total $7,962.  **Total: $257,962.** |
| ***28*** | | a) Computer equipment for the project staff (cost split among the 4 components or 25% per component), including 7 Laptops @ $1500, 5 desktop computers @ $2000 (one per park office), 1 Multifunction printer @ $2000 in year 1. Total: $5,625  b) Internet subscription for 6 offices of the National Parks Agency (cost split among the 4 components or 25% per component) to enable project implementation, online trainings and group sessions @ 400$/year/office. Total: $12,000  **Total: $17,625** |
| ***29*** | | Print material related to ESIA on value chains: $300 in year 2. **Total $300** |
| ***30*** | | a) Prizes (7) for the 6 parks logo design contests @ $200 and for the logo of the national certification of the Products of the National Parks of the Comoros @ $200 in year 3 (3.5.2) Total $1,400**.**  **Total: $1,400** |
| ***31*** | | a) Six (6) presentations on each island to present the conclusions of the ESIAs and Technical Feasibility Studies to the agency and to the targeted communities and private entrepreneurs and confirmation of their interest in getting involved in the value chains supported by the project (3.1.2): 18 one-day workshops for 40 people @ $900 per workshop in year 2. Total $16,200  b) One-day workshop for 50 people to introduce the certification process for sustainable, fair-trade products from National Parks (3.5.1) in year 2. Total $2,000.  c) Organization of annual fairs to promote the "Products of the National Parks of the Comoros" on each of the islands, from the 1st year @ $2,000 (= $6,000 per year for 3 fairs) in years 1, 3 and 5. Total $18,000  **Total: $36,200** |
| ***32*** | | Purchase of 14 motorcycles for Ecoguards @ 1250$/moto in year 1. **Total** **$17,500** |
| **Component 4** | | |
| ***33*** | Graphic designer for the design of 10 leaflets, 5 streamers, 5 kakemonos, with powerful messages as part of the project communication plan (4.2.1): $2000 in year 1. Total$2000  **Total: 2,000** | |
| ***34*** | **Project** **coordinator / PA Expert** (11.5% of time for the component) responsible for coordinating, supervising, and providing inputs to activities leading to various outputs under the component, including: Overseeing the implementation of Gender and PWD action plans (5.1.1) 3 days for years 1 to 5; Contribution to the identification of knowledge products, lessons and good practices identified during the project (4.1.2) 16 days per year in years 1 to 5; Support experience sharing among the staff of the Protected Areas National Agency and between the PA village co-management committees (4.2.2) 5 days per year in years 1 to 5; Participate in the implementation of a targeted strategic communication plan for the project and the PNC Agency (4.2.1) 4 days per year for years 1 to 5.  Total of 140 days @ $100 per day. **Total** $14,000 | |
| **Gender & PWD Officer** (83% of time for the component) responsible for overseeing gender and PWD integration in all project components and monitoring the implementation of the action plans related to gender and to PWD, including : Coordinate the implementation of Gender and PWD action plans including 3 trips per year to tour village communities in each island (5.1.1) 98 days in years 1 to 5; Responsible for the annual evaluation of the effects of the implementation of the Gender and PWD action plans and their adaptation: 48 days per year in years 1 to 5; Contribution to the communication plan for the project to ensure that it adequately targets women and PWDs and identifies the appropriate means to convey to them any message likely to be of interest to them (4.2.1) 3 days per year for years 1 to 5; Ensure that all the awareness campaigns, carried out during the project, including the messages and the means of communicating them, are planned according to a gender and PWD sensitive approach (4.2.2). 49 days per year in years 1 to 5.  Total of 990 days @ $32 per day. **Total** $31,680. | |
| **Communication and Knowledge Management Officer** (69% of time for the component) Responsible for developing and implementing the project communication strategy in support of all components, including: Contribute to the implementation of Gender and PWD action plans (5.1.1) 3 days per year in years 1 to 5; Coordination of information sharing for the compilation of knowledge products, lessons and good practices identified during the project and production of communication materials (4.1.2) 105 days per year in years 1 to 5; Support experience sharing among the staff of the Protected Areas National Agency and between the PA village co-management committees (4.2.2) 30 days per year in years 1 to 5; Development and implementation of a targeted strategic communication plan for the project and the PNC Agency including the organization and support of the journalists' tour (4.2.1) 12 days per year for years 1 to 5; Planning and organizing the participation of the PAs Agency in environmental days, supervising, and coordinating the organization of Protected Areas days and the organization of eco-school caravans (4.2.2) 15 days per year in years 1 to 5.  Total of 825 days @ $43 per day. **Total** $35,475. | |
| ***Conservateurs*** (5) of the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (20% of time for the component) responsible for coordinating, supervising, and providing inputs at PA sites to activities leading to various outputs under the component, including: Contribute to the implementation of Gender and PWD action plans at site level (5.1.1). 2 days per year in years 1 to 5; Contribution to the identification of knowledge products, lessons and good practices identified during the project (4.1.2) 10 days per year in years 1 to 5; Support experience sharing among the staff of the Protected Areas National Agency and between the PA village co-management committees (4.2.2) 8 days per year in years 1 to 5; Participation in the implementation of the communication plan for the project and the PNC Agency (4.2.1) 5 days per year for years 1 to 5; Annual participation in the organization of environmental days (4.2.2) 16 days per year for years 1 to 5.  Total of 205 days for 5 *Conservateurs* @ $55 per day per *Conservateur*. **Total** $56,375 | |
| **Community mobilizers (5)** in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (22% of time for the component) including: Contribute to the implementation of Gender and PWD action plans at site level (5.1.1) 6 days per year in years 1 to 5; Responsible for collecting local information to support the annual evaluation of the effects of the implementation of the Gender and PWD action plans (5.1.2) 12 days per year in years 1 to 5; Support experience sharing among the staff of the Protected Areas National Agency and between the PA village co-management committees (4.2.2). 10 days per year for 5 CM in years 1 to 5; Participation in the implementation of the communication plan for the project and the PNC Agency (4.2.1). 6 days per year for the 5 CM in years 1 to 5; Participation of 5 community mobilizers in the organization of environmental days (4.2.2) 30 days per year in years 1 to 5.  Total of 320 days for 5 community mobilizers @ $43 per day per mobilizer. **Total** $68,800. | |
| **Ecoguards** (60) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks to:  Support experience sharing among the staff of the Protected Areas National Agency and between the PA village co-management committees (4.2.2) 7 days per year for 60 ecoguards in years 1 to 5;  Annual participation in the organization of environmental days, Protected Areas days and the organization of eco-school caravans (4.2.2) 25 days per year for 60 ecoguards in years 1 to 5;  Total of 160 days for 60 ecoguards @ $15 per day per ecoguard. **Total** $144,000. | |
|  | **Total budget line 34: $350,330.** | |
| ***35*** | a) Travel costs for the Gender and PWD Officer to coordinate the implementation of Gender and PWD action plans (5.1.1) Airline tickets to Mwali @$200 and Ndzuani @$235 and 10-day DSA @$71 for 3 missions per year in years 1 to 5. Total $17,175  b) Travel costs to encourage partnership with the journalists 'Friends of the parks' including tours of the parks for 3 journalists in years 1 and 3, to promote the achievements and impact of the project (4.2.1) Local airline tickets to Mwali @$200 and Ndzuani @$235 and 5-day DSA @$71 for 3 participants) in years 1 and 3. Total: $4,740  c) Travel costs for the CKM officer to lead the journalists’ tours in Ndzuani in years 1 and 3 (4.2.1) Local airline ticket to Ndzuani @$235 + 2-day DSA @$71 in years 1 and 3. Total $754.  **Total: $22,669** | |
| ***36*** | a) Computer equipment for the project staff (cost split among the 4 components or 25% per component), including 7 Laptops @ $1500, 5 desktop computers @ $2000 (one per park office), 1 Multifunction printer @ $2000 in year 1. Total: $5,625  b) Internet subscription for 6 offices of the National Parks Agency (cost split among the 4 components or 25% per component) to enable project implementation, online trainings and group sessions @ 400$/year/office. Total: $12,000  **Total: $17,625** | |
| ***37*** | Lump sum (cost split among the 4 components or 25% per component) for fuel purchase@ $4000 and maintenance@ $1000 of the Project Coordination Unit's vehicle per year, to be used for field missions (consultants and project staff) and for PA motorcycles for the travel of ecoguards and community mobilizers @ $5,000 per year. **Total: $25,000** | |
| ***38*** | a) Printing costs for 1000 copies of leaflets on Gender and PWD issues (5.1.1) @ $1/copy in year 5. Total $1000.  b) Advertising spot on Gender and PWD issues (5.1.1) @ $1200 in year 3. Total $1200.  c) Printing costs for 100 copies of 10 technical sheets on project learning (4.1.2) @ $20/sheet in year 5. Total $2000  d) Printing of leaflets and banners as part of the communication plan (4.2.1): 10 leaflets in 1350 copies @ $2 per copy (some of which will be intended for schools); printing 14 banners @ $70 per banner; print of 12 kakemonos @ $400 each. Total of $8,480 in year 1. Total $8,480  e) Production of 6 short videos (1 per park) (4.2.1) @ $3000 in year 3. Total $18,000  **Total: $30,680** | |
| ***39*** | Workshops: a) Annual contribution to Environment Day @ $2,000/year for years 1 to 5 (4.2.2). Total $10,000  b) Annual organization of the Protected Areas Day (4.2.2) @ $5,000/ year in years 1 to 5. Total $25,000  c) Organization of "eco-school caravans" including visits to PAs by students and awareness tour in 5 school classes per park (4.2.2) @ $500 per park per year in years 1 to 5. Total $ 15,000  d) Participation in the World Beach Cleanup Day for 3 coastal marine parks including the cleaning of 1 beach per park per year (4.2.2) @ $1,000 per beach; $ 3,000 per year for years 1 to 5. Total $ 15,000  **Total: $65,000** | |
| ***40*** | a) Budget reserve for experience sharing travel among islands and in the region for the Project Coordinator/PA expert and for the National Parks Agency staff (*Conservateurs,* Ecoguards, Community Mobilizers), including Inter-island and regional air tickets and DSA @ 4,948 in year 1, 5,100 in years 2 to 5. Total: $25,348.  b) Budget reserve for inter-island travel for PCU staff contributing to the development of knowledge products @ $1,500 per year in years 1 to 5. Total: $7,500  **Total : $32,848** | |
| **M&E** | | |
| ***41*** | a) International consultant for the mid-term review of the project: Lump sum cost including travel costs in year 3. Total $35,000  b) International consultant for the terminal evaluation of the project: Lump sum cost including travel costs in year 5. Total $35,000  **Total: $70,000** | |
| ***42*** | a) National consultant fees for the project mid-term review (30 days @$100/day in year 3). Total $3000.  b) National consultant fees for the project terminal evaluation (30 days @$100/day in year 5). Total $3000.  **Total: $6,000** | |
| ***43*** | **Project** **coordinator / PA Expert** (2.5% of time for the component) responsible for coordinating, supervising, and providing inputs to activities leading to various outputs under the component, including: Overseeing annual project monitoring and evaluation, 6 days per year in years 1 to 5. Total of 30 days @ $100 per day. **Total** $3,000 | |
| ***Conservateurs*** (5) of the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks (20% of time for the component) responsible for coordinating, supervising, and providing inputs at PA sites to activities leading to various outputs under the component, including: Local coordination ofthe annual evaluation of the effects of the implementation of the Gender and PWD action plans, 2 days per year in years 1 to 5; Contribution to annual project monitoring and evaluation at site level, 5 days per year in years 1 to 5 Total of 35 days per year for 5 *Conservateurs* @ $55 per day per *Conservateur*. **Total** $9,625 | |
| **Ecoguards** (60) in the Coelacanth, Karthala, Mitsamiouli-Ndroudé, Ntringui and Shissiwani National Parks: Participation in the monitoring of PRF indicators. 5days per year for 60 ecoguards in years 1 to 5;  Total of 25 days for 60 ecoguards @ $15 per day per ecoguard. **Total** $22,500. | |
| **M&E/Safeguards Officer** (72% of time for the component) to: Responsible for project monitoring, including undertaking and coordinating the establishment of baseline values for PRF indicators in the first year of the project, for updating the project indicators with the collaboration of other project staff at national and site levels, continuous monitoring of environmental and social risks, and reporting as part of the annual review processes for the PIR and end-of-the-year review. Total of 174 days per year @$43/day in years 1 to 5. **Total** $37,410 | |
|  | **Total budget line 43: $72,535** | |
| ***44*** | a) Travel costs for the project mid-term review (national consultant): Local airline ticket to Mwali @$200 and Ndzuani @$235 and 8-day DSA @$71 in year 3. Total $1003.  b) Travel costs for the project terminal evaluation (national consultant): Local airline ticket to Mwali @$200 and Ndzuani @$235 and 8-day DSA @$71 in year 5. Total $1003.  c) Travel costs for the monitoring and evaluation of project results by the project M&E/Safeguards Officer, including 4 missions in the 1st year and 2 missions per year in years 2 to 5: 4 airline tickets to Mwali @$200 and to Ndzuani @$235 and 4 5-day DSA @$71 in year 1, and 2 airline tickets to Mwali @$200 and to Ndzuani @$235 and 2 5-day DSA @$71 in years 2 to 5. Total $9,480.  **Total: $11,486** | |
| ***45*** | Translation services for the annual progress reports (PIRs) and midterm review (year 3) and terminal evaluation (year 5) reports @ $2000 / report in years 3 and 5. **Total: $14,000**. | |
| ***46*** | Project launching workshops on each island (3) @ $5000 per workshop in year 1. **Total: $15,000** | |
| ***47*** | Budget reserve for inter-island travel for PCU staff contributing to documenting indicators of the PRF @ $800 per year in years 1 to 5. Total: $4,000  **Total: $ 4,000** | |
| **Project Management Unit** | | |
| ***48*** | **Project coordinator / PA Expert** (30% of time for project management) 72 days per year in years 1 to 5. Total of 360 days @ $100 daily rate. Total $36,000.  **Administrative and financial assistant** (100% for management) responsible for project financial management, accounting, purchasing and financial reporting. $1000 / month in years 1 to 5. Total: $60,000  **Watchmen** (4) @ $11 daily rate. Total of $10,560 per year (based on a total of 240 working days per year for each watchman). Total $52,800  **Total: $148,800** | |
| ***49*** | Office supplies. $2568 in years 1 to 5. **Total: $12,840** | |
| ***50*** | Annual external audits (4) starting in year 2 @ $7500/audit. **Total** **$30,000** | |
| ***51*** | Direct Project Costs as stipulated in Annex 29. Standard Letter of Agreement between UNDP and the Government for the provision of support services as per cost estimation of support services to be provided by UNDP @ $46,587 in year 1 and $46,500 per year in years 2 to 5 $. **Total $232,587** | |

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| --- | --- | --- | --- | --- | --- | --- |
| **Summary of funds** | **Amount Year 1** | **Amount Year 2** | **Amount Year 3** | **Amount Year 4** | **Amount Year 5** | **Total** |
| **GEF** | 941 106 | 1 254 145 | 828 261 | 475 482 | 525 485 | **4 024 479** |
| **UNDP** | 168 400 | 57 900 | 57 900 | 57 900 | 57 900 | **400 000** |
| General Directorate of Environment and Forests | 1 823 539 | 2 188 247 | 1 531 773 | 802 357 | 948 240 | **7 294 156** |
| National Directorate of Agriculture Strategy and Livestock | 1 875 000 | 2 250 000 | 1 575 000 | 825 000 | 975 000 | **7 500 000** |
| National Directorate of Tourism and Hospitality | 125 000 | 150 000 | 105 000 | 55 000 | 65 000 | **500 000** |
| National Directorate of Waste Management | 62 500 | 75 000 | 52 500 | 27 500 | 32 500 | **250 000** |
| CRDE Hamalengo Diboini | 187 500 | 225 000 | 157 500 | 82 500 | 97 500 | **750 000** |
| Dahari NGO | 1 000 000 | 1 200 000 | 840 000 | 440 000 | 520 000 | **4 000 000** |
| AIDE NGO | 187 500 | 225 000 | 157 500 | 82 500 | 97 500 | **750 000** |
| Banda Bitsi | 125 000 | 150 000 | 105 000 | 55 000 | 65 000 | **500 000** |
| Union of Chambers of Commerce, Industry and Agriculture | 37 500 | 45 000 | 31 500 | 16 500 | 19 500 | **150 000** |
| Eco-Massiwa | 75 000 | 90 000 | 63 000 | 33 000 | 39 000 | **300 000** |
| House of Civil Society Organizations (MOSC) | 175 000 | 210 000 | 147 000 | 77 000 | 91 000 | **700 000** |
| UMAMA Association | 100 000 | 120 000 | 84 000 | 44 000 | 52 000 | **400 000** |
| Regional Association for Forest Management and Development (ARAF) | 75 000 | 90 000 | 63 000 | 33 000 | 39 000 | **300 000** |
| Association for the Protection of the Gombessa | 50 000 | 60 000 | 42 000 | 22 000 | 26 000 | **200 000** |
| Maeecha | 205 000 | 246 000 | 172 200 | 90 200 | 106 600 | **820 000** |
| Ulanga Ngazidja | 75 000 | 90 000 | 63 000 | 33 000 | 39 000 | **300 000** |
| Women's Sustainable Development and Food Security Platform | 42 500 | 51 000 | 35 700 | 18 700 | 22 100 | **170 000** |
| Mitsamiouli Commune | 142 500 | 171 000 | 119 700 | 62 700 | 74 100 | **570 000** |
| **TOTAL cofinancing (excl. UNDP)** | **6 363 539** | **7 636 247** | **5 345 373** | **2 799 957** | **3 309 040** | **25 454 156** |
| **TOTAL cofinancing** | **6 531 939** | **7 694 147** | **5 403 273** | **2 857 857** | **3 366 940** | **25 854 156** |
| **GRAND TOTAL** | **7 473 045** | **8 948 292** | **6 231 534** | **3 333 339** | **3 892 425** | **29 878 635** |

# 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 the Union of Comoros and UNDP, signed on January 27, 1976. 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 Agriculture, Fisheries, Environment, Tourism and Handicraft (“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.

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

# Risk Management

1. Consistent with the Article III of the SBAA, 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:
2. 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;
3. assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
4. 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.
5. 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>.
6. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General’s Bulletin ST/SGB/2003/13 of 9 October 2003, concerning “Special measures for protection from sexual exploitation and sexual abuse” (“SEA”).

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment (“SH”). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

1. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:
   1. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
   2. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;
   3. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;
   4. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
   5. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
2. The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
3. 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).
4. 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.
5. 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.
6. 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.
7. 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.
8. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP’s regulations, rules, policies and procedures. 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.
9. 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.

1. 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. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner’s obligations under this Project Document.

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.

1. 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.
2. 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.
3. 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.

# Mandatory Annexes

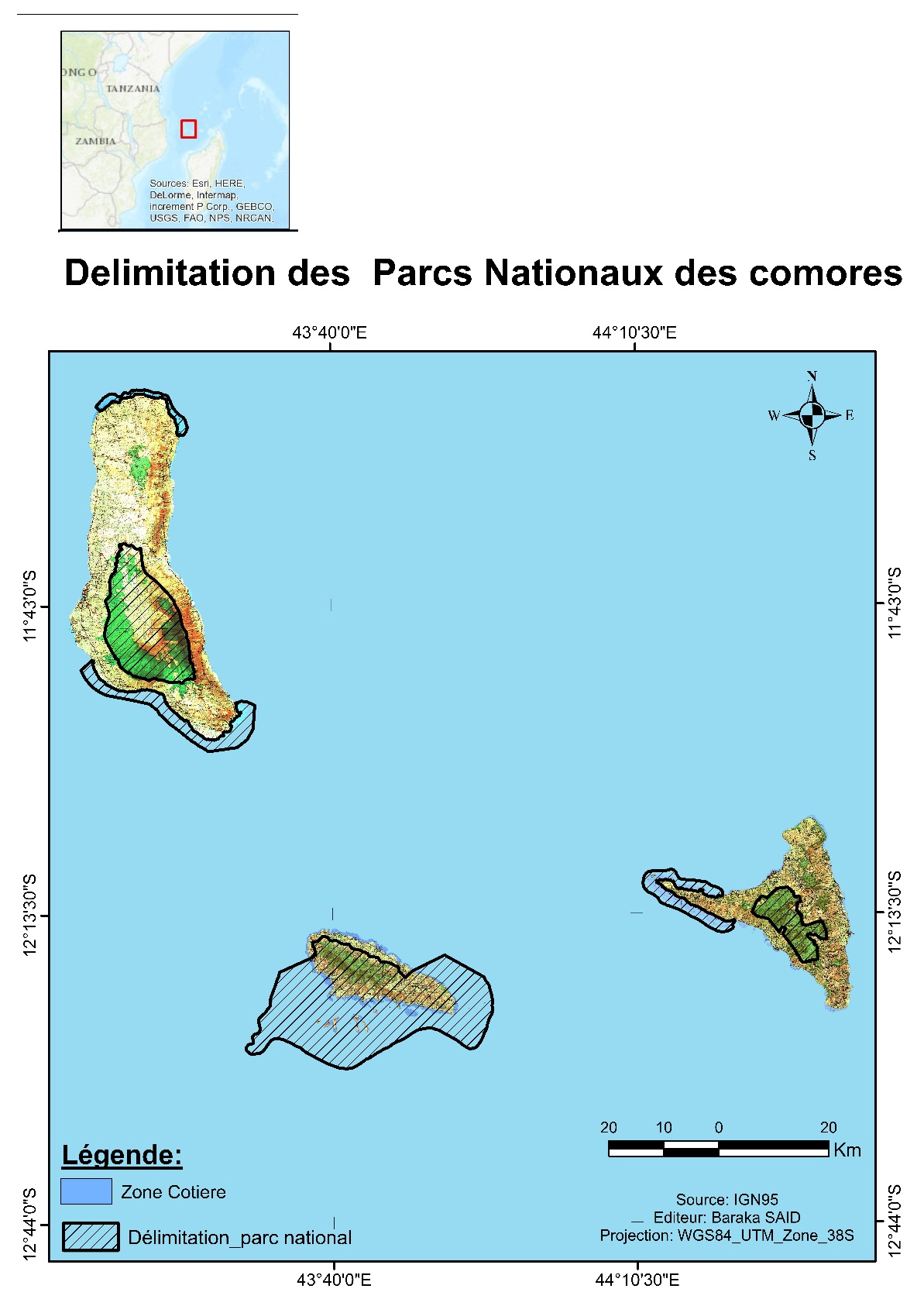
1. GEF Budget Template (available from BPPS NCE-VF)
2. Presentation of the national protected areas network in Comoros, including maps and geospatial coordinates of the project intervention sites
3. Multiyear Workplan
4. Monitoring Plan
5. Social and Environmental Screening Procedure (SESP)
6. UNDP Atlas Risk Register

*Annexed as separate documents:*

1. COVID Analysis and Action Plan
2. Overview of technical consultancies/subcontracts
3. Stakeholder Analysis and Engagement Plan
4. Environmental Social Management Framework (ESMF)
5. Gender Analysis and Gender Action Plan
6. Procurement Plan for first year of implementation
7. Climate Risk Screening
8. METT
9. GHG calculations
10. Capacity Development Scorecards (DGEF and National Parks Agency)
11. Financial Scorecard for the Comoros Protected Area System
12. Analysis of threats to biodiversity in the Comoros National Parks
13. Local populations of protected areas
14. Institutional and legislative framework for the management of the Comoros PA system
15. Gaps in the legal framework for PAs and biodiversity conservation
16. Business Model and Business Plan
17. Additional agreements: Co-financing Letters
18. Letter of commitment from the Minister of Agriculture, Fisheries and Environment to the project
19. GEF 7 Core indicator Worksheet
20. GEF 7 Taxonomy
21. Partners Capacity Assessment Tool and HACT assessment
22. UNDP Project Quality Assurance Report (completed in UNDP online corporate planning system)
23. Standard LoA between UNDP and the Government for the provision of support services

## Annex 1. GEF Budget Template

## Annex 2. Project maps and Geospatial Coordinates of project sites



**Figure 1.** Overview of the network of national parks of the Comoros on the islands of Ngazidja, Mwali and Ndzuani. Detailed maps of each of the parks are presented under the presentation of each of the parks. The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

Table 6. Overview of the Comoros National Protected Areas Network

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Category/type of Protected Area (PA)** | **Number** | **Protected Area** | **Date of creation** | **Land area (ha)** | **WDPA code** | **UICN category** | **Management authority** |
| National parks | 6 | Mohéli National Park | 2001 | 64,362 ha | 313046 | 6[[52]](#footnote-53) | Comoros National Parks Agency (PNC)/Ministry of Agriculture, Fisheries, Environment, Tourism and Handicraft (MAFETH)/General Directorate of Environment and Forests (DGEF) |
| Mitsamiouli-Ndroudé National Park |  | 2,314 ha | 555697862 | 6 |
| Mont Ntringui National Park |  | 7,914 ha | 555576147 | 6 |
| Shisiwani National Park |  | 6,497 ha | 555576146 | 6 |
| Karthala National Park |  | 26,214 ha | 555576145 | 6 |
| Coelacanth National Park |  | 9,276 ha | 555576144 | 6 |
| International designations | | | | | | | |
| Biosphere Reserve | 1 | Mohéli Biosphere Reserve | 2020 | 78,132 ha |  |  | Mwali Governorate/PNC |
| Ramsar sites | 3 | Lake Dziani Boundouni (Mwali) | 1995 | 32 ha | 95325 |  | MAFETH/DGEF/PNC |
| Mont Ntringui | 2006 | 3,000 ha | [902994](https://protectedplanet.net/902994) |  |
| Karthala Forest | 2006 | 13,000 ha | [902993](https://protectedplanet.net/902993) |  |
| Important Bird Areas | 03 | Mont Karthala |  | 21,000 ha |  |  | PNC |
| Mwali highlands |  | 4,000 ha |  |  | PNC |
| Ndzuani highlands |  | 6,850 ha |  |  | PNC |

|  |
| --- |
| **Protected Area:** A protected area is generally understood as a space in which human occupation, or at the very least, the exploitation of resources, is limited. This definition has been accepted generally in regional and global frameworks and was proposed by the International Union for the Conservation of Nature (IUCN) in its categorization of protected areas. A protected area is defined as follows: “A clearly defined geographic space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”Sources: UNEP-WCMC *About Protected Areas*, Dudley, N. (ed.) *Guidelines for Applying Protected Areas Management Categories* (IUCN: Switzerland, 2008). |

**Evolution of the Protected Areas Network**

The Presidential decree No. 01-053/CE (19 April 2001) created the Mohéli Marine Park, which was modified in 2015 to become Mohéli National Park, encompassing part of the terrestrial portion of the island. This park served as a model for the other protected areas, which were expected to be created by capitalizing on the success of this initial experience, particularly with regard to the co-management approach, under which communities are involved in all aspects of park management. In December 2014, the Comorian government committed, through the Sydney Promise, to classify at least 25 percent of its land area and 10 percent of its marine waters as protected areas. This commitment was met with support from UNDP/GEF through the project to create a national protected terrestrial and marine areas network, co-managed with local communities. The country has succeeded in conserving its biological diversity by expanding s from 19,895 ha to 50,500 ha (27%) and its protected territorial waters from 366.75 Km² to 584.90 Km² (4.49 percent), adopting a new legal framework (the protected areas act), and establishing and operationalizing the Comoros National Parks Agency (an institution governed by the provisions on associations and recognized by the State to manage all of the protected areas). Ecological studies conducted in collaboration with the communities helped to define and validate the delineation of the national parks and their zoning. The process to establish an environmental fund for the protected areas is underway.

The national Protected Areas Network is composed of the following national parks:

* Mohéli National Park
* Karthala National Park
* Coelacanth National Park
* Mitsamiouli-Ndroudé National Park
* Shisiwani National Park
* Mont Ntringui National Park

**Participatory management of the protected areas**

Given the country’s small land area, the inclusion of villages and their terroirs within the protected areas and the communities’ great dependence on natural resources, the government and the local communities chose a co-management approach to governing the protected areas. The Mohéli Marine Park served as the test case for this mode of governance, which was adopted for all the new protected areas created in the Comoros. This co-management approach involves the protected areas’ local communities, as well as all stakeholders in the protected areas, in the entire process of establishing and managing the PAs. Resource co-management agreements are negotiated with the communities; they participate in the management and surveillance of their respective lands and benefit from the ecosystem services. The communities are involved in the process of delineating and zoning the protected areas and in developing their management and development plans. A co-management committee is set up in each park; membership reflects gender parity. The villages in the protected areas are represented on the committee. They elect a representative, who automatically assumes the chair of the park co-management committee. A village committee composed of representatives of the village’s different social strata is formed to lead the co-management process and to play a direct role in all ecosystem management operations and surveillance patrols.

**Mitsamiouli-Ndroudé National Park (PNMN)**

The Mitsamiouli-Ndroudé National Park is located in northern Ngazidja, covers total land area of 2,314 ha and includes nine villages: Ndzaouze, Fassi, Mitsamiouli, Memboimboini, Ouemani, Ouellah, Bangoi-Kouni and Hantsindzi. The population of the communities in this park is 30,285; its administrative office is in Ndroudé. Its goal is to preserve marine and coastal biodiversity and develop ecotourism by promoting good governance of natural resources. A management unit, composed of a *Conservateur*, a community mobilizer and ecoguards, is operational. Based on the resources available, the park also plans to add staff, including an officer to monitor marine biodiversity, a communications officer and an ecotourism development officer.

**Mitsamiouli-Ndroudé National Park: Key facts**

**Location:** Ngazidja Island, 11°25'7.37"S, 43°24'59.96"E

**Land area:** 2,314 ha

**Main habitats:**

* Coral reefs
* Seagrasses
* Mangroves
* Beaches
* Natural monuments

**Flagship and emblematic species:**

* Whales
* Dolphins
* Marine turtles
* Reef fish

**Management**: shared willingly by the villagers.

Coral reefs are the main habitat in the PNMN, hosting 127 species of fish on the external slope that belong to 73 genera and 30 families; eight species of seagrasses, composed primarily of *Thalassia hemprichii*, *Thalassodendron ciliatum* and *Halophila ovalis*. The mangroves are divided between two sites – Saada and the Lake Salé site – and include two species, *Soneratia alba* and *Rhizophora mucronata*. The 40 white sand beaches, prized for their ecological and ecotourism value, are coveted by tourism operators. The Park is also home to spectacular natural structures, such as Lake Salé and the Queue du Dragon (Dragon’s Tail). Its off-shore waters are home to three whale species (two genera - Megaptera and Mesoplodon) and 10 species of dolphins (eight genera - Stenella, Peponocephala, Tursiops, Lagenodelphis, Grampus, Globicephala, Physeter and Kogia). The area also boasts unique features of great interest to tourists, in addition to L’île aux tortues (Turtle Island). The buildings constructed with support from the Small Grants Programme provide lodging.

|  |  |  |  |
| --- | --- | --- | --- |
| **Conservation targets** | | | **Viability ranking** |
| **Coral reefs** | | |  |
| **Marine turtles** | | |  |
| **Mangroves** | | |  |
| **Humpback whales and dolphins** | | |  |
| **Seagrasses** | | |  |
| **Beaches** | | |  |
| **Natural monuments** | | |  |
|  | | | |
| **Very good** | **Good** | **Average** | **Poor** |

The Queue du Dragon, in Ivouani (Goulaïvoini), is a remarkable basaltic natural phenomenon, lending the rocks the appearance of the tail of a huge reptile. Lake Salé is an ancient volcanic crater. Its volcanic pipes allow seawater to penetrate the ancient cone, forming this saltwater lake. The historic site of the Trou du Prophète (Prophet’s Hole) is where a namesake of the prophet is said to have landed. An old steam engine still lies in the laguna. The luxury Galawa Hotel boasts exquisite beaches and a mercenary ship, sunk 33 metres deep, which thrills scuba divers. This site offers significant biological, historic and cultural riches. The threats to the park identified as severe include habitat degradation, storms and floods, solid waste, destructive fishing, and mass killing and harvesting of aquatic resources. Threats considered to be moderate include extreme temperatures, earthquakes and tsunamis.

Park co-management is handled by the nine villages through their village committees, the park’s co-management committee, park management and the PNC agency. The co-management committee is composed of delegates from each village. They safeguard the communities’ interests in the park and ensure that human activities comply with and support conservation of biological diversity. In addition, each village community has signed a co-management framework agreement with the DGEF for implementation of park activities. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities. The park’s team is composed of a *Conservateur*, community mobilizers, seven ecoguards and one security guard.

The park has the equipment needed to manage the site (computers, cameras, GPS and binoculars) and a well-equipped building in Ndroudé. With support from partners (SWIOFISH and the Fisheries Directorate), a coral reefs management programme (biological recovery) was set up in certain areas. The communities appreciated the process and the other villages in the park would like to incorporate the programme in their areas. In addition to daily surveillance conducted by the ecoguards, the park carries out wide-ranging operations in cooperation with the Comoros’ Coast Guard and Centre for Fishing Surveillance.

Ecotourism development activities have been developed recently. The park provided support to a developer from the Trou de Prophète village to purchase the gear and equipment needed to lead visits into biodiversity areas (speedboat, fins and masks). The European Union supported the community of Memboimboini (Trou de Prophète) to build 10 ecotourism bungalows. The association of women fishers in the park benefited from the Small Grant Programme and received funding to process fishing products. Through the project, they were able to purchase production, food preservation and processing equipment and supplies (three solar freezers, one fish smoker, one fish dryer, two speedboats and one van). In January 2021, the park received funding from the Swiss Embassy to establish a plant nursery to help the women from Ndroudé village improve their agricultural yield. In 2020, the park signed a partnership with the NGO, ULANGA Ngazidja, to strengthen surveillance in the park by hiring night ecoguards. Based on the partnership signed with the NGO, Maeecha, annual environmental education sessions are held through the eco-school programme.



**Figure 2.** Mitsamiouli-Ndroudé National Park (on Ngazidja Island). The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

**Shissiwani National Park**

**Shissiwani National Park: Key facts**

**Location:** Ndzuani Island: 86°55'97"S, 41°24'07"E

**Land area:** 6,497 ha

**Main habitats:**

* Coral reefs
* Seagrass
* Mangroves
* Beaches
* Ilot de la Selle

**Flagship and emblematic species:**

* Whales
* Dolphins
* Marine turtles
* Reef fish

**Main threats:**

* Capture
* Poaching
* Trapping
* Destructive fishing
* Household waste
* Soil runoff
* Effects of climate change
* Natural disasters

**Management:** shared willingly by the villagers.

Shissiwani National Park is located in the far west of Ndzuani Island at a very low altitude, with the following geographic coordinates: longitude of 44°12’00’ and 44°20’00” E. and latitude of 12° 09'30" and 12°15'30” S. It covers 6,497 ha, primarily in the marine environment and areas of the administrative territory of Ndzuani Island, including the villages of Vassi, Shitsangasheli, Hasimpao, Marahare, Mromhouli, Boungweni, Sima, Kavani, Milembeni, Mirongani, Bimbini and Mjamaoué. Its goal is to ensure conservation of biodiversity by establishing a sustainable management system, while improving local communities’ socioeconomic conditions.

The park’s biodiversity is rich in both species and ecosystems. The latter include mangroves, the reef and coastal coral complex, including the lagoon, beaches previously used by turtles as nesting sites, sea grasses and the agro-forestry coastal strip of land. The mangrove area is a fragmented strip of trees that extends along 7 km of the southwestern coast and covers 25 ha. The coastal complex of reefs and coastal coral that borders the entire southern coast of the peninsula includes a closed lagoon and covers more than half of Shisiwani National Park. The coral colonies are dominated by *Favia* and *Favites* (massive), *Acropora* (branching), *Turbinaria* and *Montipora* (leafy) and *Platygyra* and *Leptoria* (maze). Seagrasses grow here and provide habitat and feeding sites for many fish species. It has been reported that green turtles, an endangered species (*Chelonia mydas*), leatherback sea turtles, a critically endangered species (*Dermochelys coriacea*), and the dugong (*Dugong dugon*), a vulnerable species that has disappeared from the Shissiwani NP, were previously observed here. Recent studies have confirmed the presence and wealth of these coral and fish species (Wickel, 2016).

Although relatively protected, thanks to environmental awareness and conservation efforts on the part of local populations, this site is exposed to multiple threats to biodiversity and to the environment in general:

- coastal and marine pollution from the trash disposal and soil runoff produced by land erosion, aggravated by deforestation and leading to degradation of the coral reef and seagrasses and related loss of biological diversity;

- artisanal fishing that uses destructive methods, such as Tephrosia, small-mesh nets, fishing on foot on the reef flat, and dynamiting;

- depletion of turtle populations that used to nest in Bimbini from poaching and disappearance of the nesting beaches;

- beach regression caused by extraction of sand and beach pebbles and accelerated coastal erosion; and,

- mangrove logging for construction or fuel.

Park management is handled by the different levels – the 12 villages through their village committees, the park’s co-management committee, park management and the PNC agency. The co-management committee is composed of delegates from each village. They safeguard the communities’ interests in the park and ensure that human activities comply with and support conservation of biological diversity. In addition, each village community has signed a co-management framework agreement with the DGEF for implementation of park activities. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities. The park’s team is composed of a *Conservateur*, community mobilizers, seven ecoguards and one speedboat operator. The park has the equipment needed to manage the site (computers, cameras, GPS and binoculars) and a well-equipped building in Bimbini.

|  |  |  |  |
| --- | --- | --- | --- |
| **Conservation targets** | | **Viability ranking** | |
| **Coral reefs** | |  | |
| **Marine turtles** | |  | |
| **Mangroves** | |  | |
| **Seagrasses** | |  | |
| **Beaches** | |  | |
| **Ilot de la Selle** | |  | |
|  | | | |
| **Very good** | **Good** | **Average** | **Poor** |

In 2020, the park obtained funding from the WIO-SAP programme, Implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-based Resources and Activities, to restore 2 ha of mangroves and 5 ha of seagrasses and to plant 2,500 seedlings to help reforest L’ilot de la Selle.



**Figure 3.** Shissiwani National Park (on Ndzuani Island). The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

**Coelacanth National Park**

Coelacanth National Park is located on the southern part of the island at a very low altitude, with the following geographic coordinates: longitude of 43°14'30" and 43°32'00" E. and latitude of 11° 48'00"and 11° 57'00 S. Administratively, the park is in the southwestern and eastern regions of Ngazidja, which includes three prefectures - Hambou, Badjini Ouest and Badjini Est - and five rural communes - Hambou Tsinimoipanga, Hambou Djoumoipanaga, Ngouweguoé, Ngnoumangama and Itsahidi. This park covers 15 villages, starting with Salimani Hambou in the southwest (12 km from Moroni) and extending to Malé, in the southeast (45 km from Moroni). It includes the following communities: Salimani, Banguoi, Singani, Hetsa, Mbambani, Dzahadjou, Itsoundzou, Mindradou, Mandzissani, Mlimani, Ifoundihé Chamboini, Simamboini, Chindini, Ouroveni and Malé. The park can be accessed by road (car or motorbike) from the RN2 Moroni-Foumbouni highway, but also by water (boat, speedboat or canoe).

**Coelacanth National Park: Key facts**

**Location:** Ngazidja Island: 11°48'00"S, 43°14'30"E

**Land area:** 9,276 ha

**Main habitats:**

* Coral reefs
* Seagrasses
* Mangroves
* Beaches
* Volcanic shoals sheltering the coelacanth

**Flagship species:**

* Coelacanth
* Whales
* Dolphins

**Species to be restored:**

* Marine turtles
* Dugong

**Management:** shared willingly by the villagers.

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It is essentially coastal and marine and initially included 7,572 ha of marine area along the southwest coast of Ngazidja. It was expanded (relative to the 2012 plans) to Malé (east of Chindini) to incorporate the high biological value coral ecosystem located between Chindini and Malé. A large number of cetaceans (whales and dolphins) are also found in this area. The corresponding coastal area, located between RN2 and the ocean, is included in the park. It is 200 m wide, thereby including all the beaches and mangroves. The global importance of this site is linked primarily to the underwater volcanic caves found close to the coast. They are home to the famous coelacanth, an endangered ‘living fossil’ of global scientific interest, and the turtles that are increasingly rare in the area. The site’s significance is also linked to a major coral reef in good condition in the southern area (Chindini). The species seen most frequently in the Bay of Dolphins are the long-beaked dolphin (*Stenella longirostris*), bottlenose dolphin (*Tursiops truncatus*), spotted dolphin (*Stenella attenuata*) and humpback whale (*Megaptera novaeangliae*). Available data indicate that at least 12 whale species are present in Comorian waters, including the humpback (*Megaptera novaeangliae*), Mesoplodons (*Mesoplodon sp*.), orca (*Orcinus orca*), southern right (*Eubalaena australis*) and the Bryde’s (*Balaenoptera edeni*). The pygmy killer whale (*Feresa attenuata*) has been seen in large pods of up to 500 individuals, although this is increasingly rare.

The coastal zone and its resources have been protected for many years through the initiatives of an association of representatives of 12 villages in the region of the Coelacanth Park, the Association pour la Préservation du Gombessa (APG), created in 1995. Its activities continue, thanks to the voluntary participation of its highly motivated members, two of whom have become national park agents. The APG works to protect the Coelacanth Park from its main threat – bottom fishing - through fisher education, promotion of alternative economic activities and improvement of fishing and processing facilities. A centre for information, education, development and conservation of the coelacanth and its marine environment (Maison du Cœlacanthe) was created in the Comoros to collect, process and disseminate data and information on the coelacanth and its environment. It also educates and promotes ecotourism, environmentally friendly fishing and participatory conservation of natural resources. This centre now houses the offices of Coelacanth National Park.

|  |  |  |  |
| --- | --- | --- | --- |
| **Conservation targets** | | **Viability ranking** | |
| Coral reefs | |  | |
| Marine turtles | |  | |
| Seagrasses | |  | |
| Mangroves | |  | |
| Coelacanth | |  | |
| Cetaceans (whales and dolphins) | |  | |
|  | | | |
| **Very good** | **Good** | **Average** | **Poor** |

This biodiversity faces multiple threats that could challenge the park’s viability: including poaching, trampling, destructive fishing practices, extraction, household waste, soil runoff, and the impacts of climate change and natural disasters.

Park management is handled at different levels – the 15 villages through their village committees, the park’s co-management committee, park management and the PNC agency. The co-management committee is composed of delegates from each village. They safeguard the communities’ interests in the park and ensure that human activities comply with and support conservation of biological diversity. In addition, each village community has signed a co-management framework agreement with the DGEF for implementation of park activities. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities. The park’s team is composed of a *Conservateur*, community mobilizers, 10 ecoguards, one speedboat operator and a security guard. The park has the equipment needed to manage the site (computers, cameras, GPS and binoculars) and a well-equipped building in Itsondzou. In 2019, the PNC obtained funding from the Swedish private sector (a digital entertainment company) to set up a goat-breeding operation for women fishers from the park to reduce destructive practices associated with fishing in coastal and marine habitat.



**Figure 4.** Coelacanth National Park (on Ngazidja Island). The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

**Mont Ntringui National Park**

Mont Ntringui National Park is in the centre of the island, between longitude of 44°22’00” and 44°30’00” E. and latitude of 12°11’00” and 12°18’20” S., and where vestiges of the tropical rainforest remain. This park is composed primarily of the Mont Ntringui massif, plus the Moya forest. It is located at the centre of Ndzuani Island, between longitude of 44°22’00” E. and 44°30’00” E. and between latitude of 12°11’00” and 12°18’20” S., with total land area of 7,914 ha. In accordance with the provisions of the national protected area system law, the portions of the administrative area of Ndzuani Island included in the village lands listed here are classified as national park: Bazimini, Moimoi, Chandra, tsembehou, dindri, Limbi, Adda daweni, Moya, Lingoni, Vouani, Imeré, M’jimandra, Ouzini, Pagé, Salamani, Koni djodjo, Kowet, Nindri, Bandrani ya vouani and Dzindri.

**Mont Ntringui National Park: Key facts**

**Location:** Ndzuani Island: 11°26'37"S, 43°24'59.96"E

**Land area:** 7,914 ha

**Main habitats:**

* Mont Ntringui forest
* Lake Dzialandzé
* Lake Dziadengué

**Flagship species:**

* *Livingstone’s fruit bat*
* *Scops owls*
* *Eulemur mongoz*
* *Columba polleni*
* *Alectroenas sganzini*
* *Tachybaptus ruficollis*
* *Humblotia flavirostris*
* *Turdus bewsheri*
* *Zosterops mouroniensis*
* *Comoro pigeon*
* *Wenmannia comorensis*
* *Ocotea comorensis*
* *Khaya comorensis*
* *Tambourissa comorensis*

**Natural monuments:**

* Lingoni River falls
* Tratringa River

**Management:** shared willingly by the villagers.

The Mont Ntringui forest has been identified as an Alliance for Zero Extinction site based on the presence of restricted-range, endangered or critically endangered species, as a Ramsar site, and as an important bird area. The FAO’s 2011 national forest inventory estimated the remaining forest on Ndzuani Island at 436 ha.

Those forests, located on steep and inaccessible slopes, including on Mont Ntringui, are of great interest in terms of biodiversity because they shelter endemic and threatened species, a wealth of orchids and selaginella, tree ferns and the *Philippia* genus of tree heaths. Two species of giant bats endemic to the Comoros – the Livingstone’s fruit bat (*Pteropus livingstonii*) and the common fruit bat (*Pteropus seychellensis* var. *comorensis*), the Comoros blue pigeon (*Alectroenas sganzini*), and several species of birds, fish and reptiles are also found here. Although the mongoose lemur (*Eulemur mongoz*) is rare in Madagascar, the species is widespread in Ndzuani. Lake Dzialandzé, in the centre of Ndzuani and at the top of the mountain ridges, is the island’s largest lake. The lake and its environs provide habitat for grebes, freshwater fish and several other forest species. The inaccessibility of these sites has preserved them.

Taking into account the conservation value, threat level and feasibility of each site, the analysis concludes that the Mont Ntringui forest, although significantly reduced as a result of deforestation and unsustainable farming practices, is a priority site for a reserve. This forest is located halfway up a steep south-eastern slope, between the land cleared in the region of the village of Lingoni, the town of Moya and the crater. The Imeré forest is one of the most important sites. Its high conservation value is based on the presence of the oldest and one of the largest colonies of Livingstone’s fruit bats, which Action Comores has monitored regularly since 1992. Its central area is made up of primary forest, primarily multi-state tropical rainforest with an intact canopy, plus tree ferns, a few non-native tree species and a minimally disturbed understory. This site is home to the greatest total diversity of trees of the sites visited and the greatest number of rare and threatened trees. It also hosts a wide diversity of native birds, including the Anjouan scops owl, which is endemic to the island, and other rare and threatened species, such as the mongoose lemur, which is endemic to Madagascar-Comoros. Nearby, the Sept Rivières waterfall offers a conservation benefit because conserving the forest adjacent to the waterway can maintain the water supply and help combat erosion.

Native flora and fauna are under pressure from deforestation and the expansion of farmland and pasturage, lack of management, the search for precious woods, and the introduction of alien species. Deforestation is the most significant threat. It is following the same course, with the same causes, as elsewhere in the country: underplanting (which eliminates ground vegetation and prevents regeneration), followed by land clearing for open-field farming. There is a great need for wood charcoal on Ndzuani, particularly for ylang-ylang distillation. New roads and trails have opened access, making it easier to develop the forests.

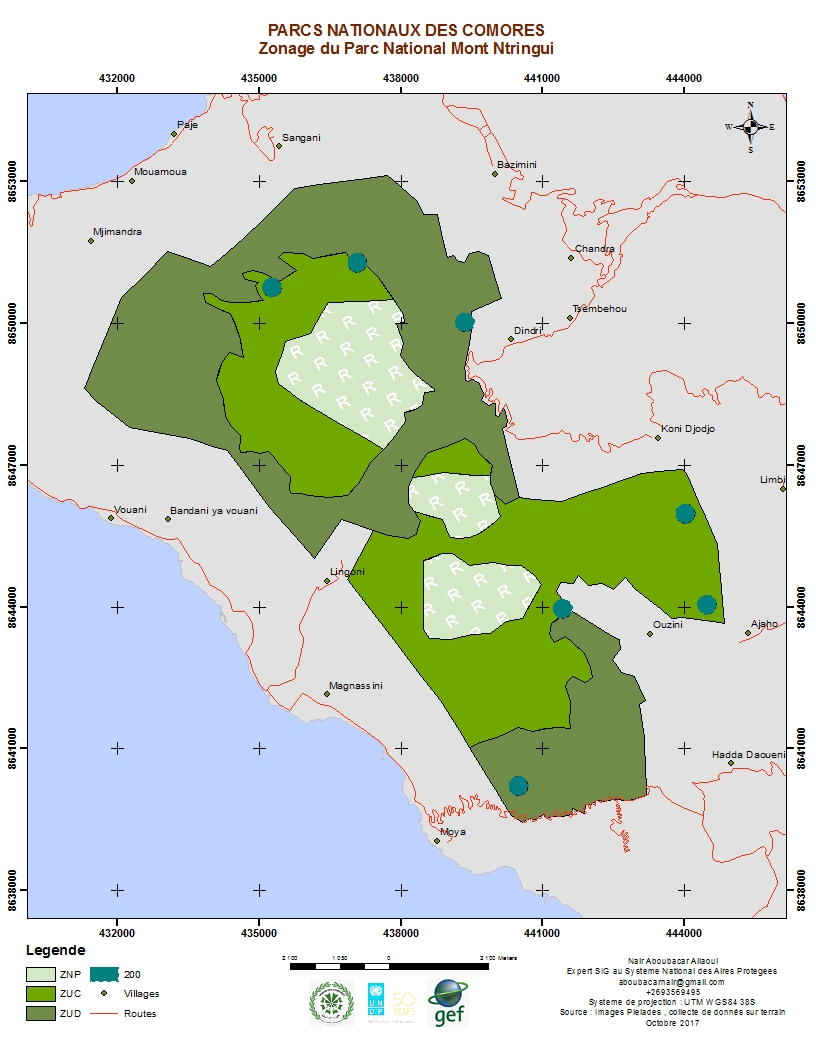
|  |  |  |  |
| --- | --- | --- | --- |
| **Conservation targets** | | **Viability ranking** | |
| **Mont Ntringui forest** | |  | |
| **Lake Dzialandzé** | |  | |
| ***Pteroptus livingstonii*** | |  | |
| ***Otus capnodes*** | |  | |
| ***Eulemur mongoz*** | |  | |
|  | | | |
| **Very good** | **Good** | **Average** | **Poor** |

The Moya forest is important to all of Ndzuani’s threatened species, including the Anjouan scops owl (*Otus capnodes*), Livingstone’s fruit bat (*Pteropus livingstonii*) and the mongoose lemur (*Eulemur mongoz*), whose distribution is linked primarily to the vestiges of the natural forests. Recent biodiversity studies have revealed the presence of 4,950 individual Anjouan scops owls, particularly in natural forests, but also in degraded ones. Agricultural development and timber extraction for construction and boards pose a threat to the forests.

Lake Dzialandzé is nearly circular in shape and is located on the slope of Mont Ntringui, at 910 m altitude, in the centre of the island and the northeast of Ntringui National Park. It covers approximately 3 ha (280 m long and 150 m wide) and is the main natural freshwater reserve on Ndzuani Island. However, it has been declining sharply over several years – both in volume and surface area – because of deforestation of the watershed by farmers, who are growing bananas and taro, and by market gardening. These agricultural activities thus promote erosion and silting of the lake. Construction of the Lingoni-Dindri road has further contributed to the lake’s degradation because it has made access very easy.

The lake is home to multiple species, from micro-organisms to freshwater fish and aquatic birds. The silting of the lake and the development of market gardening, which requires the massive use of pesticides, pose serious threats to this diversity. An in-depth study is needed to establish a baseline of the lake’s environmental status and existing biodiversity. The main threats to the park are habitat degradation, storms and floods, logging and wood gathering, fires and fire suppression (including arson fires), alien invasive plants, opening of roads, and perennial non-timber product crops.

Park management is handled by the different levels – the 20 villages through their village committees, the park’s co-management committee, park management and the PNC agency. The co-management committee is composed of delegates from each village. They safeguard the communities’ interests in the park and ensure that human activities comply with and support conservation of biological diversity. In addition, each village community has signed a co-management framework agreement with the DGEF for implementation of park activities. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities. The park’s team is composed of a *Conservateur*, community mobilizers, seven ecoguards and one security guard. The park has the equipment needed to manage the site (computers, cameras, GPS and binoculars) and a well-equipped building in Lingoni.



**Figure 5.** Mont Ntringui National Park (on Ndzuani Island), including zoning. The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

**Karthala National Park**

Karthala National Park is located in the south-central part of Ngazidja Island, at altitude ranging between 500 m and 2,361 m, with the following geographic coordinates: longitude of 43°15’45” and 43°15’26” E. and latitude of 11° 49'30" and 11° 44'00" S. It covers land area of 26, 214 ha and the territory of these 16 villages: Ntsinimoipanga, Nkouarni, Mboudé ya Boini, Kandzilé, Ntsinimoichongo, Mdjoiezi, Djoumoichongo, Mboudadjou, Dzahani, Daoeni, Mkazi, Mvouni, Bahani, Irohé, Boeni and Idjikoundzi. The park’s main goal is to preserve its perimeter from destructive human activities and to develop an area that is of particular ecological, economic, aesthetic, historic and cultural interest.

**Karthala National Park: Key facts**

**Location:** Ngazidja Island: 11°49'30''S, 43°15'45''E

**Land area:** 26,214 ha

**Main habitats:**

* Karthala Forest
* Lake Hantsogoma
* Nyoumbadjou Reserve
* Cave of Captain Dubois

**Monuments**

* Boboni and Le Belvédère
* Karthala volcano
* Nymbadjou

**Flagship and emblematic species**:

* *Otus pauliani*
* *Columba polleni*
* *Humblotia flavirostris*
* *Turdus bewsheri*
* *Alectroenas sganzini*
* *Zosterops mouroniensis*
* *Khaya comorensis*
* *cotea comorensis*
* *Eugenia comorensis*
* *Weinmania comorensis*
* *Tambourissa sp.*

**Management:** shared willingly by the villagers.

Karthala National Park contains unique biological diversity, as shown by the high levels of endemism within the various groups of fauna and flora, which are now threatened by the loss or fragmentation of their habitat, combined with inadequate management and protection. This combination makes the park a high-priority area for the conservation of globally significant biodiversity.

The park provides a range of terrestrial habitats of global importance (Karthala forest, Lake Hatsongoma, the Nyoumbadjou reserve and La Convalescence), monuments (Boboni and Le Belvédère, the cave of Captain Dubois, Karthala volcano and Nyoumbadjou), and flagship and emblematic species (*Otus pauliani, Columba polleni, Humblotia flovistris, Turdus bewsheri* and *Alectroenas sganzini*).

The Karthala Park’s woody flora includes 95 species belonging to 82 genera and 45 families. Nineteen of these species are endemic to the Comoros archipelago (20 percent of the woody flora inventoried) and five are endemic to Ngazidja Island (*Ravenea hildebrandtii, Senecio humblotii, Philippia comoriensis, Scolopia coriacea* and *Allophylus gardineri*). The most common species are *Weinmannia* *comorensis*, *Ocotea comoriensis*, *Nuxia pseudodentata*, *Tambourissa comorensis* and *Aphloia theaeformis*; the first four are endemic to the Comoros.

Endemic species are most abundant on the western slope (14 species), compared to 12 on the southern slope and nine on the eastern slope. Ngazidja Island’s western slope is also the richest in endemic species, with four found there (*Ravenea hildebrandtii, Philippia comoriensis, Allophylus gardineri* and *Scolopia coriacea*). Two species are found on the eastern slope (*Philippia comoriensis* and *Senecio humblotii*), but none have been inventoried on the southern slope.

The flora of Karthala National Park is threatened by the conversion of forest habitat; the distribution of some species is limited to a restricted area of the Karthala forest. This site was identified by the Alliance for Zero Extinction because of the presence of restricted-range species that are threatened or endangered, as a Ramsar site and as an Important Bird Area.

The flora is particularly rich in orchid species, endemic tree ferns and endemic dwarf palms on the west slope. *Khaya comorensis,* an endemic and threatened tree species that provides a precious wood, is still present in the high-altitude Karthala forest, although it has become quite rare there.

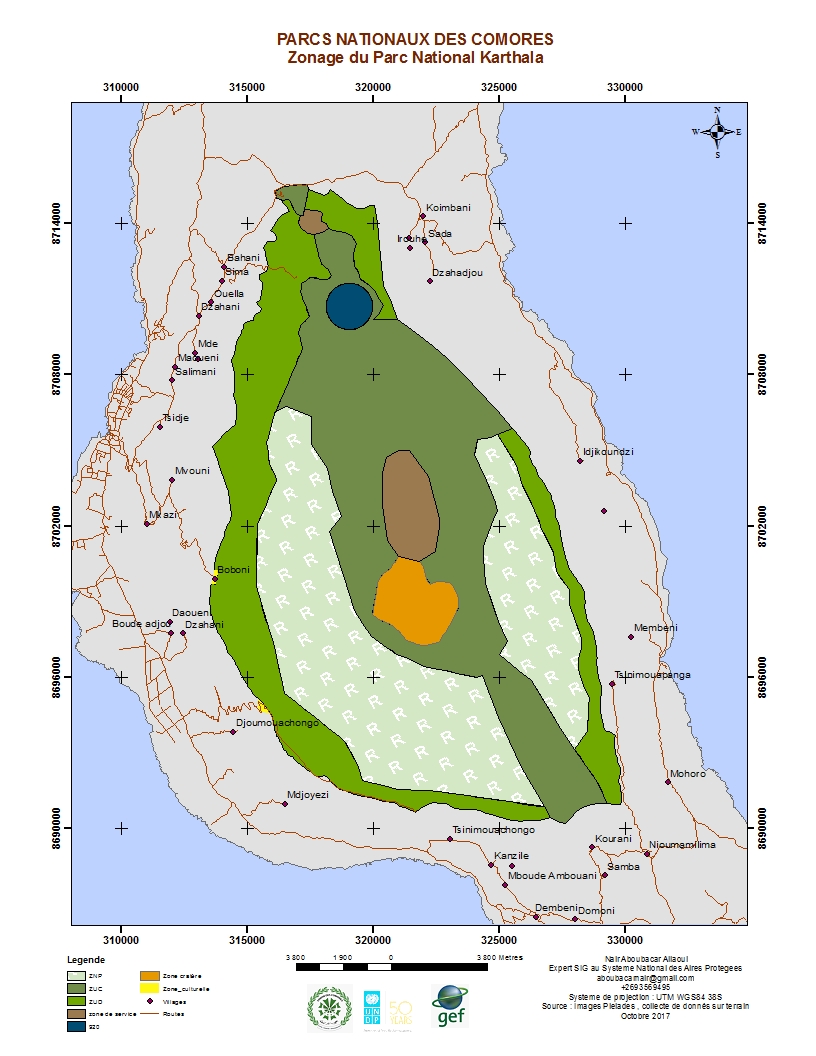
Five species of endemic and vulnerable to threatened birds are found there: the Karthala white-eye (*Zosterops mouroniensis*), the Anjouan scops owl (*Otus pauliani*), the Karthala flycatcher (*Humblotia flavirostris*), the Grande Comore drongo (*Dicrurus fuscipennis*) and the Mayotte drongo (*Dicrurus fuscipennis*). The park is also home to several endemic subspecies, such as the Comoro blue pigeon (*Alectroenas sganzini*), which is quite rare and threatened by hunting, and two threatened species, the black parrot (*Coracopsis nigra*), which lives at between 800 m and 900 m of altitude, and the Comoro pigeon (*Columba pollenii*), found at 1,400 m. All the range-limited bird species on Mont Karthala are ranked as threatened; consequently, its forests have high priority among important forests for Africa’s threatened birds.

Access roads to the Karthala volcano, deforestation, bush fires and invasive species are the park’s most serious threats. Conversely, animal breeding and the effects of climate change are considered to be lesser threats.

Viability ranking of the Karthala National Park’s conservation targets:

|  |  |  |  |
| --- | --- | --- | --- |
| **Conservation targets** | | **Viability ranking** | |
| Karthala forest | |  | |
| Lake Hatsogoma | |  | |
| *Otus paulianis* (Karthala scops owl) | |  | |
| *Zosterops mouroniensis* | |  | |
|  | | | |
| **Very good** | **Good** | **Average** | **Poor** |

Park management is handled by the different levels – the 16 villages surrounding the area of the park and through village committees, the park’s co-management committee, park management and the PNC agency. The park’s co-management committee is composed of delegates from each village. They safeguard the communities’ interests in the park and ensure that human activities comply with and support conservation of biological diversity. In addition, each village community has signed a co-management framework agreement with the DGEF for implementation of park activities. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities. The park’s team is composed of a *Conservateur*, three community mobilizers and 13 ecoguards responsible for surveillance at their respective sites to ensure compliance with environmental rules.



**Figure 6.** Mont Karthala National Park (on Ngazidja Island), including the zoning. The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

**Mohéli National Park**

The Mohéli Marine Park (PMM) was created under a UNDP project – Conservation of Biodiversity and Sustainable Development in the Comoros – and funded by the Global Environment Fund. The project was launched in early 1998 and implemented over six years, terminating at year-end 2003. The budget totalled more than $2 million and the project was executed by the General Directorate of the Environment, with technical assistance with the IUCN’s Regional Office for East Africa. The main expected results were:

- Creation of a national pilot park, managed under a co-management agreement,

- Implementation of action plans for the conservation of at least two threatened species, and

- Launch of a sustainable funding mechanism, such as a biodiversity fund, to meet the recurring needs of the protected areas and the conservation of the species at risk.

The park was created officially by presidential decree of 19 April 2001 (decree No. 01-053/CE), as an independent institution operating under the authority of the Ministry in charge of Environment of the Union of the Comoros and co-managed by the communities. In accordance with the provisions of Article 46 of the framework law on the environment, the areas of the administrative territory of Mwali Island included in the territory of the villages following are classified as national park, under the name ‘Mohéli Marine Park’: Itsamia, Hamavouna, Nkangani, Wanani, Ziroudani Nioumachoua, Ndrondroni, Ouallah II, Ouallah-Miréréni and Miringoni.

The first management plan was approved in 2003. In 2002, during the Johannesburg Earth Summit, the park received the Equator Initiative prize, which recognizes community projects that have made extraordinary efforts to reduce poverty through conservation and the sustainable use of biodiversity. However, although studies were initiated, the environmental fund has never been created.

The park initially covered a marine and coastal area of 404 km². Its boundaries were revised in November 2015 to incorporate the terrestrial watersheds, becoming Mohéli National Park, or PNM, covering an area of 64,362 ha (27,687 ha of terrestrial and 36,675 ha of marine area). This extension of the park sought to protect the ecological wealth of the island’s forestry ecosystems and to control the pressures within the watersheds that affect the coastal and marine portion of the park.

**Mohéli National Park: Key facts**

**Location:** Mwali Island: 12°22'10,4"S, 43°42'58,5"E

**Land area:** 64,362 ha, including the coast, islets and the sea, to the 100 m isobath

**Main habitats:**

Seagrasses,

several coral facies,

mangroves,

islets,

beaches,

deep ocean in good condition,

natural forest rich in locally endemic species.

**Flagship species:**

Dugong (*Dugong dugon*)

Green turtle (*Chelonia mydas*)

Hawksbill turtle (*Eretmochelys imbricata*)

Humpback whale (*Megaptera novaeangliae*) Mohéli puffin (*Puffinus temptator*)

Livingstone’s fruit bat (*Pteropus livingstonii*)

**Management:** shared willingly by the villagers.

In 2010, the idea of an AFD project to support the park emerged. This led to a feasibility study that was approved in December 2013. It proposed a project to pursue and develop the fundamentals of the park, as it was created, with the goal of developing and sustaining the PMM and of extending the integrated watershed management, with four objectives:

- To consolidate the park’s governance: revise and implement the legal and institutional frameworks; strengthen, professionalize and equip the park management unit; revise and operationalize the management, monitoring and evaluation tools; communicate, educate and support the park’s international registration as a biosphere reserve;

- To ensure the park’s financial sustainability by established a specific sub-fund dedicated to Mohéli, financed by the project, within an environmental conservation fund for the National Protected Areas Network, in collaboration with UNDP;

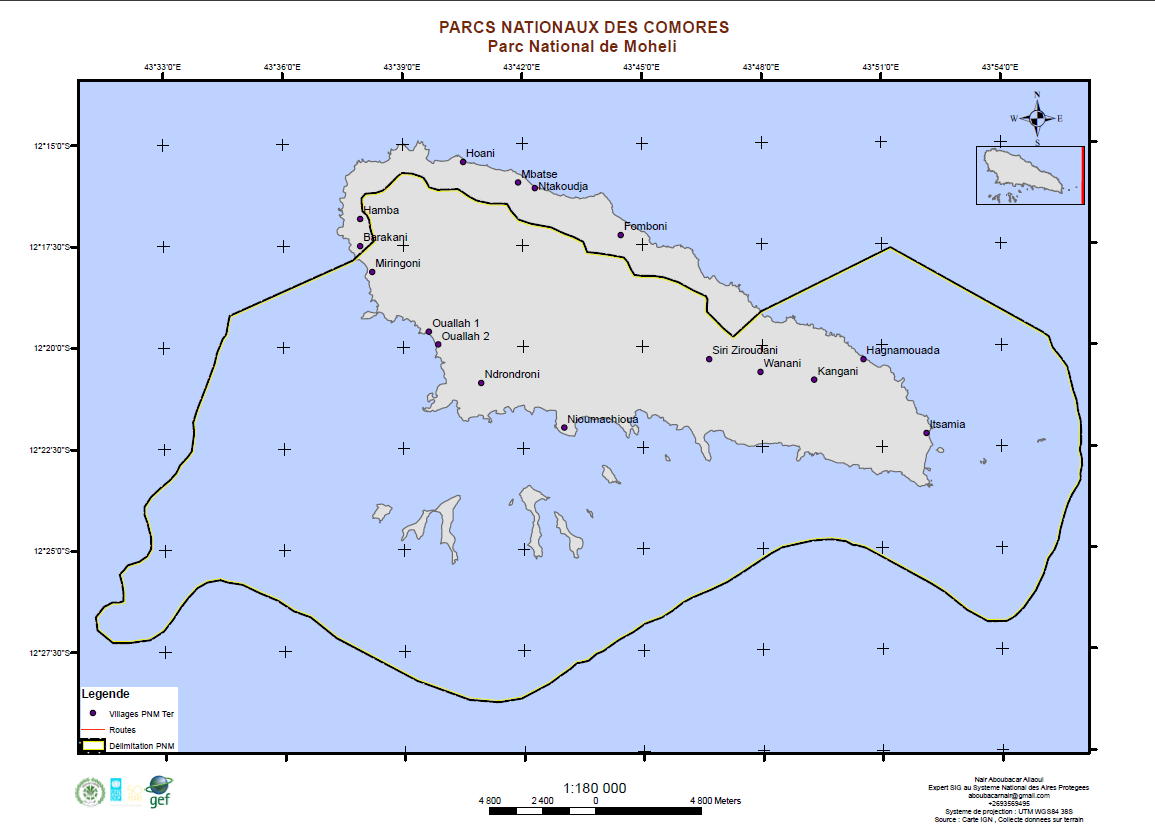
- To preserve marine and terrestrial biodiversity: learn about, monitor and protect the elements of the park’s biodiversity, gain control over the pressures and threats and strengthen surveillance; and,

- To involve communities in protecting the park, encourage income-creating activities and support their development: reorganize, train and identify the needs of the village associations, foster and support the economic development of the park’s villages (tourism, fishing and agriculture).

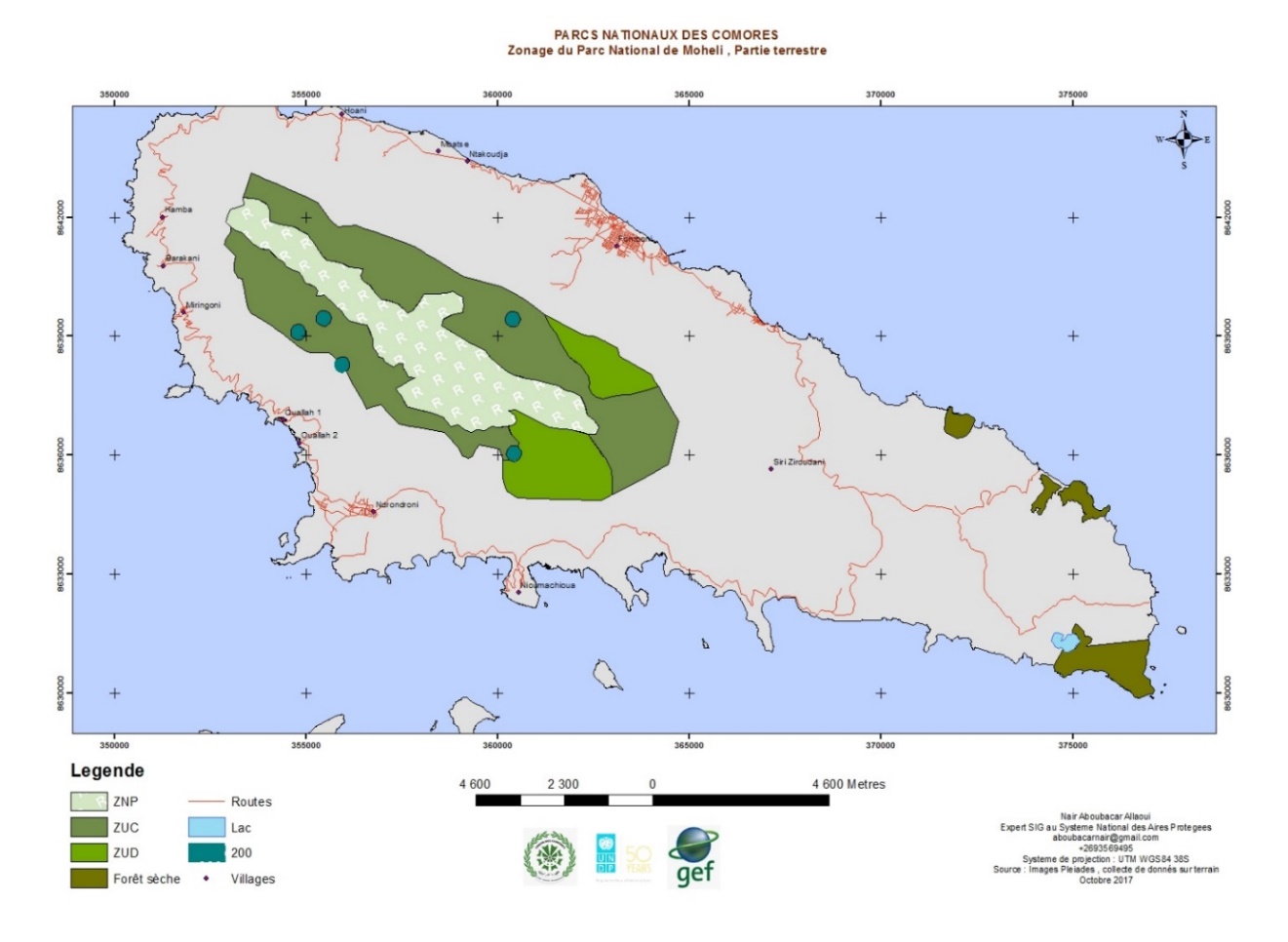
The coral reefs and ecosystems associated with them host unusually rich flora and fauna. The 2018 MAREX study (Wickel et al., 2018) of the PNM’s reef ecosystems inventoried more than 600 species of fish (397), coral (129), algae (36), phanerogams (7), echinoderms (18) and molluscs (25) in seven days of investigation. Some have become rare at the regional level (sharks: *Carcharhinus amblyrhynchos*, *Carcharhinus* *melanopterus* and *Triaenodon obesus*; stingrays: *Taeniurops* *meyeni*, *Aetobatus* *ocellatus* and *Mobula* alfredi; grouper: *Dermatolepis striolata*, *Epinephelus fuscoguttatus*, *E. lanceolatus* and *E. tukula*). These ecosystems also provide habitat to many species of mammals, turtles and marine birds. The most emblematic include the humpback whale (*Megaptera novaeangliae*), dugon (*Dugong dugon*), green turtle (*Chelonia mydas*) and hawksbill sea turtle (*Eretmochelys imbricata*). All are threatened and, however, are protected at the national and international levels (respectively, ministerial decrees and trade). The green turtle is particularly abundant here, primarily on the beaches of Itsamia village, where it buries its eggs by the hundreds year-round (up to 200 clutches per night). This turtle is also poached regularly for its flesh, which is sold in the Ndzuani and, to a lesser degree, Ngazidja markets. The MAREX study also reported a surprising diversity of coastal habitat for such a small island, with 16 reef habitats (fringing reefs in a calm to wave-battered hydrodynamic mode, external slopes with spurs and grooves, upper and intermediate drop-offs, imposing coral reefs, submerged reef flats, marine seagrass meadows, and basalt drop offs). The coral reefs and ecosystems associated with them host unusually rich flora and fauna.

The phanerogam colonies appear to have experienced a major loss of structure between 1994 and 2000 (Beudard, 2005). The fringing reef of the PMM was previously colonized by a very extensive, dense and, largely, monospecific population of *Thalassodendron ciliatum* (Beudard, 2005). This species, whose colonization strategy is characterized by slow reproduction, low reproductive capacity and great longevity, is most widespread in the western Indian Ocean. However, it has totally disappeared from Mwali, where only areas of dead matte are visible today (Poonian et al., 2016). The decline of this population has not been documented properly. However, Beudard (2003) and Poonian et al. (2016) attribute it to strong freshwater discharge, enriched by soil runoff, producing osmotic shock and smothering these communities, which are sensitive to variations in salinity and light. The secondary colonies, found between 0.7 and 3 m of depth and density, are composed primarily of pioneer species that are more resistant and characterized by more rapid reproductive strategies (*Halodule uninervis*, *H. wrightii*, *Syringodium isoetifolium* and *Halophila ovalis*) (Poonian, 2016; Wickel et al., 2018). Studies of the mangroves by Loyche Wilkie (2005) and Abdou Rabi (2010), as well as personal communications (July 2019) with Dr. Andilyat Mohamed and Ramadhoini Ali Islam (both teachers/researchers at the Faculté des Sciences et Technologies des Comores), report mangroves still in a well-preserved state. However, their numbers have declined in recent years due to the cumulative effect of silting (smothering their root structure, which conducts air, particularly following Hurricane Kenneth), development of pathogens (mushrooms – personal communication, Ben Anthoy) and, to a lesser extent, clandestine mangrove logging. It appears that classification errors were also made during the last surface area estimates of this ecosystem (teledetection project underway by the Alliance Mondiale contre le Changement Climatique). Certain coastal forest areas were classified as mangroves, but the ground truth revealed secondary ecosystems, composed primarily of *Hibiscus* *tiliaceus*, and no mangroves.

Turtle poaching, hunting and deforestation are the highest-level threats to the park. However, household wastes, trampling, coastal development, tourism and extraction are considered low-level threats. Park management is handled at different levels – the 19 villages in the park through the village committees, the park co-management committee, park management and the PNC agency. The park’s management committee is composed of 40 members, including a delegate from each village who safeguards the communities’ interests in the park and ensures that human activities comply with and support conservation of biological diversity, and representatives of the Environment ministry, the Mwali governorate, NGOs, concerned government institutions and the regional protected marine areas. In addition, each village community has signed a co-management framework agreement with the park. The agreement assigns each village its park management functions, as well as its respective rights and responsibilities.

The park’s team is composed of: a director, an administrative and financial manager, a management assistant, five officers, including one socioeconomic development officer responsible for supporting the park’s communities in developing income-generating activities, one marine and coastal environmental officer, one community awareness/environmental education officer responsible for environmental education and implementation of awareness-raising programmes for all actors, one surveillance and legal affairs monitoring officer responsible for security and protecting the park’s conservation targets, one communications officer responsible for raising the park’s profile at the regional, national and international levels and for developing partnerships, one watershed officer, one tourism development officer, five rangers responsible for surveillance and rapid intervention, and 14 ecoguards responsible for surveillance at their respective sites to ensure compliance with environmental rules.

**Figure 7.** Mohéli National Park (on Mwali Island), including the delimitation of the terrestrial and marine areas. The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.



**Figure 8.** Zoning of the forest area of the terrestrial portion of Mohéli National Park (on Mwali Island). The designations employed and the presentation of material on this map do not imply the expression of any opinion on the part of the Secretariat of the United Nations or UNDP regarding the legal status of any country, territory, town or region, or of its authorities, or concerning the demarcation of its boundaries or limits.

## Annex 3. Multi Year Work Plan

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Year 1** | | | | **Year 2** | | | | **Year 3** | | | | **Year 4** | | | | **Year 5** | | | |
| **Component 1: Institutions and governance systems** | | | | | | | | | | | | | | | | | | | | |
| **Outcome 1:** Systemic, institutional, technical and operational capacities strengthened to manage the national protected area system | | | | | | | | | | | | | | | | | | | | |
| **Output 1.1** Capacity of the NP, DGEF, and co-management committees to enforce PA laws, regulations, and management |  | | | | | | | | | | | | | | | | | | | |
| *1.1.1 Improved legal and regulatory tools for biodiversity, sustainability of its use and the rights of local communities* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.1.2 Raising awareness among all stakeholders about the newly established protected area system.* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.1.3 Strengthened institutional capacity for integrated land and resource use planning and management in PAs* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.1.4 Consolidation of the effective involvement of local communities in the governance of protected areas.* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.1.5 Strengthening the applicability of the regulatory provisions regarding Environmental Impact Assessments.* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 1.2** Master plans for terrestrial and marine areas within PAs harmonize relevant sectoral plans and strategies |  | | | | | | | | | | | | | | | | | | | |
| *1.2.1 Delimitation and mapping of village terroirs within PAs and demarcation of the boundaries of terrestrial PAs* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.2.2**Annual production of georeferenced maps of each national park* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.2.3 Collaborative planning of land, coastal and marine areas, and resource use* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.2.4 Collaborative Institutional arrangements for resource co-management* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 1.3** An investment framework and financing strategy is developed and implemented |  | | | | | | | | | | | | | | | | | | | |
| *1.3.1 Enabling Legislative Framework for FEC and Resource Mobilization* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.3.2 FEC Strategic Planning, including a business plan for the protected areas system* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.3.3 Strategy to mobilize financial resources - international donors and new financial mechanisms for conservation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.3.4 Operationalization of the FEC and fundraising* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.3.5**Development and implementation of the FEC communication strategy* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *1.3.6 Capacity development of the Board of Directors and the FEC Management on resource mobilization approaches and strategies* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 1.4** Strengthened participation of institutional partners and private sector in supporting the national PA system |  | | | | | | | | | | | | | | | | | | | |
| *1.4.1 Long-term partnership agreements between national and international institutions and the PNC Agency* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Component 2. Capacity building to improve co-management of the national PA network at site level** | | | | | | | | | | | | | | | | | | | | |
| **Outcome 2** Increased protection of important endemic species and habitats through improved management across the national PA network | | | | | | | | | | | | | | | | | | | | |
| **Output 2.1** Protocols for biodiversity monitoring developed and applied, including a national biodiversity database. |  | | | | | | | | | | | | | | | | | | | |
| *2.1.1 Operational database dedicated to the PA system* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.1.2**Protocols for long-term ecological monitoring to support adaptative management of individual PAs and network* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.1.3**Updating, dissemination and sharing of data on PAs and biodiversity in Comoros with global and regional databases* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 2.2** Management plans for key terrestrial and marine species used) drafted, approved and implemented in PAs |  | | | | | | | | | | | | | | | | | | | |
| *2.2.1 Conservation Action Plans evaluated, revised and implemented* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.2.2 Sustainable use plans for targeted species for value chain development* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.2.3 Restoration of terrestrial and coastal ecosystems* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.2.4 Invasive Alien Species Management- Pilot interventions* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.2.5 Action plans to address deforestation and shore material removal implemented, monitored and evaluated* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 2.3** Community-based co-management models evaluated, adapted and applied within the PA network |  | | | | | | | | | | | | | | | | | | | |
| *2.3.1 Documentation of the different community management models implemented in Comoros* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.3.2 Participatory evaluation of community-based management models* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *2.3.3* *Sharing recommendations with village committees and implementation of adapted community management approaches* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 2.4**Blue and green carbon stocks assessed and monitored across the PA network |  | | | | | | | | | | | | | | | | | | | |
| *2.4.1 Inventory and mapping of coastal terrestrial and marine ecosystems and of their carbon sequestration capacity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Component 3. Community Livelihoods Within The National Protected Area Network** | | | | | | | | | | | | | | | | | | | | |
| **Outcome 3.** Through capacity building and partnership directly or within value chains, private companies and local communities generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs. | | | | | | | | | | | | | | | | | | | | |
| **Output 3.1** Nature-based value chains based on a partnership between the private sector and local communities |  | | | | | | | | | | | | | | | | | | | |
| *3.1.1* *Feasibility studies of value chain options based on ecosystem services in protected areas* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.1.2**Synthesis of the conclusions of impact and feasibility studies presented to PNC Agency, local communities, and private parties* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 3.2**: Capacities of local communities to provide products that meet the needs of the value chains |  | | | | | | | | | | | | | | | | | | | |
| *3.2.1 Establishment or consolidation of community cooperatives and development of capacities* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.2.2 Training of cooperative members to offer quality products and services and integrate value chains* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 3.3** Mutually beneficial partnerships between local cooperatives and private sector actors |  | | | | | | | | | | | | | | | | | | | |
| *3.3.1 Identification of private businesses and community cooperatives and confirmation of their interest* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.3.2 Partnership agreements for optimized benefits to community cooperative partners in value chains* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 3.4** Strengthened business capacities of private enterprises for a sustainable expansion of value chains |  | | | | | | | | | | | | | | | | | | | |
| *3.4.1 Support to businesses in designing their business model involving partnership with cooperatives in local communities* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 3.5** Marketing strategy focused on biodiversity protection, fair trade, and branding in connection with PAs |  | | | | | | | | | | | | | | | | | | | |
| *3.5.1 Development of a marketing strategy including a national certification system* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.5.2 Raising public awareness of the "Comoros National Parks Products" branding* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 3.6** Support for the start-up of value chains |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.6.1 Support for the expansion of value chains to create IGAs for the benefit of local communities in PAs* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *3.6.2 Mentoring and support for new businesses and community partners* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Component 4: knowledge management, m&e, and achieving gender and disability equity through empowerment** | | | | | | | | | | | | | | | | | | | | |
| **Outcome 4*:*** Effective knowledge sharing supports learning among project stakeholders and in the Comoros and regional SIDS | | | | | | | | | | | | | | | | | | | | |
| **Output 4.1** Technical knowledge and lessons compiled, evaluated and translated into knowledge products and disseminated |  | | | | | | | | | | | | | | | | | | | |
| *4.1.1**Participatory M&E and learning system developed and implemented to enable adaptive project management* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *4.1.2**Compilation of knowledge products, lessons and good practices and production of communication materials* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *4.1.3**Experience sharing among National Parks Agency staff and among PA co-management village committees* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Output 4.2** National ownership and pride in Comoros PAs |  | | | | | | | | | | | | | | | | | | | |
| *4.2.1**Development and implementation of a targeted strategic communication plan for the project and the PNC Agency* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *4.2.2**Implementation of awareness campaigns and targeted environmental education programmes* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Outcome 5**: Increased opportunities for women and people with disabilities (PWD) to benefit from ecosystem goods and services in the protected areas (PAs) and to integrate nature-based value chains that are linked to the PAs | | | | | | | | | | | | | | | | | | | | |
| **Output 5.1** Gender and PWD action plans are implemented, monitored and evaluated |  | | | | | | | | | | | | | | | | | | | |
| *5.1.1**Gender and PWD action plans developed and implemented* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *5.1.2 Gender and PWD action plans are evaluated and adapted* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Annex 4. Monitoring Plan

This Monitoring Plan and the M&E Plan and Budget in Section VI of this project document will both guide monitoring and evaluation at the project level for the duration of project implementation.

| **Monitoring** | **Indicators** | **Targets** | **Description of indicators and targets** | **Data source / Collection Methods** | **Frequency** | **Responsible for data collection** | **Means of verification** | **Risks/Assumptions** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Objective:**  Conserve the terrestrial and marine biodiversity of the Union of the Comoros by strengthening the effectiveness of the co-management of the new network of protected areas with local communities to support sustainable development. | *Mandatory indicator 1:*  Number of direct beneficiaries disaggregated by sex and PWD. (GEF-7 Core indicator #11) | *Midterm target:*i) IGA development (trainings, setting-up cooperatives) beneficiaries: 5859, including 50% of women and 4% of PWD ii) Beneficiaries of trainings: 2049, including 40% of women and 2% PWD  *End of project (EOP) target:* IGA development beneficiaries (start-up and coaching): 5859, including 50% of women and 4% of PWD  ii) Beneficiaries of trainings: 2049, including 40% of women and 2% PWD | *Description:*  Number of direct beneficiaries in villages located within PAs benefiting from project interventions, through  i) newly created or improved livelihoods based on the sustainable exploitation of natural resources and ecosystem services within protected areas,  ii) the development of beneficiaries’ capacities to actively participate in the co-management of PAs and in the valuation of the ecosystem goods and services they provide (institutional, community and private sector actors). The midterm and end-of-project assessments will focus on the beneficiaries of project interventions related respectively to various trainings and the establishment of cooperatives, and to starting-up and coaching of value chains.  The target number of IGA development beneficiaries are calculated based on the number of beneficiaries involved in new value chains 1,085 and an average of 5.4 persons per household. the calculation basis for the total number of beneficiaries of IGAs is provided under Indicator 9.  The target number of beneficiaries of trainings have been calculated on the following basis: 60 members of the PNC Agency + 264 members of park co-management committees and 1680 members of village committees + 10 DGEF officers + 35 people in the private sector, including 40% of women and 2% PWD | *Data sources and methodology* Household surveys conducted in project intervention sites at the start, midterm, and end of the project | Annually | Monitoring & Evaluation and Safeguards Officer | Annual reports of the PCU’s Sustainable Livelihoods Officer | *Risks*: Loss of local stakeholders' support for land and resource use planning within PAs, and for partnership proposals with the private service due to climatic, economic or political events outside the control of the project  *Hypotheses*:  The preservation of biodiversity and ecosystem services is a priority for national, island and local authorities who agree to support the development of the PA system in the country and the mobilization of required sustainable financing |
| *Mandatory indicator 2* (*from the IRRF 1.4.1.2b*):  Area of existing protected areas with improved management (hectares)  a) Area of terrestrial protected areas with improved management efficiency (GEF-7 Core indicator 1.2) as shown by the evolution of the METT scores of the Karthala, Mont Ntringui and Mohéli National Parks (land portion)  *b)* Area of marine coastal protected areas with improved management efficiency (GEF-7 Core indicator 2.2) as shown by the evolution of the METT scores of the Cœlacanthe, Mitsamiouli-Ndroudé, Shissiwani and Mohéli National Parks (marine portion) | 116,577 ha  a) 61,815  b)54,762 | Number of ha of protected area over which management effectiveness is increased as shown by the evolution of the METT scores  a) in terrestrial protected areas, from baseline METT values  Mohéli: 59 Karthala: 53 Mont Ntringui: 47  b) in marine protected areas, from baseline METT values Mohéli: 59 Cœlacanthe: 43 Mitsamiouli-Ndroudé: 40  Shissiwani: 53  The target values correspond to the areas of protected areas for which an increase in METT scores is expected according to the estimate made according to the project interventions in each of the protected areas | Assessment of changes in the effectiveness of PA management based on the scores of the GEF7 BD METT for each national park. | Applied at midterm and at the end of the project | The *Conservateur* of each National Park is responsible for applying the METT every year | GEF7 BD METT applied at midterm and at the end of the project for each national park. | *Risks:* A precarious socio-economic context compromises the emergence of environmental sensitivity among all stakeholders who are not ready to change their priorities and their unsustainable use of land and natural resources and to adhere to the protection of integrity national parks  The increase in temperature linked to climate change is intensifying the degradation of coral reefs; severe climatic hazards lead to the destruction of large areas of marine and terrestrial ecosystems  *Hypotheses*: The preservation of biodiversity and ecosystem services is a priority for national, island and local authorities who agree to support the development of the PA system in the country and the mobilization of required sustainable financing |
| *Indicator 3:*  Net loss of ecosystem area in primary and secondary forests, mangroves, coral reefs and seagrass beds within the national park network (Indicator 1.1.1 of UNDP Country Programme) | *Midterm target:* No net loss  *End-of-project target:* No net loss | Indicator reporting on the cover of key ecosystems found in the PA network, targets to reflect the success of conservation efforts, with losses being compensated by restoration, from the following baselines: Forest cover of 17,564.9 ha including 14,291.8 ha of primary forest and 3273.1 ha of secondary forest  Mangrove cover: 197.25 ha  Seagrass beds cover: 6030 ha  Coral reef cover: 30,000 ha of which 18,000 ha in good health) (2020 values) | *Data source:* Databases of the National Parks Agency  *Collection method:* Statistics on the annual change in major ecosystems cover by photointerpretation of very high-resolution images acquired using a drone to cover the total ecosystem area as part of the annual ecological monitoring conducted in the parks, supported by data from the assessment of coral reef health carried out in permanent transects. | Annually | Monitoring & Evaluation and Safeguards Officer, with the support of the PCU’s GIS Officer | Annual report of the National Parks Agency | *Risks*:  The increase in temperature linked to climate change is intensifying the degradation of coral reefs; severe climatic hazards lead to the destruction of large areas of marine and terrestrial ecosystems  Loss of local stakeholder support for land and resource use planning within PAs due to climatic, economic or political events outside the control of the project  Politicians and senior ministry officials (MAFETH) have other competing priorities  Uncontrolled fires annihilate efforts to conserve and restore terrestrial ecosystems, despite the ban on voluntary fires by the Framework Law on the Environment and the Law on Protected Areas.  *Hypotheses:* The preservation of biodiversity and ecosystem services is a priority for national, island and local authorities who agree to support the development of the PA system in the country and the mobilization of required sustainable financing |
| *Mandatory indicator4:*  GHG emissions avoided through restoration of forests and reducing the rate of deforestation in protected areas.  (GEF-7 Core indicator 6 – Greenhouse gas emissions mitigated) | *Midterm target: n.a.*  *End-of-project target:* 4,768,755 tCO2eq of GHGs | 4,768,755 tCO2eq of GHGs corresponding to a reduction in the deforestation rate over 17,564 ha of primary and secondary forests through improved management effectiveness, and natural habitat restoration over 6,871 ha, including 6,800 through ANR and 53 ha through active reforestation using indigenous species.  This target was computed from the following baseline: Tropical Humid Forest type, degraded land in a Humid Tropical climate, volcanic soil type (andosols), average annual deforestation rate of 1%, and calculation period of 20 years. | *Data source* Updated FAO Ex-Ante Carbon Balance Tool (EX-ACT) on the basis of total area of habitat restored and total area where deforestation is reduced by the end of the project.  *Methodology* Carbon sequestration estimates are computed using the Ex-Ante Carbon-Balance Tool (EX-ACT) version 9.0, developed by FAO. The forest-type selected is Tropical Humid Forest, building on a baseline of degraded land in a Humid Tropical climate. The soil-type generally consists of volcanic soils (andosols). The average annual deforestation rate used is 1%. The project involves a 50% reduction of the deforestation rate over 17,564 ha of primary and secondary forests through improved management effectiveness, the restoration of 6,871 ha of primary forests through assisted natural reforestation over 6,800 ha and active reforestation over 53 ha using indigenous species. Over a period of 20 years, approximately 4,768,755 million tCO2eq will be sequestered through the project’s intervention. | At the end of the project | Monitoring & Evaluation and Safeguards Officer, with the support of the PCU’s GIS Officer (to provide the areas of restored and conserved ecosystems) | Annual report of the National Parks Agency, on the monitoring of each ecosystem coverage | *Risks:*  Loss of adherence of local stakeholders to the national regulations in force and to the ecosystem restoration plan due to climatic, economic or political events outside the control of the project  Lack of support from the municipalities, the judiciary and law enforcement agencies in the application of legislative provisions concerning logging  Uncontrolled fires annihilate efforts to conserve and restore terrestrial ecosystems, despite the ban on voluntary fires by the Framework Law on the Environment and the Law on Protected Areas.  *Hypotheses:*  The environmental conditions remain within the normal variability ranges |
| **Outcome 1.** Systemic, institutional, technical and operational capacities strengthened to ensure effective management of the national network of protected areas | *Indicator 5:*  PA co-management capacities:  a) Evolution of the institutional capacities of the protected areas management agency and the DGEF, as measured by the UNDP scorecard on capacity development for GEF projects:  b) Evolution of the capacity of National Parks Co-Management Committees and Village Committees to contribute to the planning of the management of national parks, to its implementation and to the evaluation of its effectiveness  c) Evolution of the capacity of the Board of Directors of the Comoros National Parks Agency and of the FEC to fulfill their mandate | *Midterm target:*  a) DGEF: 1: 89%, 2: 67%, 3: 89%, 4: 75%, 5: 50%  PA National Agency: 1: 78%, 2: 80%, 3: 67%, 4: 83%, 5: 67%  *End of project target:*  a) DGEF: 1: 89%, 2: 80%, 3: 89%, 4: 83%, 5: 67%  PA National Agency: 1: 78%, 2: 80%, 3: 67%, 4: 83%, 5: 67%  b) midterm and EOP targets t.b.d. during the 1st year of the project, according to the baseline value  c) midterm and EOP targets t.b.d. during the 1st year of the project, according to the baseline value | Composite indicator to report on the evolution of capacities for key actors involved in the co-management of the PA network  a) Evolution of the capacity of two key institutions, the DGEF and the National Parks Agency, based on a self-assessment using the UNDP Capacity Development Scorecard for GEF projects, for the following aspects:  1: Mobilization capacities 2: Capacity to generate, access and use information and knowledge 3: Capacity to develop strategies, policies and laws 4: Capacities for management and implementation 5: Monitoring and evaluation capacities  and from the following baselines:  DGEF (1: 89%, 2: 67%, 3: 78%, 4: 67%,  5: 50%)  National Parks Agency: (1: 56%, 2: 53%, 3: 56%, 4: 67%, 5: 33%)  b) Evolution of the capacity of the National Parks Co-Management Committees and of the Village Committees to contribute to the planning of the management of national parks, to its implementation and evaluation of its effectiveness, based on a participatory assessment using a questionnaire developed by the M&E and Safeguards Officer, with the support of the Project Coordinator and staff of the PNC Agency. The questionnaire will focus on the capacities to communicate and transmit the existing problems in the parks and the concerns and priorities of the villagers they represent, their understanding of the issues related to the conservation of biodiversity and ecosystems, their effective contributions to the implementation, updating and evaluation of the effectiveness of management plans.  c) Evolution of the capacity of the Boards of Directors of the Comoros National Parks Agency and of the FEC to fulfill their own mandate based on a participatory assessment using questionnaires developed by the M&E and Safeguards Officer, with the support of the Project Coordinator. | *Data sources and methodology*  a) Self-assessment involving the concerned stakeholders, using the UNDP Capacity Development Scorecard for GEF projects  b) and c) Summary report of the participatory assessments carried out by the M&E and Safeguards Officer, with the support of the Project Coordinator/PA Expert and staff of the PNC Agency with the concerned parties, including capacity development recommendations | Start, midterm and end of project | Monitoring & Evaluation and Safeguards Officer, with the support of the Project Coordinator/PA Expert | a) Completed scorecards, | Risks  Institutional and / or political instability leads to high mobility of training beneficiaries  Difficulties in mobilizing the necessary staff within targeted institutions due to hiring constraints in the public service (DGEF, PNC Agency) and lack of motivation (committees)  Hypotheses:  All stakeholders targeted by capacity development efforts commit to the capacity building objectives of the PA system |
| *Indicator 6:*  6 a) Evolution of funding dedicated to the management of the PA system measured using the financial viability scorecard | *Midterm target:*  a) The gap is reduced by approx. 10% by project midterm  *EOP target*: a) The gap is reduced by approx. 40% by the end of the project | Funding dedicated to the management of the PA system as measured by the annual financial gap to support the PA system under a basic PA management scenario (USD) from a baseline gap of 1,281,759 USD | Scorecard of financial viability indicators for national protected area systems | At midterm and end of the project | National Parks Agency | Completed financial viability scorecard | *Risks:* Politicians and senior ministry officials (MAFETH) have other competing priorities  Lack of political and institutional commitment to support fund mobilization for the Comoros Environmental Fund for PAs  *Hypotheses:* The global economy is recovering after the crisis caused by the pandemic due to Covid-19  Positive development in global support for biodiversity and climate change issues. |
| 6 b) Evaluation scores of the funding system using the financial viability indicators for national PA systems | *Midterm target:* i) 50%  ii) 65%  iii) 23%  *EOP target*:  i) 50%  ii) 65%  iii) 30% | Evolution of the composite scores based on a tool developed to assess the following three aspects of the financial sustainability for a protected area system from a baseline of:   1. Legislative and institutional frameworks: 42% 2. Business plans and tools for cost-effective management: 36% 3. Income generation tools by PAs: 23% | Scorecard of financial viability indicators for national protected area systems assessed | At midterm and end of the project | National Parks Agency | Completed financial viability scorecard |
| 6 c) Funds mobilized as an endowment for the Comoros Environmental Fund for protected areas (in connection with UNSDCF Indicator 1.7) | *c) Midterm target:*  1,000,000 USD  *EOP target*: 5,000,000 USD | c) Total amount mobilized for the Comoros Environmental Fund from a baseline of 0 USD. The midterm target corresponds to the initial endowment required to create the Fund as a Foundation. | FEC Annual Report | Annual | FEC Director | FEC Annual Report |
| **Outcome 2** Increased protection of endemic and key species and habitats through improved management effectiveness across the national PA network | *Indicator 7:*  Area (hectares) of forest ecosystems restored in the terrestrial NPs (a) Karthala, (b) Mont Ntringui, (c) Mohéli through: i) assisted natural regeneration (ANR)  ii) reforestation with native species  iii) control of invasive alien species (IAS) | *Midterm targets:*  a) Karthala  i) 3000 ha  ii) 25 ha  iii) 6 ha  b) Mont Ntringui  i) 800 ha  ii) 11 ha  iii) 6  c) Mohéli  i) 3000 ha  ii) 6 ha  iii) 6 ha  *EOP targets*:  a) Karthala  i) 3000 ha ii) 30 ha iii) 6 ha  b) Mont Ntringui  i) 800 ha ii) 15 ha iii) 6 ha  c) Mohéli  i) 3000 ha ii) 8 ha iii) 6 ha | Assessment of terrestrial ecosystem areas restored using the 3 approaches of (a) assisted natural regeneration, (b) active reforestation, and (c) control of invasive alien species, from the following baselines:  a) Karthala  i) 0 ii) 15.6 ha iii) 0  b) Mont Ntringui  i) 0 ii) 9.5 ha iii) 0  c) Mohéli  i) 0 ii) 4.5 ha iii) 0  Targets for each restoration approach have been estimated based on rough estimations of areas that require passive or active restoration interventions and a realistic estimation of areas that can be restored in the framework of the project. For IAS control, three (3) 2-ha plots in each NP will be targeted within forest ecosystems severely affected by invasive alien species with a high (5) invasibility level. | For (i) and (ii): Statistics on the annual change in major ecosystems cover by photointerpretation of very high-resolution images acquired using a drone to cover the total ecosystem area, supported by data from the assessment of regeneration and restoration success carried out in permanent monitoring plots.  (iii) Fixed area (ha) of pilot plots | Annual | M&E and Safeguards Officer, with the support of the Project Coordinator and staff of the PNC Agency | Annual ecological monitoring conducted in the parks | *Risks:* The hazards related to climate change and natural disasters annihilate restoration efforts  *Hypotheses:* CRDEs and other nurseries have the capacity to produce the forest seedlings (native species) required for reforestation |
| *Indicator 8:*  Number of beaches subjected to sand exploitation in MPAs and total annual volume of sand extracted from beaches and evacuated by truck for the following National Parks:  a) Mitsamiouli-Ndroudé  b) Cœlacanthe  c) Shissiwani  d) Mohéli | *Midterm target:*  *a) 2 beaches, 400 m3*  *b) 1 beach, 200 m3*  *c) 8 beaches, 1640 m3*  *d) 3 beaches, volume t.b.d.*  *EOP target*:  a) 0 beach, no extraction b) 0 beach, no extraction c) 2 beaches, 400 m3 d) 1 beach, 200 m3 | baseline  a) Mitsamiouli -Ndroudé: 4 beaches, 800 m3 b) Coelacanthe: 3 beaches, 480 m3 c) Shissiwani: 15 beaches, 2880 m3 d) Mohéli: 5 beaches, volume t.b.d. | Estimation of the number of beaches exploited and of the volume of sand based on the number of trucks that collect and transport beach sand (volume of 4 m3 each) over one year, as recorded by the ecoguards as part of the regular monitoring program | Annual | National Parks Agency | Annual monitoring reports of each NP based on the updated database dedicated to the PA system | *Risks:*  Lack of support from municipalities, justice and law enforcement authorities in the application of the legislative provisions concerning the prohibition of beach sand removal  *Hypotheses:*  Volumes of crushed volcanic sand are sufficient to meet construction needs, are available and accessible (in terms of cost) |
| **Outcome 3.** Through capacity building and partnership, directly or within value chains, private companies and local communities generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs | *Indicator 9:*  Number of beneficiaries within local communities in national parks, disaggregated by gender and disability status (PWD), who voluntarily gave up unsustainable and non-compliant livelihoods to adopt sustainable livelihood options that improve their income by at least 25 % thanks to new partnerships established with private companies that promote ecosystem goods and services within PAs, including fishers on foot, with cloth, with nets, beach sand collectors, and farmers practicing cultivation in the forest | *Midterm target:*  1,085 beneficiaries  (preliminary stages of consultation, establishment of cooperatives, training, prior feasibility assessments for resources and viability of enterprises, including scoped EIAs)  *EOP target*:  1,085 beneficiaries incl. 54% of women, 1,8% PWD and 12% youth overall | Number of participants who benefit from project interventions and their integration into equitable value chains based on sustainable uses of protected areas and their resources, in partnership with the private sector. The benefit should be reflected by an increase of at least 25% of their income. The target number of beneficiaries has been estimated for the following value chains:   1. moringa: 100 women collecting moringa, incl. 10% PWD 2. aromatic and medicinal plants: 100 women collecting plants 3. ‘clean beaches’: 70 young men and 30 young women for ‘clean beaches’, incl. 10 PWD 4. ecotourism: 30 men and 270 women in ecotourism activities 5. fishers using longlines, fish concentrating devices (FCD), pots, and those fishing for lobster, mangrove crab, crayfish, and octopus involved in networks with restaurants and hotels: 395 men and 90 women fishers (total 485). This target is based on the following estimation of potential beneficiaries: Longline: 150 men FCD: 200 men lobster: 30 men mangrove crab: 30 women  crayfish: 15 men, 15 women  octopus: 45 women | Participatory survey (involving project participants) to document household income changes of project beneficiaries attributable to the new value chains | At midterm and end of the project | PCU’s Sustainable Livelihoods Officer with the support of the Community Mobilizers in each NP | Report of the participatory survey | *Risks:*  Falling market prices for products developed by value chains  Insecurity linked to the pandemic due to Covid-19 reduced the tourist attractiveness of the country  Lack of interest and understanding of the vulnerability of natural resources due to their overexploitation and of the need to adopt sustainable management practices  *Hypotheses:*  Interest and pride of Comorian consumers in the quality of local products |
| *Indicator 10:*  Condition of populations or stands of natural resources which are subject to sustainable development by local communities in project intervention sites within PAs, including medicinal and aromatic plants in the natural environment, moringa, demersal fish, lobsters, crayfish, octopus and mangrove crabs | *Midterm target:*  Maintenance or improvement of the condition of plant or aquatic resource populations  *EOP target*:  Maintenance or improvement of the condition of plant or fish resource populations | This indicator is chosen to reflect the environmental sustainability of the nature-based value chains supported by the project. The baseline values will be determined during the 1st year of the project under Output 2.2, Sub-output 2.2.2, and will include:  - extent and density of plant stands in the exploited patches  - catch per unit of fishing effort for aquatic resources in target fishing areas). | Monitoring of populations or stands of resources that are the subject of harvesting / fishing by community groups under the supervision of technical departments, staff of CRDEs and ecoguards as part of the long-term ecological monitoring | Annual | National Parks Agency | Annual monitoring reports of the National Parks Agency | *Risks:* Communities do not commit to making the necessary efforts to ensure the sustainability of their resource use  The hazards related to climate change and natural disasters reduce the viability of natural resources  *Hypotheses:* The environmental conditions remain within the normal variability ranges  Respect for the integrity of protected areas and their resources by all stakeholders |
|  | *Indicator 11:*  Number of partnerships between local cooperatives and private companies for the development and certification of value chains based on ecosystem goods and services provided by PAs and integrating biodiversity conservation and fair-trade principles, including a) actors who already intend to engage in environment sustainable and fair-trade practices, and b) actors whose interest has been raised through information and awareness campaigns as part of the project. | *Midterm target:*  a) 5  b) 5  *EOP target*:  a) 5  b) 5 | The project approach is to develop or expand nature-based value chains through partnerships between cooperatives in local communities with the private sector involved in the PA network to create sustainable livelihoods. The development of partnerships with the following private enterprises will be supported (based on prior consultations): EcoMassiwa, private individuals/ small groups involved in cleaning beaches, Comoros Moringa, Massala Délices, Maya Beauté et Cosmétiques, and networks of hotels and restaurants on each island. In addition, the project will support the development of partnerships with additional private enterprises whose interest will have been raised through information and awareness campaigns. | Monitoring carried out by the staff of the National Parks Agency, more specifically by the Community Mobilizers of each national park under the supervision of the PCU’s Sustainable Livelihoods Officer | Annual | PCU’s Sustainable Livelihoods Officer with the support of the Community Mobilizers of each national park | Annual monitoring reports of the National Parks Agency | *Risks:* The lack of balance between the power of local communities and that of private companies limits the security of investments *Hypotheses:* Openness of stakeholders to an innovative business formula in the Comoros associating the private sector with local communities |
| **Outcome 4**  Effective knowledge sharing supports learning across project stakeholders, Comoros and regional SIDS | *Indicator 12:*  Number of village communities within national parks where members seek project support or apply knowledge and solutions shared through the project, outside targeted intervention sites or pilot sites (total of 74 villages in PAs) | *Midterm target: 10*  *EOP target*:  *20* | The number of requests for support made to the National Parks Agency by members of local communities not targeted by the project should reflect the effectiveness the project communication and knowledge-sharing – dissemination. Information collected will document the nature and origin of the requests. It is assumed that effective communication of the successes experienced by local communities through project interventions will generate interest in sustainable nature-based IGAs and active engagement in biodiversity conservation in national parks. | Information on the number of requests from non-target communities collected by the staff of the National Parks Agency, more specifically by the Community Mobilizers of each national park under the supervision of the PCU’s CKM Officer. | Annual | PCU’s CKM Officer with the support of the Community Mobilizers of each national park | Annual reports of the National Parks Agency | *Risks:*  Lack of support or interest from stakeholders in the knowledge generated within the framework of the project  *Hypotheses:*  The stakeholders targeted by the communication strategy have the technological means necessary to access shared knowledge and information |
| **Outcome 5**  Increased opportunities for women and PWD to benefit from ecosystem goods and services in PAs and to integrate nature-based value chains linked to PAs | *Indicator 13:*  Representation (%) of women in the co-governance system of national parks participatingin decision-making processes relating to management planning and development of park land and coastal marine areas and resource uses:  - PA management staff  - National Parks Agency members (60-member association)  - National Parks Co-management committees  - Village co-management committees | *Midterm target:*  PA management staff: 30%  National Park Agency: 30%  National Parks Co-management committees: 50%  Village co-management committees: 50%  *EOP target:*  PA management staff: 35%  National Parks Agency: 35%  National Parks Co-management committees: 50%  Village co-management committees: 50% | Increased proportion of women in the various PA co-management structures, and maintained parity for co-management committees, from the following baseline values:  PA management staff: 27% women (17% of Conservateurs, 25% of community mobilizers and 28% of ecoguards are women)  National Parks Agency: 23 % women  National Parks Co-management committees: 50% are women  Village co-management committees: 50% are women | Reports from the National Parks Agency | Annual | PCU’s Gender and PWD Officer | Annual reports of the National Parks Agency | *Risks:*  *Socio-cultural traditions can limit women's participation*  *Hypotheses:*  Communes and traditional local authorities encourage the participation of women in consultation frameworks concerning national parks and the use of land, coastal marine spaces and resources |

## Annex 5. UNDP Social and Environmental Screening Procedure (SESP)

**Project Information**

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| ***Project Information*** |  |
| 1. Project Title | Biodiversity protection through the effective management of the National Network of Protected Areas in the Comoros |
| 1. Project Number (i.e. Atlas project ID, PIMS+) | GEF Agency Project ID: 6257 |
| 1. Location (Global/Region/Country) | Union of the Comoros |
| 1. Project stage (Design or Implementation) | Design |
| 1. Date | 15/06/2021 |

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

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| **QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?** |
| ***Briefly describe in the space below how the project mainstreams the human rights-based approach*** |
| The project will assist the Government of the Comoros to improve its management capacity to ensure conservation of, and sustainable development in, the network of National Parks on the three islands of the Union of the Comoros. The National Parks have been created with specific co-management arrangements that include local communities and allow for access to important resources that support community livelihoods. The National Parks zoning delineated as part of the Management and Development Plans will be further defined according to the specific conservation needs of the significant biodiversity they harbour, which include globally significant species of flora and fauna. The project will engage actively with stakeholders, including i) village communities in national parks to assert their effective collaboration in the management of their park and to enhance the sustainability of the harvesting of natural land and marine resources that support their livelihoods, and ii) newly established small businesses to support the creation of alternative sources of income, in priority for vulnerable members of local communities likely to be affected by the strengthened enforcement of existing and new regulations; the project will ensure that communities benefit equitably from the activities of biodiversity-friendly businesses that will ensure sustainable development in the future. All community livelihood options that involve partnerships with the private sector will ensure that community rights are respected and enhanced. |
| ***Briefly describe in the space below how the project is likely to improve gender equality and women’s empowerment*** |
| A gender analysis was conducted during the PPG phase, in accordance with standard UNDP procedure, to identify the differences, needs, roles and priorities of women and men regarding conservation, management and resource use in the Union of the Comoros. Specific project activities are also proposed to support the engagement of women. Women will be represented at all stages of the project and fully integrated into economic value chains, natural resource management plans, and co-management initiatives in the National Parks network. The results of the gender analysis carried out during PPG were integrated into the project design to ensure that gender-based differences are built into project activities as appropriate, and gender-disaggregated targets are developed as indicators of the project’s progress towards objectives. |
| ***Briefly describe in the space below how the project mainstreams sustainability and resilience*** |
| The biodiversity of the Comoros is highly threatened by a number of factors, including conversion of the natural forests for agriculture and pasture needs, unsustainable timber exploitation for construction and firewood purposes, destructive and unsustainable fishing techniques, poaching of protected marine species (eg turtles). The project will enhance the co-management of these areas by local communities and the National Parks agency, providing targeted capacity building and awareness on the unique biodiversity harboured by PAs and the ecosystem goods and services they provide, and the need to protect the remaining terrestrial and marine ecosystems for their environmental, social and economic values, and for their intrinsic value as repositories for key endemic species. The project will also promote sustainable management of these resources, as stipulated in the national Law on Protected Areas, and improve management skills at the National Parks agency and of the co-management Committees. Project activities to enhance management of the National Parks will result in the creation of refugia for conservation of globally significant biodiversity across the Comoros and integrate considerations for the sustainable use of biodiversity into business plans developed between local communities and private sector. |
| ***Briefly describe in the space below how the project strengthens accountability to stakeholders*** |
| Through its collaborative approach at the community level, the project will strengthen the networking of stakeholders interested in the protecting biodiversity in Comoros, to help push for better management and enforcement. The project will also empower experts in the field by strengthening their capacities through the demonstration pilots and training workshops. The Project Board will ensure that the project’s Grievance Redress Mechanism is in place, accessible to the public and to project stakeholders and that all grievances are addressed in a timely and acceptable manner in line with the UNDP SES. UNDP’s Accountability Mechanism, which includes the Social and Environmental Compliance Review (SECU) and Stakeholder Response Mechanism (SRM) will also serve as an additional layer of grievance redress and empower stakeholders to demand accountability at all levels. |

**Part B. Identifying and Managing Social and Environmental Risks**

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| **QUESTION 2: What are the Potential Social and Environmental Risks?** | **QUESTION 3: What is the level of significance of the potential social and environmental risks?** | | | **QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High** |
| ***Risk Description***  ***(broken down by event, cause, impact)*** | ***Impact and Likeli-hood (1-5)*** | ***Significance (Low Moderate Substantial High)*** | ***Comments (optional)*** | ***Description of assessment and management measures for risks rated as Moderate, Substantial or High*** |
| **Risk 1: Project activities focused on strengthening and implementing management and governance regimes for the National Parks could impact current access to and use of natural resources**  Related to:   * Human rights; P.5, P.6 * Accountability; P.13, P.14 * Standard 5: Displacement and Resettlement; 5.2 | I = 2  L = 3 | **Moderate** | The project will support the Government of the Comoros to refine and strengthen its governance mechanisms and effective management of the National Parks network. The co-management agreements will be revised to include the recognition of the rights (and not only the obligations) of local communities relating to access to resources under the conditions stipulated in the management and development plans.  Local communities are predominantly subsistence farmers and fishers, with some individuals owning livestock (but in small numbers) and have used the ecosystems within the National Parks for their daily subsistence. Resources are harvested from the various ecosystems across the National Parks landscape for food, medicines, household construction, firewood, and occasionally for economic gain.  Enhanced governance, on-site management and enforcement of regulations regarding resource use in the National Parks may result in restrictions or changes in current resource use by a limited number of vulnerable users, with an associated impact on them, especially for net fishers and for people collecting sand on beaches.  The impact of the project on access to the National Parks and resource use is considered to be low (the National Parks are de facto IUCN PA Category VI), but is flagged for concern, particularly regarding ensuring that community rights are not compromised by the project. | To mitigate potential livelihood impacts resulting from Output 1.1, the project is designed to provide alternative income-generating livelihood options, first for vulnerable people, that will mitigate their losses in subsistence and other revenue as a result of restrictions on use imposed by the National Parks legislation. |
| **Risk 2: Infringement of civil rights by police and ecoguards**  Related to:   * Human Rights; P.2, P.4, P.7 * Standard 3: Community Health, Safety and Security; 3.10 | I = 3  L = 2 | **Moderate** | Poorly trained ecoguards may not conduct their tasks properly and inadvertently infringe on civil rights of the community. | The project includes a training program for the ecoguards (Activity 2.1.2), that will focus on human rights training, a system of monitoring and compliance and a grievance redress mechanism (GRM) that is available to all community members. In addition, a Code of Conduct will be developed on which both the ecoguards and police officers involved in law enforcement (Activity 2.2.6) within the PAs will be trained. |
| **Risk 3: Project activities to reinforce co-management of the Parks and create alternative income-generating activities may reproduce discrimination against women**  Related to:   * Gender Equality and Women’s Empowerment; P.8, P.10 | I = 3  L = 2 | **Moderate** | Women represent 27% of the staff of the Comoros Parks Agency, (17%) as *Conservateur*s, (25%) as Community mobilizers, and (28%) as Ecoguards to carry out all the functions required for the management of protected areas, including ecological monitoring and surveillance functions for the enforcement of regulations governing the protection and use of resources.  Women in local communities are already systematically involved in all aspects of PA co-management. Each village included in the 5 new national parks has set up a village committee to co-manage the park on a voluntary basis to support initiatives in the park, for a total of 56 village committees each made up of 15 women and 15 men (the communities have agreed to respect the principle of gender parity). | Project activities to create the National Parks network in the Comoros (UNDP PIMS 4950) included a strong participation of women in project design.Women’s groups and associations were consulted extensively during preparation of the GEF7 PIF and as far as possible during the preparation of the ProDoc (though virtual communication given the constraints limiting travels and in person meetings), and specific requests were made to ensure that women, women’s groups and associations would continue to be engaged and active co-developers of project activities, particularly as women are primary harvesters in some areas.  A gender analysis was carried out during the PPG phase along with development of a gender mainstreaming plan to ensure that the needs of, and roles played by, women are considered in project design and implementation, and that women participate effectively in project activities. Gender analysis has taken into consideration women’s use of natural resource (terrestrial and coastal) to identify any potential disproportionate impacts that project activities could have on women, together with proposed mitigation activities.  The project will support alternative livelihood options for women fishing on foot and with mosquito nets through the implementation of an octopus fishing management system as developed by the SWIOFISH project in Mitsamiouli-Ndroudé NP, based on the use of pots and the participatory delimitation of temporary no-take zones. This model has been adopted with great success by village communities in Shissiwani Park with the triple benefit of attributing the use of this resource to a village community (thus moving away from the situation of free access), of significantly increasing fish production when fishing reopens, and therefore increasing the income of fisherwomen, and of preserving coral reefs.  A gender strategy was developed during PPG to build on this participation and lift potential constraints that might limit women’s access to information, effective participation to decision-making, and their equitable chances to benefit from the project’s contribution to local development. |
| **Risk 4: Project activities within the National Parks network across three islands of the Comoros, comprising both terrestrial and marine ecosystems and different biomes, to assist with enforcement of laws and regulations governing the use and management of resources in the National Parks are applied on-site, could restrict access to, and direct harvesting of, natural resources that provide livelihood options to communities**  Related to:   * Human rights; P.5, P.6 * Accountability; P.13, P.14 * Standard 5: Displacement and Resettlement; 5.2 | I = 4  L = 3 | **Substantial** | Project activities at pilot sites will target strengthening of law enforcement and application of new regulations concerning access to and harvest of targeted ecosystems and biodiversity, i.e. enforcement of NP regulations restricting unsustainable fishing, agricultural and logging practices (communities are logging trees within the NP for construction and fuelwood) that are inconsistent with the conservation and sustainable use goals of the Park Management Plans (PAGs).  Survey results (which can be found in the ESMF) show that most illicit activities are carried out by a relatively limited number of people and motivated by survival or as a lucrative business. | The project strategy will address comprehensively the issue of unsustainable livelihoods by supporting the multiplication of IGA options based on sustainable uses of natural resources to offer sustainable livelihood opportunities in priority to vulnerable members of local communities in underprivileged villages, prioritizing those who voluntarily cease prohibited activities to abide by the new regulations implemented in PAs.  The project provides for planning for the optimal use of land and resources across protected areas the delineation of zoning (Output 1.2), i.e. i) priority areas for the conservation of biodiversity and ecosystem functions, including priority areas to be restored, ii) areas open to controlled use of resources (in which controlled use of NTFPs may be permitted in accordance with the PAGs of each of the PNs), and iii) village lands within which local communities can carry out subsistence activities based on the sustainable use of natural resources. The permitted or prohibited activities and resource uses as well as the procedures for authorizing them will be specified and integrated into the management and development plans of the NPs. In order to address the risk on livelihoods, and as described in the Environmental and Social Management Framework (ESMF) prepared during the PPG, a Strategic Environmental and Social Assessment (SESA) will be undertaken in parallel to the planning process.  During project implementation, Management Plans for the PA network, which will be developed under Output 2.2, will undergo a scope Environmental and Social Impact Assessment (ESIA) that takes into consideration livelihoods impact due to restricted access to natural resources. Impacts will be managed through implementation of an Environmental and Social Management Plan (ESMP) which will include, if needed, a Livelihoods Restoration Plan. |
| **Risk 5: Project activities to assist with the conservation of marine protected areas could affect the harvest of aquatic species for subsistence and/or commercial use by communities living within marine National Parks**  Related to:   * Human rights; P.5, P.6 * Accountability; P.13, P.14 * Standard 5: Displacement and Resettlement; 5.2 | I = 3  L = 3 | **Moderate** | For more than 20 years, it has been reported that the coastal area has been overexploited and that fishing activity is no longer profitable. Fish production is so limited that it is sold to customers directly at the landing point at prices inflated by the scarcity of the resource.  Project will support communities living alongside the Marine National Parks to secure alternative legal livelihood options based on natural resources found within the coastal and marine ecosystems at target sites. | Since their establishment, net fishing has been prohibited in MPAs. The fishers who practice this fishery were informed of this throughout the PIMS 4950 project and during the interviews carried out during the PPG phase. They have formulated their conditions to agree to comply with the new regulations, namely the purchase of their nets and support to develop new IGAs. The project will respond to the second request by providing support to fishers for the acquisition or manufacture of fishing gear in accordance with MPA regulations, i.e., traps allowing selective fishing (octopus, lobsters, crabs), longlines targeting demersal fish and fish concentrator devices (made from locally accessible materials), installed in deep zones to remove fishing pressure from the coastal zone, and on which fishers can line-fish. In addition, the project will support collaboration between the National Parks Agency, the National Directorate of Fisheries Resources and the fisher’s unions to strengthen the capacities of fishers to become responsible co-managers on the basis of better knowledge of resources and understanding their vulnerability and that of their habitat, and participating effectively in the decision-making process to establish sustainable management measures for exploited fishery resources, including monitoring of catches and fishing effort. Management measures may include temporary closures of fishing areas. This approach, implemented for octopus fishing with the support of Blue Ventures and Dahari in two villages in the Shissiwani NP in Ndzuani, allowed a biological rest and better growth of the resource, greatly improved the income from the fishery when it reopened and thus generated very strong support from fishing communities.  During project implementation, an ESIA will be undertaken prior to during the feasibility study (Activity 3.1.1) and an ESMP will be developed to manage the impacts on livelihoods (FS for developing or expanding nature-based value chains). |
| **Risk 6: Harvesting of natural resources may have a negative impact on the terrestrial ecosystem through depletion of resources**  Related to:   * Standard 1: Biodiversity Conservation & Sustainable NRM; 1.1, 1.2, 1.3, 1.7, 1.10 | I = 3  L = 3 | **Moderate** | If not managed properly, harvesting of natural resources, including medicinal and aromatic plants, for commercial purposes may lead to depletion of these resources and have an overall negative impact on the fragile ecosystem. | Best practices have been identified and integrated in the project activities to avoid or mitigate any potential negative impact of project interventions on the PA ecosystems and resources. Any project initiative to develop a livelihood activity based on the use of natural resources or ecosystems (such as ecotourism, collection of medicinal and aromatic plants) (Activity 3.1.1) will be subject to a scoped ESIA that will assess the capacity of the resources or the environment to support a certain level of use. Management measures will be developed and integrated into the ESMP to ensure the sustainability of the use of the targeted resources and environments to support the development of livelihoods.  As part of Activity 1.3.3, the feasibility assessment of commercial water harvesting will take into consideration environmental and social impacts, including impact on the the natural ecosystem and water balance in the area.  As mentioned earlier, the Management Plans for the PA network that will be revised in Output 2.2 will undergo an ESIA that will consider impact of resources depletion and propose mitigation measures in the ESMP. The assessment of the various ecosystems capacities to satisfy basic daily needs requires complex evaluations that will be conducted as part of the project prior to the development of any IGA based on the use of a natural resource, such as medicinal and aromatic plants and fish resources (rock lobsters, crayfish, mangrove crabs, demersal fish) to evaluate sustainable collection levels for specific sites. |
| **Risk 7: Introduction of invasive alien species from reforestation and other land restoration activities**  Related to:   * Standard 1: Biodiversity Conservation & Sustainable NRM; 1.4, 1.6, 1.8 | I = 3  L = 2 | **Moderate** | Inappropriate selection of species for reforestation activities may inadvertently lead introduction of invasive alien species that may compete with indigenous and vulnerable species. | The master plans for terrestrial and marine areas in the PAs (Activity 1.2.3) will be undergo a SESA that will assess the potential impact of reforestation within the PAs and propose measures and guidelines that will eliminate the risk of introduction of invasive alien species during these activities.  Protocols for reforestation planned under Activity 2.2.4 is subject to the ESIA that will be undertaken for the management plans that will be developed for the PAs. These will include measures within the ESMP and conditions in the developed protocols that eliminate the risk of the introduction of invasive alien species. |
| **Risk 8: Risk of private sector enterprises involved in the project engage in activities that lead to environmental pollution and biodiversity resource depletion**  Related to:   * Standard 1: Biodiversity Conservation & Sustainable NRM; 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.10 * Standard 3: Community Health, Safety and Security; 3.2 | I = 4  L = 2 | **Moderate** | The project will facilitate partnerships between local community and the private sector (local hotels and restaurants) who may be engaged in activities such as improper wastewater disposal and that lead to pollution or may encourage overexploitation of natural resources leading to depletion. | Partnership with private sector (local hotels and restaurants) will be explored and the establishment of mutually beneficial partnerships based on the sustainable use of aquatic resources (including rock lobsters, crayfish, mangrove crabs, and demersal fish) will be supported. Strict harvesting plans and monitoring will be put in place in collaboration with the National Directorate of Fisheries Resources to ensure sustainability and legality of any fish or aquatic resource-based enterprise.  In addition, all private sector entities that will be engaged throughout the project, particularly under Activity 3.1.1, Activity 3.4.1 and Output 3.3, will undergo a private sector risk assessment (supplemented by a SESP to ensure they are in line with SES). |
| **Risk 9: Climate change could impact the islands of the Comoros with anticipated alterations in rainfall, sea level rise, coastal erosion, increased intensity of cyclones, as well as by volcanic activity which will place an additional burden on the already stressed natural environment and compromise the success of project activities and put communities at risk**  Related to:   * Standard 2: Climate Change and Disaster Risks; 2.1, 2.2 * Standard 3: Community Health, Safety and Security; 3.6 | I = 4  L = 3 | **Substantial** | Climate change is a risk for the already vulnerable Comoros islands and in the protected areas, placing local communities’ livelihoods at risk, thereby compromising successful achievement of the project’s objective.  The ESMF includes a list of sites within PAs where such risks have been documented. | Project interventions related to reducing these risks: 1. Planning for the optimal use of land and resources within PAs (Output 1.2) will take into account areas vulnerable to the risks of erosion, flooding and landslides and ensure that no infrastructure or housing is built there. These maps will identify priority areas for the restoration of natural forests, which will improve the consistency of future interventions by different development partners. This will be addressed through the SESA that will be undertaken in parallel with the planning activities.  2. Strengthening the protection and improvement of land and resource management (Activity 2.2.4), including the restoration of degraded natural forests, will strengthen the resilience of these ecosystems to the risks of natural hazards linked to climate change. In addition, the ESIA that will be undertaken for the Management Plans that will be revised and developed will address this issue and propose mitigation and adaptation measures in the ESMP.  3. Strengthening the protection of the complex of coastal ecosystems (Activity 2.2.4) made up of associations of coral reefs, seagrass beds and mangroves will increase their resilience through the synergistic effects of the conservation of these ecosystems for their conservation and for the protection of the coastline in the face of coastal erosion. the ESIA that will be undertaken for the Management Plans that will be revised and developed will address this issue and propose mitigation and adaptation measures in the ESMP.  The project will work in collaboration with the GCF-UNDP project on watershed management ($ 50M grant) which includes reforestation programs as well as with other partners such as AFD, Dahari, Association Deux-Mains, who invest in reforestation within national parks. The coordination of ecosystem restoration interventions will be facilitated through the development of an optimal land use plan which will, among other things, identify priority sites for reforestation. |
| **Risk 10: Pilot interventions for the restoration of degraded forests through controlling invasive alien plant species could involve the application of herbicide on cut stumps that may have a negative effect on the environment or human health**  Related to:   * Standard 3: Community Health, Safety and Security; 3.4 * Standard 8: Pollution Prevention and Resource Efficiency; 8.5 | I = 3  L = 2 | **Moderate** | Limited impact in terms of magnitude (small affected area and low number of people affected, and short duration).  The probability of the Project having a negative impact on the National Parks due to the use of the chemical is low. | Activities to mitigate potential impacts related to the application of herbicides (Activity 2.2.5) to control a specific alien invasive species will include the following:  - This technique will limited to the control of only one species - Planning of pilot operations on prioritized and delimited sites - Systematic monitoring of pilot operations and results - Training ecoguards by an international expert (who developed these techniques and has extensive field experience) on IAS control techniques and specifically on the use of herbicides in combination with the cutting of IAS - Designation of team leaders responsible for supervising field operations and particularly the application of this technique - Supply of appropriate protective equipment, masks and gloves and supervision of their systematic use |
| **Risk 12: Project activities to assist communities with alternative income generating activities will involve the development of partnerships with the private sector involved in ecotourism to develop circuits that include sites of cultural interest and significance.**  Related to:   * Standard 4: Cultural Heritage; 4.1, 4.3, 4.5 | I = 3  L = 2 | **Moderate** | There are few sites of cultural significance within the protected areas. One site in the Karthala NP is well known, the sawmill and residence of Mr. Humblot in Nyumbadju which date from the end of the 19th century.  The project will help communities develop alternative livelihoods (to reduce uncontrolled harvesting and land conversion pressures on biodiversity) with various nature-based IGAs, including ecotourism-focused activities. The ecotourism products may include tours organized along various themes, including cultural heritage. Yet, it is not anticipated that the project will result in any negative impact on cultural heritage as most sites are located outside national parks.  Without being cultural heritage sites strictly speaking, rare sites deserve attention because of their use for unspoken animist practices (because they are not allowed by the Muslim religion) around the Salt Lake in the Ndroudé-Mitsamiouli NP, around Lake Dzialandzé in the Mont Ntringui NP, at the Ouénéfou islet opposite Nioumachoi in the Mohéli NP, as well as in Chouani, one of the oldest villages in the Comoros and the former site where the Nioumachoi community was established, where historical events took place (Malagasy assaults). However, due to the sensitive nature of their use, it is certain that these sites will not be included in ecotourism circuits. | As part of the development of ecotourism circuits focused on biological and cultural heritage (Activity 3.1.1), the project will work with the CNDRS and the Tourism National Directorate to identify all cultural and sensitive sites that are located within the NP and strengthen their recognition (if appropriate) and protection. This will be included in the ESIA planned for this activity.  Being included in a PA already gives these sites some form of protection, but sites and infrastructure require more protection to prevent non-compliant renovations from degrading their heritage value. To strengthen the protection of the heritage value of cultural sites, they will be integrated into the ESMP and subsequently the development of Management Plans of national parks.  The officers responsible for heritage protection at the island level will be involved in the co-management of PAs. The Secretary General of the UNESCO representation in the Comoros is a member of the Protected Areas Agency but the island representatives in charge of cultural heritage should be members of the co-management committees of each of the PAs to ensure that protection of cultural heritage is taken into account. |
| **Risk 13: Project activities to enhance the regulatory framework for management of the National Park network could impact on traditional land tenure arrangements at the targeted project sites**  Related to:   * Standard 5: Displacement and Resettlement; 5.4 | I = 2  L = 2 | **Low** | The Project will strengthen institutional and regulatory frameworks to manage the National Parks and will contribute to clarify the issue of land tenure, particularly to ascertain the extent of community land ownership, or village terroirs, within the National Parks. In this way, National Park management plans will incorporate land tenure issues in the review of park policy and strategy as well as in the revision of park management plans and all community engagement activities, in order to capture accurately tenure and community engagement in National Park management. | This issue will be addressed through the clarification of the tenure issues within the PAs, the refinement of the delineation of village terroirs within PAs under component 1, demarcation of the boundaries with landmarks built with the participation of local community members, and finally - at the request of village communities- the translation of the georeferenced coordinates of the PA boundaries and of the different zones, into their own reference system, the “lieux-dits”.  The project will document the boundaries of the different zones as well as the conflict zones. Any physical demarcation will be carried out with the collaboration of local communities and will be limited to areas that are not the subject of any dispute. The documentation of conflicts will identify the nature of the conflicts, the disputed areas, by which community or which members of these communities.  Inter-community conflicts relating to the delimitation of contiguous terrestrial village lands are more frequent on the Ngazidja island. Also, the communes have been delineated within the framework of a project supported by the EU, but some problems related to the definition of communal land versus farmland remain.  It is possible that the project does not have the means and the time to resolve all the conflicts identified, but this exercise will at least provide a basis for reflection so that all the parties concerned work on a common and updated basis with the Agency of PAs and communes to jointly resolve land disputes. |
| **Risk 14: Working conditions in private sector entities engaged in the project are in contravention to principles and standards of ILO fundamental conventions**  Related to:   * Standard 7: Labour and Working Conditions; 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 | I = 4  L = 2 | **Moderate** | Workers at the private entities engaged in the project may be denied freedom of association and collective bargaining and exposed to discriminatory working conditions and/or lack of equal opportunities, as well as exposed to health and safety risks during their work. | All private sector entities that will be engaged throughout the project, particularly under Activity 3.1.1, Activity 3.4.1 and Output 3.3, will undergo a private sector risk assessment (supplemented by a SESP) to ensure they are in line with SES. |

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|  | **QUESTION 4: What is the overall project risk categorization?** | | | | |
| ***Low Risk*** | **☐** |  | | | |
| ***Moderate Risk*** | **☐** |  | | | |
| ***Substantial Risk*** | **X** | Fourteen potentialrisks have been identified for this project, two of which are assessed as Substantial, eleven as Moderate and 1 as Low. As a result, the project has been categorized as Substantial risk. | | | |
| ***High Risk*** | **☐** |  | | | |
|  | **QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered?** | | | | |
| Question only required for Moderate, Substantial and High Risk projects | | | | |
| ***Is assessment required? (check if “yes”)*** | **X** |  |  | ***Status*** | |
| *if yes, indicate overall type and status* |  | **☐** | Targeted assessment(s) |  | |
|  | **X** | ESIA (Environmental and Social Impact Assessment) | Planned | |
|  | **X** | SESA (Strategic Environmental and Social Assessment) | Planned | |
| ***Are management plans required? (check if “yes)*** | **X** |  |  | | |
| *If yes, indicate overall type* |  | **X** | Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others) | Gender Action Plan (completed) | |
|  | **X** | ESMP (Environmental and Social Management Plan which may include range of targeted plans) | Planned | |
|  | **X** | ESMF (Environmental and Social Management Framework) | Completed | |
| ***Based on identified risks, which Principles/Project-level Standards triggered?*** |  | **Comments (not required)** | | | |
| ***Overarching Principle: Leave No One Behind*** |  |  | | | |
| ***Human Rights*** | **X** |  | | | |
| ***Gender Equality and Women’s Empowerment*** | **X** |  | | | |
| ***Accountability*** | **X** |  | | | |
| ***1. Biodiversity Conservation and Sustainable Natural Resource Management*** | **X** |  | | | |
| ***2. Climate Change and Disaster Risks*** | **X** |  | | | |
| ***3. Community Health, Safety and Security*** | **X** |  | | | |
| ***4. Cultural Heritage*** | **X** |  | | | |
| ***5. Displacement and Resettlement*** | **X** |  | | | |
| ***6. Indigenous Peoples*** | **☐** |  | | | |
| ***7. Labour and Working Conditions*** | **X** |  | | | |
| ***8. Pollution Prevention and Resource Efficiency*** | **X** |  | | | |

**Final Sign Off**

*Final Screening at the design-stage is not complete until the following signatures are included*

|  |  |  |
| --- | --- | --- |
| ***Signature*** | ***Date*** | ***Description*** |
| QA Assessor |  | UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted. |
| QA Approver |  | UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD)**,** Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC. |
| PAC Chair |  | UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC. |

**SESP Attachment 1. Social and Environmental Risk Screening Checklist**

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| **Checklist Potential Social and Environmental Risks** |  |
| INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the [SES toolkit](https://info.undp.org/sites/bpps/ses_toolkit/default.aspx) for further guidance on addressing screening questions. |  |
| **Overarching Principle: Leave No One Behind**  **Human Rights** | **Answer  (Yes/No)** |
| P.1 Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)? | *No* |
| P.2 Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project? | *Yes* |
| P.3 Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights? | *No* |
| *Would the project potentially involve or lead to:* |  |
| P.4 adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? | Yes |
| P.5 inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [[53]](#footnote-54) | Yes |
| P.6 restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities? | Yes |
| P.7 exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals? | Yes |
| **Gender Equality and Women’s Empowerment** |  |
| P.8 Have women’s groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)? | Yes |
| *Would the project potentially involve or lead to:* |  |
| P.9 adverse impacts on gender equality and/or the situation of women and girls? | *No* |
| P.10 reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? | Yes |
| P.11 limitations on women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?  *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being* | No |
| P.12 exacerbation of risks of gender-based violence?  *For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc*. | No |
| **Sustainability and Resilience:** Screeningquestions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below |  |
| **Accountability** |  |
| *Would the project potentially involve or lead to:* |  |
| P.13 exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them? | Yes |
| P.14 grievances or objections from potentially affected stakeholders? | Yes |
| P.15 risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project? | No |
| **Project-Level Standards** |  |
| **Standard 1: Biodiversity Conservation and Sustainable** [**Natural**](#SustNatResManGlossary) **Resource Management** |  |
| *Would the project potentially involve or lead to:* |  |
| 1.1 adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?  *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes* | Yes |
| 1.2 activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? | Yes |
| 1.3 changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5) | Yes |
| 1.4 risks to endangered species (e.g. reduction, encroachment on habitat)? | Yes |
| 1.5 exacerbation of illegal wildlife trade? | Yes |
| 1.6 introduction of invasive alien species? | Yes |
| 1.7 adverse impacts on soils? | Yes |
| 1.8 harvesting of natural forests, plantation development, or reforestation? | Yes |
| 1. 9 significant agricultural production? | No |
| 1. 10 animal husbandry or harvesting of fish populations or other aquatic species? | Yes |
| 1.11 significant extraction, diversion or containment of surface or ground water?  *For example, construction of dams, reservoirs, river basin developments, groundwater extraction* | No |
| 1.12 handling or utilization of genetically modified organisms/living modified organisms?[[54]](#footnote-55) | No |
| 1.13 utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[[55]](#footnote-56) | No |
| 1.14 adverse transboundary or global environmental concerns? | No |
| **Standard 2: Climate Change and Disaster Risks** |  |
| *Would the potentially involve or lead to:* |  |
| 2.1 areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions? | Yes |
| 2.2 outputs and outcomes sensitive or vulnerable to potential impacts of climate change?  *For example, through increased precipitation, drought, temperature, salinity, extreme events* | Yes |
| 2.3 direct or indirect increases in [vulnerability to climate change](#CCVulnerabilityGlossary) impacts or disasters now or in the future (also known as maladaptive practices)?  *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population’s vulnerability to climate change, specifically flooding* | No |
| 2.4 increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change? | No |
| **Standard 3: Community Health, Safety and Security** |  |
| *Would the potentially involve or lead to:* |  |
| 3.1 construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams) | No |
| 3.2 air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation? | Yes |
| 3.3 harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)? | No |
| 3.4 risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health? | Yes |
| 3.5 transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? | No |
| 3.6 adverse impacts on ecosystems and ecosystem services relevant to communities’ health (e.g. food, surface water purification, natural buffers from flooding)? | Yes |
| 3.7 influx of project workers to project areas? | No |
| 3.8 engagement of security personnel to protect facilities and property or to support project activities? | Yes |
| **Standard 4: Cultural Heritage** |  |
| *Would the project potentially involve or lead to:* |  |
| 4.1 activities adjacent to or within a Cultural Heritage site? | Yes |
| 4.2 significant excavations, demolitions, movement of earth, flooding or other environmental changes? | No |
| 4.3 adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts) | Yes |
| 4.4 alterations to landscapes and natural features with cultural significance? | No |
| 4.5 utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes? | Yes |
| **Standard 5: Displacement and Resettlement** |  |
| *Would the project potentially involve or lead to:* |  |
| 5.1 temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)? | No |
| 5.2 economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)? | Yes |
| 5.3 risk of forced evictions?[[56]](#footnote-57) |  |
| 5.4 impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources? | Yes |
| **Standard 6: Indigenous Peoples** |  |
| *Would the project potentially involve or lead to:* |  |
| 6.1 areas where indigenous peoples are present (including project area of influence)? | No |
| 6.2 activities located on lands and territories claimed by indigenous peoples? | No |
| 6.3 impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?  *If the answer to screening question 6.3 is “yes”, then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk* | No |
| 6.4 the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned? | No |
| 6.5 the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? | No |
| 6.6 forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?  *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above* | No |
| 6.7 adverse impacts on the development priorities of indigenous peoples as defined by them? | No |
| 6.8 risks to the physical and cultural survival of indigenous peoples? | No |
| 6.9 impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?  *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.* | No |
| **Standard 7: Labour and Working Conditions** |  |
| *Would the project potentially involve or lead to: (note: applies to project and contractor workers)* |  |
| 7.1 working conditions that do not meet national labour laws and international commitments? | Yes |
| 7.2 working conditions that may deny freedom of association and collective bargaining? | Yes |
| 7.3 use of child labour? | Yes |
| 7.4 use of forced labour? | Yes |
| 7.5 discriminatory working conditions and/or lack of equal opportunity? | Yes |
| 7.6 occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle? | Yes |
| **Standard 8: Pollution Prevention and Resource Efficiency** |  |
| *Would the project potentially involve or lead to:* |  |
| 8.1 the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or [transboundary impacts](#TransboundaryImpactsGlossary)? | Yes |
| 8.2 the generation of waste (both hazardous and non-hazardous)? | Yes |
| 8.3 the manufacture, trade, release, and/or use of hazardous materials and/or chemicals? | No |
| 8.4 the use of chemicals or materials subject to international bans or phase-outs?  *For example, DDT, PCBs and other chemicals listed in international conventions such as the* [*Montreal Protocol*](http://ozone.unep.org/montreal-protocol-substances-deplete-ozone-layer/32506)*,* [*Minamata Convention*](http://www.mercuryconvention.org/)*,* [*Basel Convention*](http://www.basel.int/)*,* [*Rotterdam Convention*](http://www.pic.int/)*,* [*Stockholm Convention*](http://chm.pops.int/) | No |
| 8.5 the application of pesticides that may have a negative effect on the environment or human health? | Yes |
| 8.6 significant consumption of raw materials, energy, and/or water? | Yes |

## Annex 6. UNDP Risk Register

| **#** | **Description** | **Risk Category** | **Risk assessment**  **Probability & Impact** | **Risk Treatment / Management Measures** | **Risk Owner** |
| --- | --- | --- | --- | --- | --- |
| 1 | The lack of reliable financial flows for the PA system compromises the effectiveness of PA management beyond the duration of the project intervention | Financial | P = Likely  I = High  Risk level = HIGH | The financial requirements analysis conducted in the 4950 to cover the recurrent costs of the management and development plans for all 6 protected areas in Comoros estimated the requirements at $1.5 million.  UNDP recognizes that addressing the goal of financial sustainability at the level of the PA system is important, but that it takes time, and that the approach should preferably be systemic in scope.  The project will take a concerted approach to mobilizing resources from a variety of sources, including broadening the base of donors and partners supporting the PA system, and involving the private sector. To this end, an investment framework and financing strategy will be developed and implemented to support the management of the national PA system (Output 1.3). The project will put in place an enabling legislative framework for the FEC and resource mobilization (sub-output 1.3.1), and mobilize all necessary internal and external financial resources (sub-output 1.3.3) and carry out the necessary fundraising to establish a trust fund the revenues of which can cover the recurrent costs of the proper functioning of all protected areas in Comoros. The support will also include capacity building for the Board of Directors and the FEC Management on resource mobilization approaches and strategies (sub-output 1.3.6).  The risk is manageable given the government's recent commitment, as stated in the protected areas establishment orders, to contribute to the funding of protected areas on an ongoing basis, which represents a contribution of $1,170,731 over the life of the project. | FEC  DGEF  PNC |
| 2 | Land disputes between individuals in the same village and between contiguous villages within protected areas could be an obstacle to effective management of protected areas and the adoption of new and sustainable resource use practices. | Social and Environmental | P = Likely  I = High  Risk level = HIGH | Addressing land tenure at the regulatory level may require solutions at the systemic level that go beyond the objectives for which the project is designed. However, Project Sub-output 1.2.1 is designed to document and map the delineation of village lands within protected areas and the demarcation of protected area boundaries with the participation of local communities. The project will contribute to clarify the land tenure issue, particularly to document the extent of community land ownership, or village *terroirs*, within the newly established National Parks (Karthala, Mitsamiouli-Ndroudé, Cœlacanthe, Mont Ntringui and Shissiwani). Thus, national park management plans will integrate land issues into the review of park policy and strategy and into the revision of park management plans and all community engagement activities, in order to accurately capture land and community engagement issues in national park management. Any areas of dispute will be documented (nature of the dispute, parties involved) geo-referenced and mapped to serve as a common reference for the parties involved and a mechanism will be proposed to assist communities in resolving the dispute. All appropriate safeguards will be applied to ensure that no involuntary resettlement of resident populations takes place as part of the project and that consultations with potentially affected stakeholders take place prior to any decisions on land use changes. | Co-management Committee  Community Mobilizer |
| 3 | To achieve the ambitions of the Emerging Comoros 2030 Plan, government and local authorities prioritize short-term gains over the long-term intangible benefits of conservation when faced with scarce economic opportunities and invest heavily in development and resource exploitation without applying sustainable development requirements and create undue pressure on land, water and remaining natural forest resources. | Policy | P = Likely  I = High  Risk level = HIGH | Component 1 of the project includes several interventions highlighting the importance of preserving biodiversity and ecosystem services for the country's development and economy. The interventions planned under Component 4 on communication and knowledge sharing will ensure wide dissemination of this information to raise awareness of these issues among a broad audience.  Following the launch of the project, an awareness campaign will be conducted among all stakeholders on the newly established PA system, including the new law on protected areas, the 5 new PAs and the national agency for the management of the protected area system, with the objective of understanding (i) the implications in terms of access to and use of land and resources and (ii) the roles and responsibilities conferred on the various institutions under the regulations governing biodiversity conservation, in order to optimize their complementarities and synergies in the effective management of the PA system (sub-output 1.1.2). The project will support the implementation of a strategic plan for communication and awareness raising on the ecosystem goods and services provided by PAs, the PA Law, the new PA management agency, the concept of sustainable use of natural resources and responsible consumption and promotion of PA labels in Comoros, biodiversity, and the ecosystem value of parks (sub-output 4.3.1). | DGEF  PNC |
| 4 | Climatic risks and natural disasters: Due to its geographical location, fragile soils and volcanic activity (for Ngazidja), Comoros is prone to cyclones, heavy rains, landslides, habitat disturbances and floods. | Environmental | P = Likely  I = High  Risk level = HIGH | This risk will be mitigated by reducing threats to forest ecosystems and reducing overall pressures in order to reduce the vulnerability of protected areas to climate change and increase resilience to the effects of climate change. Climate change is a slow-acting risk, and is constantly monitored in Comoros, including monitoring the health of coral reefs, seagrass beds, and mangroves; monitoring forest cover; and monitoring emblematic and endemic terrestrial wildlife. | DGEF  PNC |
| 5 | Potential conflict of interests and related damage to UNDP’s reputation due to blood relationship between the Director of the Implementing Partner (DGEF) and the Head of the UNDP Programme Unit. | Strategic | P = Certain  I = Medium  Risk level = High | To manage this risk, all UNDP-funded projects executed by DGEF will be supervised directly by the UNDP Deputy Resident Representative. | UNDP |
| 6 | Gas development, including studies involving drilling and gas development, pose varying degrees of threats to cetaceans, sea turtles and fish. Potential oil spills increase pollution risks to the marine environment and coastal habitats | Other | P: Moderately Likely  I: High  Risk level = Medium | The country is developing its gas potential. Seismic studies have been carried out and have identified 40 blocks that could be exploited. The exploitation contracts established with companies include an exploratory drilling phase to determine the existence of hydrocarbons in the Comorian territory. This phase was planned between 2021 and 2023 but has been postponed to between 2023 and 2025 due to the health situation related to COVID.  Gas drilling and exploitation operations will result in intense traffic of large vessels and increase the risk of collision with cetaceans. In addition, the risk of oil spills can lead to marine and coastal pollution and threaten all marine and coastal biodiversity.  To mitigate this risk, the government has prohibited all drilling below 8,000 square kilometers. In addition, the protected areas agency will advocate to be an integral part of the institutions that will review the environmental impact assessments done on the 40 blocks likely to be drilled. At the same time, the national protected areas agency will develop guidelines for drilling and gas operations to avoid or mitigate their impacts on the environment and biodiversity. These guidelines may include the delineation of navigational corridors and speed limits to reduce the risk of affecting cetacean populations that frequent the area likely to be affected, and the adoption of procedures requiring continuous visual monitoring and the requirement to cease all movement when a cetacean is sighted within a given radius of the vessel. | BGC  PNC |
| 7 | Marine and terrestrial ecosystems are not sufficiently resilient and their biological and physical integrity is gradually being compromised by the effects of global and regional climate change | Environmental | P: Likely  I: Medium  Risk level = Medium | Management of the national protected area system will seek to control major pressures on biodiversity and harmonize the management of important biodiversity resources within PAs with that of the surrounding ecosystems in order to reduce the negative impacts of activities that take place outside PAs.  Improving the health of seagrass beds, coral reefs, mangroves, forests and associated biodiversity by reducing pressures will boost their resilience to climate change-induced stresses such as coral bleaching. | PNC |
| 8 | There is insufficient institutional capacity to co-manage the PA system | Institutional | P: Moderately likely  I: Medium  Risk level = Low | The project aims to improve the capacity of stakeholders in the co-management of all protected areas in Comoros, including institutions such as the Agency for the Management of Protected Areas, the General Directorate of Environment and Forests, the co-management committees of each national park and the village co-management committees of national parks.  In accordance with Article 53 of Law No. 18-005/AU of December 05, 2018 on the national system of protected areas of the Comoros relating to the management delegation, the agency called 'Comoros National Parks' has as its essential mission: to manage protected areas in accordance with the provisions of the law on protected areas; to ensure regulatory control within protected areas; to develop and implement the development and management plans of protected areas. Furthermore, the national protected area system has established 56 village co-management committees for protected areas and 6 site co-management committees. All of these PA governance bodies constitute a network of actors capable of participating in the PA co-management process promoted in Comoros.  The project will develop formal collaboration agreements for the co-management of resources, established between the National Parks Agency, the National Directorate of the Environment, and the National Directorates of the fisheries, agriculture, tourism, land use planning, and the National Office of Forestry and Coastal Zones sectors, in order to harmonize land use, coastal and resource planning within the PAs with the jurisdictions relevant to these sectors (sub-output 1.2.4). | DGEF |
| 9 | The socio-economic context is unstable and does not favor the emergence of environmental awareness among the population, who are not willing to change their behaviors and unsustainable uses of natural resources. | Strategic | P: Moderately likely  I: Medium  Risk level = Low | The project will continue to raise awareness among local communities on the benefits associated with biodiversity conservation and ecosystem services through environmental education and will provide demonstration and training on new sustainable resource use practices and associated benefits (Sub-outputs 4.3.1 and 4.3.2). It will support the development of a livelihoods program based on the sustainable use of ecosystem services provided by PAs (component 3). | DGEF  PNC |
| 10 | 3rd or further waves of COVID-19, especially with the threat of the new delta variant that is already affecting countries in the region. The government could therefore adopt restrictive measures that will affect project implementation | Social and Environmental | P: Moderately likely  I: Medium  Risk level = Low | The capacity building of communities and the development of partnerships with the private sector (component 3) will generate new sources of income based on the sustainable valuation of ecosystem goods and services within PAs, which will contribute to the economic recovery of communities affected by COVID-19 while strengthening the ecological resilience of the country.  In addition, the co-management committees of the national parks with the support of community mobilisers are important actors in the implementation of the risk communication and community engagement plan (CREC) for the COVID-19 response. The ecoguards, particularly those assigned to the coastal villages, will support the efforts of the police to strengthen the control and surveillance system along the coasts to limit the spread of the virus across the islands in the country. | PNC |

1. According to current data from World Clim reported in Bourgoin et al. 2017 [↑](#footnote-ref-2)
2. Statistics are from the UNDP Human Development Report 2020. Country Profile Comoros. [↑](#footnote-ref-3)
3. expressed in constant 2017 dollars converted using purchasing power parity (PPP) conversion rates [↑](#footnote-ref-4)
4. The HDI is a synthetic indicator that reflects three basic dimensions of human development, life expectancy, the number of years of education and the standard of living assessed on the basis of gross national income per capita. [↑](#footnote-ref-5)
5. https://oec.world/en/profile/country/com [↑](#footnote-ref-6)
6. https://www.conservation.org/priorities/biodiversity-hotspots. Biodiversity hotspots must meet two criteria: (i) have **at least 1,500 vascular plants as endemics and (ii)** have **30% or less of its original natural vegetation**, i.e. it must be threatened. [↑](#footnote-ref-7)
7. **Chameleon:** *Furcifer cephalolepis*, **Geckos:** *Phelsuma comorensis, Phelsuma v-nigra,* *Paroedura sanctijohannis, Ebenavia tuelinae;* skinks: *Cryptoblepharus ater* and *Cryptoblepharus quinquetaeniatus*: Snakes: *Lycodryas cococola,* and *Madatyphlops comorensis* [↑](#footnote-ref-8)
8. Comoro Flying Fox, Comoro Roussette, Anjouan Myotis, and the Mongoz lemur (*Eulemur mongoz* **CR**) critically endangered in Madagascar but abundant in Comoros [↑](#footnote-ref-9)
9. Spiders: *Spermophora lambilloni*, *Microdipoena comorensis,* *Veissella milloti;* butterflies: *Charaxes nicati, Charaxes paradoxa, Papilio aristophontes, Graphium levassori;* moths: *Fodinoidea pupieri, Stenochora comorensis;* other insect species: *Adelophasma anjouanense*, *Pissodogryllacris picea*, *Fodinoidea pupieri, Stenochora comorensis, Pheidole vulcan* and *Tetramorium karthala*, and a land snail *Gulella decaryi* [↑](#footnote-ref-10)
10. Sewall, B.J. 2020. *Rousettus obliviosus* (amended version of 2016 assessment). *The IUCN Red List of Threatened Species* 2020: e.T19757A166527449. https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T19757A166527449.en. Downloaded on 05 July 2021. [↑](#footnote-ref-11)
11. https://www.cloudbirders.com/tripreport/repository/LAGERQVIST\_Comoros\_10\_2012.pdf [↑](#footnote-ref-12)
12. Endemic Orchids - *Angraecum scottianum*, *Bulbophyllum comorianum*, *Jumellea anjouanensis*, *Jumellea pailleri*, *Aeranthes virginalis*, and *Vanilla humblotii* [↑](#footnote-ref-13)
13. *Dypsis lanceolata*, *Ravenea hildebrandtii*, and *Ravenea moorei* [↑](#footnote-ref-14)
14. such as *Aloe alexandrei, Polyscias felicis*, *Tambourissa comorensis*, *Impatiens wibkeae*, *Gyrostipula comorensis*, and *Cyphostemma comorense* [↑](#footnote-ref-15)
15. *Khaya comorensis, Weinmannia comorensis, Ocotea comorensis*, *Nuxia pseudodentata*, *Eugenia comoriensis*, and *Calophyllum comoriense,* endemic to the Comoros, and *Gambeya boiviniana* and *Tambourissa leptophylla* (**EN**) endemic to the Comoros and Madagascar [↑](#footnote-ref-16)
16. The four IBAs in the Comoros are Grid, Mont Karthala, Mwali Highlands and Ndzuani Highlands [↑](#footnote-ref-17)
17. http://archive.ramsar.org/cda/en/ramsar-documents-list-anno-comoros/main/ramsar/1-31-218%5E16484\_4000\_0\_\_ [↑](#footnote-ref-18)
18. including *Megaptera novaeangliae* (Humpback whale) which breeds from mid-July to the end of October, *Eubalaena australis* (Southern Right Whale), *Balaenoptera edena* (Bryde’s whale) and *Physeter macrocephalus* (Sperm whale - **VU**) [↑](#footnote-ref-19)
19. including *Sousa chinensis* (Indo-Pacific humpback dolphin **VU**), *Stenella longirostris* (Spinner dolphin), *Tursiops truncatus* (Common bottlenose dolphin), and *Delphinus delphis* (Common dolphin) [↑](#footnote-ref-20)
20. Kiskzka J., O. Breysse, M. Vely and K. Boinali. 2006. Marine mammals around the Comoros archipelago (Mozambique Channel): recent records and review of available information. [↑](#footnote-ref-21)
21. Heemstra, P. C., *et al*. Fishes of the deep demersal habitat at Ngazidja (Grand Comoro) Island, Western Indian Ocean. South African Journal of Science **102**. September/October 2006 [↑](#footnote-ref-22)
22. Wickel J., Nicet J.B., Pinault M. et Maharavo J. (2016). Développement d’un réseau national d’aires protégées de l’Union des Comores : Analyse des écosystèmes marins et inventaire de la biodiversité récifale sur Grande Comore et Anjouan. Rapport MAREX pour le compte de l’Union des Comores/programme des Nations unies pour le développement. 65 pages + annexes. [↑](#footnote-ref-23)
23. Stratégie d’Expansion du Système National des Aires Protégées aux Comores (2017-2021) [↑](#footnote-ref-24)
24. Mangroves, salt marshes and sea grass beds. Lugendo, B. 2016. *Regional State of the Coast Report.*  [↑](#footnote-ref-25)
25. Spenceley, A., Snyman, S., and Eagles, P. F. J. (2017) Guidelines for tourism partnerships and concessions for protected areas: Generating sustainable revenues for conservation and development, Report to the Secretariat of the Convention on Biological Diversity and IUCN [↑](#footnote-ref-26)
26. Resources available in French: https://www.cbd.int/tourism/ [↑](#footnote-ref-27)
27. Spenceley, A., Snyman, S., and Eagles, P. F. J. (2017) ibid. [↑](#footnote-ref-28)
28. Lotter, W.D., Roberts, K., Singh, R., Clark, K., Barlow, C., de Kock, R., Steiner, K., Mander, D., Khadka, M. et Guerrero, J. (2016). Lutte anti-braconnage dans et autour des aires protégées. Lignes directrices pour la formation des gardes. [↑](#footnote-ref-29)
29. The National Office for the Environment of Madagascar may be asked to provide this support. [↑](#footnote-ref-30)
30. Project "Capacity building of grassroots community organizations and promotion of volunteerism as a model for village community involvement in achieving the Millennium Development Goals in Comoros". [↑](#footnote-ref-31)
31. These towers were built in 2008 by Telecom and in 2016-2017 by Telma, thus prior to the creation of the new national parks on the Ngazidja and Ndzuani islands, although preliminary steps for the establishment of the PA network had been initiated for several years. Since 2016, 110 towers have been built by the Telma company, which plans to build 15 more. In those years, only the Mohéli Marine Park had been created (2001) and later converted into the Mohéli National Park (2015) through the integration of a large part of the island's terrestrial territory. Negotiations for the towers built in the Mohéli National Park - without the prior consent of the Park management authorities - led to an agreement for the financing by Telma of the park's surveillance including the supply of 4 motorcycles, 4 computers and payment of the salary for 3 eco-guards for an unlimited period. The project to build and operate the towers had not until recently been the subject of any environmental impact assessment (EIA). However, in 2021, Telma undertook a procedure to ensure the environmental compliance of its facilities, including those that have already been built, and stated that it was prepared to dismantle any installation located in habitats critical to biodiversity and to negotiate with the DGEF and the National Parks Agency the compensation payment for towers located inside a PA but outside critical habitats, according to the polluter-pays principle. The ecological study entrusted to the University of Comoros showed that 10 towers were located within the boundaries of PAs. Ongoing negotiations are considering the payment of compensation for the socio-economic losses of local communities and for impacts on biodiversity, as well as the potential dismantling of all or part of these 10 towers. Telecom has implemented and is operating 100 towers of which 23 are located within PAs and plans to build 39 additional ones, of which 15 will be located within PAs. Steps to assess their environmental and socioeconomic impact and negotiate possible compensation measures have not yet been initiated. [↑](#footnote-ref-32)
32. Webinars and training tools are available on the Conservation Site Finance Alliance site, for example: https://www.conservationfinancealliance.org/what-were-watching/2021/1/27/cfa-webinar-practice-standards-for-conservation-trust-funds [↑](#footnote-ref-33)
33. https://www.cafeconsortium.org/ [↑](#footnote-ref-34)
34. https://www.conservationfinancealliance.org/ [↑](#footnote-ref-35)
35. https://avibase.bsc-eoc.org/checklist.jsp?region=KM [↑](#footnote-ref-36)
36. Management Effectiveness Tracking Tool for protected areas (METT) [↑](#footnote-ref-37)
37. https://www.dugongconservation.org/where-we-work/madagascar/ [↑](#footnote-ref-38)
38. Western Indian Ocean Marine Science Association (WIOMSA) [↑](#footnote-ref-39)
39. https://www.cms.int/dugong/en/news/wiomsa-dugong-project-going-strong [↑](#footnote-ref-40)
40. FairWild Foundation. 2014. FairWild Resource Assessment: FairWild Guidance Manual for Establishing Species and Area Management Plans for Low Risk Plant Species. (Version 1.0 - December 2014). FairWild Foundation, Weinfelden, Switzerland. [↑](#footnote-ref-41)
41. <https://www.fairwild.org/the-fairwild-standard>. The FairWild Foundation’s mission is to enable transformation of resource management and business practices to be ecologically, socially and economically sustainable throughout the supply chain of wild-collected products. [↑](#footnote-ref-42)
42. **Definition of infestation levels**: (<https://cvc.ca/wp-content/uploads/2012/09/cvc-appendix-landowners-guide-to-invasives.pdf>): **Light:** A patch of small plants where isolated clusters of plants can be easily counted or distinguished in a portion of a habitat. Patches are generally no larger than 5 meters in diameter and are distant from other stands of invasive plants. **Moderate:** Small, isolated patches 5 to 50 meters in diameter join together but do not yet constitute a coherent stand. The plants in question are not yet part of the dominant community, at the ground, shrub or canopy level. **High:** IAS species are found in abundance in the habitat and form a dominant component of the habitat at the ground, shrub, or canopy level. [↑](#footnote-ref-43)
43. Article 62, paragraph 5 of the law on the National System of Protected Areas indicates that without prejudice to the offenses provided for in the penal code, the framework law on the environment, the legislation on forestry, hunting, mining, fishing of biological resources, fauna and flora, and by the merchant marine code, constitutes an offence when committed in a protected area, any removal of shore materials, including sand, gravel and pebbles, or any alteration of animals, plants, habitats, monuments or any other object without authorization from the agency. Article 63 states that any species of fauna and flora irregularly held, transported or offered for sale outside a protected area is presumed to have been taken from within it. The same applies to minerals, quarry materials, and corals. [↑](#footnote-ref-44)
44. <https://panorama.solutions/en> [↑](#footnote-ref-45)
45. These areas do not include dry forests and will be adjusted during the 1st year of the project on the basis of inventories to be carried out. [↑](#footnote-ref-46)
46. These areas do not include dry forests and will be adjusted during the first year of the project on the basis of inventories to be carried out. [↑](#footnote-ref-47)
47. See <https://www.thegef.org/gef/policies_guidelines> [↑](#footnote-ref-48)
48. See http://www.undp.org/content/undp/en/home/operations/transparency/information\_disclosurepolicy/ [↑](#footnote-ref-49)
49. See https://www.thegef.org/gef/policies\_guidelines [↑](#footnote-ref-50)
50. PET: polyethylene terephthalate, a recyclable and reusable plastic generally considered safe and non-toxic [↑](#footnote-ref-51)
51. See <https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default>. [↑](#footnote-ref-52)
52. Category 6 Managed Resource Protected Area: managed mainly for the sustainable use of natural ecosystems. [↑](#footnote-ref-53)
53. Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to “women and men” or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people. [↑](#footnote-ref-54)
54. See the [Convention on Biological Diversity](https://www.cbd.int/) and its [Cartagena Protocol on Biosafety](https://bch.cbd.int/protocol). [↑](#footnote-ref-55)
55. See the [Convention on Biological Diversity](https://www.cbd.int/) and its [Nagoya Protocol](https://www.cbd.int/abs/) on access and benefit sharing from use of genetic resources. [↑](#footnote-ref-56)
56. Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights. [↑](#footnote-ref-57)