

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Sustainable and Inclusive Access to Water Program for Resilient Agriculture (PROAGUA)

Region

Africa

GEF Project ID

12344

Country(ies)

Cabo Verde

Type of Project

MSP

GEF Agency(ies):

IFAD

GEF Agency ID

Executing Partner

Ministry of Agriculture and Environment

Executing Partner Type

Government

GEF Focal Area (s)

Multi Focal Area

Submission Date

5/15/2026

Project Sector (CCM Only)

AFOLU

Taxonomy

Focal Areas, Biodiversity, Mainstreaming, Agriculture and agrobiodiversity, Land Degradation, Sustainable Land Management, Drought Mitigation, Ecosystem Approach, Integrated and Cross-sectoral approach, Sustainable Agriculture, Restoration and Rehabilitation of Degraded Lands, Sustainable Livelihoods, Community-Based Natural Resource Management, Improved Soil and Water Management Techniques, Food Security, Gender Equality, Gender results areas, Access to benefits and services, Participation and leadership, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators

Type of Trust Fund

GET

Project Duration (Months)

72

GEF Project Grant: (a)

4,251,202.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

403,864.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

4,655,066.00

Total Co-financing

31,000,000.00

PPG Amount: (e)

150,000.00

PPG Agency Fee(s): (f)

14,000.00

PPG total amount: (e+f)

164,000.00

Total GEF Resources: (a+b+c+d+e+f)

4,819,066.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”. (max. 250 words, approximately 1/2 page)

The Sustainable and Inclusive Access to Water Program for Resilient Agriculture (PROAGUA) project addresses critical, interlinked socioeconomic and environmental challenges in Cabo Verde, where land degradation, droughts, biodiversity loss undermine livelihoods and ecosystem stability, exacerbated by climate variability. It is recalled that Cabo Verde is a dry, resource-poor island nation where soil erosion, drought, and poor soils have long threatened agriculture and livelihoods. Over 90% of agriculture is rain-fed on steep slopes, resulting in severe soil erosion, declining productivity and increased vulnerability to droughts and extreme events. These pressures contribute to food insecurity, poverty and degradation of ecosystem services, while institutional fragmentation, weak land-use planning and limited adoption of sustainable practices constrain effective responses. The target four Islands for PROAGUA are a home to 13 Key Biodiversity Areas of global significance, on 292,521 ha. The KBAs experience drivers of biodiversity loss, principally: habitat loss and degradation; invasive and introduced species; overuse of natural resources and unsustainable fishing; and climate change and drought.

In response to the aforementioned socioeconomic and environmental challenges and barriers, PROAGUA is structured around three components: (i) strengthening the enabling environment through improved institutional capacity, policy coherence, and biodiversity mainstreaming; (ii) restoring degraded landscapes and promoting climate-resilient, biodiversity-compatible agro-sylvo-pastoral livelihoods; and (iii) M&E to enhance monitoring, evaluation, and knowledge systems to support adaptive management and scaling.

Socioeconomic benefits include improved food and nutrition security, diversified income sources, and enhanced resilience for approximately 5,400 beneficiaries, with strong inclusion of women and youth. Environmental benefits include restoration of 1,500 ha of degraded land, 474,094 metric tons of CO₂e in carbon emission mitigation potential, and improved land management through community-based sustainable land management practices and technologies, including adoption of climate-smart agriculture and agroecological practices on 2,800 ha. These interventions enhance soil fertility, water regulation, vegetation cover and biodiversity conservation, while contributing to climate mitigation and adaptation. By transitioning from fragmented interventions to an integrated landscape approach, PROAGUA is transformative in design to deliver measurable global environmental benefits and strengthens long-term socio-ecological resilience.

Indicative Project Overview

Project Objective

To enhance biodiversity conservation and sustainable land management in Cape Verde through integrated landscape management, ecosystem restoration and sustainable livelihoods on Fogo, Santiago, Santo Antão and São Nicolau Islands.

Project Components

Component 1: Strengthening the enabling environment for biodiversity conservation, ecosystem restoration and drought planning

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
400,000.00	2,959,641.00

Outcome:

1.1 Strengthened institutional capacities and policy frameworks drive coordinated implementation of biodiversity conservation, ecosystem restoration and drought planning

Output:

1.1.1: Institutional and technical capacity of 1,200 stakeholders (50% male and 50% female) strengthened for landscape-scale land rehabilitation, drought planning and biodiversity conservation on Fogo, Santiago, Santo Antão and São Nicolau Islands.

1.1.2: 12 community-based natural resource management (CBNRM) systems strengthened on priority Islands of Fogo, Santiago, Santo Antão and São Nicolau. Each CBNRM committee includes at least 40% women.

1.1.3: Gender-responsive biodiversity mainstreaming integrated into four local development plans, ensuring equitable participation and benefits for women, men, and youth in tourism, fisheries, and agriculture sectors.

Component 2: Upscaling SLM practices for sustainable agriculture and livelihood systems

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
3,446,326.00	24,474,442.00

Outcome:

2.1 Degraded agropastoral landscapes are rehabilitated through biodiversity-inclusive sustainable land management practices, resulting in restored soil functions, improved land productivity, enhanced ecosystem integrity and strengthened conservation.

2.2 Target communities, including women and youth, adopt sustainable, agro-silvo-pastoral livelihood systems that diversify incomes, enhance food and nutrition security, reduce pressure on natural ecosystems, and strengthen community resilience while contributing to biodiversity conservation and land degradation neutrality.

Output:

2.1.1: 1,500 ha of degraded landscapes restored through Nature-based solutions and sustainable biodiversity-inclusive land management practices and technologies.

2.1.2: 1,500 ha of productive landscapes and land restoration investments in output 2.1.1 integrated with gender-responsive biodiversity practices (integration of native species, habitat mosaics and pollinator-friendly practices)

2.1.3: Gender-responsive climate-smart agriculture (CSA) and agroecological practices (e.g., integration of fruit and fodder trees into agricultural plots, conservation agriculture, agroforestry, drought-tolerant crops) adopted on 2,000 ha in targeted landscapes.

2.2.1: Community-based sustainable land management practices and technologies (such as traditional terracing on slopes, stone bunds and dry-stone walls, irrigation, water harvesting and soil moisture conservation systems) established on 800 ha.

2.2.2: Gender-responsive community-based drought-smart, biodiversity and SLM-compatible value chains developed and strengthened as livelihood initiatives (beekeeping, non-timber forest products, ecotourism, and value-added enterprises) to generate sustainable community incomes for 5,400 people (50% women, 50% men and 40% youth) while creating incentives for conservation.

2.2.3: Capacity of 2,500 smallholder farmers (50% women, 50% men and 40% youth) strengthened with community-level governance mechanisms to support LDN and biodiversity outcomes and GALS+ to address climate change and tackle the social and gender dynamics that often block effective adaptation.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
202,438.00	2,089,728.00

Outcome:

3.1 Effective results-based management, monitoring, and knowledge sharing enhance learning and adoption of best biodiversity and SLM practices with a focus on gender-responsive and socially inclusive approaches

Output:

3.1.1: Gender-inclusive knowledge products and lessons generated and shared with 5,400 people (50% women, 50% men and 40% youth) target beneficiaries through targeted dissemination and facilitated inter-Island (Fogo, Santiago, Santo Antão and São Nicolau) exchange visits to strengthen peer learning, adoption of sustainable practices.

3.1.2: At least five (5) project gender and youth-inclusive communication tools developed and widely disseminated through existing Island information exchange platforms to enhance outreach and stakeholder engagement.

3.1.3: Gender-responsive digital monitoring tools and geospatial platforms developed and operationalized to facilitate the monitoring, reporting and sharing of lessons.

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1: Strengthening the enabling environment for biodiversity conservation, ecosystem restoration and drought planning	400,000.00	2,959,641.00
Component 2: Upscaling SLM practices for sustainable agriculture and livelihood systems	3,446,326.00	24,474,442.00
M&E	202,438.00	2,089,728.00
Subtotal	4,048,764.00	29,523,811.00
Project Management Cost	202,438.00	1,476,189.00
Total Project Cost (\$)	4,251,202.00	31,000,000.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Cabo Verde is a small, dry, volcanic archipelago at the crossroads of subtropical Macaronesia and the Sahel. Its biodiversity is relatively poor in species but rich in endemics (species found nowhere else) and is highly exposed to climate change and human pressure. Out of nearly 400 taxa of native vascular flora in the country, 92 are endemic. Also, out of the 518 tax of useful plants, 38 are endemic with 44 endangered.^[1] The country experiences tropical dry climate, with low, irregular rainfall (~300–350 mm/year) and frequent droughts; wetter,

mountainous western islands contrast with lower, drier eastern islands.^{[2]²} Rugged mountains and deep valleys create many microclimates that shape species distributions and remnants of native vegetation. Also, rugged terrain often acts as a refuge where native vegetation persists because it is harder to exploit.^{[3]³} It should be emphasised that desertification and land degradation in Cabo Verde are critical environmental challenges driven by intense droughts, steep terrain, and unsustainable land use, affecting food security and rural livelihoods. The archipelago faces significant soil erosion, loss of organic matter, and water scarcity, aggravated by climate change.^{[4]⁴}

However, biodiversity is increasingly being threatened. Habitat loss, overuse of native plants and introduced species are major drivers of biodiversity decline. Much native vegetation has been replaced by crops, plantations (e.g., pine, eucalyptus), and other introduced plants, with burning and grazing accelerating erosion and scrubland degradation.^{[5]⁵} Table 1 below further provides main threats to biodiversity in Cabo Verde.

Chronic drought and desertification, is expected to accelerate species range shifts, increase extinction risk; especially for narrowly distributed island endemics - and alter ecosystem services critical to livelihoods.^{[6]⁶} It is recalled that endemism increases the climate change risk for species, with terrestrial endemics being 2.7-10 times more affected than non-endemic natives and introduced species, highlighting the need for adaptation and mitigation strategies in biodiversity rich areas.^{[7]⁷} Cabo Verde is among the West African regions already experiencing warming, high climate variability and recurrent droughts, trends expected to intensify.^{[8]⁸} Impacts include:

- Endemic trees: By 2080, climatically suitable habitat is projected to shrink by 28–34% for *Dracaena draco* subsp. *caboverdeana* and *Sideroxylon marginatum*, while expanding for the more arid-tolerant *Phoenix atlantica*.^{[9]⁹}
- *Faidherbia albida*: About two-thirds of current territory is climatically suitable, but suitable area is projected to decline by 2080, especially under high-emission scenarios.^{[10]¹⁰}
- Marine realm: Changing oxygen conditions in the eastern tropical North Atlantic may favor some gelatinous zooplankton taxa while harming others, potentially reshaping midwater communities off Cabo Verde.^{[11]¹¹}

Cabo Verde's biodiversity is concentrated in a small, harsh and highly variable island environment, with many species found nowhere else. Endemic plants and fragile terrestrial ecosystems are already heavily impacted by land-use change and are projected to face substantial additional stress from warming and drying climates. Thus, combining protection of endemic-rich habitats, restoration with native species and broader nature-based

solutions offers the most promising path to conserve biodiversity while strengthening human well-being in the archipelago.

Overall, Cabo Verde faces severe and interlinked challenges of land degradation, biodiversity loss, drought and climate vulnerability, driven by arid to semi-arid climatic conditions, steep island topography and increasing climate variability. More than 90 per cent of agricultural land is rain-fed and located on sloped terrain, exposing soils to acute hydric erosion, nutrient depletion and declining productivity. Prolonged droughts, intense rainfall events and extreme climatic shocks further intensify degradation processes and ecosystem fragility.^[12]^[12] On the other hand, structural gender disparities undermine communities' ability to adapt. Women, particularly in rural areas, are more vulnerable because of their responsibility for managing natural resources, such as water and subsistence farming. Water scarcity and soil degradation increase their workload and threaten the food security of the families they head.^[13]^[13]

Land degradation national context: Land degradation in Cabo Verde reflects centuries of overuse of a very fragile, drought-prone island environment, leading to erosion, desertification and loss of native vegetation. Strong governance and extensive conservation work have partially stabilized landscapes but pressures from climate change, water scarcity and past mismanagement mean that soils, vegetation and biodiversity remain highly vulnerable.

Cabo Verde faces systemic land degradation and biodiversity loss, driven by a combination of climate variability, steep island topography and unsustainable land-use practices. Over 90 per cent of agricultural land is rain-fed and located on highly sloped terrain, making soils extremely vulnerable to hydric erosion, nutrient loss and declining productivity. Recurrent droughts, intense rainfall events and extreme climatic shocks (e.g. hurricanes and prolonged drought periods) further exacerbate land degradation processes.

National assessments conducted between 2000 and 2015 reveal that approximately 40% of the national territory is affected by erosion, while over 8,400 ha show declining land productivity and more than 2,100 ha have undergone ecologically negative land-cover change, particularly through conversion of forests and rangelands into unsustainable agricultural or urban uses. Soil organic carbon levels are critically low in large parts of the country, undermining both land productivity and ecosystem resilience. These pressures directly contribute to loss of terrestrial biodiversity, degradation of forest and pasture ecosystems, reduced ecosystem services, increased vulnerability of rural livelihoods, sedimentation of coastal and marine ecosystems and heightened risks of desertification.

Socio-economic and environmental context of priority Islands: Fogo, Santiago, Santo Antão and São Nicolau

Santiago has the largest area used for agriculture (52.5%), followed by Santo Antão (16%) and Fogo (15.8%) and rainfed farming dominates in all of them. The staple crops, such as maize and beans, are produced through rainfed subsistence farming, whereas irrigated crops (i.e., sugarcane, tomatoes) are mostly grown for commercial purposes. The prolonged drought periods, exposure, erosion and soil degradation, which led to increasing desertification over the last decades, have been identified as the main constraints to agrarian

development across the ten islands of the archipelago.^{[14]¹⁴}

Fogo, Santiago, Santo Antão, and São Nicolau are mountainous, volcanic islands in a dry tropical climate, with livelihoods strongly tied to rainfed agriculture, livestock, and increasingly tourism. All face water scarcity, land degradation, biodiversity loss, and climate-change-driven droughts, but differ in population weight and economic roles. From the physical and environmental context:

- All four are rugged high islands: max elevations are Fogo 2829 m, Santo Antão 1979 m, Santiago 1392 m, São Nicolau 1304 m.^{[15]¹⁵}
- Useful plant diversity is highest on Santiago (388 taxa) and Santo Antão (372), followed by Fogo (297) and São Nicolau (234), reflecting altitude and farming intensity. Native and endemic plants provide fuelwood, forage, and utilitarian materials, but some are overused and threatened.^{[16]¹⁶}
- On Fogo Island, there have been shifts from native grassland to systems dominated by exotic trees and crops, with increased fire, erosion and soil degradation.^{[17]¹⁷}
- In the São Nicolau highlands, there is past presence of native woody taxa (e.g. *Euphorbia tuckeyana*, *Dracaena*) suitable for restoration. However, there is a recent introduction of pines, eucalypts, cacti, with grazing and burning driving scrub loss and erosion.^{[18]¹⁸}
- Additionally, though knowledge is scanty due to limited research, marine/coastal ecosystems around Santo Antão and other islands host diverse corals, gorgonians and fishes.^{[19]¹⁹}
- Climate is semi-arid with ~300 mm/year, highly seasonal rainfall and frequent drought; topography creates humid highland vs arid lowland microclimates, especially on Santiago, Santo Antão and Fogo.^{[20]²⁰}
- There have been efforts for afforestation on high, humid slopes (Santo Antão, Santiago, Fogo) to reduce erosion. However, lowlands remain more arid and degraded.^{[21]²¹}
- Native vegetation formerly included open woodlands and scrub; over time, native woody scrub has been replaced by pasture and crops, and invasive species have expanded, e.g. on Fogo and São Nicolau.^{[22]²²}

The table below summarises land use and indicators on the agriculture sector related to the four target Islands.

Table of key land use and agriculture indicators^{[23]²³}

Island	Share of national agri area	Environmental notes	Population and poverty context notes ^{[24]²⁴}
• Santiago	• 52.5% of agricultural land	• Diverse microclimates;	• 273,988 (2021 Census), making it the most populous island, hosting about 56% of the national population.

heavy land conversion			
• Santo Antão	• 16.0% of agricultural land	• Steep, humid NE slopes; important for crops	• 36,950 - with a trend of decreasing population due to migration. Poverty is rated above the national average. It is characterized by subsistence agriculture and has been impacted by severe drought, which elevates poverty levels, often considered higher than the national average.
• Fogo	• 15.8% of agricultural land	• Active volcano, fertile but erosion-prone soils	• 33,754. Poverty levels: Fogo has historically faced high poverty rates. A 2015 assessment cited a 49.4% poverty rate on the island, the highest at the time, frequently impacted by volcanic activity and drought-related agricultural losses.
• São Nicolau	• 3.4% of agricultural land	• Historical scrub degradation; reforestation potential	• Population: 12,306. Poverty levels: Similar to Fogo and Santo Antão, São Nicolau exhibits a vulnerability rate that is above 50%, with a poverty rate above the national average. The island's economy, dependent on agriculture, has suffered from drought.

On the socio-economic context and livelihoods front, Santiago is the largest, first colonized, political capital (Praia) and main agricultural and economic centre; majority of arable land and population; strong reliance on rainfed maize/beans plus irrigated cash crops.^{[25]²⁵} On Fogo Island, the economy is based on agriculture (notably in Chã das Caldeiras), livestock and growing geotourism around the active volcano and Natural Park. Repeated eruptions (e.g. 2014–2015) destroy villages and fields but also create new geosites and attract visitors.^{[26]²⁶} Santo Antão is an important agricultural island with terraced, steep slopes. The island supports rainfed and irrigated farming in humid valleys. It is also a site for coastal and marine research and fisheries.^{[27]²⁷} Finally, São Nicolau has a smaller share of national agriculture; historically experienced substitution of native scrub by pasture. Gathered palaeoecological data inform current restoration and land-use planning on the island.^{[28]²⁸}

It should be noted that across islands, livelihoods are highly climate-sensitive (drought, soil erosion, natural hazards) and constrained by water scarcity and limited arable land.^{[29]²⁹} Coastal dependence is strong, with >90% of national population and most economic activity concentrated along coasts, including on Santiago and Fogo.^{[30]³⁰}

The four target islands are relatively small in terms of land mass, however they are home to key biodiversity areas (KBAs) of global significance. The map below shows KBAs – labelled are those of global significance with important trigger species.

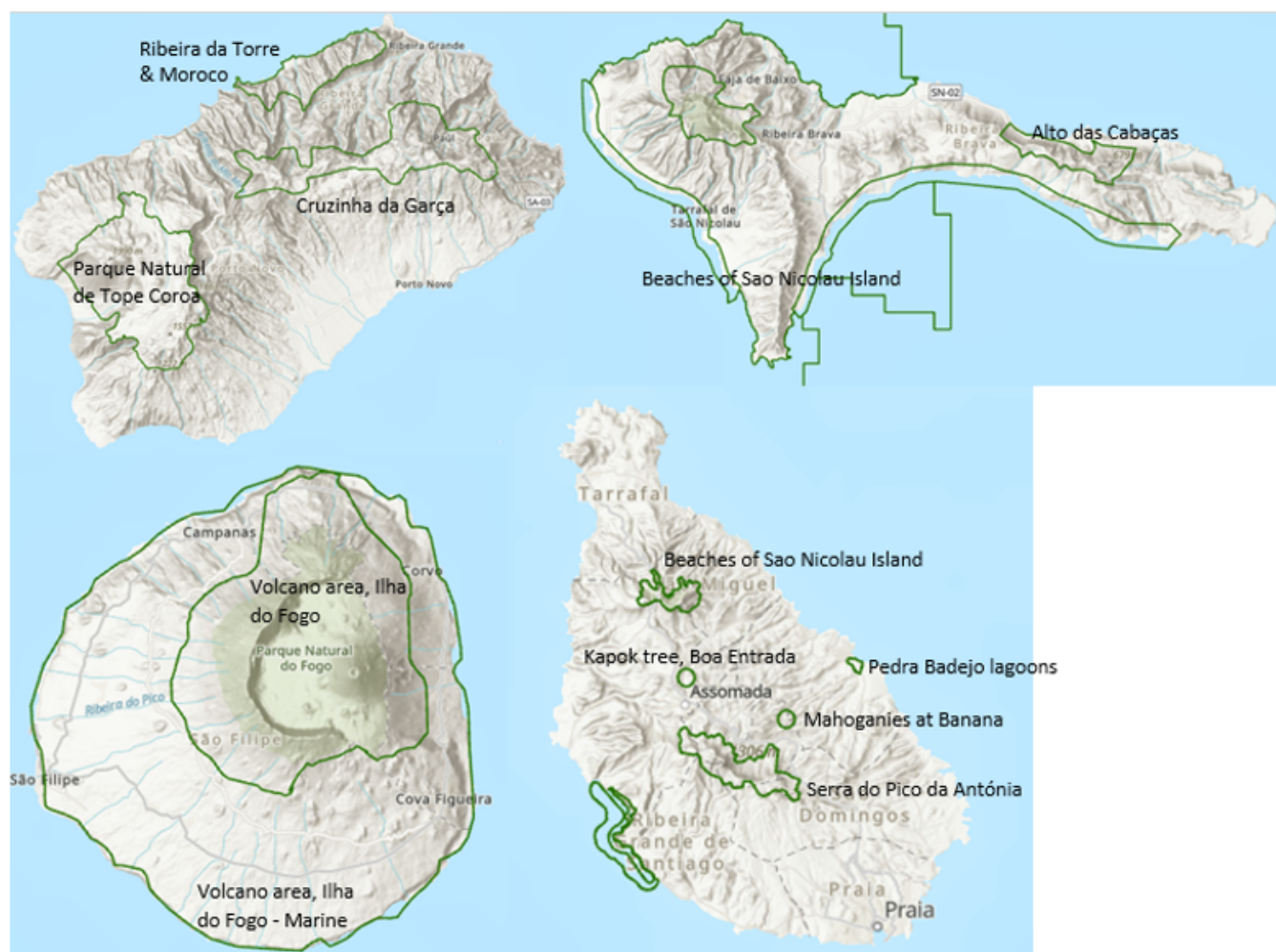


Figure showing KBA of global significance in the target islands (grouped)

Source: Key Biodiversity Areas Partnership[1]

In total, the KBAs on the target islands is about 2,925.21 km² (or 292,521 ha). The table below summarizes the KBAs on each target Island and the species:

Table of KBAs of global significance per target Island

[1]Key Biodiversity Areas Partnership (2026) Key Biodiversity Areas factsheet Cabo Verde – accessed from <https://keybiodiversityareas.org/> [March 26, 2026]

Name of Island[1]	Name of KBA	Species details
Santo Antão	Cova / Paul / Ribeira da Torre and Moroco Area of KBA (km²): 55.68374 Protected area (PA) coverage (%): 53.69	Fabales (<i>Lotus latifolius</i> - DD); Asterales (<i>Tolpis farinulosa</i> – EN); Asterales (<i>Phagnalon melanoleucum</i> – EN); Asterales (<i>Sonchus daltonii</i> – EN); Gentianales (<i>Periploca chevalieri</i> – EN); Poales (<i>Carex antoniensis</i> – CR); Lamiales (<i>Verbascum capitis-viridis</i> – VU); Brassicales (<i>Diplotaxis gorgadensis</i> – EN); and Ranunculales (<i>Papaver gorgoneum</i> – CR)

Name of Island[1]	Name of KBA	Species details
	Cruzinha da Garça Area of KBA (km²): 25.01143 PA coverage (%): 99.78	Caryophyllales (<i>Limonium braunii</i> - EN); Lamiales (<i>Campylanthus glaber</i> - EN); Asterales (<i>Launaea gorgadensis</i> - CR); and Ericales (<i>Sideroxylon marginatum</i> - EN)
	Parque Natural de Tope Coroa Area of KBA (km²): 84.89818 PA coverage (%): 99.82	Asterales (<i>Artemisia gorgonum</i> - VU); Malpighiales (<i>Euphorbia tuckeyana</i> - NT); Lamiales (<i>Micromeria forbesii</i> - EN); Asterales (<i>Conyza feae</i> - EN); Brassicales (<i>Diploaxis antoniensis</i> - VU).
Sao Nicolau	Central mountain range of Ilha de São Nicolau[2] Area of KBA (km²): 18.53663 PA coverage (%): 51.23	Aves (<i>Pterodroma feae</i> Fea's Petrel - VU); Aves (<i>Pterodroma feae</i> Cape Verde Petrel - NT); Aves (<i>Acrocephalus brevipennis</i> Cape Verde Swamp-warbler - EN); Aves (<i>Falco peregrinus</i> Peregrine Falcon - LR/lc); and Aves (<i>Apus alexandri</i> Alexander's Swift - LC)
	Alto das Cabaças Area of KBA (km²): 12.59532 PA coverage (%): 87.60	Asterales (<i>Helichrysum nicolai</i> - CR); Brassicales (<i>Diploaxis sundingii</i> - CR); and Asterales (<i>Conyza schlechtendalii</i> - CR)
	Beaches of Sao Nicolau Island Area of KBA (km²): 51.44538	Reptilia (<i>Caretta caretta</i> Loggerhead Turtle - VU)
	Parque Natural da Serra da Malagueta Area of KBA (km²): 10.19193 PA coverage (%): 75.63	Asterales (<i>Conyza pannosa</i> - EN); Lamiales (<i>Globularia amygdalifolia</i> - EN); Caryophyllales (<i>Limonium lobinii</i> - CR); Asterales (<i>Conyza varia</i> - EN); Boraginales (<i>Echium hypertropicum</i> - EN); Malpighiales (<i>Euphorbia tuckeyana</i> - NT); and Asterales (<i>Campanula jacobaea</i> - VU)
Santiago	Pedra Badejo lagoons[3] Area of KBA (km²): 1.0542 PA coverage (%): 64.72	Aves (<i>Acrocephalus brevipennis</i> Cape Verde Swamp-warbler - EN).
	Serra do Pico da Antónia[4] Area of KBA (km²): 28.73381 PA coverage (%): 99.83	Aves (<i>Passer iagoensis</i> Cape Verde Sparrow - LC); Aves (<i>Apus alexandri</i> Alexander's Swift - LC); and Aves (<i>Acrocephalus brevipennis</i> Cape Verde Swamp-warbler - VU).

Name of Island[1]	Name of KBA	Species details
	Mahoganies at Banana, Ribeira Montanha, Ilha de Santiago Area of KBA (km²): 1.8309	Aves (<i>Ardea purpurea</i> Purple Heron - LR/lc)
	Kapok tree, Boa Entrada[5] Area of KBA (km²): 1.83062	Aves (<i>Ardea purpurea</i> Purple Heron - LR/lc)
Fogo	Volcano area, Ilha do Fogo Area of KBA (km²): 160.88517 PA coverage (%): 52.58	Aves (<i>Pterodroma feae</i> Fea's Petrel - VU); Aves (<i>Pterodroma feae</i> Cape Verde Petrel - NT); Aves (<i>Apus alexandri</i> Alexander's Swift - LC).
	Volcano area, Ilha do Fogo – Marine Area of KBA (km²): 2,472.51238 PA coverage (%): 0.03	Aves (<i>Pterodroma feae</i> Fea's Petrel - NT); and Aves (<i>Pterodroma feae</i> Cape Verde Petrel - NT).

Where DD = Data Deficient; EN = Endangered; CR = Critically Endangered; VU = Vulnerable; LC = Least Concern; LR/lc = Lower Risk / least concern; and NT = Near Threatened.

[1] Key Biodiversity Areas Partnership (2026) Key Biodiversity Areas factsheet <https://keybiodiversityareas.org/>

[2] A telecommunications station has been constructed on the summit of Monte Gordo and this may have caused disturbance to the breeding grounds of *P. feae*, although the species mainly breeds at somewhat lower elevation and was probably not affected by the construction itself.

[3] In view of the location of the site and its heavy use by local people and domestic livestock, protection of the lagoons will be difficult, perhaps impossible, to implement - reason for the disappearance of *Gallinula chloropus*

[4] Tree-felling causes temporary disturbance.

[5] The heron colony itself is severely threatened by local disturbance, in particular by birds being shot at and by boys collecting eggs.

The rich biodiversity of global significance summarized in the table above is under serious threat. The threats and drivers of biodiversity loss are linked to poor organizational management and legislative enforceability, and poor environmental knowledge and awareness. Others include the following:

- Habitat loss and degradation: Historical deforestation, agriculture, grazing, erosion; dry forest ecoregion now 'virtually none' of original habitat. [2]
- Invasive/introduced species: *Lantana*, *Furcraea*, *Prosopis*, *Eucalyptus* displace natives; forests mostly non-native.[3]

- Overuse and fishing: Overharvest of native/endemic plants; shark overfishing, multi species declines. [4]
- Climate change and drought: Increased droughts, shifting suitable habitat for endemic trees, reduced recruitment and survival. [5]

[2] Gonçalves-Souza, D., Verburg, P., & Dobrovolski, R. (2020). Habitat loss, extinction predictability and conservation efforts in the terrestrial ecoregions. Biological Conservation. <https://doi.org/10.1016/j.biocon.2020.108579>.

[3] Duarte, M., Gomes, I., Catarino, S., Brilhante, M., Gomes, S., Rendall, A., Moreno, Â., Fortes, A., Ferreira, V., Baptista, I., Dinis, H., & Romeiras, M. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. Plants, 11. <https://doi.org/10.3390/plants11101313>.

[4] Varela, J., Nunes, E., De Pina, D., Moreno, N., Reis, M., Pissarra, V., Santos, C., Repolho, T., Santos, C., & Rosa, R. (2025). Exploring the Decline of Shark Populations in Santiago Island, Cabo Verde: Insights From Local Fishers' Knowledge and Perspectives. Aquatic Conservation: Marine and Freshwater Ecosystems. <https://doi.org/10.1002/aqc.70167>.

[5] Varela, D., Romeiras, M., & Silva, L. (2022). Implications of climate change on the distribution and conservation of Cabo Verde endemic trees. Global Ecology and Conservation. <https://doi.org/10.1016/j.gecco.2022.e02025>.

Overall, Fogo, Santiago, Santo Antão and São Nicolau have important biodiversity resources of global and regional importance. They share a dry, hazard-prone volcanic environment where steep topography, scarce water and fragile soils shape both ecosystems and economies. Santiago and Santo Antão are primary agricultural and population hubs, while Fogo combines fertile volcanic landscapes with recurrent eruption risk and geotourism, and São Nicolau is smaller but ecologically important for restoration. Across all four islands, historical land use and species introductions have degraded native vegetation and soils, yet also created complex agro-ecosystems that sustain livelihoods. Current policy directions focus on protected areas, nature-based solutions, and more participatory risk and resource management to balance socio-economic needs with environmental resilience.

Drivers of biodiversity loss in Cabo Verde: In the 2014-2030 NBSAP, the government of the Cabo Verde identifies six drivers of biodiversity loss in the country. These are:

- **Overexploitation of natural resources:** Many useful native plants are heavily used for fuelwood, forage and utilitarian purposes, leading to overuse of some taxa; 44 useful species are endangered. [31]³¹ Unsustainable harvesting of fuelwood, and overgrazing reduce species populations and degrade ecosystems. Limited natural resources and high dependence on them intensify pressure, leading to soil degradation. It has been reported that habitat degradation, human disturbance (e.g., agriculture, traditional uses), and exotic species are primary reasons ~78% of endemic plants are threatened. [32]³²
- **Destruction of terrestrial habitats:** Urban expansion, tourism infrastructure, sand extraction, and agricultural encroachment contribute to habitat loss and fragmentation. Coastal ecosystems, such as mangroves and coral reefs, are particularly vulnerable to degradation. It has been reported that Long-term records from Santo Antão and São Nicolau show a transition from native scrub and woodland to open, degraded landscapes after human settlement, driven by burning, grazing, and cultivation, which triggered severe erosion and scrubland degradation. [33]³³
- **Introduction of exotic species:** Invasive species outcompete native flora and fauna, disrupt ecological balance, and can lead to local extinctions. Island ecosystems like Cabo Verde are especially sensitive due to their high

levels of endemism. Indeed, afforestation with fast-growing exotics (e.g., *Prosopis*, *Pinus*, *Eucalyptus*) changed vegetation structure and displaced native communities.^{[34]³⁴}

- **Poor organizational management and legislative enforcement:** Weak institutional coordination, limited technical capacity, and inadequate enforcement of environmental laws allow unsustainable practices to persist, undermining conservation efforts.
- **Poor environmental knowledge and awareness:** Low levels of awareness among communities and stakeholders can lead to unsustainable resource use, as the long-term impacts on biodiversity and ecosystem services are not fully understood.
- **Drought, desertification and Climate change:** Rising temperatures, desertification, prolonged droughts, sea-level rise, and increased storm intensity exacerbate ecosystem stress, reduce water availability, and threaten both terrestrial and marine biodiversity. It has been reported that Cabo Verde's dry climate, recurrent droughts, and projected increases in drought frequency and duration pose critical threats to terrestrial biodiversity and water-dependent species.^{[35]³⁵}

In light of the above drivers of biodiversity loss, it is acknowledged that Cabo Verde does have an environmental policy context that covers various pillars of the environment and not only soil, water and reforestation. From 1975 to 1991, the environment conservation policy in Cabo Verde was mostly focused on rural areas, with significant investments in the fight against erosion and desertification, vegetation recovery and mobilization and enhancement of water resources. This can be attested by the successive government programs and national development plans. Between 1986 and 1990, concerns about the reorganization of the territory, integrated development and the continued development of new and renewable energy policies come into play with some force. Since 1991, the Government started giving particular importance to the environment in the respective governing programs, with special emphasis on ecology, environment and natural resources, aimed at environmental preservation and the quality of life for citizens. Likewise, the 1996-2001 government program gave highlighted in particular marine environment and coastal areas. For land issues, the program adopted protection and planting of forests, enhancement of the urban environment and all its surroundings, and the promotion of international cooperation as main guidelines. The Government program for the VI Legislature (2001-2005) held that 'the conservation of ecosystems and the development of the islands were a central concern of the Government, which should be translated into a crosscut political orientation and fully taken into account in all other sectoral policies.' In the marine environment, the Government took it in order to protect marine ecosystems and the coastal areas so as to ensure the sustainable exploitation of its resources.^[1]

^[1] MAHOT, 2014. Estratégia Nacional e Plano de Ação para a Conservação da Biodiversidade 2015-2030. Direção Geral do Ambiente, Praia- República de Cabo Verde, Pag. 100pp <https://www.cbd.int/doc/world/cv/cv-nbsap-v2-en.pdf>

In sum, Cabo Verde's terrestrial and marine biodiversity is globally significant but highly vulnerable due to its small island geography, arid climate, and limited natural resource base. Biodiversity loss in the country is driven by a combination of direct pressures, including overexploitation of natural resources, habitat destruction (burning, grazing, agriculture, afforestation with exotics), and invasive alien species—and systemic constraints, such as weak enabling environments, limited institutional capacity, low environmental awareness, and escalating climate change impacts including drought and desertification. These drivers interact and reinforce one another, creating structural barriers that prevent effective conservation, ecosystem restoration, and climate-resilient development of the country.

Addressing these drivers is however stifled by critical systemic and institutional barriers – described below:

Barrier 1: Weak enabling environment for biodiversity conservation, land restoration and drought planning: A fundamental barrier underpinning biodiversity loss in Cabo Verde is the limited effectiveness of the enabling environment for biodiversity conservation, ecosystem restoration, and drought risk integration. While Cabo Verde has made progress in establishing protected areas and formal environmental policies, organizational, institutional, and legislative constraints limit their effectiveness. Key issues include: a) inadequate enforcement of environmental laws and protected area

regulations; b) fragmented institutional mandates across biodiversity, climate change, land use, fisheries, and development planning; c) insufficient integration of biodiversity conservation and drought risk considerations into national, sectoral, and municipal planning frameworks; and d) limited capacity for strategic land- and seascape-level planning that accounts for cumulative pressures and climate change impacts.

These constraints exacerbate the destruction of terrestrial habitats, particularly in coastal zones, dryland ecosystems, and nearshore marine environments. Climate change further amplifies these impacts through rising temperatures, prolonged droughts, sea-level rise, coastal erosion, and ecosystem degradation. Without a strengthened enabling environment, investment in conservation and restoration remains piecemeal, short-term, and unable to address systemic drivers of biodiversity loss.

Barrier 2: Limited adoption of sustainable land management, climate-smart and biodiversity-friendly food production systems: Rural communities heavily depend on climate-sensitive natural resources for survival, yet viable alternatives that reduce pressure on ecosystems remain underdeveloped or inaccessible. Unsustainable agricultural practices, overgrazing, and reliance on extractive activities continue due to limited access to climate-resilient technologies, financing, and diversified livelihood options. Climate variability, particularly drought, further undermines productivity, reinforcing a cycle of resource overexploitation and ecosystem degradation. Rural and coastal communities rely heavily on rain-fed agriculture, grazing, artisanal fisheries, and coastal resources all of which are increasingly disrupted by climate change. Key challenges include: a) Recurrent droughts and water scarcity reducing agricultural productivity; b) land degradation and soil erosion undermining ecosystem health; and c) Limited livelihood diversification options that are compatible with biodiversity conservation.

In this context, the country faces systemic land degradation and biodiversity loss, driven by a combination of climate variability, steep island topography, and unsustainable land use practices. Over 90% of agricultural land is rain fed and located on highly sloped terrain, making soils extremely vulnerable to hydric erosion, nutrient loss, and declining productivity. Recurrent droughts, intense rainfall events, and extreme climatic shocks (e.g. hurricanes and prolonged drought periods) further exacerbate land degradation processes^[36] – and communities often respond to climate stress by intensifying resource extraction, leading to overexploitation of natural resources, encroachment into sensitive habitats, and reduced ecosystem resilience. Climate change thus acts as a threat multiplier, reinforcing both biodiversity loss, land degradation and poverty.

Barrier 3: Weak monitoring, evaluation, and knowledge management systems: The barrier translates to limited results based management, monitoring, and knowledge uptake. This is noted as a cross-cutting barrier undermining biodiversity and climate action in Cabo Verde is the lack of robust results-based management, systematic monitoring, and effective knowledge sharing. This constrains the ability to track biodiversity trends, assess the effectiveness of interventions, and scale up successful practices. In addition, low environmental awareness among stakeholders limits the uptake of sustainable practices and reduces public support for conservation efforts. Linked challenges include: a) Weak biodiversity and climate monitoring systems, limiting the ability to track ecosystem trends, climate impacts, and management effectiveness; b) Inadequate use of data and evidence to inform adaptive management and policy decisions; c) Limited documentation and dissemination of best practices, lessons learned, and locally relevant knowledge; and d) Low levels of environmental awareness and behavioural change at community and institutional levels. These constraints reduce the effectiveness and sustainability of interventions, hinder learning across sectors and institutions, and limit scaling and replication of successful biodiversity and climate solutions.

Future without intervention: an uncertain trajectory under intensifying drivers: In the absence of transformative interventions, biodiversity and ecosystem services in Cabo Verde are likely to follow a trajectory of continued decline driven by reinforcing interactions among environmental, socio-economic, and institutional pressures. Overexploitation of natural resources, particularly fuelwood extraction, overgrazing, and unsustainable agricultural practices will intensify as rural populations remain dependent on increasingly scarce ecosystem goods. This pressure is compounded by limited livelihood alternatives, reinforcing a cycle of degradation and poverty. Simultaneously, ongoing destruction of terrestrial habitats due to unplanned urban expansion, tourism development, and unsustainable agricultural practices will further fragment ecosystems across Fogo, Santiago, Santo Antão, and São Nicolau islands.

Drought, desertification and climate variability act as a threat multiplier within this system. Increasing temperatures, prolonged droughts, erratic rainfall, and sea-level rise will reduce ecosystem resilience, exacerbate soil erosion, and accelerate coastal degradation. These changes will undermine agricultural productivity, water availability, and fisheries, thereby intensifying reliance on already degraded natural resources.

The introduction and spread of invasive species will continue to outcompete endemic species, particularly in fragile island ecosystems, leading to biodiversity loss and reduced ecosystem functionality. Weak institutional coordination, limited enforcement of environmental regulations, and insufficient integration of climate risks into planning will allow these pressures to persist unchecked. Low environmental awareness further constrains behavioral change and adoption of sustainable practices.

Under this scenario, the combined effects of these drivers will result in: (i) declining ecosystem integrity and biodiversity, (ii) reduced provision of ecosystem services such as soil fertility, water regulation, and coastal protection, (iii) increased vulnerability of communities to climate shocks, and (iv) deepening rural poverty and food insecurity. These reinforcing feedback loops risk locking Cabo Verde into a pathway of ecological degradation.

Baseline scenario, project additionality, and pathway to change - Baseline (Without the Project):

Current baseline investments by government, bilateral, and multilateral partners in Cabo Verde support biodiversity conservation, climate adaptation, and rural development. These include protected area management, small-scale ecosystem restoration initiatives, and climate-smart agriculture pilots. However, these efforts remain fragmented, limited in scale, and insufficiently coordinated across sectors and landscapes. Key baseline characteristics include:

- *Policy and institutional gaps:* Biodiversity and drought considerations are not systematically integrated into spatial planning or sectoral policies (e.g., tourism, fisheries, agriculture). Enforcement capacity remains weak.
- *Limited uptake of sustainable practices:* Adoption of climate and drought smart agriculture and diversified livelihoods is constrained by limited access to finance, technology, and extension services.
- *Inadequate data and learning systems:* Monitoring systems are fragmented, with limited use of geospatial tools and weak knowledge-sharing mechanisms, reducing adaptive management and scaling of best practices.

Overall, under the baseline, Cabo Verde continues to implement fragmented initiatives in soil and water conservation, forest management, and rural development through national programs and partner-supported projects. While these efforts have slowed degradation in localized areas, they remain insufficient in scale, integration, and financing to reverse national land degradation trends or achieve LDN targets. Weak land-use planning enforcement, limited incentives for sustainable land management, and inadequate monitoring systems persist. As a result, current interventions are insufficient to address the scale and systemic nature of biodiversity loss, climate vulnerability and land degradation. However, PROAGUA project will be fully developed to introduce an integrated, systems-based approach that directly addresses the identified barriers and shifts the baseline toward sustainability and socioecological resilience.

Outcome 1: Strengthened enabling environment to support biodiversity conservation, land restoration and drought planning (Barrier 1): By enhancing institutional capacity, policy coherence, and enforcement, and integrating biodiversity and climate risks into spatial and sectoral planning, the project will: Enable coordinated, cross-sectoral decision-making; Improve management effectiveness of protected areas and OECMs; Mainstream biodiversity into key productive sectors; and strengthen governance of natural resources and reduce unsustainable exploitation.

In terms of change from baseline, the project will move from fragmented and weakly enforced frameworks to an integrated, policy-driven system that proactively manages biodiversity and climate risks.

Outcome 2: Drought resilient ecosystems and livelihoods (Barrier 2): Through ecosystem restoration, nature-based solutions, and climate-resilient livelihood diversification, the project will: Restore degraded landscapes and coastal ecosystems (e.g., mangroves, slopes); Increase adoption of climate-smart agriculture and agroecological practices; Strengthen water management systems; and Diversify income sources through biodiversity-friendly enterprises.

In terms of change from baseline, the project will transition from isolated pilots and unsustainable practices to scaled, community-driven models that reduce pressure on ecosystems while enhancing productivity, food security, and incomes.

Outcome 3: Strengthened M&E and knowledge systems (Barrier 3): By operationalizing digital monitoring platforms, promoting knowledge exchange (including SIDS-focused South-South learning), and strengthening inclusive reporting systems, the project will: Improve data availability and decision-making; Enable adaptive management and learning; Facilitate replication and scaling of successful practices; and Increase stakeholder awareness and engagement.

In terms of change from baseline, the project will shift from fragmented, weak monitoring systems to robust, data-driven, and learning-oriented management frameworks. Thus, GEF support through PROAGUA will enable Cabo Verde to transition from isolated interventions to a fully integrated, landscape level LDN approach, generating global environmental benefits that would not occur under the baseline. The project will, among other benefits: a) scale up sustainable land management (SLM) and climate smart agriculture in priority degradation hotspots; b) restore soil carbon, vegetation cover, and productivity across multifunctional landscapes on the priority islands; c) strengthen biodiversity outcomes through ecosystem restoration and reduced land use pressure; and strengthen the institutionalization of biodiversity and land degradation management mechanisms across relevant sectors. The GEF increment will produce measurable, reportable gains toward LDN, biodiversity conservation, contributing simultaneously to the UNCCD, CBD, and SDGs.

Gender context in Cabo Verde

Gender dynamics in Cabo Verde reflect notable progress alongside persistent inequalities. The country ranks relatively high in gender equality compared to many African nations, supported by strong legal frameworks and policies promoting women's rights and political participation. While overall poverty has significantly declined, gender disparities have widened: 33% of female-headed households live in poverty compared to 21% of male-headed households, particularly in rural areas. Women also face higher unemployment rates and are disproportionately engaged in informal, low-paid, and insecure work. Many households depend primarily on women for survival, with 48% of families headed by women.

Women's entrepreneurship remains limited and largely concentrated in informal trade, with restricted access to modern technologies, entrepreneurial skills, and financial services. Moreover, the policy and institutional environment for private sector development insufficiently addresses gender concerns, and gender awareness and capacity remain weak.^{[37]³⁷} At the socio-cultural level, gender norms are evolving gradually, as young women and men navigate shifting ideologies through adaptation rather than outright rejection of traditional roles.^{[38]³⁸}

Historically, women's political participation expanded only after independence from Portugal in 1975, gaining momentum following the first multi-party elections in 1991. Institutional progress included the establishment of the Institute for the Condition of Women in 1994, later renamed the Institute for Gender Equality and Equity in 2006. Civil society and non-governmental organizations have since become increasingly active in promoting women's empowerment. Informal commerce has played a crucial role in women's livelihoods, often through transnational trade networks, while migration has enabled women to support their families and pursue higher education, contributing to transnational family dynamics.^{[39]³⁹}

Women are well represented in education and are increasingly active in public and political life, including parliament and local governance. However, economic disparities persist, with women overrepresented in lower-paying sectors such as services and domestic work. Despite Cabo Verde's strong performance on gender indices, a leadership gap remains: women are active in politics and community mobilization but continue to be underrepresented in leadership positions, and political parties rarely implement funding mechanisms targeting women.^{[40]⁴⁰} This gap is reflected in the country's

ranking, which places it 62nd globally in terms of women's parliamentary representation.^[41]⁴¹ Long-term male-dominated migration patterns have also contributed to the high prevalence of female-headed households, challenging traditional gender roles of male breadwinner and female caregiver.^[42]⁴²

Despite this enabling legal and institutional framework, women continue to experience unequal power relations across socio-economic, political, and cultural spheres.^[43]⁴³ Women's political presence and leadership remain limited despite ongoing efforts to promote gender equality and strengthen community mobilization.^[44]⁴⁴

In rural areas such as Santiago, women's livelihoods can involve environmentally harmful practices like sand harvesting, illustrating both their agency and vulnerability in the face of limited economic opportunities.^[45]⁴⁵ Gender-based violence also remains a persistent concern despite prevention efforts, while entrenched cultural norms continue to place a disproportionate burden of unpaid care work on women. Rural women, particularly on islands with fewer economic opportunities, face compounded vulnerabilities.

The gender-related dimensions of climate change in Cabo Verde are shaped by four interlinked challenges: structural inequalities (access to resources, decision-making, domestic work); weak and non-intersectional gender mainstreaming in climate policies; gender-blind financing mechanisms; and the systemic exclusion of women's local knowledge, despite its proven value for building resilience.^[46]⁴⁶

Overall, while Cabo Verde demonstrates a strong commitment to gender equality, significant structural and socio-economic gaps remain, requiring targeted and sustained gender-responsive interventions.

[1] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>

[2] Varella, D., Romeiras, M., & Silva, L. (2022). Implications of climate change on the distribution and conservation of Cabo Verde endemic trees. *Global Ecology and Conservation*. <https://doi.org/10.1016/j.gecco.2022.e02025>

[3] Varella, D., Romeiras, M., & Silva, L. (2023). Present and future distribution of *Faidherbia albida* in Cabo Verde as revealed by climatic modelling and LULC analysis. , 11. <https://doi.org/10.3389/fevo.2023.1057852>

[4] Baptista, I et al (2025). Soil and Water Conservation Strategies in Cape Verde (Cabo Verde in Portuguese) and Their Impacts on Livelihoods: An Overview from the Ribeira Seca Watershed. <https://doi:10.3390/land4010022>

[5] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>

[6] Manes, S., Costello, M., Beckett, H., Debnath, A., Devenish-Nelson, E., Grey, K., Jenkins, R., Khan, T., Kiessling, W., Krause, C., Maharaj, S., Midgley, G., Price, J., Talukdar, G., & Vale, M. (2021). Endemism increases species' climate change risk in areas of global biodiversity importance. *Biological Conservation*, 109070. <https://doi.org/10.1016/j.biocon.2021.109070>

[7] Manes, S., Costello, M., Beckett, H., Debnath, A., Devenish-Nelson, E., Grey, K., Jenkins, R., Khan, T., Kiessling, W., Krause, C., Maharaj, S., Midgley, G., Price, J., Talukdar, G., & Vale, M. (2021). Endemism increases species' climate change risk in areas of global biodiversity importance. *Biological Conservation*, 109070. <https://doi.org/10.1016/j.biocon.2021.109070>.

- [8] Mulunch, M. (2021). Impact of climate change on biodiversity and food security: a global perspective—a review article. *Agriculture & Food Security*, 10. <https://doi.org/10.1186/s40066-021-00318-5>
- [9] Varela, D., Romeiras, M., & Silva, L. (2022). Implications of climate change on the distribution and conservation of Cabo Verde endemic trees. *Global Ecology and Conservation*. <https://doi.org/10.1016/j.gecco.2022.e02025>
- [10] Varela, D., Romeiras, M., & Silva, L. (2023). Present and future distribution of *Faidherbia albida* in Cabo Verde as revealed by climatic modelling and LULC analysis. , 11. <https://doi.org/10.3389/fevo.2023.1057852>
- [11] Hoving, H., Neitzel, P., Hauss, H., Christiansen, S., Kiko, R., Robison, B., Silva, P., & Körtzinger, A. (2020). In situ observations show vertical community structure of pelagic fauna in the eastern tropical North Atlantic off Cape Verde. *Scientific Reports*, 10. <https://doi.org/10.1038/s41598-020-78255-9>
- [12] Government of Cabo Verde (2019). Land Degradation Neutrality Target Setting [Report](#)
- [13] Study on Gender and Climate Change in Cabo Verde, Government of Cabo Verde, Luxembourg aid & development, June 2025
- [14] Monteiro, F.; Fortes, A.; Ferreira, V.; Pereira Essoh, A.; Gomes, I.; Correia, A.M.; Romeiras, M.M. Current Status and Trends in Cabo Verde Agriculture. *Agronomy* 2020, 10, 74. <https://doi.org/10.3390/agronomy10010074>
- [15] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>
- [16] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>
- [17] Nunn, P., & Kumar, R. (2017). Understanding climate-human interactions in Small Island Developing States (SIDS): Implications for future livelihood sustainability. *International Journal of Climate Change Strategies and Management*, 10, 245-271. <https://doi.org/10.1108/ijccsm-01-2017-0012>
- [18] Castilla-Beltrán, A. et al. (2020). Using multiple palaeoecological indicators to guide biodiversity conservation in tropical dry islands: The case of São Nicolau, Cabo Verde. *Biological Conservation*, 242, 108397. <https://doi.org/10.1016/j.biocon.2019.108397>
- [19] Gómez-Gras, D. et al. (2025). First characterization of upper mesophotic coral assemblages in Santo Antão (Cabo Verde, East Atlantic Ocean): Demographic and community approaches provide baseline ecological data. *Progress in Oceanography*. <https://doi.org/10.1016/j.pocan.2025.103432>
- [20] Brilhante, M., Varela, E., Essoh, A., Fortes, A., Duarte, M., Monteiro, F., Ferreira, V., Correia, A., Duarte, M., & Romeiras, M. (2021). Tackling Food Insecurity in Cabo Verde Islands: The Nutritional, Agricultural and Environmental Values of the Legume Species. *Foods*, 10. <https://doi.org/10.3390/foods10020206>
- [21] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>
- [22] Castilla-Beltrán, A., Duarte, I., Nascimento, L., Fernández-Palacios, J., Romeiras, M., Whittaker, R., Jambrina-Enríquez, M., Mallol, C., Cundy, A., Edwards, M., & Nogué, S. (2020). Using multiple palaeoecological indicators to guide biodiversity conservation in tropical dry islands: The case of São Nicolau, Cabo Verde. *Biological Conservation*, 242, 108397. <https://doi.org/10.1016/j.biocon.2019.108397>
- [23] Data based on: i) Olehowski, C. et al. (2008). Geo-ecological spatial pattern analysis of the island of Fogo (Cape Verde).. *Global and Planetary Change*, 64, 188-197. <https://doi.org/10.1016/j.gloplacha.2008.09.006>; ii) Monteiro, F. et al. (2020). Current Status and Trends in Cabo Verde Agriculture. *Agronomy*. <https://doi.org/10.3390/agronomy10010074>; iii) Brilhante, M. et al. (2021). Tackling Food Insecurity in Cabo Verde Islands: The Nutritional, Agricultural and Environmental Values of the Legume Species. *Foods*, 10. <https://doi.org/10.3390/foods10020206>; and iv) Castilla-Beltrán, A. et al. (2020). Using multiple palaeoecological indicators to guide biodiversity conservation in tropical dry islands: The case of São Nicolau, Cabo Verde. *Biological Conservation*, 242, 108397. <https://doi.org/10.1016/j.biocon.2019.108397>
- [24] Census information is based on the 2021 national census, and poverty data sourced from World Bank (2024): Cabo Verde - Poverty Assessment [here](#) and WHO (2025): Public Health Situation Analysis (PHSA) [here](#)
- [25] Monteiro, F., Fortes, A., Ferreira, V., Essoh, A., Gomes, I., Correia, A., & Romeiras, M. (2020). Current Status and Trends in Cabo Verde Agriculture. *Agronomy*. <https://doi.org/10.3390/agronomy10010074>
- [26] Alfama, V., Henriques, M., & Barros, A. (2024). The Challenging Nature of Volcanic Heritage: The Fogo Island (Cabo Verde, W Africa). *Geoheritage*, 16. <https://doi.org/10.1007/s12371-024-00939-9>

- [27] Larrea, A., Torres, P., Seijo, C., Ventura, M., Costa, A., Parente, M., Lopes, E., Castaño, D., & Botelho, A. (2023). Environmental coastal research: a systematic review for Azores and Cabo Verde, two peripheral Macaronesian archipelagos. *Frontiers in Marine Science*. <https://doi.org/10.3389/fmars.2023.1242799>
- [28] Monteiro, F., Fortes, A., Ferreira, V., Essoh, A., Gomes, I., Correia, A., & Romeiras, M. (2020). Current Status and Trends in Cabo Verde Agriculture. *Agronomy*. <https://doi.org/10.3390/agronomy10010074>
- [29] Neves, J., Rocha, V., & Rocha, D. (2022). The Importance of Nature-Based Solutions to Enhance Cabo Verde's Environment. *Integrated Science*. https://doi.org/10.1007/978-3-030-91843-9_6
- [30] Larrea, A., Torres, P., Seijo, C., Ventura, M., Costa, A., Parente, M., Lopes, E., Castaño, D., & Botelho, A. (2023). Environmental coastal research: a systematic review for Azores and Cabo Verde, two peripheral Macaronesian archipelagos. *Frontiers in Marine Science*. <https://doi.org/10.3389/fmars.2023.1242799>
- [31] Duarte, M. et al. (2022). Diversity of Useful Plants in Cabo Verde Islands: A Biogeographic and Conservation Perspective. *Plants*, 11. <https://doi.org/10.3390/plants11101313>.
- [32] Varela, D., Romeiras, M., & Silva, L. (2022). Implications of climate change on the distribution and conservation of Cabo Verde endemic trees. *Global Ecology and Conservation*. <https://doi.org/10.1016/j.gecco.2022.e02025>.
- [33] Castilla-Beltrán, A., De Nascimento, L., Fernández-Palacios, J., Fonville, T., Whittaker, R., Edwards, M., & Nogué, S. (2019). Late Holocene environmental change and the anthropization of the highlands of Santo Antão Island, Cabo Verde. *Palaeogeography, Palaeoclimatology, Palaeoecology*. <https://doi.org/10.1016/j.palaeo.2019.03.033>.
- [34] Castilla-Beltrán, A., Duarte, I., Nascimento, L., Fernández-Palacios, J., Romeiras, M., Whittaker, R., Jambrina-Enríquez, M., Mallol, C., Cundy, A., Edwards, M., & Nogué, S. (2020). Using multiple palaeoecological indicators to guide biodiversity conservation in tropical dry islands: The case of São Nicolau, Cabo Verde. *Biological Conservation*, 242, 108397. <https://doi.org/10.1016/j.biocon.2019.108397>.
- [35] Varela, D., Romeiras, M., & Silva, L. (2022). Implications of climate change on the distribution and conservation of Cabo Verde endemic trees. *Global Ecology and Conservation*. <https://doi.org/10.1016/j.gecco.2022.e02025>.
- [36] Government of Cabo Verde (2019). Land Degradation Neutrality Target Setting [Report](#)
- [37] UN Women Africa: Cabo Verde <https://africa.unwomen.org/en/where-we-are/west-and-central-africa/cabo-verde>
- [38] Challinor, E. (2017). Caught Between Changing Tides: Gender and Kinship in Cape Verde. *Ethnos*, 82, 113 - 138. <https://doi.org/10.1080/00141844.2015.1042489>
- [39] Fortes, C., & Challinor, E. (2020). Women in Cape Verde. <https://doi.org/10.1093/acrefore/9780190277734.013.575>
- [40] Borges, A. (2025). Women's Political Presence in Cabo Verde: Are We Closing the Leadership Gap?. *Africa Today*, 71, 43 - 66. <https://doi.org/10.2979/at.00036>
- [41] Clara Mendes de Barros (n.d). Gender Situation Analysis and Gender Action Plan (GAP 2016-2020) in the context of EU - Cabo Verde cooperation. https://www.eeas.europa.eu/sites/default/files/gap_cv_2016-2020_version_eng_.pdf
- [42] Giuffré, M. (2021). Female migration in the Cape Verde islands: From islandness to transnationalism. *Island Studies Journal*. <https://doi.org/10.24043/isj.180>
- [43] Andrade, F. (2016). Políticas públicas y privadas para la inserción socio-económica y cultural de la mujer cabo-verdiana y su desarrollo: el papel de las ONGS y del ICIEG. Estudio comparativo.
- [44] Borges, A. (2025). Women's Political Presence in Cabo Verde: Are We Closing the Leadership Gap?. *Africa Today*, 71, 43 - 66. <https://doi.org/10.2979/at.00036>.
- [45] Vieira, M., & Rocha, E. (2021). Gender and Environment in the Interior of Santiago Island/Cape Verde: Sand Harvesting From Women Heads of Families. *Frontiers in Sociology*, 6. <https://doi.org/10.3389/fsoc.2021.625405>.
- [46] Study on Gender and Climate Change in Cabo Verde, Government of Cabo Verde, Luxembourg aid & development, June 2025

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

Proposed Theory of Change at PIF stage

The previous section detailed the environmental challenges Cabo Verde faces triggered by natural and anthropogenic factors - these lead to biodiversity loss and land degradation. The barriers to address the challenges constitute natural factors as well as systemic and institutional ones. These include weak enabling environment for biodiversity conservation and climate-responsive planning, limited adoption of sustainable land management, climate-resilient and biodiversity-friendly food production systems, and weak monitoring, evaluation, and knowledge management systems.

The Theory of Change (ToC) for PROAGUA project is grounded in a DPSIR (Drivers–Pressures–State–Impacts–Responses) framework and reflects the systemic interactions among climate change, land degradation, biodiversity loss, and livelihood vulnerability across the priority islands of Fogo, Santiago, Santo Antão, and São Nicolau. Gender perspective is mainstreamed throughout, recognizing that women and men experience and respond to environmental changes differently due to unequal access to resources, decision-making power, and differentiated roles in natural resource management.

Drivers, Pressures, State, and Impacts (Baseline)

At the level of Drivers, climate change and increasing climate variability, combined with strong dependence of rural and coastal communities on climate-sensitive natural resources, historical land-use practices, and weak integration of biodiversity and climate risks into development planning, generate structural vulnerability across ecosystems and livelihoods. Gender-specific drivers include: unequal access by women to land, credit, and extension services; women's disproportionate responsibility for water, food, and energy at household level; and systematic under-representation of women in local and sectoral planning bodies (addressed by Component 1; Outcome 1.1). These drivers translate into Pressures on ecosystems, including land degradation and soil erosion on steep rain-fed slopes, habitat destruction and fragmentation, overexploitation of forests and rangelands, invasive alien species, and chronic water scarcity.

These pressures have resulted in a degraded State of terrestrial, freshwater, and coastal ecosystems, characterized by declining soil fertility, reduced vegetation cover, threatened endemic biodiversity, and fragile agro-silvo-pastoral systems (baseline conditions underpinning Outcome 2.1). The degraded state generates Impacts, including declining ecosystem services (soil fertility, water regulation, coastal protection), increased vulnerability of populations to climate shocks, food and nutrition insecurity - especially women who face higher exposure to malnutrition and respiratory diseases, and greater economic precarity -, and reinforcing poverty–degradation feedback loops (Outcomes 2.1 and 2.2).

- Assumption (baseline to response): Without gender-sensitive targeted intervention, institutional fragmentation, climate stress, and livelihood constraints will continue to reinforce biodiversity loss, land degradation, and poverty.
- Risk: Climate change impacts (e.g. prolonged droughts or extreme events) may accelerate ecosystem degradation faster than baseline restoration efforts can compensate. If gender inequalities are not addressed, women and other vulnerable groups will bear a disproportionate burden and be excluded from emerging adaptation opportunities.

PROAGUA Responses (Causal Pathway)

Through Component 1 – Strengthening the enabling environment, PROAGUA addresses root systemic drivers by strengthening institutional and technical capacity, improving policy coherence, and mainstreaming biodiversity and drought mitigation risks into local and sectoral planning (Outcome 1.1; Outputs 1.1.1–1.1.3). A gender-responsive approach will be applied, including capacity building on gender and climate for national and local institutions and gender quotas or targets in community-based natural resource management committees. This intervention is expected to improve coordination across sectors (agriculture, fisheries, tourism), strengthen community-based natural resource management, and create enabling conditions for sustainable land and biodiversity management.

- *Assumptions (Component 1):* i) National and local institutions remain committed to cross-sectoral coordination and gender equality; and ii) Gender sensitive policy reforms and planning tools are adopted and operationalized beyond the project life.
- *Risks:* i) Institutional turnover or limited enforcement capacity may delay implementation; ii) Competing short-term development priorities may weaken biodiversity and climate integration into planning; and iii) Deep-rooted patriarchal norms may resist women's leadership.

Through Component 2 –Drought-resilient ecosystems and livelihoods, the project directly responds to ecosystem pressures and degraded states. Degraded landscapes are rehabilitated using nature-based solutions and biodiversity-inclusive land management practices actively involving women, and (Outcome 2.1; Outputs 2.1.1–2.1.3), contributing to GEF-8 Core Indicators on Area of land restored and Area of landscapes under improved practices. In parallel, communities adopt climate-resilient, diversified, and biodiversity-compatible livelihood systems (Outcome 2.2; Outputs 2.2.1–2.2.3), contributing to the Number of direct beneficiaries (disaggregated by gender) indicator.

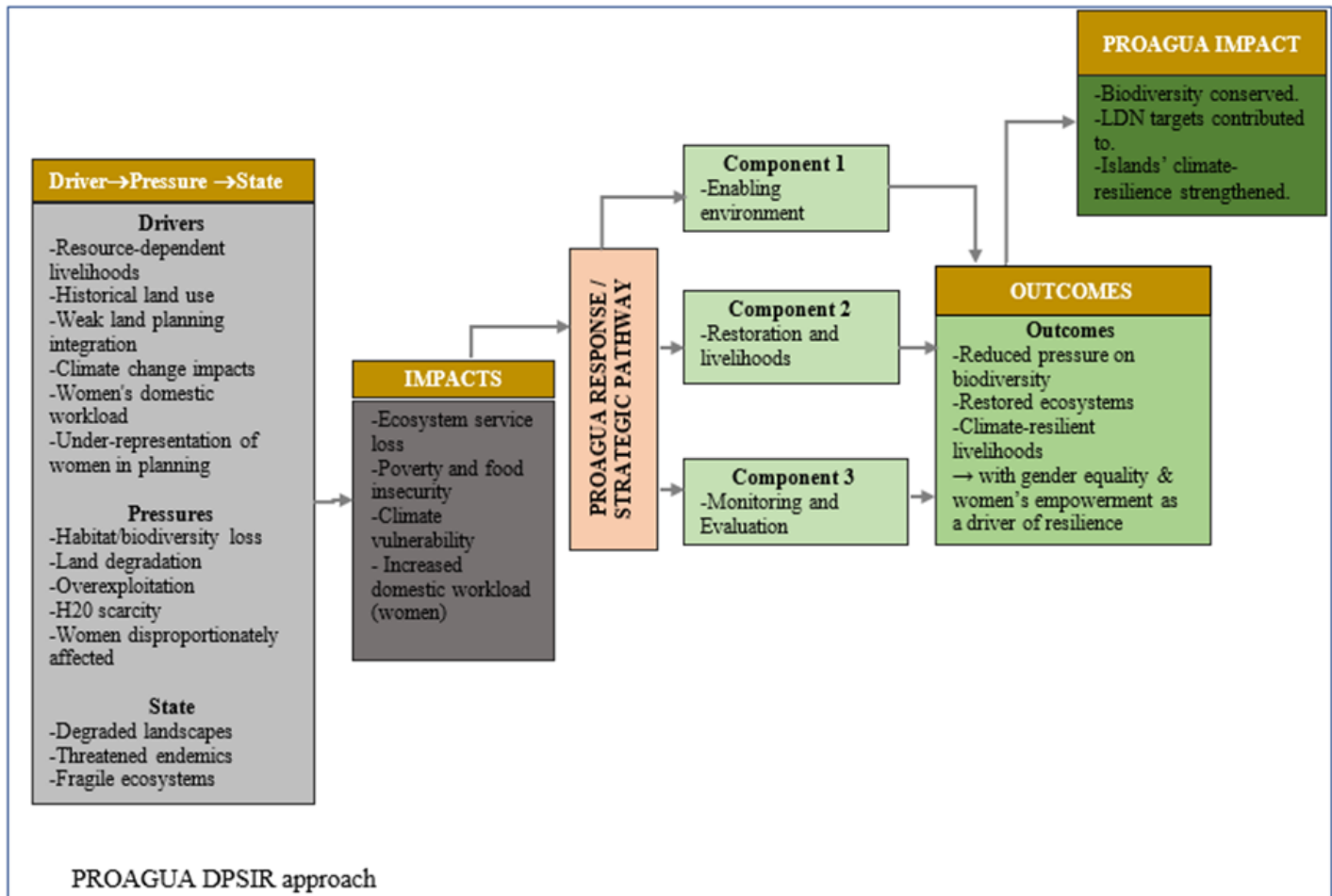
- *Assumptions (Component 2):* i) Communities perceive tangible livelihood and socioecological resilience benefits from restoration and sustainable practices for both women and men; and ii) Nature-based and climate-smart practices are context-appropriate and technically feasible under local conditions.
- *Risks:* i) Extreme climatic events (e.g. consecutive drought years) may reduce short-term productivity gains; ii) Market access constraints may limit the profitability of biodiversity-compatible value chains; especially for women producers and iii) social inequalities could limit participation of women and youth if not continuously addressed through targeted outreach, quotas, and gender-transformative approaches (e.g., GALS+ methodology), and iii) elite capture of benefits may exclude the poorest women and persons with disabilities.

Through Component 3 – Monitoring, evaluation, and knowledge sharing, the project strengthens learning, accountability, and adaptive management by operationalizing digital and geospatial monitoring tools, promoting inter-island knowledge exchange, and scaling successful practices (Outcome 3.1; Outputs 3.1.1–3.1.3), supporting the *Area of landscapes under improved practices monitored* core indicator. A gender-responsive M&E system will be established, including sex-disaggregated data, gender-sensitive indicators, knowledge products.

- *Assumptions (Component 3):* i) Data generated is routinely used by institutions and stakeholders for decision-making and includes gender analysis; and ii) knowledge products are accessible and tailored to local users.

- *Risks:* i) Limited technical capacity or connectivity may slow uptake of digital monitoring tools; ii) Knowledge may not be institutionalized unless embedded in formal planning and reporting systems and iii) Lack of gender-disaggregated data collection and analysis may undermine this commitment.

Schematically, this is represented as below:

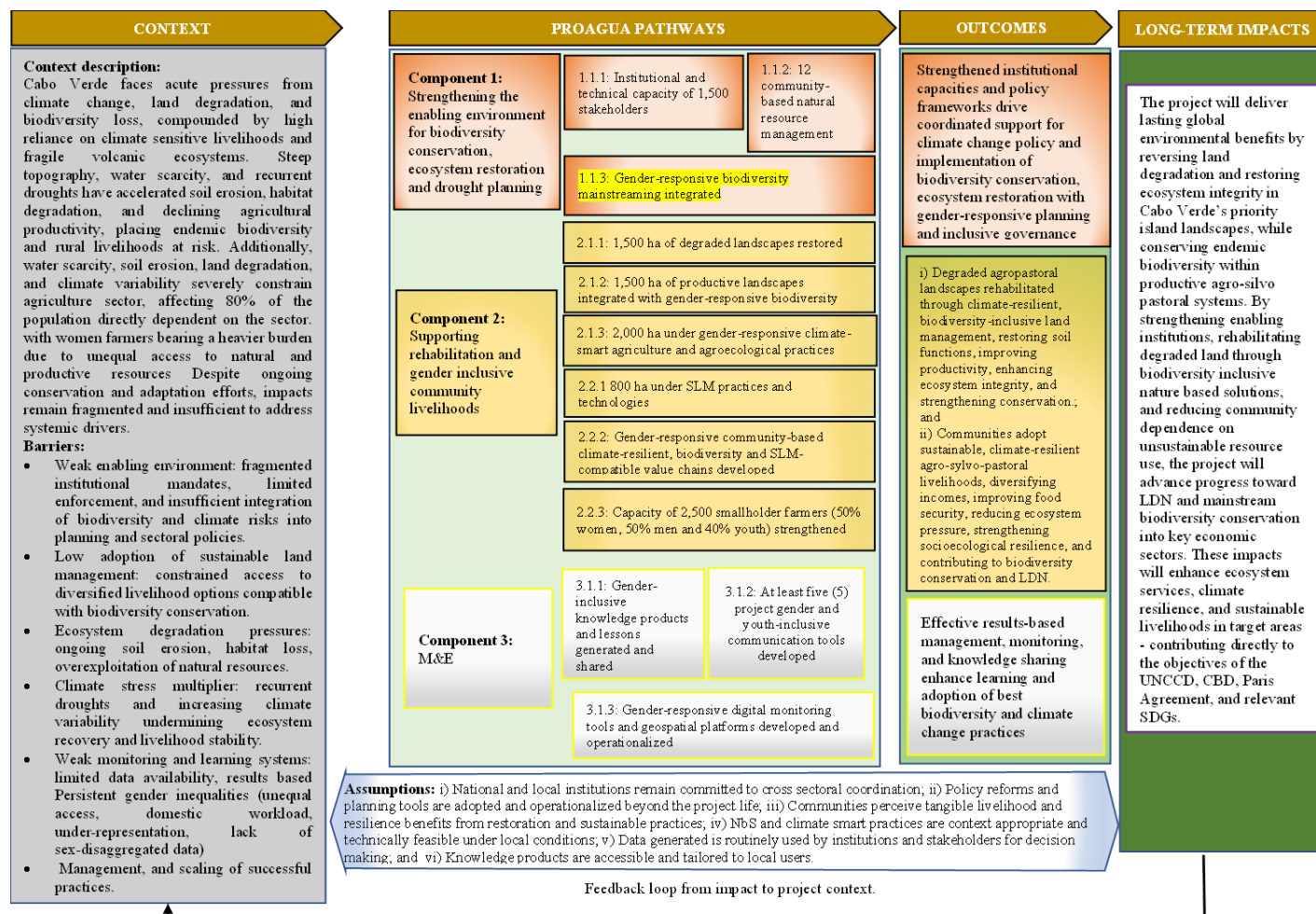


In this manner, PROAGUA will be fully designed as transformative by shifting Cabo Verde from fragmented, small-scale interventions to an integrated, landscape-level model that simultaneously addresses land degradation, biodiversity loss, and climate vulnerability, while ensuring that women and men benefit equitably and participate equally in decision-making. It embeds biodiversity and land degradation neutrality into national and sectoral planning (agriculture, tourism, and fisheries), strengthening institutional coordination and governance. The project scales nature-based solutions and climate-resilient agro-sylvo-pastoral systems, restoring ecosystems while enhancing productivity and resilience. It transforms livelihoods by promoting biodiversity-compatible value chains, creating economic incentives for conservation. Through digital monitoring systems, knowledge platforms, and community-based management, it enables adaptive management, replication, and long-term sustainability. This systemic approach delivers enduring global environmental benefits beyond the project lifecycle.

Key levers of transformation include: (i) policy and institutional reform; (ii) financial incentives and value chain development; (iii) technology and data systems for adaptive management; and (iv) behavioral change through inclusive community-based governance. Together, these enable systemic change, replication, and sustained global environmental benefits.

Based on the schematic representation and description of PROAGUA DPSIR approach, the diagram below illustrates the project's ToC.

Diagram of the Theory of Change at PIF stage:



Overall, the underpinning logic and causal links are that if Cabo Verde strengthens its enabling environment for biodiversity conservation and climate-informed planning, and rehabilitates degraded landscapes through nature-based and biodiversity-inclusive practices, and enables communities to adopt climate-resilient, diversified livelihoods supported by robust monitoring and learning systems, then ecosystem integrity, biodiversity conservation, and land productivity will be restored, pressures on natural resources will be reduced, and communities will become more resilient to climate change – thus, generating global environmental benefits under the CBD, UNCCD, and climate frameworks. Scaling up sustainable land management practices in priority degradation hotspots, and biodiversity mainstreaming biodiversity into productive systems within a strong institutional coordination and monitoring context will contribute to reducing land degradation pressures, the recovery of ecosystem services and biodiversity, and strengthening climate resilience.

Component description

Component 1: Strengthening the enabling environment for biodiversity conservation, ecosystem restoration and drought planning

Component 1 will address the root systemic drivers of biodiversity loss and land degradation in Cabo Verde, notably fragmented institutional mandates, weak enforcement, and insufficient integration of biodiversity and climate risks into development planning. Through this component, the project will therefore, contribute to addressing policy coherence, environmental regulations and planning as they relate to addressing biodiversity loss and land degradation at regional and national level. To address policy coherence concerns, the project under component 1 will conduct national policy analysis during PPG to identify inconsistent policies or bad incentives, but also how planning can support and enhance biodiversity conservation and land restoration. It is noted that while Cabo Verde has established protected areas and environmental policies, their effectiveness is constrained by limited coordination across sectors (agriculture, fisheries, tourism, land use), weak community-level governance, and inadequate consideration of cumulative pressures and climate change impacts. By strengthening institutional, technical, and community capacities, this component creates the enabling conditions required for sustainable land management, ecosystem restoration, and biodiversity conservation to be implemented at scale and sustained beyond the project's lifetime.

Delivery mechanisms of the component will include: i) structured capacity development programmes (training, certification, technical guidelines); ii) technical assistance through national and international experts; iii) institutional strengthening of ministries and decentralized services; and iii) development of decision-support tools (spatial planning, climate risk screening).

Outcome 1.1: Strengthened institutional capacities and policy frameworks drive coordinated implementation of biodiversity conservation, ecosystem restoration and drought planning

This outcome will promote a shift toward coherent, cross-sectoral governance systems, enabling sustainable land and biodiversity management across production landscapes and seascapes – ensuring that biodiversity and land degradation objectives are systematically embedded in national, sectoral, and local decision-making processes thereby reducing policy fragmentation, improving coherence across institutions, and enabling coordinated action across landscapes and seascapes. The outcome will be delivered through the following outputs:

- *Output 1.1.1 – Institutional and technical capacity of 1,200 stakeholders (50% male and 50% female) strengthened for landscape-scale land rehabilitation and biodiversity conservation on the Islands of Fogo, Santiago, Santo Antão and São Nicolau:* This output will build the skills and knowledge of national institutions, local authorities, civil society, and community actors (including women and youth) to plan and implement biodiversity-inclusive ecosystem restoration and climate-responsive land management, strengthening long-term governance capacity, including dedicated training on gender and climate change. It will build national and local capacity to design and implement NbS, SLM, and biodiversity conservation interventions, supporting evidence-based planning and LDN achievement through structured capacity development programmes, technical assistance, institutional strengthening of ministries and decentralized services, and development of decision-support tools, among others.
- *Output 1.1.2 – 12 community-based natural resource management (CBNRM) systems strengthened on priority Islands of Fogo, Santiago, Santo Antão and São Nicolau:* By reinforcing CBNRM structures, the project empowers communities to sustainably manage land and biodiversity resources, reduce overexploitation, and increase compliance with conservation objectives. Under this output, the project will enhance participatory governance and local stewardship, ensuring sustainability of restoration and conservation efforts through establishment and formalization of CBNRM committees (including at least 40% of women),

participatory land-use planning and community agreements, and facilitation by local NGOs and extension services, among others.

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- *Output 1.1.3 – Gender-responsive biodiversity mainstreaming integrated into four local development plans, ensuring equitable participation and benefits for women, men, and youth in tourism, fisheries, and agriculture sectors:* Integration of biodiversity considerations into agriculture, fisheries, and tourism planning ensures that economic development reduces, rather than exacerbates, pressures on ecosystems, directly supporting GEF-8 priorities on biodiversity mainstreaming and policy integration. Under this output, the project will integrate biodiversity considerations into key productive sectors, reducing ecosystem pressures and aligning development with conservation goals through policy advisory support and regulatory reviews, multi-sectoral coordination platforms, and integration of biodiversity indicators into planning tools, among others.
- Additionally, under this output, the project will deliberately seek to contribute to gender equality and women’s empowerment by ensuring that women’s knowledge, priorities, and livelihood needs are reflected in local planning and natural resource management processes. By promoting women’s participation in decision-making, access to sustainable livelihood opportunities, and inclusion in biodiversity-related value chains, the project will help reduce gender disparities in access to resources, economic opportunities, and environmental governance. The integration of gender-responsive measures will also strengthen women’s resilience to climate and environmental shocks while enhancing their leadership role in sustainable ecosystem management and community development.

Component 2: Supporting Drought-Resilient Ecosystems and Livelihood Systems

Desertification and land degradation in Cabo Verde arise from a combination of harsh Sahelian climate, steep fragile landscapes, and centuries of intensive human use. The main problems are water-driven soil erosion, salinization, declining fertility, and loss of native vegetation, which undermine agriculture and rural livelihoods. Recurrent droughts, irregular intense rains, and strong winds reduce vegetation cover and trigger high runoff and erosion, especially on steep slopes.^{[1]⁴⁷} It has been documented that Inadequate farming on steep slopes, overgrazing, deforestation for fuelwood, over-pumping groundwater (causing salinization), and dam construction all contribute to degradation.^{[2]⁴⁸} Within this context, Component 2 will deliver the on-the-ground transformation required to reverse land degradation, restore ecosystem services, and reduce pressures on endemic biodiversity, while simultaneously strengthening climate-resilient livelihoods. Cabo Verde’s steep, rain-fed, and drought-prone landscapes are highly vulnerable to erosion, declining productivity, and habitat degradation, which in turn deepen rural poverty and food insecurity. To support envisioned interventions, the project under component 2 will use landscapes approaches – on the understanding that landscape approaches reconcile conservation, production, and livelihoods at the scale of whole watersheds or mosaics of land uses, rather than single sites.^[1] During PPG, the project will conduct ecological assessment to inform appropriate restoration activities, establish baselines and identify and prioritize areas to be restored. Through this component, PROAGUA will respond by scaling up NbS, biodiversity-inclusive land management, and diversified livelihood systems that align ecosystem restoration with socio-economic benefits. This will be an investment-focused component to deliver

on-the-ground transformation by restoring degraded landscapes and promoting climate-resilient, biodiversity-compatible livelihoods.

[1] Mansourian, S. et al. (2019). Putting the pieces together: Integration for forest landscape restoration implementation. *Land Degradation & Development*, 31, 419 - 429. <https://doi.org/10.1002/ldr.3448>.

Outcome 2.1: Degraded agro-pastoral landscapes are rehabilitated through climate-resilient and biodiversity-inclusive land management practices, restoring soil functions, ecosystem integrity, and land productivity.

This outcome directly supports LDN objectives by reversing land degradation trends and restoring ecosystem functionality in priority landscapes, while enhancing habitat conditions for endemic species. The outcome will be delivered through the following outputs:

- *Output 2.1.1 – 1,500 ha of degraded landscapes restored through Nature-based solutions and sustainable biodiversity-inclusive land management practices and technologies:* Restoration interventions (e.g. slope stabilization, revegetation, soil and water conservation) increase vegetation cover, improve soil organic matter, water infiltration and aquifer recharge, regulate runoff and reduce erosion and sediment loading, preserving overall systemic water quality. Thus, PROAGUA will restore ecosystem functionality and productivity through soil, water, and vegetation rehabilitation through public works and community-based restoration schemes, partnerships with local contractors and cooperatives, and integration with national land restoration programmes, among others.
- *Output 2.1.2 – 1,500 ha of productive landscapes and land restoration investments in output 2.1.1 integrated with gender-responsive biodiversity practices (integration of native species, habitat mosaics and pollinator-friendly practices):* The integration of native species, habitat mosaics, and pollinator-friendly practices ensures that restoration also delivers biodiversity gains within productive land uses. Through this output, the project will ensure restoration enhances ecological integrity and biodiversity outcomes, not only productivity through provision of inputs (native seedlings, seeds, planting materials), technical extension services on biodiversity-friendly practices, demonstration plots and pilot sites, and collaboration with research institutions on species selection, among others.
- *Output 2.1.3 – Gender-responsive climate-smart agriculture (CSA) and agroecological practices (e.g., integration of fruit and fodder trees into agricultural plots, conservation agriculture, agroforestry, drought-resistant crops) adopted on 2,000 ha in targeted landscapes:* Adoption of conservation agriculture, agroforestry, and drought-resilient crops increases productivity while reducing land degradation pressures and climate vulnerability, by increased adaptive capacity to water stress and scarcity. The project will promote sustainable production systems that reduce land degradation and increase resilience through farmer field schools and extension services, input support (tools, drought-resistant crops), and digital advisory services (climate and agronomic information), among others.

Outcome 2.2: Target communities, including women and youth, adopt sustainable, climate-resilient agro-silvo-pastoral livelihood systems that diversify incomes, enhance food security, and reduce pressure on natural ecosystems.

This outcome addresses the poverty–degradation feedback loop by positioning sustainable livelihoods as an incentive for biodiversity conservation and sustainable water and land use management. The outcome will be delivered through the following outputs:

- *Output 2.2.1 – Community-based sustainable land management practices and technologies (such as traditional terracing on slopes, stone bunds and dry-stone walls, irrigation, water harvesting, and soil moisture conservation systems) established on 800 ha:* Local investments in water harvesting, irrigation efficiency, and soil moisture conservation will be aligned with sustainable groundwater availability and informed by hydrological assessments to reduce vulnerability to drought and support sustainable intensification without degrading ecosystems. Under this output, the project will address water scarcity and land degradation constraints critical to dryland ecosystems through small-scale infrastructure investments (rehabilitation of water regulation and mobilization infrastructure, irrigation systems, solar-powered pumping systems and water harvesting systems), community-led construction and maintenance models, and technical supervision and quality assurance mechanisms, among others. Additionally, the community-based governance mechanisms will support equitable and sustainable allocation of irrigation water, while ensuring long-term systems ‘sustainability
- *Output 2.2.2 – Gender-responsive community-based climate-resilient, biodiversity and SLM-compatible value chains developed and strengthened as livelihood initiatives (beekeeping, non-timber forest products, ecotourism, and value-added enterprises) to generate sustainable community incomes for 5,400 people (50% women, 50% men and 40% youth) while creating incentives for conservation:* Livelihood opportunities such as beekeeping, non-timber forest products, ecotourism, and value-added enterprises generate income while creating incentives to conserve restored ecosystems and biodiversity. The project will create economic incentives for conservation through nature-positive enterprises through business incubation and entrepreneurship support, market linkage facilitation and value chain development, and Public-private partnerships (PPPs), among others.
- *Output 2.2.3 – Capacity of 2,500 smallholder farmers (50% women, 50% men and 40% youth) strengthened with community-level governance mechanisms to support LDN and biodiversity outcomes:* Strengthened farmer organizations and governance mechanisms institutionalize sustainable practices and ensure long-term stewardship of restored landscapes. The project will strengthen local institutions and collective action for sustainable resource management through farmer organizations and cooperatives strengthening, training on governance, financial management, and sustainable practices, integration with CBNRM structures, and peer learning and farmer-to-farmer exchange, among others. GALs+ action learning will also be promoted to and GALs+ to address climate change and tackle the social and gender dynamics that often block effective adaptation, including roles for youth and women in oversight committees.

Component 3: Monitoring, Evaluation, Knowledge Management, and Learning

Component 3 will be cross cutting support for results measurement, adaptive management, and scaling of global environmental benefits - addressing the critical barrier of weak monitoring, learning, and evidence-based decision-making. Without robust data and knowledge systems, biodiversity and land restoration efforts cannot be adapted, scaled, or sustained. By institutionalizing digital, geospatial, and participatory monitoring systems, this component will ensure accountability, learning, and replication across Cabo Verde. Thus, through component 3, PROAGUA will ensure results-based management, learning, and scaling of best practices, addressing gaps in monitoring systems and knowledge dissemination - aligning with adaptive management, innovation, and knowledge sharing. The component will ensure evidence based implementation, learning, and scaling of biodiversity and land degradation solutions across Cabo Verde. The knowledge products will also include practical lessons learned on water mobilization, irrigation management, watershed restoration and solar-based pumping systems performance impacts recorded.

Delivery mechanisms of the component will include: i) development and operationalization of digital and geospatial monitoring platforms, ii) dedicated learning events, inter-island exchanges, and knowledge products; and iii) integration of monitoring systems into national reporting processes for CBD and UNCCD.

Outcome 3.1: Effective results-based management, monitoring, and knowledge sharing enhance learning, adaptive management, and scaling of biodiversity and climate-resilient land management practices.

- *Output 3.1.1 – Gender-inclusive knowledge products and lessons generated and shared with 5,400 people (50% women, 50% men and 40% youth) target beneficiaries through targeted dissemination and facilitated inter-Island (Fogo, Santiago, Santo Antão and São Nicolau) exchange visits to strengthen peer learning, adoption of sustainable practices:* The output will facilitate scaling and replication of successful NbS, SLM, and biodiversity practices through documentation and peer-to-peer learning promote uptake of best practices and replication beyond project sites, development of knowledge products (guidelines, case studies, toolkits), inter-island exchange visits and learning platforms, South-South cooperation and SIDS knowledge networks, and engagement with academic and research institutions, among others.
- *Output 3.1.2 – At least five (5) project gender and youth-inclusive communication tools developed and widely disseminated through existing Island information exchange platforms to enhance outreach and stakeholder engagement:* Targeted outreach increases awareness, stakeholder engagement, and behavioral change in support of biodiversity and land degradation objectives. The project will promote awareness and behavioral change to support biodiversity conservation and sustainable land use, multimedia campaigns (radio, digital platforms, and community outreach), stakeholder engagement strategies, collaboration with local media and civil society, and integration into national awareness programmes, among others.
- *Output 3.1.3 – Four (4) Gender-responsive digital monitoring tools and geospatial platforms developed and operationalized to facilitate the monitoring, reporting and sharing of lessons:* Integrated monitoring supports reporting on GEF-8 core indicators, adaptive management, and long-term sustainability of project impacts. The project will strengthen data-driven decision-making and tracking of GEF indicators (LDN, biodiversity) through development of GIS-based monitoring systems, mobile data collection tools for field monitoring, integration with national environmental information systems, and capacity building for data management and analysis, among others.

Together, the three components form a coherent intervention package that simultaneously strengthens governance, restores degraded ecosystems, reduces pressures on biodiversity, and builds resilient livelihoods delivering durable global environmental benefits under the Biodiversity and Land Degradation focal areas. Through complementary delivery mechanisms across governance reform, field investment, and learning systems, PROAGUA will implement a GEF-8-aligned, integrated pathway that restores degraded land, mainstreams biodiversity into productive landscapes, and secures climate-resilient livelihoods - ensuring durable global environmental benefits.

PROAGUA project will be fully designed to address the underlying drivers and direct threats contributing to biodiversity loss and ecosystem degradation in Cabo Verde through an integrated landscape restoration, water security, climate resilience, and biodiversity conservation approach. The project combines ecosystem restoration, sustainable land and water management, institutional strengthening, climate adaptation, and community-based livelihood interventions to address interconnected environmental pressures affecting the country's fragile island ecosystems. For example:

Habitat loss and degradation: PROAGUA addresses habitat loss and degradation mainly under Component 2, complemented by Component 1. Under Component 2, the project promotes restoration of degraded landscapes through reforestation using native and climate-resilient species, assisted natural regeneration, agroforestry systems, soil and water conservation measures, erosion control structures, and sustainable land management practices. These interventions are intended to restore vegetation cover, improve ecological connectivity, reduce land degradation, stabilize soils, and recover ecosystem functions critical for biodiversity conservation and water security. Component 1 supports participatory land-use planning, integrated watershed governance, and strengthened institutional coordination to reduce unsustainable land-use practices and improve management of productive and ecological landscapes. The project also promotes sustainable agricultural systems that reduce pressure on remaining natural habitats while improving livelihoods and food security for local communities.

Invasive and introduced species: This threat is addressed primarily under Component 2, with technical support from Component 3. The project design emphasizes biodiversity-sensitive restoration approaches that prioritize the use of native and ecosystem-appropriate plant species in reforestation and restoration interventions. Ecological assessments, technical guidance, and adaptive restoration planning will help minimize the use and spread of invasive species and improve ecosystem recovery outcomes. Component 3 strengthens ecological monitoring systems, geospatial tools, biodiversity data collection, and knowledge-sharing mechanisms to support evidence-based restoration and long-term ecosystem monitoring. Partnerships with universities, research institutions, and technical experts will contribute to identifying suitable native species, improving restoration methodologies, and monitoring invasive species dynamics.

Overuse of natural resources and unsustainable fishing: PROAGUA addresses Natural Resources and Unsustainable Fishing mainly under Component 2, complemented by Component 1. Component 2 will support sustainable livelihood diversification, agroecological production systems, agroforestry, and improved water management practices that reduce dependence on unsustainable extraction of natural resources. By improving land productivity, water availability, and climate resilience, the project will help reduce pressure on fragile terrestrial ecosystems and endemic plant resources. Component 1 will strengthen governance systems, community participation, and integrated natural resource management approaches that promote local stewardship of ecosystems and biodiversity. Participatory planning and community engagement mechanisms will be expected to improve sustainable resource management and encourage conservation-oriented practices. Although PROAGUA will focus primarily on terrestrial and watershed ecosystems, restoration and erosion control interventions will also reduce sedimentation and land-based degradation affecting downstream coastal and marine ecosystems. Through this integrated ridge-to-reef approach, the project contributes indirectly to improving the ecological resilience of marine habitats affected by unsustainable resource use.

Climate change and drought: Climate change and drought are cross-cutting threats that will be addressed throughout the project, particularly under Component 2 and Component 3. Component 2 will promote climate-resilient ecosystem restoration, drought-adaptive land management, water harvesting systems, improved groundwater recharge, and integrated watershed management approaches designed to strengthen ecosystem resilience to climate stress. Restoration of vegetation cover and degraded soils improves water infiltration, moisture retention, and microclimatic regulation, helping ecosystems better withstand prolonged drought conditions. The project will also promote the use of native and

drought-tolerant species to improve long-term ecosystem adaptation and support the persistence of endemic biodiversity under changing climatic conditions. Component 3 strengthens climate information systems, digital monitoring tools, ecological monitoring, and adaptive management mechanisms that improve evidence-based decision-making under climate uncertainty. Knowledge management and learning systems will support continuous adaptation of restoration and conservation practices in response to evolving climatic and ecological conditions. Through this integrated approach, PROAGUA will address both the ecological and socio-economic dimensions of climate vulnerability while strengthening the long-term resilience of Cabo Verde's biodiversity and landscapes.

[1] Castilla-Beltrán, A., Duarte, I., Nascimento, L., Fernández-Palacios, J., Romeiras, M., Whittaker, R., Jambrina-Enríquez, M., Mallol, C., Cundy, A., Edwards, M., & Nogué, S. (2020). Using multiple palaeoecological indicators to guide biodiversity conservation in tropical dry islands: The case of São Nicolau, Cabo Verde. *Biological Conservation*, 242, 108397. <https://doi.org/10.1016/j.biocon.2019.108397>.

[2] Monteiro, F., Fortes, A., Ferreira, V., Essoh, A., Gomes, I., Correia, A., & Romeiras, M. (2020). Current Status and Trends in Cabo Verde Agriculture. *Agronomy*. <https://doi.org/10.3390/agronomy10010074>.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

GEF additionality: global environmental, socioeconomic and adaptation benefits

The PROAGUA project is designed to generate global environmental benefits (GEBs) and co- climate adaptation benefits that would not materialize under the baseline scenario due to structural, financial, and institutional constraints. The project's additionality lies in its ability to move beyond fragmented, small-scale interventions toward a coherent, scaled, and integrated landscape approach, consistent with GEF-8 biodiversity and land degradation focal area strategies.

GEF-8 financing through PROAGUA will enable Cabo Verde to move from fragmented, project-level interventions to an integrated, landscape-scale approach that restores 1,500 ha of degraded land, places 2,300 ha under improved management, mainstreams biodiversity into productive systems, and benefits 5,400 people through climate-resilient livelihoods. These results would not have accrued without GEF support, due to scale, integration, and institutionalization requirements beyond baseline capacity. The additionality of GEF resources is summarized in the following:

- Without GEF funding, restoration would remain small-scale and uncoordinated. GEF financing enables landscape-level rehabilitation, integration with livelihoods, and alignment with LDN targets, generating durable global environmental benefits that would not accrue under the baseline.
- Baseline investments do not finance biodiversity outcomes outside protected areas. PROAGUA uses GEF resources to mainstream biodiversity into agriculture, rangelands, and community-managed lands critical for conserving globally significant island endemism.
- Without GEF support, adaptation efforts would remain short-term and coping-focused. PROAGUA delivers ecosystem-based adaptation that strengthens long-term resilience while generating global environmental benefits.

The project strategically contributes to GEF-8 core Indicators. In demonstration of the project's additionality, the table below summarizes GEF-8 indicators, the baseline context and additionality value of the project.

GEF-8 Core Indicator	Baseline (Without GEF)	Increment with PROAGUA (GEF-financed)
Area of ecosystems under improved management for biodiversity (ha)	Biodiversity actions largely confined to protected areas	1,500 ha of productive landscapes integrated with biodiversity-responsive practices (native species, habitat mosaics, pollinator-friendly systems) (Output 2.1.2)
Terrestrial area under improved practices (ha)	Biodiversity not systematically embedded in agriculture and rangelands	800 ha under biodiversity-inclusive CSA and agro-ecology (Output 2.1.3)
Total area under improved management (landscape level) (ha)	No integrated biodiversity-restoration-livelihood model	Up to 2,300 ha (through land restoration (1,500 ha) and community-based sustainable land management practices and technologies (800 ha)) - that is combining restoration, biodiversity mainstreaming, and SLM in productive landscapes.
Area of land restored (ha)	Localized and fragmented restoration pilots; no landscape-scale rehabilitation	1,500 ha of degraded landscapes restored through nature-based solutions and sustainable land management (Output 2.1.1).
Area of landscapes under improved practices (excluding protected areas) (ha)	Limited, non-systematic adoption of SLM and CSA	2,000 ha under climate-smart agriculture and agro-ecological practices (Output 2.1.3) + 800 ha under community-based SLM and sustainable water management systems (Output 2.2.1).
Total area under improved management (ha)	No integrated landscape-level management	Up to 2,300 ha combining restored areas and improved land-use practices across priority islands (that is, through land restoration (1,500 ha) and community-based sustainable land management practices and technologies (800 ha)).
Number of direct beneficiaries (disaggregated by gender)	5,400 people (50% women, 50% men; 40% youth) benefiting from climate-resilient, biodiversity-compatible livelihoods and value chains (Output 2.2.2)	
Area of landscapes with enhanced climate resilience (ha)	2,300 ha benefiting from improved soil functions, water regulation, and vegetation cover through NbS and CSA (that is, through land restoration (1,500 ha) and community-based sustainable land management practices and technologies (800 ha)).	

Overall, the additionality of PROAGUA lies in its ability to: i) transition from fragmented, small-scale interventions to integrated, landscape-level transformation; ii) generate measurable, scalable, and sustained global environmental benefits; and iii) simultaneously deliver biodiversity conservation, land restoration, and climate resilience outcomes. These outcomes would not be achieved without GEF financing, which provides the catalytic resources, technical support, and strategic framework necessary to overcome systemic barriers and deliver global environmental benefits at scale.

Baseline projects

PROAGUA will be fully designed as a complementary, integrative landscape project to build on and connect existing GEF and other partner investments, rather than duplicating sectoral, geographic, or institutional interventions. Its focus on productive terrestrial landscapes, biodiversity mainstreaming, and LDN positions it as a unifying project across the GEF biodiversity and land degradation portfolios in Cabo Verde. Below are relevant baseline projects:

- **Agricultural OECMs for Biodiversity Conservation: A Demonstration on Santo Antão Island:** With a GEF total financing of \$4,625,465 and FAO as Implementing Agency, this project pilots agricultural Other Effective Area-Based Conservation Measures (OECMs) on Santo Antão. PROAGUA will scale up and operationalize lessons from this demonstration by embedding agricultural OECM approaches within broader landscape-scale restoration and sustainable land management systems across multiple islands. PROAGUA also links OECMs more explicitly to LDN targets and biodiversity-compatible livelihood incentives.

PROAGUA will avoid duplication by not re-piloting or replicating the Santo Antão demonstration. Instead, it will use the OECM experience as a tested modality, integrating lessons in land restoration activities, CBNRM, and policy mainstreaming instruments beyond the single-island focus.

- **Accelerating Cabo Verde's Transition to Blue and Green Economy:** With a GEF project grant of \$10,024,158 and FAO as Implementing Agency, this project addresses system-level transformation of agriculture, fisheries, and tourism to support green and blue growth. PROAGUA complements this by deepening terrestrial ecosystem restoration and biodiversity outcomes in inland and upland landscapes, which underpin green economy sectors but are not the primary focus of the blue-green transition project. PROAGUA therefore strengthens the ecological foundation that enables sustainable agriculture and reduces land-based pressures on coastal systems.

PROAGUA will not directly intervene in fisheries management, maritime governance, or sector-wide policy reforms already covered under the blue-green economy project. Its interventions will be spatially and thematically focused on degraded terrestrial landscapes, ensuring clear functional separation.

- **Strengthening Biodiversity Governance Systems for the Sustainable Management of Living Natural Resources:** With a GEF project grant of \$3,484,703 and UNDP as Implementing Agency, this project strengthens governance frameworks, institutions, and financing mechanisms for biodiversity conservation, particularly at national and sectoral levels. It strengthens national and local governance for the conservation of terrestrial ecosystems and species of global and national significance through effective management and sustainable financing and firmly position biodiversity as being foundational to the country's social and economic resilience. PROAGUA translates these governance gains into on-the-ground outcomes by operationalizing policy, coordination, and institutional capacity at landscape and community levels through restoration, biodiversity mainstreaming, and livelihoods.

PROAGUA will not duplicate national-level governance reforms or biodiversity financing mechanisms. Instead, it will use these strengthened systems as enabling conditions, ensuring that governance improvements result in measurable biodiversity and land degradation outcomes.

- **Towards Land Degradation Neutrality for Improved Equity, Sustainability, and Resilience:** With a GEF project grant of \$2,183,105 and FAO as Implementing Agency, this is Cabo Verde's flagship project for LDN implementation. PROAGUA directly complements it by adding biodiversity depth and KM-GBF alignment to LDN-oriented interventions. While the LDN project prioritizes food security and resilience, PROAGUA explicitly integrates habitat restoration, native species, ecosystem connectivity, and biodiversity mainstreaming into productive landscapes.

PROAGUA will not replicate LDN investments, indicators, or institutional arrangements. It builds on the LDN framework while expanding the scope to deliver global biodiversity benefits, ensuring added value rather than parallel implementation.

- **Managing Multiple Sector Threats on Marine Ecosystems to Achieve Sustainable Blue Growth:** With a GEF project grant of \$3,787,864 and UNDP as Implementing Agency, this project focuses on marine and coastal ecosystems and sector-based marine threats. It strengthens systemic and institutional capacity for reducing

multiple threats to globally significant marine ecosystems and achieve sustainable blue growth in Cape Verde. PROAGUA contributes indirectly by addressing land-based drivers of marine degradation, such as erosion, sedimentation, and unsustainable upstream land use. This creates a ridge-to-reef synergy, improving marine outcomes without direct marine interventions.

In its design, PROAGUA will not finance marine protection, fisheries governance, or coastal infrastructure. Its exclusive focus on terrestrial landscapes will ensure complementarity with marine-focused investments.

- Climate Change Adaptation of Cabo Verde's Agri-Food Systems for Improved Food Security and Livelihoods: With a GEF project grant of \$2,639,726 and FAO as Implementing Agency, this project strengthens adaptive capacity and food security through climate-resilient agri-food systems. It enhances Cabo Verde's agri-food systems' adaptive capacity through strategic investments in the enabling environment, nature-based solutions and innovations, and in knowledge and learning. PROAGUA complements it by embedding ecosystem restoration, biodiversity-inclusive NbS, and LDN principles within adaptation interventions, thereby generating global environmental benefits in addition to local resilience outcomes.

PROAGUA will not duplicate adaptation finance or agri-food system investments. Instead, it adds a biodiversity and land degradation lens, ensuring that adaptation actions also contribute to CBD and UNCCD objectives.

- The World Bank Cabo Verde Resilient Tourism and Blue Economy Development Project, initially approved in May 2022 and expanded through a Second Additional Financing in April 2024, has a total financing envelope of approximately USD 75 million (IDA). The project promotes inclusive, resilient tourism and blue-economy growth across six islands through infrastructure, SME support, and policy reform.

PROAGUA will create synergy by strengthening inland and upland ecosystems through restoration, erosion control, and biodiversity-inclusive land management that underpin sustainable tourism and reduce land-based pressures on coastal assets. Duplication is avoided as PROAGUA does not finance tourism infrastructure, fisheries governance, coastal works, or SME support, remaining strictly focused on terrestrial landscapes and global environmental benefits.

- The AfDB Emergency Food Production Support Programme, approved in June 2023 under the African Emergency Food Production Facility (AEFPF), has a value of approximately USD 13.2 million. It focuses on rapid response to food insecurity through certified seeds, fertilizers, and governance reforms to boost short-term production.

PROAGUA complements this by locking in resilience and sustainability, scaling nature-based solutions, land restoration, climate-smart and agro-ecological practices, and biodiversity mainstreaming that stabilize productivity over the long term. Duplication is avoided as PROAGUA does not provide emergency inputs, subsidies, or budget support, instead delivering structural ecosystem solutions aligned with LDN and CBD objectives.

Overall in terms of coordination, complementarity and value addition, PROAGUA will act as a bridging and integrating project within Cabo Verde's development project portfolio by: i) linking governance → restoration → livelihoods → monitoring across projects; ii) scaling tested innovations rather than re-piloting them; iii) ensuring ridge-to-reef coherence across terrestrial investments; iv) and delivering additional positive land degradation and biodiversity outcomes aligned with LDN and KMGBF, respectively.

PROAGUA will be fully designed to be distinct yet complementary: it will strengthen terrestrial ecosystems and biodiversity outcomes that underpin partner project objectives, will integrate with existing governance and monitoring platforms, and will add long-term environmental value without overlapping sectoral investments. Through formal coordination under Component 1 and shared monitoring and knowledge platforms under

Component 3, PROAGUA will maximize synergy, avoid duplication, and enhance the cumulative global environmental impact of resource investments in Cabo Verde.

Stakeholder Engagement Process and Integration of Stakeholder Concerns in PROAGUA Design

The design of PROAGUA was informed by a structured, participatory and multi-stakeholder engagement process involving national institutions, local governments, communities, civil society, private sector actors, and development partners – to ensure inclusiveness, transparency, and responsiveness. Stakeholder concerns were not only documented but directly influenced key design choices, including the theory of change and component, outcome and output structure. Between 2025 and 2026, stakeholders were engaged and consulted on the target ideas.

Engagement took place through technical consultations, multi-sector meetings, and targeted discussions with key stakeholder groups, including government institutions, local authorities, community representatives, civil society organizations, private sector actors, development partners, and technical experts. These engagements were aligned with ongoing national planning and donor coordination processes to avoid duplication and ensure coherence.

Stakeholder groups, key concerns raised, and design responses:

- **National government institutions:** Central government ministries and agencies responsible for environment, agriculture, land management, water, climate change, and planning were engaged throughout project preparation. Discussions focused on: i) alignment with the NBSAP, LDN targets, NAP, and NDC; ii) addressing governance fragmentation and enforcement gaps; and iii) ensuring institutional ownership and inter-sectoral coordination. These discussions directly informed Component 1, which prioritizes strengthening the enabling environment, policy coherence, and institutional capacity.

Concerns raised and integration in project design: National government institutions raised concerns regarding: i) fragmentation of responsibilities across environment, agriculture, land, and water sectors; ii) weak enforcement of land-use plans and biodiversity regulations at sub-national levels; and iii) limited operationalization of national strategies (NBSAP, LDN targets, NAP) beyond planning documents. To integrate these concerns, Component 1 explicitly focuses on strengthening the enabling environment, inter-sectoral coordination, and policy coherence. Biodiversity mainstreaming was built into spatial and sectoral planning processes, ensuring implementation of national policies. Finally, PROAGUA emphasizes institutionalization rather than pilots, responding to concerns over weak policy follow-through.

- **Local governments and municipal authorities:** Island- and municipal-level actors highlighted challenges related to weak land-use planning enforcement, limited resources, and climate exposure. In response, PROAGUA integrates decentralized delivery mechanisms, supports local planning processes, and strengthens links between national policy and local implementation.

Concerns raised and integration in project design: Local governments and municipal authorities raised concerns regarding insufficient technical capacity and financial resources to manage land degradation and climate risks, and mismatch between national priorities and local realities, particularly in erosion-prone and drought-affected areas. To integrate these concerns, decentralized delivery mechanisms were embedded in Components 1 and 2, enabling municipalities to lead implementation. It should be noted that landscape prioritization explicitly targets local degradation hotspots, ensuring relevance. Finally, capacity building for local authorities is included as a core activity rather than an add-on.

- **Communities and community-based organizations:** Community representatives emphasized the need for livelihood-linked restoration; equitable benefit-sharing, particularly for women and youth; and recognition of traditional and local knowledge in land and resource management.

Concerns raised and integration in project design: Communities and community-based organizations raised concerns related to observed experiences that restoration projects often fail to deliver tangible livelihood benefits. They also pointed to the risk of exclusion of women, youth, and vulnerable households from decision-making, and lack of recognition of local knowledge and customary practices. To integrate the concerns raised PROAGUA has adopted CBNRM as a foundational implementation approach. Gender-responsive design elements were included to address inequalities highlighted in consultations. Also, the project includes livelihood-linked restoration (climate-smart agriculture, agroecology, biodiversity-compatible value chains) in Component 2. Overall, the concerns have been integrated through CBNRM approaches under Components 1 and 2 and through the adoption of biodiversity-compatible and climate-resilient livelihood options.

- **Civil Society Organizations and NGOs:** Environmental NGOs and CSOs stressed the risks of fragmented pilots, limited scaling, and weak monitoring. As a result, the project design emphasizes landscape-scale interventions, coordinated governance, and robust monitoring, evaluation, and learning systems under Component 3.

- *Concerns raised and integration in project design:* Civil Society Organizations and NGOs raised concerns regarding over-reliance on small, fragmented pilots with limited scalability, weak monitoring, data, and learning systems that prevent adaptive management, and inadequate coordination among projects and institutions. PROAGUA adopts a landscape-scale, systems-based approach, moving beyond isolated pilots to address some of the concerns raised by Civil Society Organizations and NGOs. PROAGUA introduces robust digital and geospatial monitoring systems and structured learning mechanisms in Component 3. Finally, coordination with other GEF and non-GEF initiatives was explicitly built into implementation arrangements.

- **Private Sector Actors:** Engagement with private sector stakeholders, including actors linked to agriculture, value chains, and tourism, highlighted the importance of predictable incentives, viable markets, and risk reduction. These inputs informed the inclusion of biodiversity-compatible value chains and avoided dependence on unsustainable or extractive business models.

Concerns raised and integration in project design: The Private Sector Actors' concerns related to the high perceived risk and low profitability of biodiversity-compatible production models, and limited access to predictable incentives and markets. In response to the concerns, PROAGUA focuses on biodiversity-compatible value chains with demonstrated market potential. Also, the design of the project embeds risk-reducing measures (ecosystem restoration, productivity stabilization, institutional support) to improve viability.

- **Development Partners and Technical Experts:** Consultations with development partners and participation in coordination meetings (including targeted stakeholder consultations held in March 2026) ensured alignment with ongoing and planned investments and avoidance of duplication. Concerns during consultations related to: i) risk of duplication with ongoing GEF, World Bank, and AfDB projects; and ii) the need for stronger linkage between biodiversity, land degradation, and climate adaptation objectives. To address the concerns, PROAGUA was designed as a complementary, bridging project, explicitly filling gaps in terrestrial landscape restoration. Synergies and non-overlap with other investments were formally articulated in design and coordination mechanisms.

Education institutions and research organizations

- University of Cabo Verde (Uni-CV - Universidade de Cabo Verde: Through its School of Agriculture and Environmental Sciences, the University provides academic programs and research centered on sustainable land management, climate change, and environmental development; and the UNESCO Chair 'Land within sea': Housed in collaboration with Uni-CV and international partners, this academic chair focuses explicitly on island biodiversity, territorial sustainability, and terrestrial natural resource management: These institutions play a critical role in generating evidence, strengthening technical capacity, supporting innovation, and facilitating long-term monitoring and knowledge transfer.

Engagement with these stakeholders highlighted the importance of: i) strengthening the science–policy–practice interface; ii) improving locally generated data and long-term ecosystem monitoring systems; iii) ensuring use of native species and ecosystem-appropriate restoration approaches; iv) increasing opportunities for youth engagement, applied research, and environmental education; and v) promoting knowledge exchange between islands and with other Small Island Developing States. These inputs informed the integration of stronger knowledge management, learning, and adaptive management systems within PROAGUA. The project design already places significant emphasis on evidence generation, digital monitoring systems, knowledge dissemination, and collaboration with academic and research institutions.

Concerns raised and integration in project design: Educational and research stakeholders raised concerns regarding: i) limited ecological baseline data and fragmented monitoring systems for biodiversity and land degradation; ii) weak linkages between scientific research and policy or operational decision-making; iii) insufficient integration of local knowledge and scientific evidence in restoration planning; iv) risk of introducing inappropriate species or restoration approaches not adapted to island ecosystems; and v) limited involvement of youth and educational institutions in long-term environmental stewardship.

To address these concerns, PROAGUA under Component 3, introduces digital and geospatial monitoring platforms, structured knowledge products, and inter-island learning mechanisms to improve evidence-based decision-making and adaptive management. Partnerships with academic and research institutions will support biodiversity assessments, monitoring, species selection, and dissemination of lessons learned. Under Component 2, restoration interventions prioritize native species and biodiversity-friendly approaches, while Component 1 strengthens institutional and technical capacity to ensure that scientific evidence informs policy and planning processes. In addition, the project promotes learning and capacity-building opportunities for youth and local institutions to strengthen long-term sustainability and ownership.

The PIF development stage also engaged with community-level potential beneficiary groups. These are presented in the table below together with the dates when they were met, the location and the type of consultation conducted.

Table showing community-level beneficiary groups consulted

Date	Island / Location	Community / Beneficiary Group Consulted	Community-Based Organizations (CBOs) / Local Associations	Type of Consultation
27 Nov 2025	Ribeira da Cruz, Porto Novo, Santo Antão	Farmers and beneficiaries of the Ribeira da Cruz hydro-agricultural scheme	Associação de Ribeira da Cruz	Field visit and consultation on irrigation infrastructure, water access and agricultural production systems

27 Nov 2025	Morro de Cavol / Ribeira da Cruz, Santo Antão	Agricultural producers benefiting from borehole and irrigation investments	Associação de Ribeira da Cruz	Consultation during visit to sustainable hydro-agricultural project, borehole and agricultural warehouse
27 Nov 2025	Jorge Luís, Porto Novo, Santo Antão	Farmers using irrigation water supplied through solar pumping systems	Community water users and beneficiary farmers	Discussion on water availability and solar-powered pumping systems
27 Nov 2025	Lajedinho, Porto Novo, Santo Antão	Beneficiaries of the integrated rural development project	Local beneficiary groups (men and women)	Consultation on integrated and sustainable agricultural development needs and constraints
27 Nov 2025	Zurinca, Paul, Santo Antão	Farmers and livestock producers targeted under PTBA 2025/2026 current project	Local beneficiary groups (men and women)	Consultation during visit to proposed hydro-agricultural and pastoral development site
27 Nov 2025	Pontinha de Janela, Paul, Santo Antão	Beneficiaries of the Zurinca Project	Beneficiary farmers' group (men and women)	Meeting with project beneficiaries to discuss needs, priorities and expected investments
27 Nov 2025	Vale da Ribeira da Torre (Ribeirinha de Jorge), Ribeira Grande, Santo Antão	Farmers in Ribeirinha de Jorge valley	ACD Top d'Mranda (CBOs)	Consultation during visit to hydro-agricultural project and planned extension areas
27 Nov 2025	Lagoeiros / Quinta São João Baptista, Porto Novo, Santo Antão	Local farmers and rural households	Community representatives (men and women)	Community consultation
27 Nov 2025	Chã de Caso Pello, Porto Novo, Santo Antão	Local farmers and rural households	Community representatives	Community consultation
29 Nov 2025	Planalto Norte (Chã de Feijoal), Porto Novo, Santo Antão	Farmers and community members	Community representatives	Community consultation on water and agricultural development priorities
29 Nov 2025	Planalto Norte (Chã Principal), Porto Novo, Santo Antão	Farmers and community members	Community representatives	Community consultation on water and agricultural development priorities
2 Dec 2025	Zona Sul (São Filipe), Fogo	Farmers benefiting from irrigation infrastructure	Beneficiary farmers	Consultation during visit to water supply optimization project
2 Dec 2025	Ramo Inglês, Fogo	Women farmers	Individual beneficiary farmer	Consultation with female producer on irrigation and production constraints
2 Dec 2025	Jardim, Fogo	Farmers	Individual beneficiary farmers	Consultation regarding irrigation and agricultural production
2 Dec 2025	Achada Furna, Fogo	Livestock keepers	Livestock producer groups	Consultation on livestock production and water access
2 Dec 2025	Cabeça Fundão, Fogo	Agro-pastoralists	Community producer groups	Consultation on agro-pastoral production and resilience
2 Dec 2025	Chã das Caldeiras, Fogo	Farmers, processors and wine producers	Adega Chã das Caldeiras and local producers	Consultation on livelihoods, climate resilience

PROAGUA reflects systematic integration of stakeholder concerns, translating them into concrete project features. By directly responding to governance, livelihood, gender, scalability, and coordination challenges raised during consultations, the project demonstrates strong country ownership and social legitimacy, thereby enhancing the likelihood of sustainable and transformational outcomes. That is, through sustained and inclusive

stakeholder engagement, PROAGUA reflects shared priorities, locally grounded solutions, and national policy commitments – strengthening ownership, a high likelihood of successful implementation and sustainability.

Overall, stakeholder feedback was systematically incorporated into PROAGUA through: i) the adoption of an integrated DPSIR-based theory of change addressing root causes rather than symptoms; ii) explicit attention to gender inequalities and vulnerable groups, reflected in gender-responsive design elements; iii) integration of nature-based solutions and climate-smart/agro-ecological practices to link restoration with livelihoods; and iv) establishment of gender-responsive adaptive management and knowledge-sharing systems to respond to emerging risks and lessons.

Core Indicators

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1500	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

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

Indicator 3.2 Area of forest and forest land under restoration

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

Indicator 3.3 Area of natural grass and woodland under restoration

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

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,500.00			

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2800	0	0	0

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

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

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

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

Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,800.00			

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

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

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	474094	0	0	0
Expected metric tons of CO ₂ e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	474,094			
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting	2027			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,700			
Male	2,700			
Total	5,400	0	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

- a) 1,500ha to be brought under land and ecosystems under restoration is based on the relative cost of envisaged interventions and community contribution to land restoration-related activities (1,500 ha). The estimation has been informed by expertise advice in the country. This will be confirmed after additional consultations and baseline studies during the PPG phase.
- b) 2,800 ha of landscapes to be brought under sustainable land manage through community-based sustainable land management practices and technologies (800 ha), and adoption climate-smart agriculture and agroecological practices (2,000) on is based on the estimated number of beneficiaries, and household size in the target four Islands.
- c) 474,094metric tons of CO₂e is based on the model output, estimated using the Nationally Determined Contribution Expert Tool (NEXT), under high activity clay soils, sandy soils and annual crop land use and gain and losses approach scenarios. The tool has been developed by FAO. The estimated amount of carbon mitigation potential of the project is direct based on the project restoration activities on 1,500 ha (output 2.1.2), climate-smart agriculture and agroecological practices on 2,000 ha (output 2.1.3), and community-based sustainable land management practices and technologies on 800 ha (output 2.2.1), as noted above under points 1 and 2, respectively – over a period of 30 years (see NEXT output in Annex D.1 on p.39). Within the period of the project (that is, till 2032) the project will contribute to 34,707 metric tons of CO₂e. The CCM marker remains at 1 because the GHG figure is a co-benefit of restoration activities primarily designed for BD/LD goals.
- d) 5,400 persons (2,700 women, and 2,700 men) corresponding to ~1,588 households reflects the estimated number of beneficiaries of the project based on cost per beneficiary.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Substantial	Assessment: Cabo Verde is highly exposed to recurrent droughts, erratic rainfall, and extreme climatic events, which may undermine restoration success, agricultural productivity, and water availability. Climate variability may also reduce survival rates of planted vegetation and affect ecosystem recovery. Mitigation: Adoption of climate-resilient NbS (drought-tolerant native species, agroforestry); water harvesting and soil moisture conservation; climate-informed spatial planning; phased and adaptive implementation; integration of climate risk screening tools; diversification of livelihood systems to reduce climate dependency. The project will prioritize NbS, drought resilient species, soil and water conservation, and climate smart/agro ecological practices under Component 2. Adaptive management is supported by geospatial and climate sensitive monitoring systems under Component 3, allowing timely adjustment of interventions.
Environmental and Social	Substantial	Assessment: Risks include unintended impacts from restoration (e.g., inappropriate species selection), potential land-use conflicts, and unequal access to project benefits, particularly for women and vulnerable groups. Mitigation: Application of environmental and social safeguards; promotion of native species and biodiversity-friendly practices; participatory land-use planning; gender-responsive targeting and benefit-sharing mechanisms; grievance redress systems; continuous monitoring of social inclusion outcomes. Strong CBNRM, participatory planning, and gender responsive approaches are embedded in Components 1 and 2. Environmental and social safeguards screening and continuous stakeholder engagement reduce adverse impacts
Political and Governance	Substantial	Assessment: Although Cabo Verde has a stable governance framework, risks include policy discontinuity, limited enforcement capacity, and weak cross-sectoral coordination. Elections will be held in 2026, which may result in a shift of national priorities. Mitigation: Strong alignment with national strategies (e.g., NBSAP, LDN targets); institutional capacity building; establishment of inter-ministerial coordination platforms; policy mainstreaming into sectoral plans; stakeholder engagement to ensure ownership across political cycles. The project embeds actions within existing national strategies and sectoral planning processes, strengthens inter institutional coordination, and builds institutional capacity rather than relying on individuals (Component 1), reducing exposure to political crises.
INNOVATION		
Institutional and Policy	Moderate	Assessment: Weak inter-sectoral coordination, limited enforcement of environmental regulations, and insufficient integration of LDN objectives and biodiversity and climate risks into sectoral planning may constrain effectiveness. Mitigation: Strengthening institutional capacity; establishing coordination platforms; mainstreaming biodiversity into sectoral policies (agriculture, tourism, and fisheries); development of planning tools and guidelines; capacity building for enforcement agencies. The project will embed activities within existing national strategies and sectoral planning

		frameworks, will strengthen inter-institutional capacity rather than relying on individuals (Component 1), reducing exposure to policy or leadership shifts.
Technological	Moderate	Assessment: Limited technical capacity and infrastructure may constrain adoption of digital monitoring tools, geospatial platforms, and climate-smart technologies, particularly in remote islands. Mitigation: Capacity building and training on digital tools; use of user-friendly, low-cost technologies; partnerships with technical institutions; phased deployment and technical support; integration with existing national systems. Component 3 adopts stepwise deployment of user friendly tools, targeted training, and integration with existing national reporting systems, reducing technological complexity and sustainability risks.
Financial and Business Model	Moderate	Assessment: Risks include limited access to finance for smallholders, weak market linkages, and sustainability of livelihood investments beyond project support. Mitigation: Development of blended finance mechanisms (grants, microfinance, revolving funds); strengthening value chains and market access; promotion of public-private partnerships; business development support; embedding financial sustainability strategies early in implementation. The project supports diversified livelihood portfolios, targeted business and market linkage support, and reduced dependence on single commodities under Outcome 2.2, improving resilience to market shocks.

EXECUTION

Capacity	Moderate	Assessment: Institutional and technical capacity gaps at national and local levels may affect timely and effective implementation, especially across multiple islands. Mitigation: Comprehensive capacity development strategy; technical assistance; decentralized implementation structures; partnerships with NGOs and local service providers; clear roles and coordination mechanisms; adaptive management approaches. Capacity development is a core element of project design through structured training, technical assistance, and peer learning (Component 1), paired with phased implementation and decentralized delivery.
Fiduciary	Moderate	Assessment: Potential risks relate to financial management, procurement inefficiencies, and accountability at decentralized levels. Mitigation: Application of IFAD and GEF fiduciary standards; with particular attention to higher-risk areas such as organization and staffing, flow of funds, and audit arrangements. The project will receive annual audits and submit periodic financial reporting. IFAD will provide capacity building in procurement and financial management; GEF funds will be channeled through a Dedicated Account, with disbursements based on periodic financial reports.
Stakeholder	Moderate	Assessment: Risks include limited stakeholder engagement, low adoption of sustainable practices, and potential resistance to behavioral change, particularly where short-term costs are perceived. Mitigation: Inclusive stakeholder engagement strategy; strengthening of CBNRM systems;

		awareness campaigns; incentives for adoption (e.g., livelihood benefits); participatory approaches; continuous consultation and feedback mechanisms. A robust stakeholder engagement and communications strategy, co design of interventions, and linkage of benefits to livelihoods and ecosystem services are implemented across Components 1 and 2.
Other	Moderate	Assessment: Cabo Verde's archipelagic nature poses logistical challenges, including high transportation costs, limited connectivity, and coordination difficulties across islands. Additionally, Invasive alien species may undermine restoration outcomes in fragile island ecosystems. Mitigation: Decentralized implementation planning; use of local partners and service providers; efficient logistics planning; digital coordination tools; clustering of interventions geographically to optimize resources. Restoration efforts prioritize native species, ecosystem appropriate designs, and monitoring for early detection and response, supported under Components 2 and 3.
Overall Risk Rating	Substantial	After implementation of mitigation measures, the project's overall risk is assessed as Substantial. Environment and social, political and governance and climate risks remain significant due to structural exposure. The full design will ensure strong institutional alignment, and support to livelihoods and restoration efforts to reduce risks to achieving intended outcomes.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

PROAGUA is fully aligned with GEF-8 programming directions, particularly under the Biodiversity and Land Degradation focal areas, while delivering strong climate adaptation co-benefits. The project applies GEF-8's integrated and transformational approach by addressing structural drivers of biodiversity loss and land degradation in Cabo Verde's fragile island landscapes.

Under the Biodiversity focal area, PROAGUA contributes directly to Objective BD-1: Improve conservation, sustainable use, and restoration of ecosystems, with a strong emphasis on biodiversity mainstreaming in productive landscapes rather than reliance on protected areas alone. Through large-scale ecosystem restoration, integration of native species and habitat mosaics, and biodiversity-compatible land-use practices, the project reduces pressures on endemic biodiversity while maintaining production functions—an explicit priority under GEF-8.

Under the Land Degradation focal area, PROAGUA operationalizes landscape-scale restoration and sustainable land management (SLM) in line with LD Objective 1 (Avoid and reduce degradation) and LD Objective 2

(Reverse degradation through restoration), contributing directly to Cabo Verde's LDN agenda. The project applies NbS and climate-smart/agro-ecological practices across degraded and erosion-prone landscapes, generating durable improvements in soil health, vegetation cover, and ecosystem services. Consistent with GEF-8 cross-cutting principles, PROAGUA emphasizes gender-responsive implementation, community-based natural resource management, knowledge generation, and adaptive management, supported by geospatial monitoring systems. These approaches ensure sustainability, scalability, and replication in other SIDS.

PROAGUA is strongly aligned with national development and environmental strategies of Cabo Verde, including the NBSAP, the National Adaptation Plan (NAP), voluntary LDN targets under the UNCCD, and climate commitments under the Paris Agreement (NDC). By translating these policy commitments into coordinated, landscape-scale action, the project bridges the implementation gap between planning and on-the-ground results. At the regional level, the project responds to shared West African and Atlantic SIDS priorities, including ecosystem fragility, land degradation, water scarcity, and climate vulnerability, contributing lessons and models relevant beyond Cabo Verde. PROAGUA directly supports national implementation of the following Multilateral Environmental Agreements (MEAs):

- Convention on Biological Diversity (CBD): through ecosystem restoration, biodiversity mainstreaming, and community stewardship;
- UN Convention to Combat Desertification (UNCCD): through LDN-aligned restoration and sustainable land management;
- Paris Agreement: through ecosystem-based adaptation and resilience-building in AFOLU systems.

No national policies that contradict the project's intended outcomes have been identified. Instead, PROAGUA reinforces and operationalizes existing national policies and MEA commitments. However, potential tensions exist through: i) agricultural expansion and intensification policies may encourage practices that increase land degradation; ii) tourism development that may lead to habitat fragmentation and coastal ecosystem pressure; and afforestation policies using exotic species may conflict with biodiversity restoration goals. PROAGUA will address these risks through: i) biodiversity mainstreaming into sectoral policies and planning frameworks; and ii) strengthening policy coherence and cross-sectoral coordination mechanisms.

The preparation of PROAGUA acknowledges the policy and regulatory context of Cabo Verde. PROAGUA is fully aligned with Cabo Verde's national environmental, land, biodiversity, climate, and development policy frameworks. By operationalizing the NBSAP, Forestry Policy, NAP, NDC, and environmental framework laws through integrated, landscape-scale interventions, the project will translate national policy commitments into tangible global environmental benefits under the GEF-8 Biodiversity and Land Degradation focal areas, while reinforcing climate resilience and sustainable development objectives. The country has blue and green economy transition frameworks (including national Blue Economy and Green Growth initiatives) promote sustainable use of natural capital as a foundation for economic development. PROAGUA will support the biodiversity-compatible value chains (e.g. agroecology, NTFPs) and restored ecosystems support green, climate-resilient economic activities.

Contribution to Kunming–Montreal Global Biodiversity Framework (KMGBF): PROAGUA will contribute to the implementation of KMGBF targets – as tabulated below.

Table Mapping of PROAGUA contributions to KM-GBF targets

GBF Target	Contribution and Relevant Outputs
Target 1: Spatial planning	Supports integrated, participatory land-use planning incorporating biodiversity and climate risks. Outputs: 1.1.3 (biodiversity mainstreamed into sectoral and local plans); 1.1.1 (capacity building for spatial planning).
Target 2: Ecosystem restoration	Restores degraded agropastoral landscapes using NbS and native species. Outputs: 2.1.1 (1,500 ha restored through NbS and SLM); 2.1.2 (integration of biodiversity-friendly restoration practices).
Target 4: Species conservation	Enhances habitats for endemic and threatened species. Outputs: 2.1.2 (native species integration, habitat mosaics); 1.1.1 (capacity building in biodiversity conservation).
Target 6: Invasive alien species	Reduces reliance on invasive species through restoration with native species. Outputs: 2.1.2 (biodiversity-friendly restoration practices); 1.1.1 (technical capacity building).
Target 8: Climate change impacts	Enhances ecosystem resilience and supports climate adaptation through NbS and CSA. Outputs: 2.1.1 (restoration); 2.1.3 (CSA practices); 3.1.3 (monitoring tools for climate and ecosystems).
Target 9: Sustainable management of wild species	Strengthens governance for sustainable resource use. Outputs: 1.1.2 (CBNRM systems); 2.2.3 (community governance strengthening).
Target 10: Sustainable agriculture, aquaculture, forestry	Promotes biodiversity-friendly agricultural systems and agroforestry. Outputs: 2.1.3 (CSA/agroecology on 800 ha); 2.1.2 (biodiversity integration in production systems).
Target 11: Ecosystem services	Restores soil fertility, water regulation, and other ecosystem services. Outputs: 2.1.1 (land restoration); 2.2.1 (water management systems).
Target 13: Access and benefit-sharing	Promotes equitable benefit-sharing through livelihoods and community systems. Outputs: 2.2.2 (value chains benefiting 5,400 people); 2.2.3 (community governance mechanisms).
Target 14: Mainstreaming biodiversity	Integrates biodiversity into key sectors (agriculture, tourism, fisheries). Outputs: 1.1.3 (mainstreaming into sectoral plans); 1.1.1 (institutional capacity strengthening).
Target 15: Business and financial institutions	Supports biodiversity-friendly enterprises and value chains. Outputs: 2.2.2 (development of climate-resilient value chains); 2.2.3 (capacity building for entrepreneurship).
Target 20: Capacity-building	Strengthens institutional and community capacities. Outputs: 1.1.1 (1,500 stakeholders trained); 2.2.3 (2,500 farmers trained); 3.1.1 (knowledge dissemination).
Target 21: Knowledge and data	Develops monitoring systems and knowledge platforms. Outputs: 3.1.3 (digital monitoring tools); 3.1.1 (knowledge products and exchanges).
Target 22: Participation and rights	Ensures inclusive and participatory approaches. Outputs: 1.1.2 (CBNRM systems); 2.2.3 (community governance); 3.1.2 (communication and engagement tools).
Target 23: Gender equality	Promotes gender-responsive approaches across interventions. Outputs: 2.2.2 (50% women beneficiaries); 3.1.1 (gender-inclusive knowledge products); 1.1.1 (gender-balanced capacity building).

Overall, PROAGUA exemplifies GEF-8's integrated programming by jointly addressing biodiversity loss, land degradation, and climate vulnerability in a SIDS context. It operationalizes national policy commitments and MEA obligations while contributing directly to multiple targets of the KMGBF, delivering durable global environmental benefits through landscape-scale, biodiversity-inclusive restoration and sustainable livelihoods.

National policy priorities: The country has ratified major international conventions and agreements on the management of environmental and natural resources such as those on Biological Diversity, Combating Desertification and Climate Change. Cabo Verde signed the Convention on Biological Diversity in June 1992 and ratified it in March 1995. The country is part of the Convention on the Conservation of Migratory Species of Wild Animals - Bonn Convention, since 2006, the Convention on Wetlands - Ramsar Convention and the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES since 2005, among

other treaties and conventions. However, due to the country's lack of financial and technical resources, aggravated by the insular nature of the territory, the implementation of these conventions and treaties is facing some difficulties.^{[1]⁴⁹}

- National Biodiversity Policy and Legal Framework - NBSAP 2014–2030 (Estratégia Nacional e Plano de Ação sobre a Biodiversidade – EPANB). The NBSAP is Cabo Verde's primary policy instrument for implementing the Convention on Biological Diversity. PROAGUA will directly support NBSAP objectives related to restoration and sustainable management of degraded ecosystems; conservation of endemic and threatened terrestrial biodiversity; and mainstreaming biodiversity into agriculture, land use, and local development planning.
 - Land Degradation Neutrality National Targets: Cabo Verde has formally committed to achieving Land Degradation Neutrality (LDN) by 2030 under SDG target 15.3.1 and the UNCCD framework. National LDN targets include: i) reducing land degradation due to land-cover change by 50%; ii) reducing areas with declining land productivity by 45%; iv) increasing soil organic carbon stocks by 2%; and vi) reducing eroded land from 40% to 15%. Through its restoration activities, PROAGUA will directly support the country towards the achievement of the LDN national targets.
- Law No. 86/IV/93 – Environmental Policy Framework Law ((Lei de Bases da Política do Ambiente): The Law establishes the fundamental principles for environmental protection, sustainable use of natural resources, and environmental impact management. PROAGUA will operationalize this law through integrated landscape restoration, pollution-reducing land management practices, and environmental safeguards embedded in community investments.
- Land, Forestry, and Natural Resource Management Frameworks - Law No. 25/X/2023 – General Policy Framework for the Forestry Sector: The law governs forest protection, restoration, sustainable use, and climate-resilient forestry, with explicit provisions on gender equity and community participation. PROAGUA will support forest and tree-based restoration, agroforestry, and biodiversity-compatible land management in degraded landscapes, directly advancing the law's objectives.
- National Strategic Plan for Water and Sanitation (PLENAS 2.0) – Resolution No. 52/2025: This provides the national framework for sustainable management of water resources under conditions of scarcity and climate stress. Through soil and water conservation, watershed restoration, and climate-smart agriculture, PROAGUA will reduce land degradation impacts on water resources and strengthens ecosystem-based water regulation
- Climate Change and Adaptation Policy Framework - National Adaptation Plan (NAP) of Cabo Verde (2021; updated 2022–2030): The Law defines national priorities for climate resilience across ecosystems, agriculture,

water resources, and vulnerable communities. PROAGUA will deliver ecosystem-based adaptation, strengthening soil fertility, vegetation cover, and water regulation, while reducing livelihood vulnerability, key NAP priorities.

- Cabo Verde Nationally Determined Contribution (NDC 3.0, 2025). The NDC commits Cabo Verde to climate resilience in AFOLU systems and sustainable land use. Through restoration of degraded land and sustainable land management PROAGUA directly support NDC targets on land use, resilience, and ecosystem services.
- Resolution No. 38/2024 – Climate Governance Framework – The resolution establishes institutional arrangements for climate policy coordination, monitoring, and transparency. Through Component 3 (Monitoring and Learning) PROAGUA will support the operationalization of this framework through geospatial monitoring, reporting, and adaptive management.
- National Development and Cross-Sectoral Strategies - Strategic Plan for Sustainable Development (PEDS): This is Cabo Verde’s overarching development strategy emphasizing sustainability, resilience, and inclusive growth. The Plan reinforces country’s ‘Vision for 2030’, prioritizing stronger management of environmental pressures on biodiversity, an improved co-management approach for PAs, and sustainable management of terrestrial ecosystems and resources used in agriculture. PEDS II also emphasizes the need for strengthening agro-silvo-pastoral systems and valorizing agricultural products. PROAGUA will integrate environmental restoration with livelihood diversification, contributing to poverty reduction, food security, and resilience in rural and island communities.

In sum, it is noted that Cabo Verde has established a progressively robust environmental policy and regulatory framework that reflects its commitment to addressing biodiversity loss, land degradation, water scarcity, and climate vulnerability within the context of sustainable island development. The country’s environmental governance architecture is anchored in the **National Biodiversity Strategy and Action Plan (EPANB 2014–2030)**, which provides the principal framework for implementing the Convention on Biological Diversity and advancing ecosystem restoration, conservation of endemic biodiversity, and mainstreaming biodiversity into productive sectors and territorial planning. PROAGUA directly contributes to these priorities through integrated landscape restoration, biodiversity-compatible agricultural practices, and strengthened ecosystem stewardship at community level.

The national commitment to achieving **Land Degradation Neutrality by 2030** further reinforces the policy imperative for restoring degraded lands and enhancing ecosystem functionality. Cabo Verde’s targets on reducing land degradation, restoring productivity, increasing soil organic carbon, and reducing erosion are highly relevant to the project’s focus on sustainable land management and restoration of agro-silvo-pastoral systems. These interventions also operationalize the principles of **Law No. 86/IV/93 (Environmental Policy Framework Law)** and **Law No. 25/X/2023 on Forestry**, which emphasize sustainable resource management, ecosystem restoration, climate resilience, and participatory governance.

The project is equally aligned with national water and climate policy instruments, notably **PLENAS 2.0**, the **National Adaptation Plan (2022–2030)**, and **NDC 3.0 (2025)**, all of which prioritize ecosystem-based adaptation, water security, resilient land use systems, and restoration of ecological functions under increasing climate stress. Through watershed rehabilitation, soil and water conservation, and climate-smart agricultural practices, PROAGUA will strengthen ecosystem-based water regulation while enhancing resilience of vulnerable rural livelihoods.

Finally, the project supports implementation of the **Strategic Plan for Sustainable Development (PEDS II)** and the **Climate Governance Framework (Resolution No. 38/2024)** by integrating geospatial monitoring, adaptive management, and inclusive territorial planning. In doing so, PROAGUA serves as a practical delivery mechanism for translating Cabo Verde’s environmental commitments into measurable landscape-level outcomes.

Institutional arrangement: The strategic governance of PROAGUA will be ensured by the Ministry of Agriculture and Environment. It will provide the overall oversight of the project and chair the National Steering Committee (NSC) which will be established by a ministerial decree and will include representatives from relevant sectoral ministries, municipalities, specialized agencies the private sector, civil society, and producers' organizations, with due attention given to the representation of women and youth. The ministerial decree will reinforce its legitimacy.

The NSC will be responsible for: (i) validating strategic orientations, Annual Work Plans and Budgets (AWPBs), and annual reports; (ii) monitoring the overall performance of the programme, risks, and mitigation measures; (iii) approving major design adjustments and implementation agreements; and (iv) facilitating coordination with other national programmes and technical and financial partners.

Consultation and local planning mechanisms are organized in each intervention island, bringing together municipalities, decentralized government services, producers' organizations, water users' associations, and other stakeholders, in order to ensure bottom-up planning and territorial ownership of investments.

As at PIF, the operational implementation of the project will be done by the National Project Implementation Unit (NPIU), based in Praia, and to local focal points on the islands. The NPIU will be structured around three main functional areas: a) specialized technical functions (water/irrigation, infrastructure and equipment, agronomy and agricultural and veterinary advisory services, agribusiness, and rural finance; b) cross-cutting technical functions (gender and social inclusion, nutrition, environment and climate resilience, monitoring and evaluation and GIS, knowledge management, and communication); and c) management functions (administration, financial management, procurement, internal audit, and human resources management).

[1] Government of Cabo Verde (2024) National Biodiversity Strategy and Action Plan 2014-20230

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

Details of the consultations with stakeholders for this PIF have been detailed in the section, 'Stakeholder Engagement Process and Integration of Stakeholder Concerns in PROAGUA Design.' The project will continue engaging with stakeholder to strengthen the social legitimacy, ownership and participation in the implementation and monitoring of the project. Pictures and full list of stakeholders that took part of consultations on the priority Islands - have been cut and pasted in the PIF word document attached in RoadMap.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

<p class="MsoNormal" style="margin-top:3.0pt;margin-right:9.0pt;margin-bottom:3.0pt;margin-left:9.35pt"><i>Assessment:</i> Risks include unintended impacts from restoration (e.g., inappropriate species selection), potential land-use conflicts, and unequal access to project benefits, particularly for women and vulnerable groups. <o:p></o:p></p><p>

</p><p><i>Mitigation:</i> Application of environmental and social safeguards; promotion of native species and biodiversity-friendly practices; participatory land-use planning; gender-responsive targeting and benefit-sharing mechanisms; grievance redress systems; continuous monitoring of social inclusion outcomes. Strong CBNRM, participatory planning, and gender-responsive approaches are embedded in Components 1 and 2. Environmental and social safeguards screening and continuous stakeholder engagement reduce adverse impacts.</p>

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
IFAD	GET	Cabo Verde	Biodiversity	BD STAR Allocation: BD-1	Grant	2,795,915.00	265,612.00	3,061,527.00
IFAD	GET	Cabo Verde	Land Degradation	LD STAR Allocation: LD-1	Grant	1,455,287.00	138,252.00	1,593,539.00
Total GEF Resources (\$)						4,251,202.00	403,864.00	4,655,066.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

150000

PPG Agency Fee (\$)

14000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
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IFAD	GET	Cabo Verde	Biodiversity	BD STAR Allocation: BD-1	Grant	99,000.00	9,410.00	108,410.00
IFAD	GET	Cabo Verde	Land Degradation	LD STAR Allocation: LD-1	Grant	51,000.00	4,590.00	55,590.00
Total PPG Amount (\$)						150,000.00	14,000.00	164,000.00

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
IFAD	GET	Cabo Verde	Biodiversity	BD STAR Allocation	3,169,937.00
IFAD	GET	Cabo Verde	Land Degradation	LD STAR Allocation	1,649,129.00
Total GEF Resources					4,819,066.00

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	2,795,915.00	20387967
LD-1	GET	1,455,287.00	10612033
Total Project Cost		4,251,202.00	31,000,000.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	IFAD	Grant	Investment mobilized	29571000
Recipient Country Government	Ministry of Agriculture and Environment	In-kind	Recurrent expenditures	1429000
Total Co-financing				31,000,000.00

Describe how any "Investment Mobilized" was identified

- \$29,571,000 represents the level of IFAD's investment in the Sustainable and Inclusive Access to Water Programme for Climate-Resilient Agriculture project in Cabo Verde – the project is an eight-year investment (2027-2034).

- \$1,429,000 represents the portion contribution from the Government of Cape Verde through staff time to the project.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

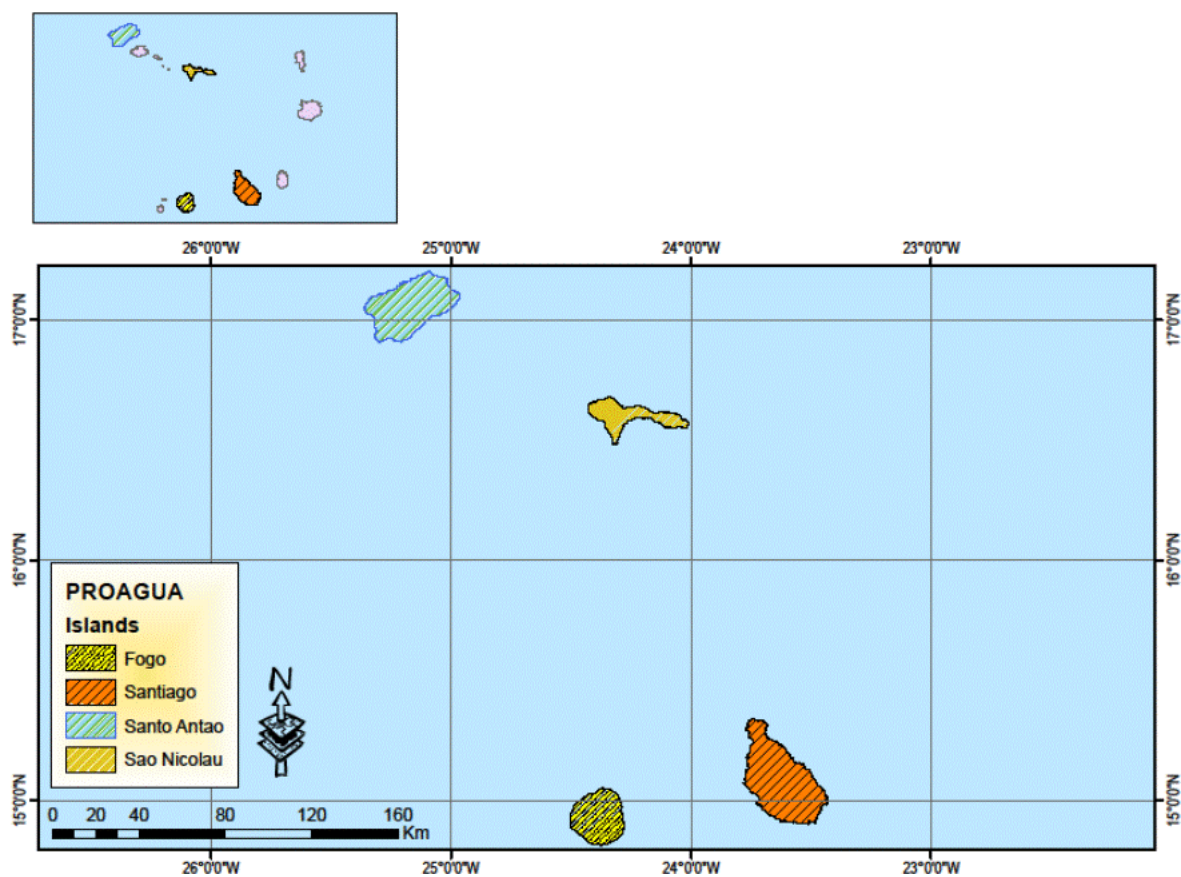
GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Lead Multilateral Climate Funds (AF, GEF, GCF)	5/15/2026	Pierre-Yves Guedez		p.guedez@ifad.org
GEF Agency Coordinator	GEF Technical Lead	5/15/2026	Paola Palestini		p.palestini@ifad.org
Project Coordinator	Country Director Capo Verde	5/15/2026	Ann Turinayo		a.turinayo@ifad.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Mr. Alexandre Nevsky Medina Rodrigues	National Director of Environment	Ministry of Agriculture and Environment	4/16/2026

ANNEX C: PROJECT LOCATION

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



Map showing Fogo, Santiago, Santo Antão and São Nicolau Islands for PROAGUA implementation

Geographical coordinates :

Santo Antão

Ribeira da Cruz (Porto Novo) 17.05553 -25.17230

Morro de Cavol / Ribeira da Cruz

Jorge Luís (Porto Novo) 17.08581 -25.21928

Lajedinho (Porto Novo)

Lajedo 16.98521 -25.12946

Zurinca (Paul) 17.078, -25.071

Pontinha de Janela (Paul) 17.12026, -24.98661

Vale da Ribeira da Torre (Ribeirinha de Jorge, Ribeira Grande) 17.1841, -25.0637

Lagoeiros / Quinta São João Baptista (Porto Novo) 17.025, -25.166

Chã de Caso Pello (Porto Novo) 16.7300, -22.9500

Planalto Norte (Chã de Feijoal, Porto Novo) 17.0794, -25.2666

Planalto Norte (Chã Principal, Porto Novo) 17.0197, -25.0647

Fogo

Zona Sul (São Filipe) 14.8952, -24.4946

Ramo Inglês 14.8917, -24.4697

Jardim - does not exists

Achada Furna 14.873, -24.359

Cabeça Fundão 14.899, -24.349

Chã das Caldeiras 14.971, -24.367

Sao Nicolau

Faijã da Cima/Baixo 16.635, -24.325

Cachaco 16.627, -24.337

Barril 16.6064, -24.4186

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

Cabo Verde - PROAGUA GEF8 Project - SECAP ESC Screening

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Principal Objective 2	Principal Objective 2	Principal Objective 2

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing Models	Strengthen institutional capacity/decision-making		
Stakeholders	- Beneficiaries, Local communities, Private sector, Civil society Type of engagement: - Knowledge and learning, Stakeholder engagement		
Capacity, Knowledge and Research	Capacity development, Knowledge generation and exchange, Learning		
Gender Equality	Gender mainstreaming, Gender results areas		
Focal Area/Theme	Biodiversity, Land degradation, Climate Change		