

GEF-8 PPG REQUEST FOR GBFF PROJECTS

TABLE OF CONTENTS

GENERAL PROJECT INFORMATION3

 Indicative Project Overview4

PROJECT COMPONENTS4

PROJECT CONCEPT DESCRIPTION.....7

 Core Indicators.....13

ANNEX A: PROJECT FINANCING TABLES18

 GEF Financing Table18

 Project Preparation Grant (PPG)18

 Sources of Funds for Country Star Allocation19

 Indicative Action Area Elements19

 Indicative Co-financing20

ANNEX B: ENDORSEMENTS21

 GEF Agency(ies) Certification21

 Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):.....21

General Project Information

Project Title:

Empowering Indigenous Peoples and Local Communities (IPLCs) for sustainable management and conservation of 700,000 hectares of critical ecosystems in three Highland provinces in Papua New Guinea

Region:

Papua New Guinea

GEF Project ID:

11787

Country(ies):

Papua New Guinea

Type of Project:

GBFF

GEF Agency(ies):

FAO

GEF Agency Project ID:

751150

Anticipated Executing Entity(s):

Conservation and Environment Protection Authority (CEPA)

Anticipated Executing Type:

Government

GEF Focal Area (s):

Biodiversity

Submission Date:

9/30/2024

Project Sector (CCM Only)

Mixed & Others

Taxonomy

Focal Areas, Biodiversity, Biomes, Tropical Rain Forests, Protected Areas and Landscapes, Terrestrial Protected Areas, Forestry - Including HCVF and REDD+, Mainstreaming, Agriculture and agrobiodiversity, Species, Wildlife for Sustainable Development, Financial and Accounting, Payment for Ecosystem Services, Conservation Finance, Supplementary Protocol to the CBD, Access to Genetic Resources Benefit Sharing, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Climate Change Adaptation, Community-based adaptation, Livelihoods, Climate resilience, Ecosystem-based Adaptation, Climate finance, Forest, Land Degradation, Sustainable Land Management, Sustainable Agriculture, Community-Based Natural Resource Management, Improved Soil and Water Management Techniques, Sustainable Livelihoods, Income Generating Activities, Ecosystem Approach, Integrated and Cross-sectoral approach, Land Degradation Neutrality, Land Cover and Land cover change, Transform policy and regulatory environments, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Convene multi-stakeholder alliances, Deploy innovative financial instruments, Indigenous Peoples, Stakeholders, Private Sector, Beneficiaries, Communications, Awareness Raising, Education, Behavior change, Public Campaigns, Strategic Communications, Local Communities, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Information Dissemination, Partnership, Consultation, Participation, Gender results areas, Gender Equality, Access to benefits and services, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Access and control over natural resources, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Knowledge Exchange, Capacity, Knowledge and Research, Peer-to-Peer, Innovation, Knowledge Generation, Training, Learning, Theory of change, Adaptive management, Indicators to measure change

Type of Trust Fund:

GBFF

Project Duration (Months)

48

GEF Project Financing: (a)

GEF Project Non-Grant: (b)

6,439,269.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant: (d)
611,731.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing:
7,051,000.00	30,200,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
200,000.00	19,000.00
PPG total Amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
219,000.00	7,270,000.00

Project Tags:

Support IPLC, GBF Target 1, GBF Target 2, GBF Target 3, GBF Target 4, GBF Target 8, GBF Target 10, GBF Target 14, GBF Target 18, GBF Target 19, GBF Target 20, GBF Target 21, GBF Target 22, GBF Target 23

Indicative Project Overview

To enhance biodiversity conservation and ecosystem resilience across critical ecosystems in three Highland provinces of Papua New Guinea by empowering Indigenous Peoples and Local Communities (IPLCs) to foster connectivity in biodiversity corridors and peacebuilding.

Project Components

Component 1. Landscape management and IPLC empowerment

Component Type	Trust Fund
Technical Assistance	GBFF
GEF Project Financing (\$)	Co-financing (\$)
2,699,329.00	13,488,597.00

Project Outcomes:

1.1: Biodiversity conservation enhanced through effective landscape management and participatory Decision Support Systems (DSS)

GEF core indicator 3: Area of land and ecosystems under restoration. Target: 5,000 hectares

-

GEF core indicator 4: Areas of landscapes under improved practices. Target: 2,265,461 hectares

-

GEF core indicator 11: People benefiting from GEF-financed investments with at least 20,000 at least 50% women

Project Outputs:

1.1.1: Ten (10) landscape management plans developed, approved and implemented for high-biodiversity areas.

1.1.2: Ten (10) 10 OECMs, including conservation deeds, explored and incorporated into landscape management plans.

1.1.3. Community-led landscape management systems established, integrating traditional knowledge and SFM practices with modern technologies to ensure landscape-wide conservation and resource use.

1.1.4: Highly participatory platforms in three (3) provinces established supporting IPLC/ multi- stakeholder NRM and landscape planning; meaningful consultations reduce tribal NRM conflict, promote peace building, and sustainable NRM (link to 2.1.3, below).

Component 2. Sustainable financing mechanism for biodiversity conservation

Component Type	Trust Fund
Investment	GBFF
GEF Project Financing (\$)	Co-financing (\$)
1,500,000.00	5,105,028.00

Project Outcomes:

2.1: Innovative financing mechanisms established to support long-term biodiversity conservation and ensure the financial sustainability of OECMs and PAs.

Indicator: Amount of funding identified through incentive-based approaches for biodiversity conservation

Indicator: Revenue generated from biodiversity-friendly products

Project Outputs:

2.1.1: Three (3) locally owned, adaptable model landscape incentive mechanisms developed; viewed for wider scale up.

2.1.2: Existing incentive-based financing approaches adapted, implemented, and supported by capacity building for stakeholders in design, uptake, and management.

2.1.3: Biodiversity-friendly livelihoods and value-chains developed and/or strengthened.

2.1.4: Catalytic financing interventions, including pilot projects, tested and scaled (e.g. green bonds, BD offsets, etc.).

Component 3. Policy Integration, Institutional Strengthening, and Knowledge Sharing

Component Type	Trust Fund
Technical Assistance	GBFF
GEF Project Financing (\$)	Co-financing (\$)
1,749,329.00	9,762,565.00

Project Outcomes:

3.1: Policy frameworks strengthened, institutional capacities enhanced, and knowledge-sharing platforms created to support biodiversity conservation and sustainable development across sectors

GEF core indicator 4: Areas of landscapes under improved practices. Target: 2,265,461 hectares

Project Outputs:

3.1.1: National and subnational biodiversity policies, including the National OECM policy, provincial land use and biodiversity conservation policies, and sectoral plans, aligned with global targets and PNG's NBSAP National Target 12.^[1]

3.1.2: Enhanced institutional capacity for identifying and recognizing potential OECMs, including training on national guidelines, registry, management, monitoring, and reporting mechanisms.

3.1.3: Digital knowledge platform established for real-time sharing of best practices and lessons learned for stakeholders with internet access.

3.1.4: Community-based knowledge-sharing mechanisms disseminate best practices and lessons learned between IPLCs in locally appropriate formats.

^[1] PNG's NBSAP National Target 12 focuses on increasing the coverage and effectiveness of protected areas in PNG.

M&E

Component Type	Trust Fund
Technical Assistance	GBFF
GEF Project Financing (\$)	Co-financing (\$)
183,980.00	691,432.00

Project Outcomes:

Strengthened project effectiveness and sustainability through systematic monitoring and evaluation.

Project Outputs:

1. Biannual project supervision and adaptive management
2. Mid-term strategy review and adjustment
3. Terminal project evaluation and lessons learned

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)

Component 1. Landscape management and IPLC empowerment	2,699,329.00	13,488,597.00
Component 2. Sustainable financing mechanism for biodiversity conservation	1,500,000.00	5,105,028.00
Component 3. Policy Integration, Institutional Strengthening, and Knowledge Sharing	1,749,329.00	9,762,565.00
M&E	183,980.00	691,432.00
Subtotal	6,132,638.00	29,047,622.00
Project Management Cost (PMC)	306,631.00	1,152,378.00
Total Project Cost (\$)	6,439,269.00	30,200,000.00

Please provide justification

PROJECT CONCEPT DESCRIPTION

Project Concept Description (No more than seven pages total, including 5 pages of text maximum. Concepts longer than 7 pages will be returned. Please note the portal entry will be limited to up to 19,400 characters of text and up to two figures.).

(i) Current Situation/Baseline Conditions

Papua New Guinea (PNG), the largest Pacific island state, comprises the eastern half of New Guinea and numerous smaller islands. The country's unique geographic location and topological diversity make it one of the world's most significant biodiversity hotspots, housing over 7% of the planet's biodiversity on less than 1% of the earth's total land area. PNG is home to more than 13,634 documented plant species, with around 64% being endemic. This is considerably higher than other biodiversity-rich islands (e.g. Madagascar and Borneo). The island's flora includes highly endemic plant species, particularly within the *Podocarpaceae* and *Orchidaceae* families.

PNG hosts approximately 150,000 insect species, 314 freshwater fish species, 641 species of amphibians and reptiles, 740 bird species, and 276 mammal species, many of which are endemic. Species like the tree kangaroos (genus *Dendrolagus*, 12 of the 14 known species), the Eastern Long Beaked Echidna (*Zaglossus bartoni*) and the Birds of Paradise (family *Paradisaeidae* of the order *Passeriformes*, with 15 out of 17 genera occurring in PNG) highlight the country's global significance in terms of unique wildlife.

The nation's vast forest cover nurtures its ecological importance. Forests, which span approximately 78% of the country's land area, play a crucial role in carbon sequestration, making PNG a net-zero emissions country. However, these ecosystems face increasing pressures from deforestation, primarily due to subsistence agriculture, population growth, and commercial activities like oil palm development and logging. Between 2000 and 2019, approximately 353,000 hectares of forest were cleared, with the annual deforestation rate rising significantly from 10,066 hectares per year (2001-2010) to 28,016 hectares per year (2011-2019).

Despite these threats, primary forests still cover around three-quarters of the country's total forest area, making PNG's forests among the most intact globally. Logging concessions cover about 28% of these forests, and forest degradation poses a larger threat than deforestation due to the extensive scale of commercial logging. Moreover, the rapid population growth rate of 3.1% annually exacerbates land use pressure, increasing the risk of habitat destruction and biodiversity loss.

PNG's existing protected area (PA) network is critically underdeveloped, covering less than 4% of its terrestrial area. This falls significantly short of the Kunming-Montreal Global Biodiversity Framework (KMGBF) Target 3, which aims to conserve 30% of terrestrial and inland water ecosystems by 2030. While 62 PA have been formally established, representing about 4.8% of PNG's land area, their effectiveness is hindered by inadequate funding, insufficient management capacity, and limited community involvement.

Indigenous Peoples and Local Communities (IPLCs), who own 97% of the land, play a critical role in biodiversity conservation through their customary land management practices. However, their engagement in formal conservation efforts remains limited due to poor consultation, unresolved land rights issues, insufficient capacity, and weak legal protections.

Despite these challenges, community-led initiatives such as the Tree Kangaroo Conservation Program (TKCP) in the YUS Conservation Area and the proposed Torricelli Mountain Range Conservation Area demonstrate how localized efforts can effectively conserve biodiversity. The TKCP has emerged as a model for leveraging customary land tenure systems for conservation, ensuring that both biodiversity and local livelihoods are protected. Additionally, conservation deeds in Jiwaka and Chimbu provinces, such as the Mt. Goplom Conservation Area and the Inaugl tribe's protection of over 12,000 hectares of forest, further illustrate the growing role of community-led efforts in safeguarding biodiversity through legal agreements and customary land management practices.

Climate change further compounds the threats facing PNG's ecosystems. According to the Global Climate Risk Index by Germanwatch, the country is ranked as the 10th most vulnerable to climate change globally, with increasing risks of natural disasters like landslides, flooding, and extreme weather events. These disasters, along with the impacts of logging and agricultural expansion, continue to degrade vital ecosystems, threatening the biodiversity that underpins local livelihoods. For instance, a major landslide in Enga Province in May 2024, caused by heavy rains, resulted in the tragic loss of 175 lives and underscored the need for improved land-use planning and forest conservation.

(ii) Problems Addressed

- A. Loss of biodiversity and habitat degradation: PNG faces significant biodiversity loss and habitat degradation due to deforestation, commercial logging, and agricultural expansion, underscoring the need for sustainable forest management (SFM) practices as outlined in NBSAP National Target 6.
- B. Limited IPLC participation and capacity in conservation: While IPLCs have always been central to conservation efforts, the customary land tenure system and lengthy processes involved in establishing formal protected areas often delay their full participation in formal conservation initiatives.
- C. Unsustainable economic practices and reliance on resource extraction: PNG's economy heavily depends on extractive industries, which degrade ecosystems and threaten biodiversity.
- D. Insufficient financial mechanisms and incentives for conservation: The long-term sustainability of conservation efforts in PNG is constrained by inadequate funding.
- E. Gaps in policy frameworks and limited institutional capacity: The effectiveness of PNG's biodiversity conservation efforts is hampered by fragmented and outdated policy frameworks, as well as inadequate institutional capacity.

(iii) Goal and Objectives of the Project

Goal: The overarching goal of the project is to enhance biodiversity conservation in PNG by strengthening the management of critical ecosystems, empowering IPLCs, and developing sustainable financing mechanisms that support long-term environmental and socio-economic resilience. The project seeks to contribute to global biodiversity targets, particularly Target 3 of the KMGBF, which aims to conserve at least 30% of terrestrial and inland water ecosystems by 2030, while integrating IPLCs as key partners in conservation efforts.

- A. Conservation and sustainable use of high-biodiversity landscapes:
 - Implement integrated landscape management plans targeting critical habitats in areas with high biodiversity significance, including species-specific action plans for threatened species such as tree kangaroos, Birds of Paradise, and other endemic fauna.
 - Ensure ecological connectivity through the establishment of well-connected biodiversity corridors that promote species migration and enhance climate resilience.
 - Promote the establishment and official recognition of OECMs, such as conservation areas and conservation agreements, to increase area-based conservation coverage, focusing on community-led approaches and sustainable use.

B. Empowerment of IPLCs for sustainable resource management:

- Strengthen IPLC capacity to manage biodiversity and natural resources by providing technical training in sustainable agriculture, forestry, and fisheries, and by developing community-led landscape management systems that combine traditional knowledge with modern technology.
- Facilitate inclusive governance mechanisms and benefit-sharing mechanisms that ensure IPLCs receive direct economic benefits from sustainable activities and participate in decision-making processes concerning land use and biodiversity management.
- Facilitate peacebuilding and social cohesion in regions affected by tribal conflicts over land and resources by encouraging collective management of shared natural resources through community-led conservation initiatives.

C. Development of sustainable economic alternatives:

- Promote biodiversity-friendly livelihoods through the development of organic farming, sustainable agroforestry initiatives and eco-tourism, reducing reliance on destructive industries like logging and mining, while creating sustainable value chains that balance economic development with long-term biodiversity conservation.
- Explore the potential designation of Globally Important Agricultural Heritage Systems (GIAHS) in key areas such as the Highlands, linking sustainable agriculture practices with biodiversity conservation.
- Expand market access for sustainable products such as certified coffee and non-timber forest products, supporting IPLCs in building economically viable and sustainable enterprises.

D. Establishment of sustainable financing mechanisms:

- Three (3) model landscape incentive mechanisms developed. These are adaptable for broader scale-up, with existing financing approaches (e.g., green bonds, PES, biodiversity offset) supported through capacity-building efforts, to provide long-term financial support for conservation efforts.
- Leverage REDD+ initiatives and other financial mechanisms to provide continuous support for PNG's PA system and OECMs, enhancing their long-term financial sustainability while benefiting local communities.

E. Strengthening of policy and institutional frameworks:

- Align national and subnational biodiversity policies with global conservation targets, such as the KMGBF, by integrating biodiversity considerations into the agriculture, forestry, and fisheries sectors.
- Build institutional capacity through targeted training and the establishment of a knowledge management platform that supports adaptive management and evidence-based policy-making in biodiversity conservation.

(iv) Justification for the Project Intervention

The project is crucial for safeguarding PNG's unique biodiversity from increasing threats posed by deforestation, habitat degradation, and unsustainable resource extraction. PNG's rich ecosystems—home to many endemic species—are under pressure due to economic expansion and population growth, which have resulted in habitat loss and ecosystem degradation. As IPLCs control over 97% of the land, they are pivotal in achieving conservation success. However, their participation has been limited due to capacity gaps, weak governance frameworks, and insufficient financial support. Therefore, empowering IPLCs to manage their land sustainably is not only a conservation priority but a socio-economic necessity.

The intervention is further justified by the urgent need to close the conservation financing gap. Currently, PNG's PA network covers less than 4% of the land, far short of the 17% target set in NBSAP National Target 12. This project introduces innovative financial mechanisms, which will provide sustainable long-term funding to manage PA and the potential expansion of OECMs. The project will explore the feasibility of establishing structures for OECMs, including conservation deeds, as potential tools for PNG's biodiversity conservation efforts. Ensuring ecological connectivity through these OECMs will be central to achieving landscape-level conservation, fostering species migration and enhancing climate resilience. Additionally, the project will integrate disaster management strategies, particularly addressing the risks of landslides and flooding, which threaten both community livelihoods and biodiversity in vulnerable regions such as the Highlands.

Social cohesion and peacebuilding are additional justifications for the project. In regions affected by tribal conflicts over land and resources, conservation can become a tool for conflict resolution and sustainable development. Well-connected biodiversity corridors can also foster regional cooperation across tribal boundaries, encouraging collective management of shared natural resources and enhancing social cohesion. Initiatives such as the Velotige proposed conservation area have shown how community-led conservation can foster cooperation and build peace. The project's focus on integrating traditional knowledge with modern conservation will strengthen IPLC governance, enhance social stability, and ensure inclusive economic growth.

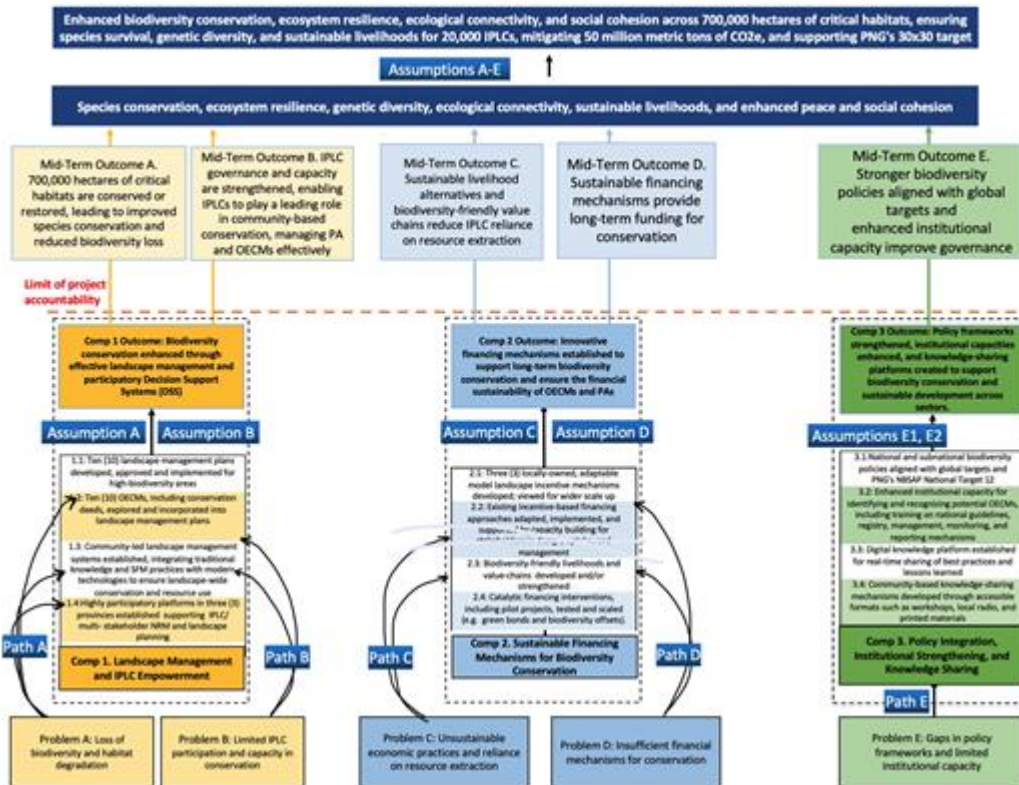
Ultimately, this project aligns with PNG's 2014 Protected Areas Policy and the global GBF Target 3 by integrating IPLCs into national biodiversity strategies, thus ensuring that conservation efforts are sustainable, culturally appropriate, and driven by local stakeholders. This approach will provide long-term resilience for both ecosystems and communities, by ensuring well-connected landscapes that support species migration, ecosystem stability, and climate resilience. By linking biodiversity conservation with sustainable agriculture through the exploration of GIAHS, and addressing disaster management challenges such as landslides, the project will enhance the socio-economic resilience of local communities. By making OECMs and PA part of connected conservation networks, the project ensures that biodiversity conservation in PNG becomes a cornerstone of its sustainable development pathway.

(v) **Expected results including the Global Environmental Benefits and an estimate of the project's contributions to the relevant biodiversity core indicators.**

The project will achieve the following Global Environmental Benefits (GEBs):

- Biodiversity
 - The project will protect critical habitats for key species, including tree kangaroos and Birds of Paradise, by creating or improving management of 500,000 ha of terrestrial PA and OECMs, supporting NBSAP National Target 12 on expanding protected area coverage. This will prevent species extinction and improve conservation status.
 - Genetic diversity: By enhancing traditional agricultural systems and promoting sustainable practices, the project will maintain and protect genetic diversity of wild and domesticated species in the Highlands.
- Sustainable use
 - Sustainable management: The project will improve 2,265,461 ha of landscapes, which is entire area of the three target provinces through strengthen land use policies, land use planning and monitoring, sustainable agriculture and agroforestry, supporting long-term ecosystem viability and biodiversity-friendly livelihoods.
 - Equitable sharing: At least 20,000 people, with 50% being women, will benefit from GEF-financed investments through sustainable use and conservation initiatives, ensuring fair and equitable sharing of benefits.
- Ecosystem services
 - Climate regulation: The project will mitigate 50 million metric tons of CO₂e by protecting forests and promoting sustainable land management, enhancing the role of ecosystems in carbon sequestration. The project will create biodiversity corridors to support migration and climate resilience.
 - Water security: Restoration of highland watersheds will improve water availability and quality for local communities, reducing risks of floods and landslides.
- Human well-being
 - Livelihoods: The project will support sustainable livelihoods through agroforestry, organic farming and eco-tourism, improving income and reducing dependence on extractive industries.

Figure 1. Project Theory of Change



Pathway A: Empowering IPLCs to manage their lands will lead to better protection of critical habitats and species, contributing to species conservation and genetic diversity. The project targets Protected Areas (PAs) and Other Effective Area-Based Conservation Measures (OECMs) for improved management. By establishing well-connected biodiversity corridors, the project will ensure ecological connectivity to support species migration and enhance climate resilience, further reducing habitat loss.

Pathway B: Enhancing IPLC capacity through training and benefit-sharing mechanisms will lead to greater IPLC engagement in conservation efforts and improved landscape management using both traditional knowledge and modern technology. Community-led conservation initiatives can also foster peacebuilding and social cohesion in regions affected by tribal conflicts over land and natural resources, encouraging collective management and cooperation.

Pathway C: Sustainable financing will enable IPLCs to engage in biodiversity-friendly economic activities, ensuring the long-term viability of conservation efforts and mitigating CO₂e.

Pathway D: By developing incentive-based financing approaches, the project ensures sustained funding for PA and OECMs, addressing the conservation financing gap.

Pathway E: Improved policy and institutional capacity will facilitate the effective governance and management of PA and OECMs, integrating community-driven conservation into national biodiversity strategies.

Assumption A: IPLCs will engage in landscape management if economic benefits from improved livelihoods are clear.

Assumption B: IPLC capacity-building will effectively strengthen their ability to manage and monitor biodiversity.

Assumption C: Sustainable financial incentives will reduce IPLCs' reliance on destructive practices like logging and mining.

Assumption D: Incentive-based financing approaches will generate adequate and predictable funding for long-term biodiversity conservation.

Assumption E1: Government and IPLCs will cooperate effectively in managing biodiversity through improved governance structures.

Assumption E2: Training programs will successfully build capacity for sustainable biodiversity management at both the national and community levels.

○

- Component 1 focuses on IPLC empowerment and landscape management through Decision Support Systems (DSS), aligning with the objective to enhance biodiversity conservation through community-led conservation and sustainable land management.

Component 2 establishes sustainable financing mechanisms, directly supporting the project objective's focus on long-term financial sustainability for biodiversity conservation. Three (3) landscape models will be developed, and the financing mechanisms will be tested for scalability (green bonds, biodiversity offsets).

Component 3: The project is strongly aligned with key national policies, such as Vision 2050, the Protected Areas Policy 2014, and the National Biodiversity Strategy and Action Plan (NBSAP). Through Component 3, the project will ensure that lessons learned and best practices, particularly regarding the management of OECMs and community-driven conservation approaches, are integrated into these policies. By strengthening institutional capacities and policy frameworks, the project will facilitate the inclusion of IPLC-led initiatives in national conservation strategies, further contributing to global biodiversity targets and national biodiversity commitments.

The project will involve a wide range of stakeholders:

- **Government:** The Ministries of Environment, Agriculture, and Forests, with CEPA leading coordination, will guide policy, ensure compliance, and align project activities with national plans. Local governments in Enga, Jiwaka, and Chimbu provinces will also be involved in coordinating on-the-ground activities.
- **IPLCs:** IPLCs in the Highlands provinces will engage in biodiversity conservation through traditional knowledge, landscape management, and participation in sustainable livelihood activities like agroforestry and eco-tourism. Specific IPLCs, such as the Inaogl tribe in Chimbu and the Kwiop clans in Jiwaka, will play a leading role in the management of OECMs and will benefit from capacity-building programs.
- **Civil Society Organizations (CSOs):** In PNG, CSOs like Partners with Melanesians (PwM) and the Wildlife Conservation Society (WCS) have played pivotal roles in advancing community-driven conservation. Their experience in supporting OECMs, such as promoting conservation deeds in Jiwaka and fostering local stewardship over montane rainforests, showcases the potential impact of partnering with these actors. This groundwork will help ensure the effective involvement of IPLCs in future biodiversity initiatives.
- **Private sector:** The private sector, particularly companies in the agriculture, forestry, and eco-tourism sectors, will contribute to sustainable development initiatives. Through Corporate Social Responsibility (CSR) programs, companies will fund community-based projects, adopt biodiversity-friendly practices in industries like sustainable coffee production in Jiwaka and eco-tourism ventures in Chimbu, and support conservation through value chain development and green investments.
- **Academic and research institutions:** Institutions such as the University of Goroka and the PNG Institute of Biological Research will be engaged in landscape management, supporting project design through research and evaluation of conservation strategies. These institutions will also provide training programs for local stakeholders on biodiversity management and sustainable practices.

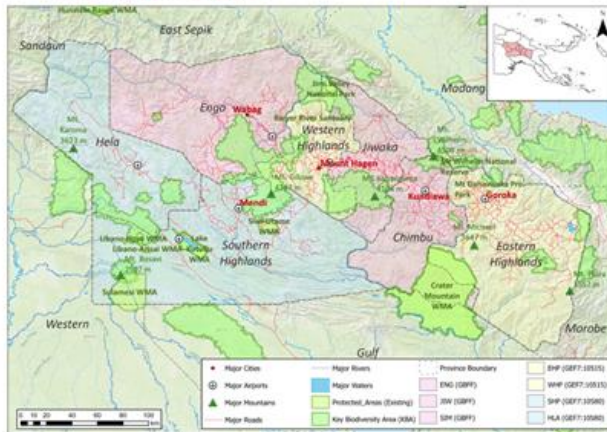
○ Figure 2. Commented map of the three project target provinces

Across the 3 provinces, Challenges:

- Deforestation due to logging and agricultural expansion
- Climate change affecting agriculture and biodiversity
- Food security challenges due to environmental changes
- Economic pressures leading to unsustainable practices

Opportunities for IPLCs:

- Sustainable agriculture initiatives
- Community conservation efforts
- Climate change mitigation and adaptation programs
- Eco-tourism and sustainable resource management benefits
- Establishment of resource centers for conservation and community development



Enga Province

Biodiversity: 90% forest cover, home to diverse ecosystems, including montane forests that host a variety of flora and fauna. Key species include the tree kangaroo (*Dendrolagus goodfellowi*) and various bird species like the Princess Stephanie's *Astrapia* (*Astrapia stephaniae*).

Management: implemented the "Strengthening Integrated Sustainable Landscape Management" project, funded by the EU. The project includes the establishment of community conservation areas. It integrates government systems, private sector, and community actions to promote sustainable development.

Chimbu Province

Biodiversity: High biodiversity in rainforests, steep mountainous terrain and montane forests. Variety of endemic plant and animal species, home to species like the tree kangaroo and birds of paradise.

Management: In 2023, 5 clans from the Inaugl tribe in Gembogl District signed a conservation deed to protect 12,241 hectares of high biodiversity forest. The KGWan Eco Habitat project aims to conserve 20,000 hectares of terrestrial biodiversity while addressing livelihoods and socio-economic needs.

Jiwaka Province

Biodiversity: 95% forest cover, diverse ecosystems perfect for bird watching, with unique species such as the Kingfisher (*Alcedinidae*) and the Mountain Cuscus (*Phalanger carmelitae*). The region also supports various plant species, including bamboo, casuarina, coffee, tea, cocoa, spices, food crops.

Management: In 2021, 8 clans from Kwio in the Jimi District signed a conservation deed to protect 3,500 hectares of montane rainforest. These efforts are supported by organizations like the Wildlife Conservation Society (WCS) and USAID.

The project aligns with GBF Action Areas 1, 2, and 6, contributing to biodiversity conservation and ecosystem resilience across 505,415 hectares of critical habitats and supporting the 30x30 target. It promotes community-led governance via OECMs and conservation deeds, empowering IPLCs in biodiversity management. Integrating biodiversity into land-use planning and promoting sustainable practices enhances resilience and prevents degradation.

- Action Area 1: The project supports sustainable biodiversity management, enhancing IPLC capacities to secure species like tree kangaroos and Birds of Paradise.
- Action Area 2: Establishing biodiversity corridors ensures connectivity, supporting species migration, climate resilience, and reducing fragmentation.
- Action Area 6: Partnerships in sustainable coffee and eco-tourism integrate biodiversity into local economies, benefiting both IPLCs and the environment.

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500000	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500000	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Existing community conservation areas		Protected area with sustainable	15,741.00			

		use of natural resources				
Existing PAs		National Park	227,772.00			
Key Biodiversity Areas to be targeted currently outside of PA system		Others	256,487.00			

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

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

Name of the Protected Area	WDP A ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
----------------------------	----------	---------------	----------------------	----------------------------------	----------------------------	---------------------------	--	------------------------------	-----------------------------

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)
5000	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)
Cropland				

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)
5,000.00			

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)

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)
2265461	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)
2,265,461.00			

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)

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 CO₂e (direct)	91750	0	0	0
Expected metric tons of CO₂e (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 CO₂e (direct)	91,750			
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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)

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	10,000			
Male	10,000			
Total	20,000	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)

The quantitative targets were determined through existing knowledge, expert consultations, and practical considerations, aligned with the GBFF's goals.

1. Terrestrial protected areas: The project will provide support to all existing protected areas covering 227,772 ha and community conservation areas spanning 15,741 ha. Currently, approximately 280,000 ha of Key Biodiversity Areas remain outside of these protected zones, making them high-priority targets for the establishment of new protected areas. Taking these factors into account, the project aims to create or enhance the management of about 500,000 ha of terrestrial protected areas.

PROVINCE	DISTRICT	NAME OF PA	STATUS	AREA	WDPA ID
CHIMBU					
	Kundiawa-Gembogl	Mt. Wilhelm National Park	Gazetted	817 ha	71364
	Kundiawa-Gembogl	Kuralgbau	Proposed		NA NA
	Kundiawa-Gembogl	Kuglkane Ranges Protected Zone	Proposed		NA NA
	Sinesine Yongumugl	Mauberema Community Conservation Area	Proposed		2,500 ha NA
	Kundiawa-Gembogl	Inaugl Natural Resource Management Area	Conservation Deed signed	12,241 ha	NA
	Karamui-Nomane	Karamui Conservation Area	Proposed	212,000 ha	NA
	Karamui-Nomane	Crater Mountain Wildlife Management Area	Gazetted	270,000 ha	76321
	Kerowagi	Boko Nature Reserve	Proposed	NA	NA

Kundiawa-Gembogl (estimate)	NA	Mt. Wilhelm National Park (Proposed Extension)	Proposed extension	1,500 ha
--------------------------------	----	--	--------------------	----------

JIWAKA

Jimi	Mt. Goplom Conservation Area	Conservation Deed signed	3,500 ha	NA
North Wahgi	Biluban River Catchment	Proposed	10,444.73 ha	NA
North Wahgi	Odan Zoo	Proposed	NA	NA
North Wahgi	Kimil Headwaters	Proposed	Approximately 5,000 ha (estimate)	NA
Anglimp/South Waghi	Kunjing Ku (Stone Axe)	Proposed	NA	NA
Anglimp/South Waghi	Mt. Au (Kambia)	Proposed	NA	NA
Jimi	Kavali Reserve	Proposed	NA	NA
Jimi	Jimi TPR	Proposed	NA	NA
Jimi	Kuip Community Conservation Area	Proposed	Approximately 4,000 ha (estimate)	NA

ENGA

Papua New Guinea Conservation and Environment Protection Authority (CEPA) does not have any information on proposed PAs or conservation deeds in Enga Province, yet. Due to recent conflict in Enga Province, access to the region has been severely restricted. This situation currently hinders data collection and the availability of up-to-date information on protected areas at this time.

AREA: The areas listed as NA (Information not available) are due to the lack of publicly accessible data on their exact sizes. Many proposed areas are still under consideration, and their official measurements have not been released.

WDPA IDs: Only Mt. Wilhelm National Park and Crater Mountain Wildlife Management Area have WDPA IDs assigned, as they are officially gazetted and recognized in the World Database on Protected Areas. NA: Indicates that information is "Not Available" due to the areas being proposed, not yet officially gazetted, or not yet recorded in the WDPA database.

3. Area of land and ecosystems under restoration: The target provinces encompass 426,379 ha of degraded forests and 115,117 ha of grassland. Given the high population density of 68.8 people per km²—more than twice the national average of 25.5 people per km²—and the ongoing population growth, the project will prioritize protecting 1.09 million ha of primary forest over restoring degraded environments. Certain lands will be required for development, and portions of grasslands and heavily degraded forests may be suitable for this purpose. The project aims to restore 1% of the degraded forests and grasslands, totaling 5,415 ha.

4. Area of landscapes under improved practices: The project will support land use policies across each target province, focusing on protected areas, forestry, and agriculture. Additionally, the project will aid in the establishment of land use plans and monitoring systems. These efforts are expected to lead to improvements in land use practices throughout the target provinces.

6. Greenhouse Gas Emissions Mitigated (metric ton of CO₂e): Between 2015 and 2019, an average of 585 ha per year were deforested in the target provinces, reflecting an annual deforestation rate of 0.04%. During the same period, an average of 782 ha per year experienced forest degradation, resulting in greenhouse gas emissions of 343,100 t CO₂e annually. Meanwhile, the annual greenhouse gas removal by secondary forests in these provinces amounted to 782,405 t CO₂e. This calculation is based on the total area of degraded forests and the IPCC annual growth factor for degraded tropical mountain forests, using the formula 1 t d.m./ha/yr x carbon factor 0.5 x CO₂ factor 3.67. Overall, the Land Use, Land-Use Change, and Forestry (LULUCF) sector in these provinces shows a significantly negative annual CO₂ emission balance. Given that deforestation and forest degradation levels are minimal, the project will focus on maintaining this status quo while enhancing CO₂ removal through ecological restoration. Post-project, it is expected that 1 t d.m./ha/yr of carbon sequestration will occur on 5,000 ha, leading to an additional annual CO₂ removal of approximately 9,175 t CO₂e. Over a 10-year period after project completion, this restoration is projected to remove 91,750 t CO₂e from the atmosphere. This estimate does not include the potential benefits from avoiding further deforestation and

degradation due to project interventions, as these impacts could be substantial but are uncertain and dependent on the model applied.

7. People benefiting from GEF-financed investments: (at least 20,000, at least 50% women): The beneficiary target, with an emphasis on gender equity, was derived from demographic data and insights from similar projects. The project aimed for inclusivity, leveraging community engagement records and expert advice to estimate the project's reach.

These methods ensured that the project's objectives were practical and tailored to PNG's conservation priorities within the available timeframe.

ANNEX A: PROJECT 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	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 1	2,575,708.00	244,692.00	2,820,400.00
FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 2	1,931,781.00	183,519.00	2,115,300.00
FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 6	1,931,780.00	183,520.00	2,115,300.00
Total GEF Resources (\$)					6,439,269.00	611,731.00	7,051,000.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

200000

PPG Agency Fee (\$)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG (\$)	Agency Fee(\$)	Total PPG Funding(\$)
------------	------------	---------------------------------	------------	-------------------------	-----------------------	----------	-------------------	--------------------------

FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 1	Grant	80,000.00	7,600.00	87,600.00
FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 2	Grant	60,000.00	5,700.00	65,700.00
FAO	GBFF	Papua New Guinea	Biodiversity	GBFF Action Area 6	Grant	60,000.00	5,700.00	65,700.00
Total PPG Amount (\$)						200,000.00	19,000.00	219,000.00

Please provide justification

Sources of Funds for Country Star Allocation

(Only for Multi-Trust Fund projects where GEF TF is included)

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
Total GEF Resources					0.00

Indicative Action Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
GBFF Action Area 1	GBFF	2,575,708.00	12,080,000.00
GBFF Action Area 2	GBFF	1,931,781.00	9,060,000.00
GBFF Action Area 6	GBFF	1,931,780.00	9,060,000.00
Total Project Cost		6,439,269.00	30,200,000.00

Amount of resource allocated to support actions by IPLCs for the conservation, restoration, sustainable use and management of biodiversity:

Amount

2,883,446.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Conservation and Environment Protection Authority (CEPA)	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Conservation and Environment Protection Authority (CEPA) PNG Forest Authority (PNGFA)	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Department of Lands and Physical; Planning (DLPP)	In-kind	Recurrent expenditures	200,000.00
Recipient Country Government	Department of Agriculture and Livestock (DAL)	In-kind	Recurrent expenditures	200,000.00
Recipient Country Government	Climate Change and Development Authority (CCDA)	In-kind	Recurrent expenditures	200,000.00
Recipient Country Government	Enga Provincial Administration	In-kind	Recurrent expenditures	500,000.00
Recipient Country Government	Jiwaka Provincial Administration	Grant	Recurrent expenditures	500,000.00
Recipient Country Government	Chimbu Provincial Administration	Grant	Recurrent expenditures	500,000.00
Donor Agency	Green Climate Fund (GCF) – (PNG Results Based Payment)	Grant	Investment mobilized	10,000,000.00
Donor Agency	EU - FCCB Project: Expertise France components	Grant	Investment mobilized	5,000,000.00
Donor Agency	EU - FCCB Project: FAO components	Grant	Investment mobilized	2,000,000.00
Donor Agency	EU/FAO Sustainable Wildlife Management Programme	Grant	Investment mobilized	500,000.00
Donor Agency	France - One Country Package	Grant	Investment mobilized	4,000,000.00
Donor Agency	UK - AIM4Forests Project	Grant	Investment mobilized	300,000.00

Donor Agency	UN-REDD Programme	Grant	Investment mobilized	300,000.00
Donor Agency	USAID Highlands peace building project	Grant	Investment mobilized	4,000,000.00
Total Co-financing				30,200,000.00

Describe how any "Investment Mobilized" was identified

-The GCF – PNG Results Based Payment grant aligns with the GBFF criteria for investment mobilization by facilitating targeted financial support for biodiversity conservation and sustainable land management practices. This \$5,000,000 investment underscores a strategic approach to leverage significant resources towards the realization of biodiversity benefits.

-The EU-FCCB Project's Expertise France components grant of \$5,000,000 for investment mobilization is relevant to the GBFF PNG project proposal by contributing to biodiversity conservation, restoration, and sustainable use across various ecosystems, aligning with GBFF's programming directions and enhancing capacity building, policy development, and resource mobilization efforts in PNG.

-The France - One Country Package grant of \$2,000,000 is relevant to the project proposal for the GBFF as it represents a significant investment mobilized to support biodiversity conservation and sustainable use in PNG, aligning with GBFF's objectives to enhance global biodiversity benefits through targeted conservation and sustainable management practices.

-The UK-AIM4Forests Project's grant investment of \$300,000 is strategically aligned with the objectives of enhancing biodiversity protection and SFM in PNG, contributing significantly to the GBFF's mission to mobilize resources for the conservation, restoration, and sustainable use of biodiversity.

-The UN-REDD Programme grant of \$300,000 is relevant to the project proposal as it aligns with efforts to improve the management of PA in PNG, enhancing biodiversity conservation and supporting local communities in sustainable land management practices, thus contributing significantly to the objectives of the GBFF.

-The project's Output 1.1.3 aligns with the initiatives under the USAID Highland's peace building project.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Jeff Griffin	9/30/2024	Aaron Becker	00166958056392	Jeffrey.Griffin@fao.org

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

Name	Position	Ministry	Date (MM/DD/YYYY)
Jude Tukuliya	Managing Director	Conservation and Environment Protection Authority	9/20/2024