

Key Programme Information for the Gold Standard for Global Goals Voluntary Project Activity (VPA)

" Ibu Bakau: Community-powered Mangrove Afforestation in Indonesia 1"

Section A: Project Summary

The proposed VPA "Ibu Bakau: Community-powered Mangrove Afforestation in Indonesia 1" is an Afforestation and Reforestation (A/R) of Mangroves type project of the Gold standard for Global Goals. This is the first of the several VPAs in the Sumatran island of Indonesia under a broader PoA "Ibu Bakau: Community-powered Mangrove Afforestation in Indonesia".

The VPA is designed to achieve the following:

1. Restore degraded and fragmented mangrove habitats through plantation activities in identified discrete parcels of land
2. Improve socio-economic status of the local community through provision of training for Income Generation Activities (IGAs), income diversification, and reduced climate vulnerabilities
3. Improve biodiversity in existing mangroves by restoring degraded mangrove habitats, increasing surveillance and patrolling, and reducing the community's unsustainable extraction of mangrove resources

The local communities heavily rely on these mangrove ecosystems for their livelihood and sustenance. The mangrove habitats in the project area have undergone significant losses in the mangrove habitats over the past few years. The degraded and continued degradation of the project area leads to several difficulties in the natural regeneration in the land within project boundary. Abandoned aquaculture ponds are not suitable for natural regeneration, and instead requires significant anthropogenic intervention to re-introduce mangrove and other native vegetation into the site. The mangrove ecosystems in the project area have degraded to an extent where natural regeneration is unlikely to occur. Rapid conversion of mangrove habitats to low saturated vegetation, aquaculture, agriculture and inadequate infrastructure development have been the key drivers of mangrove degradation. To address these challenges, the project has adopted a community-centered and comprehensive approach in these regions.

The primary objective of the programme is the restoration of degraded mangrove habitats through plantation of native mangrove tree species across Indonesia. The lands selected for the project are discrete parcels of land within degraded and fragmented mangrove ecosystems. The lands are of several land uses and types, including abandoned intensive aquaculture ponds, abandoned agricultural lands, open patches of land within degraded mangrove habitats, parcels of land within mangrove ecosystems that are identified as most appropriate for planting due to the presence of various indicators. Here, replicating the natural composition of the mangrove species guided by established protocols for plantation activities and community engagements by the implementation party remains at the heart of restoration activities.

Alongside the restoration efforts, the programme also helps address the root causes of degradation through providing awareness, training, and alternative sustainable livelihoods to ensure permanence of the restored habitats aided by carbon revenue. Community livelihoods are strengthened through diversified income streams, community organization, value addition, and market linkage. These interventions support climate resilience and income diversification for fishing-dependent community members. Additionally, the establishment of mangrove eco-centres enhance education and eco-tourism income generation. Guided by a community centred approach, communities lead all the project activities including collection of planting material and planting and ensuring its long-term survival.

The implementation framework of this VPA involves collaborative efforts between diverse cross section of stakeholders including governmental bodies, non-governmental organizations (NGOs), Universities and local communities. This ensures the voluntary and participatory nature of community involvement in the restoration and management efforts.

The VPA is intended to register with the Gold Standard for Global Goals to claim the emission reductions. The carbon revenue generated from carbon credits would be significant in ensuring project sustenance while contributing to community empowerment and welfare through promoting medium- and long-term community developing efforts and preservation of restored mangroves. Overall, the project is a comprehensive effort contributing towards multifaceted benefits through environmental conservation, community development, and sustainable livelihoods.

Interventions Undertaken

The activities, spanning across the three major domains of mangrove restoration, community empowerment and biodiversity enrichment, can be broadly classified as:

Activities for Restoration of Mangroves
Plantation, including nursery establishment, sourcing of seed material, site selection, land preparation, planting, maintenance
Monitoring and patrolling
MOUs with Government departments to ensure support and partnerships
Training and meetings on the importance of mangroves

Activities for Community
Plantation providing direct benefits such as employment, and indirect benefits such as positive impacts on livelihoods due to the presence of healthy mangrove ecosystems.
Health care and subsidies for food/vitamins proposed for persons from the lowest economic strata.
Establish and manage solar pumps and sanitation systems

Development of innovative food and food products from mangrove and mangrove associated species and other coastal resources
Facilitate establishment of women-led social business models including shrimp paste, dried fish, mangrove food processing and organic batik
Facilitate development of silvo-fishery/organic aquaculture models including for organic fish, crab and shrimp, sea-grass production
Market linkage of these IGAs
Establishment of mangrove eco-tourism models including activities such as building mangrove trails with required facilities

Activities for Biodiversity
Plantation to restore degraded and fragmented mangrove habitats
Monitoring and patrolling to ensure no degradation of existing mangroves
Establishment of Mangrove Education Centre (MEC) to provide awareness to the larger public
Mobile awareness programme to visit schools to increase awareness on and provide environmental education on mangrove conservation and climate change issues
Initiatives at the village level on use of policy as legal tools for mangrove conservation through development of Village Land-use Plans (VLPs), Mangrove Protected Areas (MPAs) and Village Regulations based on local traditional knowledge and wisdom.
Trainings and village/district level meetings on planting preparation and post planting project activities to strengthen commitment and policy support.

The activities are expected to contribute towards achieving the following outputs, outcomes and broader impacts:

Expected positive outputs
Nurseries set up and target areas planted
Increased employment
plantations regularly monitored
Communities and stakeholders educated on the importance of mangroves
Improved protection and law enforcement
Setup of sustainable IGAs
Health care and subsidies for food/vitamins proposed for persons from the lowest economic strata
Better access to clean water

Expected positive outcomes
Communities actively engaged in restoration work
Prevention of illegal logging poaching and encroachment
Sustainable management of mangrove resources
Diversification of income sources
Reduced spending on healthcare
Improved health and hygiene
Increased green cover
Facilitation of natural regeneration
Reduced dependency of communities on mangroves

Expected Positive Impacts
Mangroves restored and protected
Improved biodiversity
poverty reduced and increased wellbeing

Section B: Project Impacts

The VPA contributes to various dimensions of sustainable development. The specific impacts on the socio-economic and environment spheres are listed below:

Socio-Economic Impacts

- **Education and awareness:** Communities and stakeholders, particularly targeting youth and children, are educated on the importance of mangroves, its conservation and their role in preserving coastal ecosystems.
- **Diversification of income sources:** Nurseries and planting activities provide employment opportunities for local communities, contribute to their involvement and increase their income. Sustainable income generating activities (IGAs), such as market gardening, beekeeping, fishing, handicrafts are established to provide alternative livelihoods to local communities and reduce their dependence on mangrove resources.

- **Access to basic social services:** Local communities would have improved access to basic social services (healthy, education, sanitation and water services) and better living conditions, enabling them to be more actively involved in long-term mangrove restoration and preservation.

- **Women and Youth empowerment:** Underlined by principles of inclusivity and equality, women and youth are empowered through capacity building and IGA's development. This includes facilitating silvo-fishery, aquaculture models and women-led social business models including shrimp paste, dried fish, mangrove food processing and organic batik.

Environmental Impacts

Mangroves provide several fundamental ecosystem services crucial for the development and survival of ecosystems and human communities. Consequently, the project will have positive impacts on:

Food Supply: Mangroves serve as habitats for fisheries and marine life, thereby contributing to the food supply.

Climate Regulation: Mangroves play a crucial role in regulating the climate by sequestering carbon through their trees and storing it in the soil as organic carbon.

Erosion Prevention and Coastal Protection: Mangroves help prevent erosion and act as natural barriers, protecting coastlines.

Mitigation of Extreme Weather Events: Mangroves reduce the impacts of extreme weather events such as submersion, floods, and droughts.

Biodiversity Conservation and Enrichment: The restoration project maintains and enriches biodiversity in mangrove ecosystems, improving conditions for wildlife and strengthening their habitat.

Section C: Contact details

In order to receive any further information regarding the project, stakeholders are requested to contact at the following address:

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