TERM OF REFERENCE

Preliminary Feasibility Study of Blue Carbon Credit in the Coastal and Small Islands Conservation Area of Derawan Islands and Its Surrounding Waters

Background

Blue carbon is the carbon stored in coastal and marine ecosystems such as mangroves, salt marshes, and seagrasses. Blue-carbon ecosystems have a small global footprint, but they can bury many times more carbon per acre than even a tropical rainforest. In addition, the existence of blue carbon ecosystems is essential to protect the upland as well as providing other environmental services. Because of their significant value in tackling climate change, blue carbon ecosystems have been the focus of a large number of environmental restoration and protection projects.

Blue carbon ecosystems are among the most threatened on Earth. Seagrasses are being lost at a rate of 7%/year, with only 26% of them lying within managed or protected waters (Potouroglou et al., 2020). Meanwhile, the rate of mangrove loss more than halved over the three decades, from 46,700 ha per year in 1990–2000, to 36,300 ha per year in 2000–2010, to 21,200 ha per year in the most recent decade (FAO, 2020).

The protection of blue carbon habitats by incorporating them into government-run marine protected areas (MPAs) is an alternative solution for preserving existing blue carbon environments. However, the large size of MPAs and broader environmental gradient covered also limits the amount of funding that can be specifically diverted to protecting the blue carbon ecosystem (Newell et al., 2019). Therefore, alternative sustainable financing is needed to support the management of the area.

Yayasan Konservasi Alam Nusantara (YKAN) aims to identify suitable mechanisms of funding streams that can ensure the conservation, restoration, and sustainable management of the blue carbon ecosystem in the marine protected area. One of the targeted locations is the Coastal and Small Islands Conservation Area of Derawan Islands and Its Surrounding Waters (KKP3K-KDPS).

KKP3K-KDPS was established in 2016 with an area of 285,548.95 ha which has high biodiversity to support the livelihoods of local communities. Biodiversity included in the blue carbon ecosystem includes mangroves (17,057 ha) and seagrass (14,277 ha). This area has important value in the development of tourism, research, and education sectors. In addition, there are also pond cultivation activities in the area with an area of 538 ha.

Objectives

Objectives of this work are:

1. Analyze international and national policy of blue carbon credit in marine protected areas (MPAs).
2. Perform a carbon credit preliminary feasibility study of the blue carbon ecosystem (mangrove and seagrass) in the Coastal and Small Islands Conservation Area of Derawan Islands and Its Surrounding Waters.

Scope of Works

The scope of work consists of:

1. Analyze international and national policy of blue carbon credit in MPAs:
   - Identify existing and future plans, if any, of international policy of blue carbon credit from MPAs
   - Identify relevant methodologies of blue carbon credit in MPAs. This can include listing examples of blue carbon projects from MPAs globally
   - Analyze the national policy position and future projection regarding blue carbon credit in MPAs. This will include recommendations on future follow-ups that need to be done to implement potential crediting projects in the areas and project players.
   - Develop an action plan for a blue carbon market targeting KKP3K-KDPS.
2. Perform a carbon credit preliminary feasibility study (pre-fs) of the blue carbon ecosystem:
   - The pre-fs should be done for the mangrove and seagrass ecosystem in the KKP3K-KDPS (Appendix 1).
   - The Pre-FS will include avoided deforestation, restoration, and other methods/mechanisms relevant to the proposed project areas.
   - Identify threats and additionality of blue carbon projects in KKP3K-KDPS.

Deliverables

Based on the scope of work above, it is expected to produce:

1. Report on blue carbon policy analysis and action plan.
2. A Preliminary Feasibility Study Report on Blue Carbon Credit in the Coastal and Small Islands Conservation Area of Derawan Islands and Its Surrounding Waters.

Budget and Period of Work

We would like the consultant to propose a budget and a time breakdown that fits the methodology they propose. We expect that the work duration will be from November 2024 to February 2025. The total proposed budget for the assignment should cover the entire work duration including the deliverables requested and proposed, and all costs incurred for all administrative, arrangements, and travels. Payment arrangements will be confirmed once the consultant is selected.

Competency of the Consultant

The consultant competencies required include:

1. Individuals or teams with experience and sample portfolios in designing and implementing carbon projects.
2. Knowledge of the marine protected areas (MPAs) regulation and management and familiar with blue carbon credit policy in MPAs.
3. Have experience in policy analysis.

Application Procedure

Individuals or companies interested in this work are invited to send their CV and/or company profile, technical proposal, and budget plan to topik.hidayat@ykan.or.id, no later than October 14, 2024. Only selected candidates will be contacted further.

Appendix

Map of Study Area Coverage