

Wetlands International Indonesia / Yayasan Lahan Basah

Best Practice Documentation and Training Curriculum Development on Ecological Mangrove Rehabilitation (EMR) Practices

Terms of Reference (ToR)

Position Title : **Consultant for Best Practice Documentation and Training Curriculum Development on Ecological Mangrove Rehabilitation (EMR) Practices**

Location : Remote

Duration : 6 months

1. Introduction

Indonesia's immense coastline is home to some of the planet's most crucial mangrove forests. These coastal forests provide a multitude of ecological and socioeconomic benefits, including coastal protection, carbon sequestration, biodiversity conservation, and support for fisheries. However, Indonesia's mangroves are facing unprecedented challenges, including deforestation, conversion to aquaculture ponds, and the impacts of climate change, leading to significant degradation and loss. Mangrove degradation and loss has changed the biophysical structure and functions of valuable coastlines, decreasing the ecosystem services mangroves used to provide and emitting carbon back to the atmosphere in the process.

Recognising the invaluable benefits of mangrove, there have been many restoration efforts undertaken by various stakeholders across the country. However, such good intentions have not been successful to

regrow the degraded and lost mangroves, predominantly due to the lack of science-based methods, poor project planning and lack of local engagement¹. Moreover, it requires a considerable length of time to restore the deforested and lost mangroves, certainly through successful restoration efforts. Indeed, reflecting to the failed restoration efforts is as useful as learning from the successful ones to improve the practices.

To achieve the objective of successful mangrove rehabilitation, there is an urgent need for effective and inclusive rehabilitation strategies. This necessitates the development of innovative and successful restoration guidance documents and training curriculum that advocate for more effective approaches to restoration. Specifically, this effort will prioritize the Ecological Mangrove Rehabilitation (EMR) method, which emphasizes restoring natural hydrology and promoting self-recovery system. Crucially, the development of these best practice documents will integrate innovative gender-sensitive practices, recognizing the distinct roles and

¹ Beeston, M., Cameron, C., Hagger, V., Howard, J., Lovelock, C., Sippo, J., Tonneijk, F., van Bijsterveldt, C. and van Eijk, P.

(Editors) 2023. Best Practice guidelines for mangrove restoration.

knowledge of women in mangrove management and rehabilitation. These approaches are particularly relevant within the Indonesian coastal context, where traditional rehabilitation efforts have often yielded limited success due to a lack of understanding of natural processes, a focus on monoculture planting, and the exclusion of women's perspectives. By creating accessible and practical resources that actively engage and empower women, this initiative aims to directly support the objective attainment of Return of the Mangrove (RTM) program, empowering local communities, government agencies, and practitioners to implement effective mangrove rehabilitation and restoration, ultimately contributing to the resilience and prosperity of Indonesia's coastal regions.

2. Purpose

2.1. To provide a comprehensive and stepwise references that guide practitioners, from government agencies, NGOs, community groups, private sector, and academics in implementing Ecological Mangrove Rehabilitation (EMR) approach. This documentation aims to consolidate proven techniques, lessons learned, and adaptive management approaches that support sustainable, ecologically sound, and community-inclusive rehabilitation of mangrove ecosystems.

2.2. To provide training curriculum to equip the capacity building of coastal community groups, local government institutions, and mangrove rehabilitation practitioners in effectively applying the Ecological Mangrove Rehabilitation (EMR) approach.

3. Objectives

3.1. To identify and capture on the ground practices and lessons learned of Ecological Mangrove Rehabilitation method implementation across diverse mangrove habitats, socio-ecological contexts, reflecting to Indonesian policy on capacity building.

3.2. To develop training curriculum (including supplementary materials) on EMR method, reflecting to Indonesian policy on capacity building.

4. Scope of Work

4.1. The consultant/team will

4.1.1. Best Management Practices (BMPs) Documentation

- Preparation:
 - Outlining the BMPs documentation design, methodology and workplan;
 - Conduct literature review on EMR practices, initial information gathering in EMR practices based on Yayasan Lahan Basah (YLBA) lessons learnt, other practices, and relevant guidelines related with EMR approach.
- Content development:
 - Develop a narrative on BMPs based on the agreed design;
 - Conduct serial discussions with YLBA staff members and relevant stakeholders, encompassing communities and practitioners on the EMR approach, ensuring the narrative is drawn upon existing experiences and practices;
 - Present results and incorporate feedback from internal and external reviews to improve the BMPs document;
 - Finalize the Best Management Practices (BMPs) document by integrating feedback and recommendations received through the review process.
- Present BMPs document on dissemination activities held by YLBA to mangrove rehabilitation practitioners.

4.1.2. Training Curriculum

- Preparation:
 - Outlining training curriculum development methodology and workplan, ensuring that all processes and outputs are aligned with the Indonesian regulations or policies on capacity building.
- Curriculum and modules development:
 - Develop a structured practical curriculum equipped with learning objectives, topics, delivery methods, and session flow;
 - Develop training modules drawn upon the developed curriculum, that include the agreed content coverage. Training modules include facilitator guides and supplementary materials;
 - Write training curriculum and modules document; conduct serial discussions with YLBA staff members and relevant stakeholders, encompassing communities and practitioners on the EMR approach, ensuring the narrative is drawn upon existing experiences and practices;
 - Present results and incorporate feedback from internal and external reviews to improve the training curriculum and modules.
- Pilot testing:
 - Collect feedback to improve the content and delivery methods on Trial Sessions with selected participants and Training of Trainers (ToT).

- Revision and finalization:

- Revise the draft training documents based on the results of pilot testing, expert input and ToT. Finalize the training curriculum and modules document by integrating feedback and recommendations received through the review process.

4.2. Content Coverage

In addition to the listed themes below, content coverage will remain flexible in line with discussions with the YLBA team and relevant experts.

4.2.1. Best Management Practices (BMPs) Documentation

Site assessment and selection, EMR implementation works – Hydrological restoration and natural regeneration, monitoring and evaluation, community engagement and specific regional challenges

4.2.2. Best Management Practices (BMPs) Documentation

Modul 1 – Mangrove ecology and biophysical; Modul 2 – CB-EMR Concept and definition; Modul 3 – Preliminary assessment including understanding social-tenurial issue; Modul 4 – Biophysical forensic related with hydrological-topography assessment, mangrove reference and condition, biodiversity assessment and social economy assessment; Modul 5 – EMR designing and action plan; Modul 6 – Hydrological-Topography restoration works; Modul 7 – Assisted Propagule Distribution; Module 8 – Monitoring and Evaluation Process.

5. Deliverables and Timeline

- The assignment will be carried out in the period from August 1st 2025 to January 30th 2026.

- The consultancy team's timetable will include the following activities and key milestones:

Date	Activity	Deliverable
August 1-8, 2025	Initial start-up meetings with Work Package Lead and Program Manager	Inception report outlining the BMP and training curriculum development design, methodology and workplan, including presentation on this.
November 15, 2025	Development of <ul style="list-style-type: none">• the BP document• training curriculum	Interim report documents should be made available.
December 15, 2025	Refining of BMP document	Final report document, consisting of BMPs document that have been incorporated with feedback and comments from internal and external experts should be made available.
January 30, 2025	Refining of training curriculum and modules	Final report documents, consisting of training curriculum and modules that have been incorporated with feedback and comments from internal and external experts should be made available.

6. Required Qualifications and Experience

The Best Management Practice (BMP) documents and training curriculum will be developed by the recruited consultant in close collaboration with designated staffs from YLBA.

The consultant should have:

- Experience in capturing best practices and develop training curriculum and its supplementary materials.
- Expertise in sustainable mangrove management, competency-based training, capacity building policy and guidance in Indonesia.
- Experience in developing technical guidelines and training curriculum on best practice approaches and corrective actions in natural resources management, sustainable mangrove management, or other sector that link with national standard training in Indonesia.
- Strong rigorous and lucid BMPs and training curriculum writing and communication skill.

- Advanced degree in environmental science, ecology, or other related fields.
- Proven track records in BMPs and training curriculum development and its design.
- Experience working with diverse stakeholders.

7. Review Process

Review process will involve technical review committee, consisting of experts with diverse background and expertise relevant to theoretical and practical knowledge in mangrove ecology, rehabilitation, hydrology, and sustainable aquaculture practices. Such experts would likely from academia, research institutions, government agencies, NGOs, and local communities. Reviewers will be given sufficient timeline to thoroughly review the document and deadline for submission. The coordination and communication channels for reviewers to submit feedback and ask questions will use email, online workspace, and virtual meetings.

8. Coordination, Communication and Reporting

The designated staffs of YLBA will supervise the BMPs document and training curriculum development. Regular check-ins between the YLBA team and the consultant will be conducted to ensure alignment with the activity objectives. During the BMPs document and training curriculum development process, coordination and communication between YLBA team and the consultant will be conducted through the agreed channels, i.e. WhatsApp Group, email, online workspace (repository or Google drive), and virtual or in person meetings. Both YLBA team and the consultant are required to report the work progress and deliverables to the designated staffs of YLBA according to the time schedule above.

9. Budget and Payment

- The proposed budget must not exceed the maximum ceiling of IDR 75,000,000 (Seventy-five million rupiahs). This amount is intended to cover the consultant's service fee only, encompassing the development the BMPs document and training curriculum and its supplementary materials.
- All operational costs related to field works, face-to-face consultations, stakeholder meetings, review and curriculum trial workshops will be covered separately by the project and should not be included in the consultant's financial proposal.
- Interested candidates are required to submit a detailed financial proposal that clearly outlines the breakdown of the service fee. Payment will be made in instalments in accordance with the completion of the following key milestones:
 - 30% of the fees upon signing the contract;
 - 30% of the fees after submission of the interim report documents of BMPs document and training curriculum and its supplementary documents;

- 40% of the fees after submission of the final report documents of BMPs and training curriculum documents.

10. Intellectual Property

The ownership of the intellectual property rights to the BMPs document and training curriculum belong to YLBA, with publication right attached to YLBA.

11. Application Process

Interested candidates should submit:

1. A letter of bid duly signed
2. A technical proposal outlining:
 - applicant's understanding of the ToR;
 - suggested methodology;
 - draft work plan.
3. A financial proposal: The financial proposal covers the consultant's service fee only, encompassing the development the BMPs document and training curriculum and its supplementary materials; costs incurred outside the terms agreed in the financial proposal and final contract will not be reimbursed. The offer will also state whether the details of the amount not including taxes or including all taxes. Any special exemption should be clearly stated.
4. Annexes:
 - at least two sample reports of similar assignment which will be treated confidentially;
 - CV of lead of the writing team.

Submission Deadline: July 25, 2025, 17:00 WIB (Close of Business)

The application and inquiries should be sent to: admin@wetlands.or.id no later than 17:00 WIB (Close of Business) on July 25, 2025, and bearing the subject in the email: BMP and Training Curriculum consultancy proposal.

Proposals will be scored according to the following criteria

		Max. score
Technical proposal (70%)	Proposed methodology and approach	40
	Experience	20
	Writing and presentation	10
Financial proposal (30%)	Value for money	30
Total		100

These are further details for the offer:

- Review and evaluation of offers: The offers will be sorted by YLBA by 28 July 2025. An evaluation committee will be tasked to assess the eligible offers. The choice will be based on technical capacity. The final choice will be made considering the budget available for this action. The evaluation result will be announced by July 29, 2025, at 17:00 WIB (Close of Business).
- Reserve on cancelling the bid: The present invitation to bid can be cancelled due to the conditions below:
 - o There has not been enough competition;
 - o No offer meeting the requirements of the invitation to bid has been received;
 - o The offers accepted at the time of the perusal by far exceeded the available budget.
- Conditions for carrying out the mandate:
 - o The service will be subject to a contract and will be added as an appendix to the present ToR and the offer shall be validated;
 - o The consultancy team leader will take up all the tax obligations related to its status of consultancy;
 - o The consultancy team will comply with YLBA management procedures while performing the services, subject to this offer of consultancy;
 - o The assigned documents need to be written in Bahasa Indonesia.