



Bay of Bengal Large Marine Ecosystem Project

National Consultative Workshop on

BOBLME Project Phase II Implementation in Maldives

11 - 13 August 2024

Naifaru Island, Lhaviyani Atoll, Maldives

Organized by

**International Union on Conservation of Nature (IUCN)
Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)**

Bay of Bengal Large Marine Ecosystem Project Phase II

***Report of the National Consultative Workshop on
BOBLME Project Phase II Implementation in
Maldives***

Naifaru Island, Lhaviyani Atoll, Maldives

12 – 13 August 2024

Bay of Bengal Programme
Inter-Governmental Organisation
(BOBP-IGO)
Chennai

International Union for Conservation of
Nature (IUCN),
Asia Regional Office
Bangkok

Executive Summary

The Bay of Bengal Large Marine Ecosystem Phase II (BOBLME-II: 2023-28) is a regional initiative aimed at sustainable management of marine living resources, and ecosystems in the Bay of Bengal region. Involving seven countries—Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka, and Thailand and building on the foundation of the first phase (2009-2015), BOBLME-II focuses on addressing transboundary challenges such as overfishing, habitat degradation, and pollution. Funded by the Global Environment Facility (GEF) and the Norwegian Agency for Development Cooperation (NORAD), the project is being implemented by the Food and Agriculture Organization (FAO) in partnership with the International Union for Conservation of Nature (IUCN), the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO), and the Southeast Asian Fisheries Development Center (SEAFDEC). It seeks to institutionalize ecosystem approach fisheries management, curb IUU fishing, restore critical habitats, reduce pollution, and enhance the livelihoods of coastal communities, while strengthening regional cooperation for long-term sustainability.

The National Consultative Workshop on BOBLME Project Phase II Implementation in Maldives took place during 12-13 August 2024, at Naifaru Island, Lhaviyani Atoll, Maldives. The event was collaboratively organized by BOBP-IGO and IUCN, Asia Regional Office.

The primary objective of the workshop was to initiate activities under the BOBLME-II project in Maldives. The workshop was aimed at disseminating information about the project's progress and future plans, prioritizing and planning the implementation of the Ecosystem Approach to Fisheries Management (EAFM) and Marine Managed Areas (MMAs), and developing strategies to combat Illegal, Unreported, and Unregulated (IUU) fishing. It also sought to strengthen regional cooperation and establish robust partnerships among stakeholders.

The workshop had five sessions. At the inaugural session, Workshop's objective and arrangements were detailed. The second and third sessions focused on the overview; and developing the plans and implementation of EAFM and MMA. Session 4 was on reducing catch from IUU fishing. At the concluding session, speakers highlighted the ways forward in planning and implementing the BOBLME Project Phase II in Maldives.

A total of fifty-four participants attended the Workshop representing government, non-government and fishers' organizations, academic and research institutions and project staff from BOBP-IGO and IUCN.

Key takeaways

A. Scoping EAFM Plan Development and Implementation

Considering the prioritized EAFM sites indicated in the BOBLME Phase II project document, the Fisheries Management Units (FMUs) for developing and implementing the EAFM plan were finalized as

- *Livebait and Reef Fisheries in Lhaviyani Atoll*
- *Livebait and Reef Fisheries in Huvadho Atoll.*

Experts and resource persons from regional organizations and Maldives made presentations on the thematic subjects, followed by group exercise on profiling the ecological and socioeconomic status, legal and governance arrangements, and identifying issues and threats and potential management actions in Lhaviyani Atoll. Considering the prevailing issues identified by the participants in the workshop as well as those in the earlier reports prepared by the Government of Maldives, it was decided to apply the already existing national fisheries management plans to the livebait and reef

fisheries in Lhaviyani Atoll based on the components of EAFM, namely, ecological well-being, human well-being and good governance Broadly, the strategy in the two FMUs are:

Livebait Fisheries in Lhaviyani Atoll

- *Protection of livebait resources*
- *Reducing harvest & post-harvest loss of livebaits*
- *Exploring farming potential of livebaits in the Atoll*
- *Raising awareness and capacity building*

Reef Fisheries in Lhaviyani Atoll

- *Improving data collection and analysis*
- *Improving marketing; increasing profitability of the fisheries*
- *Raising awareness and capacity building.*

The guiding principles of EAFM i) encouraging stakeholder involvement, iii) promoting community development, iv) enhancing human resource development, and vi) promoting gender equality will be followed for finalizing and implementing the plan.

Next Steps and support needed from the Government of Maldives

- *Preparation of Scoping Report on characterization, identification of threats and issues, stakeholders, and capacity development needs for livebait and reef fisheries of Lhaviyani Atoll*
- *Conducting meeting and prepare Scoping Report on characterization, identification of threats and issues, stakeholders, and capacity development needs for livebait and reef fisheries of Huvadhu Atoll*
- *Finalization of EAFM plans for the two FMUs by establishing stakeholder groups.*
- *BOBP-IGO shall engage a National Consultant and work closely with the MFOR to plan and implement EAFM in the selected FMUs.*
- *Constitution of the National Working Group will be finalized in consultation with the MFOR, Government of Maldives.*
- *Communication with experts, institutions and Government will be taken up for active follow-up of the project activities.*

B. Scoping MMA Plan Development and Implementation

The MMA group work emphasized the need to evaluate atoll-level management, particularly concerning the seven MPAs in Lhaviyani Atoll. Discussions centered on the background and reasons for choosing these MPAs, including their current management status. Some sites were excluded due to competing priorities, such as economic development. Public awareness and NGO support were deemed crucial for effective MPA management. It is recognized that the World Bank's GEF-8 project aims to improve management effectiveness of Lhaviyani Atoll protected areas. The stakeholder mapping by the group identified the core values and challenges of various stakeholders, including EPA, MoCCEE, academic institutions, and NGOs, and emphasized the need for improved data sharing, capacity building, and long-term strategic planning. The priorities include conducting comprehensive ecological and social assessments, providing targeted training and capacity building, developing and implementing effective management plans, enhancing communication and awareness efforts, and adapting management effectiveness tracking tools such as Management Effectiveness Tracking Tool (METT) framework to the Maldivian context.

Fushi Faru Thila and Vavvaru are recognised as ecologically significant and critical areas and establishing a baseline assessment is recommended to determine its current ecological value. There is concern that local fishers may not fully be aware of MPA boundaries and management directives of MPAs. Major threats to MPAs include anchoring and general fishing activities. Improved cooperation with marine policy and the Environmental Protection Agency (EPA) is needed. There is a lack of a long-term strategic plan, technical and financial capacity, and challenges with data sharing and navigation systems are also identified. Improving access to information are crucial for addressing these issues.

Recommendations and Next Steps

- *OECM Workshop: Organize a one-day workshop to focus on Other Effective Conservation Measures (OECMs) and their application in the country.*
- *MPA Management Plans: Prioritize developing an MPA management plan for a pilot MPA site in either Lhaviyani Atoll or Huvadoo Atoll. The MPA management plan process should be replicable across Lhaviyani Atoll (scaled up under the GEF-8 WB Project to cover all 7 MPA sites). MoCCEE will consider the pros and cons of selecting Lhaviyani Atoll or Huvadoo Atoll. Initial discussions will be held within MoEECC in the week following the National Consultative Workshop, followed by a meeting with IUCN to finalize the site selection decision.*
- *Stakeholder Collaboration: Enhance collaboration among stakeholders, including NGOs, Government agencies, and local communities, to ensure comprehensive support and engagement.*
- *Capacity Building and Training: Invest in national capacity development, based on the IUCN Green List framework and especially on ecological assessments, MPA planning, monitoring, and enforcement, to address current gaps and improve management effectiveness.*

C. Initiating Plan for Reducing IUU Fishing

Considering the national policies and challenges to combat IUU fishing in Maldives, the thrust activities of BOBLME project are to reduce IUU fishing by:

- *Implementing a Regional Plan of Action (RPOA) on IUU fishing*
- *Strengthening NPOA-IUU and NPOA-MCS and Vessel Monitoring System (VMS) strengthened*
- *Developing and implementing (i) tools for promoting best practice to combat IUU; and (ii) policies and national actions to combat IUU fishing in national pilot/investment project*
- *Implementing regional capacity building program on port inspections, MCS, and traceability.*

Next Steps and support needed from the Government of Maldives

- *Establish linkages with National IUU Fishing Working Group*
- *Review of NPOA-IUU*
- *Review and endorsement of RPOA-IUU*
- *Assistance in data collection on IUU fishing*
- *Assistance in conducting capacity development programmes.*

A follow up meeting will be organized between BOBP and MFOR officials in this regard.

D. Other considerations

- **Gender Mainstreaming:** Implementation of gender-sensitive approaches across all project components, ensuring equitable participation and benefits for women, and inclusion in training programs and decision-making processes.

- **Livelihood Enhancement and Resilience:** Development of initiatives linking conservation efforts to local livelihood enhancement, such as promoting eco-tourism, diversifying aquaculture, and facilitating community-led resource management.
- **Partnership and Collaboration Enhancement:** Establishment of a robust framework for ongoing collaboration among governmental bodies, NGOs, academic institutions, and community groups to support sustainable marine resource management in the region.

Epilogue

The workshop objectives were met through a systematic approach which also provided an excellent impetus to kickstart the Phase II of the BOBLME Project in Maldives. It helped bring various stakeholder groups together on a common platform to debate, discuss and finalize a set of tasks towards realization of the goal of sustainable fisheries in Maldives.

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A. Background

1.0 Overview of BOBLME Project

1.1 Introduction

The Bay of Bengal Large Marine Ecosystem (BOBLME) is noted for its rich biodiversity and significant natural resources, which are vital for the social and economic health of the region. Fisheries and aquaculture are especially critical for food security and employment in the region. Considering its importance, BOBLME Project phase I was implemented with a wide range of activities relating to the conservation and management of fisheries and the marine environment. The initial phase (2009-2015) identified key issues including overexploitation of resources, habitat degradation, and pollution affecting the health of the ecosystem. These findings led to the creation of a Strategic Action Programme (SAP), which is being implemented in the second phase. The BOBLME project phase II is a follow-up to the BOBLME-I project and focuses on implementing the measures to manage and protect the marine environment of the Bay of Bengal. This project, formally titled "Sustainable management of fisheries, marine living resources, and their habitats in the Bay of Bengal region," seeks to enhance sustainability and benefit coastal communities and states.

1.2 Project Partners

BOBLME project phase II is funded by the Global Environment Facility (GEF) and the Norwegian Agency for Development Cooperation (NORAD). It is being implemented by the Food and Agriculture Organization of the UN (FAO), in partnership with three executing agencies viz., International Union for Conservation of Nature (IUCN), Bay of Bengal Programme Inter-Governmental Organizations and Southeast Asia Fisheries Development Center (SEAFDEC).

1.3 Objective and Approach

The project's objective is to contribute to the sustainable management of fisheries, marine living resources, and their habitats in the Bay of Bengal region, to reduce environmental stress and improve environmental status for the benefit of coastal states and communities.

This will be achieved through interlinked project components based on the SAP themes by undertaking country-led programmes and adopting a participatory, bottom-up, integrated focus area approach to planning and implementation at community, sub-national, national, and regional levels to ensure the greatest impact.

1.4 Project Details

Details of the Phase II of the BOBLME project are provided in **Table 1**.

Table 1. Details of the BOBLME Phase-II

Component	Outcome	Executing Agencies for South Asia
1. Sustainable Management of Fisheries	1.1 EAFM institutionalized at the national level, including targeted transboundary fish stocks 1.2 IUU catch in the BOBLME reduced	BOBP-IGO

2. Restoration and conservation of critical marine habitats and conservation of biodiversity	2.1 Coastal and marine managed areas (MMAs) contribute to the conservation of biodiversity 2.2 National MMAs established or strengthened, resulting in improved MMA management effectiveness at the national level 2.3 Regional consensus and agreements reached on reduction of threats to marine biodiversity in coastal and open waters	IUCN
3. Management of coastal and marine pollution to improve ecosystem health	3.1 Improved waste management practices in fishing harbours 3.2 Marking of fishing gears and the development and dissemination of corresponding regional guidelines	BOBP-IGO
4. Improved livelihoods and enhanced resilience of the BOBLME	4.1. Enhanced resilience and reduced vulnerability to natural hazards, climate variability, and change in selected coastal communities 4.2 Enhanced sustainable livelihoods and diversification for selected coastal communities	IUCN
5. Regional mechanism for planning, coordination, and monitoring of the BOBLME	5.1 Strengthened institutional mechanisms at regional and national levels for planning, coordination, and monitoring of the BOBLME 5.2 Adaptive results-based management and sharing of information and lessons learned	IUCN & BOBP-IGO

2.0 Maldives National Consultative Workshop

The National Consultative Workshop on BOBLME Phase II Project Implementation in Maldives held from 12-13 August 2024, in the Secretariat of Faadhippolhu Atoll Council, Naifaru Island, Lhavaniya Atoll, Maldives. The event was jointly organized by BOBP-IGO and IUCN.

The primary objective of the workshop was to initiate the activities under the BOBLME project phase II in Maldives. Within this broad objective, the specific objectives were to:

- *Share information on the BOBLME Project;*
- *Scope the identified EAFM and MMA sites to develop plans and implementation, while considering national interests and policies;*
- *Initiate planning for reducing IUU fishing; and*
- *Establish partnerships with and amongst stakeholders for future collaboration.*

The methodology followed was participatory with presentations by resource persons followed by break-out groups discussing on identified themes. The group discussions were moderated by experts from Maldives as well as from BOBP-IGO and IUCN. The workshop was conducted in Dhivehi and English.

The expected outcomes of the workshop included a clear plan for the Fishery Management Unit of EAFM sites and sites for MMA, and initial plans for addressing IUU fishing. The programme of the Workshop is given in **Annex I**.

The workshop was attended by 54 participants representing government, non-government and fishers' organizations, academic and research institutions, BOBP-IGO and IUCN. The list of participants is given in **Annex II**.

The following set of information materials in the form of a booklet was shared with the participants prior to the workshop to ensure engaging discussions:

- *Overview of Ecosystem Approach to Fisheries Management and Marine Managed Area*
- *Methodologies for:*
 - *Profiling of livebait and reef fisheries in Maldives*
 - *Identifying & Prioritizing Issues and Opportunities*
 - *Identifying Stakeholders*
 - *Assessing National Capacity Needs*
- *Combatting IUU fishing*
- *Management of Coastal and Marine Pollution*
- *Improved Livelihoods.*

The workshop was conducted largely in Dhivehi with summary translation in English for non-Maldivian participants. **The presentation made during the Workshop are available at <www.bobpigo.org/boblme**

B. Workshop Report

1.0 Inaugural Session

The workshop commenced with the Recitation from Holy Quran. Mr. Mohammed Rashid, President of the Naifaru Island Council, warmly welcomed the participants to the event. He highlighted the importance of collaboration in advancing the island's developmental goals and unique challenges and opportunities faced by the island's communities, particularly in relation to fisheries management, coastal development, and environmental conservation.

Dr. P Krishnan, Director, BOBP-IGO extended a warm welcome to all participants and laid the foundation for the workshop's discussions. He proceeded to provide an overview of the BOBLME Project, highlighting its evolution and key achievements. Dr. Krishnan explained that the first phase of the BOBLME Project (BOBLME-I) was focused on knowledge-building and strategic planning. During this phase, substantial efforts were directed toward understanding the marine ecosystem, fisheries dynamics, and socioeconomic conditions within the region. The groundwork laid in BOBLME-I helped generate a wealth of scientific data, mapped out the key challenges, and led to the development of action plans aimed at addressing critical issues such as overfishing, habitat degradation, and pollution. Moving on to the second phase, BOBLME-II, Dr. Krishnan explained that the current focus is on the operationalization and implementation of these plans. He stressed that this phase aims to ensure tangible outcomes in terms of improved fisheries management, ecosystem conservation, and livelihoods enhancement for coastal communities. Dr. Krishnan also highlighted the importance of aligning these efforts with national and regional policies and international commitments to ensure their long-term sustainability.

Ms Maeve Nightingale, Senior Programme Officer, Marine and Coastal, IUCN Asia Regional Office presented an overview of the component 2 (Restoration and conservation of critical marine habitats and protection of biodiversity), component 4 (Improved livelihoods and enhanced resilience of the BOBLME) and component 5 (Regional mechanism for coordination, monitoring and assessment of the project in the 7 countries). The focus will be on improving management effectiveness of marine managed areas (MMAs), applying IUCN Green List Standard. It aims to improve the contribution that these areas make to the conservation of nature and associated cultural values and ecosystem services. Developing national plans for conservation of ETP species, enhanced sustainable livelihoods and diversification for selected coastal communities, and strengthening institutional mechanisms at regional and national levels for planning, coordination and monitoring of the BOBLME will be addressed, she said.

Mr Ahmed Shiyam, Honourable Minister, Ministry of Fisheries and Ocean Resources, Government of Maldives, Chief Guest of the National Workshop, delivered the Inaugural address. He said that Maldives fisheries has always been renowned for its sustainability. "We have been blessed with abundant resources in our waters and our forefathers have respected their power and understood its fragility. The baton of this legacy has been passed from them to us, and I believe we should pass it on to our children.". Mr. Shiyam highlighted those empowering fishers in the management of fisheries is an important policy of the Government of Maldives. In the past, fishers were involved in the formulation of the fisheries Act, but it is important to also involve them fully in the implementation of these regulations and management regimes. He said that "I believe this project gives the opportunity to do that, and I am very grateful for BOBP-IGO and IUCN for facilitating that for us". The Minister also released a book "Waves of Art-5: Decorative Art on Fish" published by the BOBP-IGO, highlighting the intricacies of marine life through the lens of decorative art.

2.0 Session 2: Overview of MMA, EAFM and Fisheries Management in Maldives

2.1 Marine Managed Area (MMA) – Overview and Scope of Work

Ms Maeve Nightingale provide further details of the Component 2 on MMA and ETP species protection, Component 4 on resilient coastal communities and Component 5 on regional cooperation.

She explained about the IUCN Green List standard for protected and conserved areas. The four components were 1) Good Governance that allowed legitimacy and voice to achieve transparency and accountability which enabled governance vitality and capacity to respond actively; 2) Sound Design and Planning that helped identify major site values to design for long term conservation including the need to understand threats and challenges to major site values by understanding the social and economic context; 3) Effective Management which called for developing and implementing a long term management strategy to manage ecological conditions within the social and economic context of the area and to manage threats effectively and fairly enforce laws and regulations; and 4) Successful Conservation Outcomes that demonstrate Conservation of major natural values, associated ecosystem services and cultural value. She said that green listed sites demonstrate respect for local community through meaningful engagement, design that identifies needs to secure important values of the area, effective management and successful conservation results.

She also listed the criteria for selecting the MMAs – the usefulness of the site as a national MPA learning area, management and governance arrangement, opportunities to support fisheries co-management, commitments by the stakeholders and finance availability, and solvable conflicts in the site.

Overview of Protected and Conserved Areas in Maldives

Ms. Aishath Amal, Senior Conservation Officer at the Ministry of Environment, presented on the evolution of the Maldives' protected and conserved areas. She presented the Environmental Protection and Preservation Act (4/93) of 1993, which laid the groundwork for the nation's environmental conservation efforts. This was followed by the designation of 15 dive sites as protected areas in 1995, marking the country's initial steps in marine conservation.

In 2004, the Maldives designated its first mangrove as a protected area, and in 2011, the Baa Atoll Biosphere Reserve was established as the nation's first UNESCO Biosphere Reserve, setting a critical precedent for future conservation initiatives. The regulatory framework continued to advance with the Hanifaru MPA Regulation (2012/R-23), which provided specific protections for the Hanifaru Bay area. In 2018, the Protected Area Regulation (2018/R-78) was formally adopted, alongside the introduction of specific regulations for the protected areas of Addu City (Addu City Protected Areas Regulation 2018/R-105) and Fuvahmulah (Fuvahmulah City Protected Areas Regulation 2018/R-106). The momentum continued with the designation of two additional biosphere reserves in 2020: Fuvahmulah Biosphere Reserve and Addu Atoll Biosphere Reserve. As of August 2024, the Maldives has 93 legally designated protected areas, covering a total of 63,401.33 hectares.

In 2022, the Maldives published guidelines for Other Effective Area-Based Conservation Measures (OECMs) in tourism-leased areas, with four potential sites currently undergoing the process. In 2023, assessments, including Protected Area Management Effectiveness (PAME) assessments for three sites and an IUCN Green List feasibility study, provided insights to enhance management effectiveness. These efforts resulted in the 2024 publication of the "Maldives National Framework of Protected and Conserved Areas 2024-2029" and the "Maldives Management Plan Guidance for Protected and Conserved Areas," which will guide conservation efforts over the next five years.

Challenges include limited understanding of ecosystems, disagreements over resource use, and resource shortages.

Key lessons emphasize stakeholder involvement, the value of citizen science, and the integration of new technologies. Opportunities include implementing the Maldives National Framework for the Management of Protected and Conserved Areas (2024-2029) and the National Management Plan Guidance. Forming strategic partnerships and adopting technologies, such as drones for enhanced remote monitoring, are crucial for improving conservation efforts. Additionally, frameworks like the PAME and the IUCN Green List offer valuable tools for strengthening conservation efforts. The Ministry of Climate Change, Environment, and Energy alongside the Ministry of Fisheries and Ocean Resources, seeks to integrate OECMs into the broader conservation framework, distinguishing them from Marine Protected Areas (MPAs).

2.2 EAFM: Overview and Scope of Work

An 'Overview of Ecosystem Approach to Fisheries Management' was presented by Dr E Vivekanandan, International Consultant, BOBLME Project, BOBP-IGO. He began with a discussion of the various versions of EAFM within the context of BOBLME Phase I. He said that it recognized the multifaceted challenges facing fisheries, including overcapacity, overfishing, destructive practices, illegal fishing and pollution, among others. There was a consensus on the need for an inclusive approach to fisheries management that considers both fisheries and non-fisheries factors.

EAFM evolved from this realization, aiming to address the complexities of coastal ecosystems by considering broader ecological and human well-being. It aligns with sustainable development goals emphasizing good governance and balances ecological and human needs. EAFM also integrates with other approaches such as co-management, integrated coastal zone management (ICZM), marine spatial planning, and ecosystem-based management (EBM), contributing to blue economy initiatives.

Key principles of EAFM include good governance, appropriate scale, increased stakeholder participation, addressing multiple objectives, cooperation and coordination, adaptive management, and a precautionary approach. The EAFM process involves defining and scoping the fishery management unit (FMU), identifying and prioritizing issues and goals, developing an EAFM plan, implementation, and monitoring, evaluation, and adaptation.

Co-management is central to EAFM, emphasizing increased stakeholder participation and shared responsibility between local resource users and government. EAFM and Marine Managed Area (MMA) site selection have been completed in Bangladesh, India and Sri Lanka, focusing on both fishery and location criteria.

For implementing EAFM in Maldives, the following FMUs have been identified in BOBLME project phase I:

- *Livebait and reef fisheries in Lhaviyani Atoll*
- *Livebait and reef fisheries in Huvadhu Atoll.*

As the first step, livebait and reef fisheries in Lhaviyani Atoll will be characterised in the National Consultative Workshop, Dr Vivekanandan said.

The presentation generated lively interaction with the participants. In general, the approach of the BOBLME was well-received by the participants. To a question on addressing multiple issues, it was explained that EAFM can have multiple objectives and address issues by increased participation of stakeholders, institutional arrangements and co-management.

Fisheries Management in the Maldives

Ms Munshidha Ibrahim, Fisheries and Ocean Resources Management Section, Ministry of Fisheries and Ocean Resources, Government of Maldives narrated the international conventions like UNCLOS and UNFSA, and emphasized that the management of highly migratory stocks such as the tunas need

international cooperation with the support of intergovernmental organizations. The fisheries regulatory framework of Maldives is primarily governed by the Fisheries Act of Maldives, that was ratified in 2019. It covers 10 Fisheries Regulations, 8 Fisheries Management Plans and other legally binding instruments. The objectives of FMPs are to Implement a Monitoring, Control and Surveillance (MCS) mechanism, strengthen data collection and data reporting mechanisms for each commercial fishery, and prioritise evidence-based policymaking through the collection of biological and socio-economic data on each fishery. The important provisions in the regulatory framework are licensing of all stakeholders, establishing logbook reporting and other data collection mechanisms, and catch certification mechanism. Area closures, gear-based restrictions, fish size limits and harvest/export provisions are the other unique measures, she said.

Marine/Fisheries OECMs for the Maldives: Unlocking Conservation Potential

Dr P Krishnan, Director, BOBP-IGO introduced the concept of Other Effective area-based Conservation Measures (OECM) to Maldives, particularly Fisheries OECM. OECMs are essential for reaching global conservation targets and complement traditional protected areas by including areas where conservation is a secondary or ancillary outcome. Globally, as of July 2024, there are 199 marine OECMs, covering 0.11% of the ocean. In the Bay of Bengal region, including the Maldives, no marine / fisheries areas have yet been designated as OECMs, highlighting significant potential for future recognition. The uniqueness of Maldives ecosystem has the potential for areas with community-based management and sustainable tourism practices to be recognized as OECMs. One of the benefits of recognizing OECMs is that it helps the Maldives meet international commitments under the Convention on Biological Diversity (CBD) and the Global Biodiversity Framework (GBF). He concluded stating that EAFM approach for sustainable fisheries management, implemented in BOBLME project, aligns with OECM principles, and the Fishery Management Unit selected for implementing EAFM in Maldives will have the potential to be considered as a fishery OECM.

During the post-presentation interaction, following points were further elaborated:

- OECMs are recognized as important conservation tools that operate outside traditional protected area categories. According to the FAO¹ (2022), OECMs in marine fisheries are identified, evaluated, and reported based on their contributions to fisheries conservation. OECMs are spatially defined management or conservation measures that, while not designated as protected areas, achieve positive, long-term, in-situ biodiversity outcomes alongside their intended fisheries-related objectives.
- Fisheries OECMs have not yet been formally explored by the Government of Maldives. For example, grouper aggregation sites managed by the MFOR are potential OECMs. It was noted that OECMs are not legally binding as a primary measure.
- The emphasis on the Global Biodiversity Framework (GBF) and its 30x30 target—aiming to protect and conserve 30% of marine ecosystems under effective management by 2030—has led to a broader consideration of how various ministries contribute to biodiversity conservation. This target has highlighted the need to recognize and incorporate contributions from different sectors, even those not directly under MoCCEE.
- Various ministries, including those responsible for agriculture, fisheries, and the environment, contribute to biodiversity conservation within their respective mandates. For instance, sites that are not legally protected areas can still play a crucial role in conservation. This ensures that all relevant sites are acknowledged, helping to maximize resources and meet conservation targets. Countries, including India, have developed their own protocols for recognizing OECMs, reflecting

¹ FAO. 2022. *A handbook for identifying, evaluating and reporting other effective area-based conservation measures in marine fisheries*. Rome. <https://doi.org/10.4060/cc3307en>

national contexts and priorities rather than a global, static system. Maldives has introduced a guideline to recognize resort islands as OECMs and opportunities exist to recognize other sectors such as fisheries and agriculture. The Government has the opportunity to define what qualifies as an OECM, allowing flexibility in addressing local conservation needs and contributing to the global biodiversity target.

- There was a concern that a site belonging to a private party may not be accessible to owner of the party if it is recognised as OECM. It was explained that it was a wrong notion, and the party has full right to the area as well as the right to decide if the area has to continue as OECM or not.

Presentation on livebait and reef fisheries by resource persons from Maldives

Livebait fisheries in Maldives

Resource Person: Dr. A Riyaz Jauharee, Maldives Marine Research Institute, Ministry of Fisheries and Ocean Resources, Government of Maldives

Livebaits are used in tuna and reef fisheries in Maldives. From a very small-scale fisheries using small cotton nets in the 1970s, the fishery has developed into use of larger, lighter nylon nets employed during daytime as well as night. Fishers dive to locate the bait fishes using masks. The boat size has increased, and mechanization of the boats improved water circulation in the tank holding the livebaits, thereby increasing the livebait survival. At night, powerful lights of 2000-8000 W are used from the boats, and occasionally two submersible lights of 4000 W each are used. Logbook has been introduced to collect data and the catch and number of scoops are reported. Livebait fishing grounds in 13 atolls of the Maldives has been mapped. Of 15 species contributing to the fishery, sprats, fusilier, cardinalfish and anchovy are common.

Recently, the bait-hold of a pole and line fishing vessel was modified on an experimental scale with assistance from the Japanese Government to reduce postharvest mortality of livebaits in the hold. The scoop net design has also been improved. Awareness activities were conducted to reduce livebait postharvest mortality.

However, issues related to livebait fishing, handling and postharvest mortality remain. The availability of livebaits has reduced, and consequently, the livebait fishing effort and thereby the number of tuna fishing days have reduced.

The fishermen complain of substantial loss or access to fishing grounds because reefs and islands are being allocated for tourism and other developments.

Reef fisheries in Maldives

Resource Person: Mr Mohamed Shimal, Maldives Marine Research Institute, Ministry of Fisheries and Ocean Resources, Government of Maldives

In Maldives, fisheries activities that catch demersal and reef associated finfish, excluding catches from the grouper fishery is considered as Reef Fisheries. Lines and hooks are the gears used with baits, employed from small boats. The fishery is of high economic significance to small scale fishers. Species belonging to the groups- carangids, lethrinids and lutjanids are common, in addition to groupers.

A strategic reef fishery sampling program started as part of Sustainable Fisheries Resources Development Project (SFRDP). General fishery information (vessel type, size etc.), catch/effort (trip length, no of fishers, total catch etc.) and catch sampling to species level (fork length, weight) have been collected from 16 landing site islands (where intermediary buyers are available) and 262 fishing trips.

Demand from tourism sector, local consumers and exporters are the major drivers of reef fisheries. Intermediary buyers at islands link fishers to wider markets. The fishery is likely to expand due to increasing demand, emergence of intermediary buyers and widespread use of dinghy.

Implementing a systematic scientific fishery monitoring program aimed at resource assessments and understanding stock status of commonly exploited species are necessary.

The two presentations by the resource persons brought to light the characteristics and issues in the livebait and reef fisheries in the Maldives. In the interaction that followed, the prospects of stock assessment and implementation of management plan for the two fisheries were discussed. The presentations provided an understanding on identifying specific interventions of the BOBLME project in Lhaviyani Atoll.

3.0 Session 3. Scoping for EAFM & MMA Plan Development and Implementation

3.1 Brief profile of Lhaviyani Atoll

Lhaviyani Atoll (also known as Faadhippolhu Atoll) is located between 5° 15" and 5° 35" N and between 73° 20" and 74° 40" E (Figure 1). There are a total of 54 islands in the atoll of which only 4 are inhabited, namely Naifaru, Hinnavaru, Kurendhoo and Olhuvelifushi. The capital of the atoll is Naifaru Island. There are eight resorts in the atoll. There is a canning factory in Felivaru and an airport at the Madivaru Island.

Lhaviyani Atoll is known for its abundant marine life, especially popular for livebait fishing. Seagrass beds with associated fauna are available that supply food to green sea turtles. Lhaviyani Atoll hosts some of the best reefs in the Maldives. However, Lhaviyani Atoll reefs have not been spared from the recent spate of sustained coral bleaching which has affected the reef. Mangroves have been reported in eight islands of Lhaviyani Atoll. Three species, namely, *B. cylindrica*, *H. littoralis* and *P. acidula* have been reported (Source: Cerri *et al.*, *Aquat Sci* **86**, 44 (2024). <https://doi.org/10.1007/s00027-024-01061-2>).

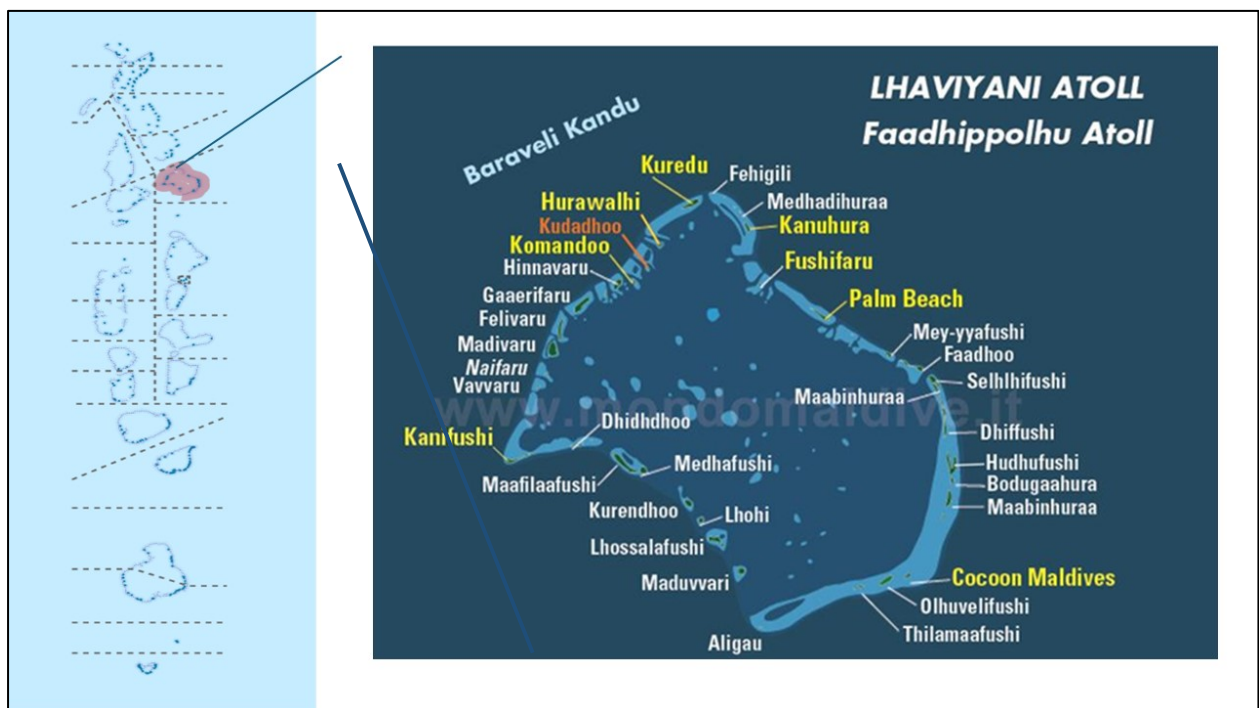


Figure 1. Map of Maldives. Inset: Lhaviyani Atoll (Source: Mondomaldive)

3.2 Scoping Lhaviyani Atoll for EAFM Plan Development and Implementation

Next, a scoping exercise for EAFM & MMA plan development and implementation in Lhaviyani Atoll was carried out. The participants were divided into two groups, one for EAFM group exercise and another for MMA group exercise.

The EAFM group was divided into two sub-groups, each participating in two rounds of discussions focusing on livebait and reef fisheries of Lhaviyani Atoll. In the first round, the groups deliberated on ecological profiling of these fisheries, while the second round addressed socio-economic and legal and institutional profiling. These discussions also covered related issues, opportunities, potential stakeholders, and capacity needs essential for EAFM planning and implementation. The themes for each round and the respective moderators are provided in **Table 2**.

Table 2. EAFM themes for group discussion

Group	Round	Theme	Moderator
1	1	Ecological profiling of livebait fisheries	Dr Riyaz Jauharee
2	1	Ecological profiling of reef fisheries	Dr Shiham Adam & Mr Mohamed Shimal
1	2	Socio-economic profiling of livebait and reef fisheries	Dr Shiham Adam
2	2	Profiling of legal and institutional arrangements in livebait and reef fisheries	Ms Munshidha Ibrahim & Mr Mohamed Shimal
Plenary		Presentation of outputs by each group	Respective moderators

The group discussion on Ecological Profiling was focused to get the opinion of the stakeholders of the following broad topics:

- *Resource and ecological characteristics of Lhaviyani Atoll*
- *Identification and prioritization of ecological issues*
- *Suggesting strategy and management intervention for the identified issues.*

The output from group on the ecological profiling of livebait fisheries and reef fisheries in Lhaviyani Atoll is given below:

3.2.1 Ecological profiling of livebait fisheries in Lhaviyani Atoll

The tuna fisheries play a vital role in the local economy, as they provide employment opportunities and income for many households. The socio-economic well-being of these communities is inherently tied to these fisheries. In recent years, a decline in skipjack tuna availability, and low rate of encounters with free swimming schools have been reported.

In Lhaviyani atoll, the livebait fisheries is widely spread. While baitfishes are used extensively in skipjack tuna pole-and-line fishery, various forms of reef fishing and the yellowfin handline fishery also require

large quantities of livebait on a regular basis. There is also specific preference for the livebait species in these fisheries. Traditionally, baiting was carried out in the morning. A simple, cotton lift net was deployed from one side of the fishing boat using long poles. Starting in the 1970s several developmental interventions and innovations revolutionized the livebait fishery, especially the use of nylon scoop nets, much larger pole-and-line vessels, and night baiting using lights. Currently, most bait is obtained at night using lights. Fishing is done where the depth is 40-45 m, and 20 to 30 scoops are

harvested per trip. The fishery varies with season, with poor catch during June to August, and September being the best season. Many vessels from other atolls also fish in Lhaviyani Atoll. On average, 25 vessels fish every night during good bait fishing periods in the atoll. The livebait catch has decreased over the years, and the boats must spend 3 to 4 days and travel long distances to catch the required amount of livebaits. It has become increasingly challenging to get adequate amount of bait for the tuna-fishing vessels as the amount of bait required for each tuna fishing trip has risen².

Important reasons for reduction in livebait availability and catch are use of lights for attracting and aggregating the fish using powerful lights (often two 3000 W lamps/one submersible lamp of 3000 W).

There is significant waste of baitfish due to poor handling techniques and release of excess baits. However, fishers are aware of importance of reducing postharvest mortality and techniques for reducing loss following capture and holding. They do not catch more than what is required and most have measures in place in the bait well to deal with the issues, like elevated mouth to reduce slosh effect, lights to reduce stress, generous water circulation. However, very few have aeration through air bubbles. It is important to improve the handling methods and better management while holding the baits in the bait well. Currently JICA is assisting to install bait tanks with circulation and pressure-assisted removal of dead bait from livebait wells.

Interaction of the livebait fishery with whale shark is rare, but interaction with dolphins, manta and sting rays are relatively more. These interactions are often linked with sightings of the species in the fishing ground rather than being trapped inside the bait fishing net. The impacts of livebait fishery on the ecosystem are not known³.

Industrial activities, reclamation, dredging and harbor construction, and sewage effluents are affecting the habitat. Dredging specifically affects sprat fishing by reducing visibility presumably affecting their ability to feed.

Conflicts between the fisheries and the tourism sectors: Resorts protect nearby local reefs and inshore areas from commercial bait fishing; currently, the tourism sector is undergoing an expansion phase, resulting in more limitation in bait fishing grounds.

A few issues in baitfish fishing practices were identified by the participants: There is escalating use of bait-attraction lights at night, with a major problem being the need for all vessels to increase the number and intensity of lights to maintain catch levels; and the use of scuba gear to target the bait species found in deep waters.

The participants suggested limiting the intensity of light, limiting the operational depth of light fishing, restricting/stopping diving as solutions. They do not believe that closing some areas for fishing will be of use.

The livebait species distribution has preference to specific species of corals; and the areas of concentration of reef fishes are also areas of abundance of livebaits. There is a need to identify the important features of livebait habitats.

Livebait fishery management plans have been developed in the Maldives from time-to-time. However, the fishers are mostly unaware of the need for and benefits of regulation, and only a few measures

² For more details, see Adam, M. S., & Jauharee, A. R. (2023). *Livebait Fishery in the Maldives: Current Trends*. The Maldives National University. Retrieved from <https://mnu.edu.mv/wp-content/uploads/2024/04/Livebait-fishery-Maldives-current-trends-2023.pdf>.

³ For more information, see: Miller, K. I., Jauharee, A. R., Nadheeh, I., & Adam, M. S. (2021). *Interactions with Endangered, Threatened and Protected (ETP) Species in the Maldivian Pole-and-Line Tuna Fishery*. International Pole & Line Foundation. Retrieved from <https://ipnlf.org/wp-content/uploads/2021/02/ipnlf-tech-report-etp-species-interactions-with-pole-and-line-fisheries-in-the-maldiveslr.pdf>.

have been enforced, considering the limited resources available for enforcement and monitoring. Raising the awareness and capacity building of the fishers on the need for management and capacity to implement are needed, recognizing that fishers are allies of the process.

The management plans are at the national level. Considering practicalities, especially enforcement difficulties, it is recognized that some issues could be dealt at the atoll level, complementing the national level measures. Accordingly, for those issues where atoll level authorities are more sensitive and/or able to enforce rules, atoll councils could implement the rules. For example, regulations on the use of baitfish attracting lights (number, intensity), regulations on the size of livebait fishing nets, use of scuba gear in baitfishing, any baitfishing-related activities that are shown to disrupt coral reefs, etc. could be implemented by the council. However, as the authorities at atoll level are not currently ready to assume fisheries management responsibilities, such changes need to evolve slowly through awareness and capacity building. Extensive consultation with fishers, atoll authorities, commercial companies, other ministries, and interested parties is required for adoption at atoll level.

3.2.2 Ecological profiling of reef fisheries in Lhaviyani Atoll

Reef fishing is conducted throughout the entire atoll using boats that range in length from 18 to 24 feet. These boats are equipped with inboard diesel or outboard engines, with horsepower ranging between 20 and 100. The primary fishing techniques used include jigging, casting, handlining, and drop lines. Each boat typically catches between 30 to 50 kilograms of fish per trip, with casting lasting around six hours per trip. Notably, the fishers do not carry ice on the boats to preserve their catch.

The main fish species targeted, listed in order of catch volume, are jacks, snappers, jobfish, groupers, rainbow runner, emperors, and chubs. Manta rays are occasionally encountered, but there is no interaction with turtles, dolphins, or whale sharks in this fishery. Additionally, the reef fishing activities do not impact coral reefs, and fishers in this sector do not engage in livebait fishing.

The growing tourism industry has provided lucrative market opportunities for reef fishers, middlemen, and traders. Prices for reef fish, particularly grouper, are high, resulting in strong economic returns for fishers. Most reef fishers are highly experienced, having honed their skills over many years, and more young people are now entering this sub-sector. Since reef fishing is carried out with small-scale vessels, it requires relatively low investment and operating costs, making it an accessible industry for new entrants.

Issues:

Following issues were flagged by the participants:

- Depredation of catch by sharks is a major issue.
- Some fish like trevally are easily spoiled as ice is not used in the boat. Access to ice, water, engine spare parts and fishing gear is a challenge for reef fishers.
- The data collection mechanism as a basis for research and monitoring is insufficient. There is no information on stock status. However, the participants informed that the catch of large fishes like red snapper have reduced and that of small fishes has increased. The size of some species like the trevally, *Caranx ignobilis* has decreased in the catch. In general, the catch rate of reef fisheries has decreased, and the catch composition has changed. The participants voiced concern that spear fishing and net fishing practiced occasionally in the atoll has a negative impact on the resources.
- As development of reef fisheries has been driven by a high demand, there is pressure for certain high value species of groupers, that could possibly lead to overexploitation.

- Heavy exploitation of livebaits to cater to the increasing demand from the large vessels operating in the tuna fishery will seriously affect the reef fishery.
- Coastal infrastructure development, dredging activities and dumping of wastes in the coastal and marine environment is a serious issue.
- There is no information to understand the impact of MPAs on the resources in the Lhaviyani Atoll as well as the impact of reef fisheries on the ecosystem and ETP species.
- The safety of divers is a serious concern, particularly in the grouper fishery.
- Fishermen do not want to share information on the catches due to fear of competition from other fishers.

Suggestions given by the participants

- The participants were of the view that management plans should be reviewed and implemented. They supported the Principle of Subsidiarity, in which the central authority will perform only those tasks which cannot be performed at a local level.
- Species management should be extended to habitat management, considering large scale reclamation activities.
- Shark fishery can be opened for a period of 3 to 5 years, with time-area restrictions.
- Spear fishing has been banned, but effective implementation is required by ban on import of spears.
- Reducing/stopping reclamation from inside the atoll or atoll basin.
- Proper data collection and documentation should be ensured. The data should be collected at island-level and coordinated by the Fisheries Ranger or any other appropriate person, who will report to the Ministry, as well as to the fishermen. By this way, a near real-time data collection will be ensured.

3.2.3 Socio-economic profiling of livebait and reef fisheries

The group discussion on socio-economic profiling of livebait and reef fisheries was focused to get the opinion of the stakeholders on the following broad topics:

- *Users of the atoll*
- *Existence of fisher co-operatives*
- *Women's role in fisheries*
- *Share of fish value among the actors in the value chain*

Major users of the ecosystem

- *Fishermen of Lhaviyani Atoll*
- *Fishermen from other atolls*
- *Recreational fishers*
- *Tourists (resorts)*
- *Development agencies*
- *Safaris*

- *Divers*
- *Cargo boats*
- *Passenger ferries*
- *Water sports*

Role of Fisher Cooperatives

In Naifaru, there was previously a fisher cooperative aimed at marketing fish products. However, it struggled to operate effectively due to the fragmentation among producers and the cartelization of supply chains.

Currently, the Fishermen Association of Naifaru (FAN) is active, with a notable number of women members. The association focuses on community-driven activities and serves as a bridge between local communities and government officials, facilitating communication and cooperation.

In addition, the NGO Atoll Marine Conservation – Naifaru Juveniles is operating in the area. Its primary efforts include the recovery, rehabilitation, and release of sea turtles injured by ghost gear (debris entering Maldivian waters from foreign fisheries), as well as the collection of plastics from homes and fishing boats. These plastics are then handed over to Parley, another NGO focused on environmental conservation.

Role of Women in Fisheries

Women participate in fish supply chain both directly and indirectly. Women are engaged in selling fresh fish to families, but they are unable to sell directly to the resorts. The participants informed that micro-credit facilities and insurance are not available for the fishers.

A scoping study by IPNLF on the role of women in tuna fisheries in Lhaviyani atoll in 2016 provides important information to the BOBLME project. The study shows that women's cooperatives were emerging at the time and provided a diversification of livelihoods for women in the Maldives. The next generation of Maldivian women are pursuing higher levels of education and more responsibility in their careers, and more women are moving into management positions, which is elevating the role of women in the Maldivian workforce. The scoping study has further illustrated the potential of women for enhancing fisheries by providing access to technology, social networking and mass media. Gender-disaggregated data is required to understand how women's involvement in fisheries contributes to the health of the fishery and the well-being of the community.

To go forward, there is an opportunity to engage with activities aimed at identifying additional data that would strengthen gender-responsive policy and planning. Areas for attention could include sex-disaggregated data on workers by subsector activities, and on incomes earned by workers in different activities. Collecting this data can be used to understand how women's involvement in fisheries contribute to the health of the fishery and the wellbeing of the communities of which they are a part and make sure that those participating in the fisheries are recognized and adequately represented in decision-making.

Supply chain for reef fisheries

The demand for reef fish is mainly from the resorts. Marketing and pricing of the reef fish is dependent on the buyers from the resorts and contractors. The fishers are unable to sell the catch directly to the resorts due to species-specific, size-specific, high-volume demand from the resorts. The demand is also sporadic and dispersed. Moreover, practicality of access to the resorts is an issue; it does not make sense to the fishers to travel long distances to sell fish to the resorts located far away. Often, timely payment is not made to the fishers. The buying and marketing capacity of local fisheries is weak.

Absence of ice plants, storage facilities and cold chain are major challenges to improve the supply chain.

The supply chain to the resorts for the reef fishes broadly functions as in **Figure 2**.

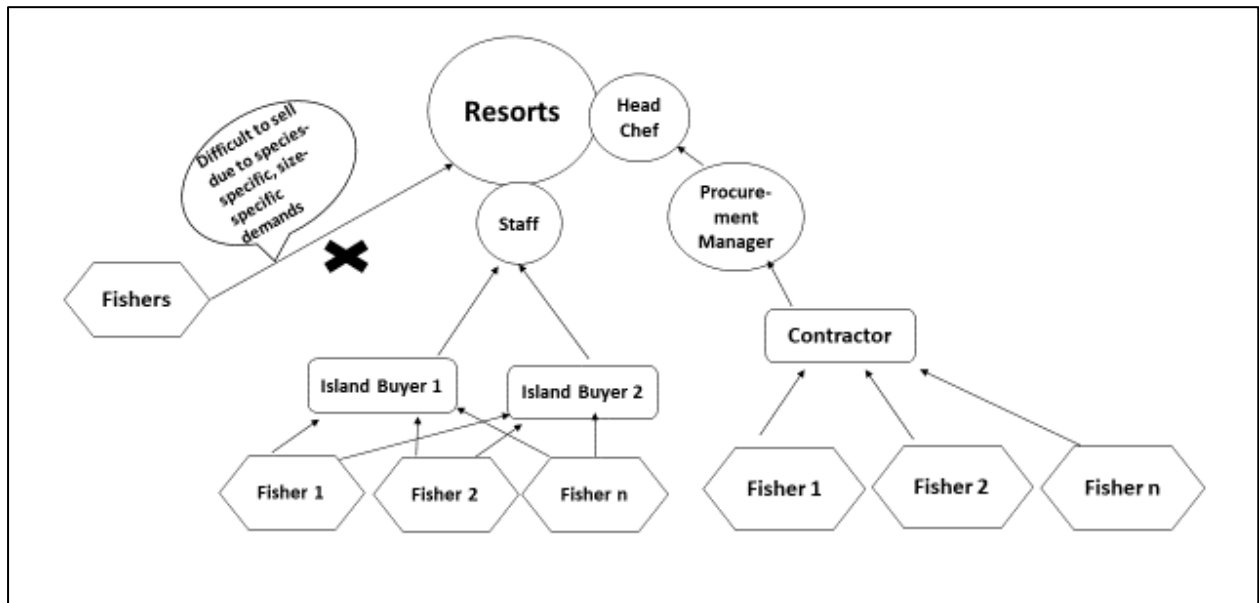


Figure 2. Supply Chain flowchart for reef fishes in Lhaviyani Atoll

The participants informed that the boat owner gets two shares of the value of the catch and the crew gets one share. The buyers sell the catch for 50 to 90% profit.

To improve the buying and marketing capacity of islanders, fresh fish storage facilities may be established on the islands, with provision for ice plants. Loan schemes should be accessible to the buyers. Mechanism for better marketing and timely payment for the purchase from the fishers from the end-markets should be ensured.

3.2.4 Profiling of legal and institutional arrangements in livebait and reef fisheries

The group discussion centered around the following topics:

- *Legislative background in managing the fisheries*
- *Details of stakeholder consultations, decision making process*
- *MCS arrangements*
- *Participatory, co-management arrangements*

Fisheries regulatory Framework in Maldives

The fisheries regulatory framework of Maldives is primarily governed by the Fisheries Act of Maldives, that was ratified in 2019. It entails 10 Fisheries Regulations, 8 Fisheries Management Plans (FMPs) and other instruments. The objectives of FMPs are to Implement a Monitoring, Control and Surveillance (MCS) mechanism, strengthen data collection and data reporting mechanisms for each commercial fishery, and prioritize evidence-based policymaking through the collection of biological and socio-economic data on each fishery. The important provisions in the regulatory framework are licensing of all stakeholders, establishing logbook reporting and other data collection mechanisms, and catch certification mechanism. Area closures, gear-based restrictions, fish size limits and harvest/export provisions are the other unique measures.

Details of stakeholder consultations, decision making process

The fisheries is regulated by the MFOR and the process is facilitated by Island Councils. The Councils discuss with major stakeholders for taking decisions and implementation, but the fishery regulations are generally centralized. Occasionally, NGOs are invited to the consultations.

The following are the solutions suggested by the participants for a better legislative framework:

- *Better and stronger enforcement of regulations and penalties.*
- *Better communication strategies with improved flow of information and promoting vibrant community groups at atoll-level, that will be administered by the Ministry.*
- *Seasonal fishing closures may be considered, instead of closures forever.*
- *Monitoring the performance of management measures by applying proper scales.*
- *Fishers may be compensated for undertaking protection measures. Fishers are always excluded from accessing the benefits.*
- *Fishers should be communicated by the Ministry of Tourism with information on tourism boundaries to address access issues.*
- *Cooperation and coordination, and trust building among the communities and organizations are important.*
- *Engage NGOs to facilitate fishers to secure funds, project implementation and carry out training programmes.*

3.2.5 Capacity Building requirements in fisheries in Lhaviyani Atoll

To facilitate better performance and productivity, the participants suggested the following capacity building programmes to the resource users and other stakeholders:

- *Use of technology like communication, GPS, fish finding systems*
- *Fisheries information system (Keyolhu- application for fishing licenses, submitting fishing trip logbook information, and registering and updating information in the National Registry of Fishermen)*
- *Fish handling and cold chain management*
- *Fish processing (e.g., rihaakuru processing)*
- *Market intelligence*
- *Quality check of fishery products*
- *Business development of micro, small and medium enterprises*

3.2.6 Development of provisional EAFM plan for livebait and reef fisheries of Lhaviyani atoll

Based on the inputs from the participants and resource persons in the National Consultative Workshop, a provisional EAFM plan has been developed for livebait and reef fisheries of Lhaviyani atoll. In addition to the inputs by the participants, preparation of this provisional plan has relied on the following management plans prepared earlier for the livebait fishery and reef fisheries in the Maldives:

Reference	Details
<p>Gillett, R., Jauharee, A. R., and Adam, M. S. (2013). <i>Maldives livebait fishery management plan</i>. Marine Research Centre, Ministry of Fisheries and Agriculture, Maldives, 17 p.</p>	<ul style="list-style-type: none"> - Government initiative for sustainable exploitation of livebait resources in the Maldives. - Supported by the Maldives Environment Management Project, funded by the World Bank.
<p>Japan International Cooperation Agency, INTEM Consulting, Inc., Fisheries & Aquaculture International Co., Ltd. (2018). <i>Republic of Maldives: Project for the formulation of master plan for sustainable fisheries (MASPLAN). Final Report</i>, 280 p.</p>	<ul style="list-style-type: none"> - Submitted to the Ministry of Fisheries and Agriculture, Government of Maldives. - Focus on Sustainable Fisheries Development Plan for 2016-2025 in oceanic fisheries, reef fisheries, aquaculture, and post-harvest value addition. - Outputs of pilot initiatives included.
<p>Ministry of Fisheries, Marine Resources and Agriculture, Maldives (2020). <i>Maldives tuna management plan</i>, 76 p.</p>	<ul style="list-style-type: none"> - Prepared under Article 18 of the Fisheries Act (Act No. 14/2019). - Requires the Ministry to develop and periodically review management plans for fisheries governed by the Fisheries Act.
<p>Ministry of Fisheries, Marine Resources and Agriculture (2020). <i>Maldives Reef Fishery Management Plan</i>. MoFMRA, Malé, Maldives, 40 p.</p>	<ul style="list-style-type: none"> - Primary guide for authorities and stakeholders on sustainable development of the reef fishery and related trade in the Maldives.
<p>Ministry of Fisheries, Marine Resources and Agriculture (2020). <i>Maldives Grouper Management Plan</i>. MoFMRA, Malé, Maldives, 58 p.</p>	<ul style="list-style-type: none"> - Provides guidance for sustainable development of the grouper fishery and trade in the Maldives.
<p>Nashath, M., Adam, M. S., Shimal, M., Jauharee, A. R., Nadheeh, I., and Saneeh, I. (2023). <i>Livebait fishery of the Maldives - fishing grounds in the Central and Southern Atolls, fisher perception and current trends in fishery</i>. Maldives National University, Maldives, 65 p.</p>	<ul style="list-style-type: none"> - Examines fishing grounds in the Central and Southern Atolls. - Analyzes fisher perceptions and trends in the livebait fishery.

The outlines of the provisional plans are given in **Table 3** and **Table 4**.

Table 3. EAFM provisional planning and implementation for Livebait Fisheries in Lhaviyani Atoll

#	Issue	Strategy	Potential activities
1	Livebait abundance reducing in the atoll	Protection of livebait resources	<ul style="list-style-type: none"> (i) Review implementation of livebait fishery management plan in Maldives (ii) Collection and analysis of data on livebait fisheries in Lhaviyani Atoll from primary and secondary sources (iii) Assess the status of livebaits in the atoll (iv) Analyse livebait fishery/tourism interaction (v) Analyse potential impacts of the fishery on the ecosystem and ETP species (v) Explore implementation potential of national management measures through stakeholder engagement at atoll level
2	Harvest & post-harvest loss of livebaits	Reduce harvest & post-harvest loss of livebaits	<ul style="list-style-type: none"> (i) Better management of livebait fishing operation (ii) Modifying scoopnet (iii) Modifying livebait holding tank following Japanese Technology
3	Alternate source of livebait supply not available	Explore farming potential of livebaits in the Atoll	<ul style="list-style-type: none"> (i) Review of global experience on farming baitfish, particularly milkfish (ii) Assess the demand for baitfish in Lh Atoll (iii) Prepare a technical and economic/business feasibility of baitfish farming in ponds/pens in Lh Atoll (iv) Summarise and submit feasibility report for Lh to the Government
4	Management responsibilities not significant at atoll level	Raising awareness and capacity building	<ul style="list-style-type: none"> (i) Education/communication strategy to be developed (ii) Encouraging women participation in management (iii) Conducting periodic capacity building programmes (iv) Publicity materials, regular interaction with the public and school children

Table 4. EAFM provisional planning and implementation for Reef Fisheries in Lhaviyani Atoll

#	Issue	Strategy	Potential activities
1	Status of reef fisheries not clear	Improve data collection and analysis	(i) Improvement of fisheries, biological and socio-economic data collection and analysis in the atoll by adopting sound survey technique (ii) Understand effectiveness of MPAs (iii) Understand the impacts of reef fisheries on the ecosystem and ETP species (iv) Strengthen documentation of reef fishery (v) Review implementation of Reef Fisheries, Grouper Fisheries and Lobster Fisheries Management Plans in Maldives (vi) Explore feasibility of implementing the above three plans in Lh
2	Marketing system needs improvement to increase profitability to fishers	Improve marketing; increase profitability of fishers	(i) Analyse the performance of supply chain and suggest improvements in marketing (ii) Explore improvements in boat design/ equipment for fish handling, in particular live grouper, and ice and fish storage (iii) Facilitate and encourage fisher participation in benefit schemes targeted for fishers (iv) Prepare and disseminate information on best practices in reef fishery
3	Management responsibilities not significant at atoll level	Raising awareness and capacity building	(i) Capacity enhancement on fishery resource management (ii) Awareness in fish handling and storage techniques for quality maintenance (iii) Encouraging women participation in management (iv) Publicity materials, regular interaction with public and school children

The final EAFM Plan for the livebait and reef fisheries of Lhaviyani Atoll will be prepared with the following broad contents:

- (i) Scoping the Fishery Management Unit (FMU)
 - *Define the FMU*
 - *Stakeholders identification and prioritization*
 - *Issues and opportunities in the FMU*
- (ii) EAFM Plan Participatory/Co-management arrangement
 - *Vision, Goals and Objectives*
 - *Indicators and Benchmarks*
 - *Management actions*
 - *Plan formalization*
 - *Challenges and Opportunities in meeting the goals and objectives*
 - *Establishing a communication mechanism*
- (iii) Way Forward for Implementation of the Plan

3.2.7 Approach to finalize the EAFM plan and implementation

The approach to finalize the EAFM plan and implementation will be done by the following process:

(i) Establishing/Connecting to a National Working Group on EAFM (NWG-EAFM) or similar framework

In consultation with the MFOR, a National Working Group (NWG-EAFM) will be constituted by identifying institutions and individuals within the country. However, if a similar framework or working group already exists, the new NWG-EAFM will connect and align its efforts with that structure, ensuring coherence and avoiding duplication of efforts. The NWG is crucial as it engages with, gives responsibility and power to the community members, and works through the planning and implementation process. Representatives from the following organisations will constitute the NWG:

- *Representative from MFOR (Chair)*
- *Representative from MCCEE (Co-Chair)*
- *Research Organisation*
- *Academic Organisation*
- *Non-Government Organisation*
- *Fisher Organisation*
- *International Consultant on EAFM from BOBP-IGO (Member-Secretary).*

(ii) Establishing a stakeholder group

A working arrangement will be made with stakeholders where management responsibility will be shared between the government, Atoll & Island Councils, fishing communities and other stakeholders in Lhaviyani Atoll. The group will meet at regular intervals to discuss current issues and potential solutions. Stakeholder engagement will be ensured by facilitating participatory workshops, awareness raising and community mobilization.

(iii) Engaging a National Consultant

In consultation with the National Government, a National Consultant will be engaged to provide technical expertise and support for the development, planning, and implementation of EAFM strategies. The selection of the National Consultant will be conducted through a transparent process, ensuring that the individual possesses the necessary qualifications and experience in fisheries management, marine conservation, and stakeholder engagement. The National Consultant will play a critical role in bridging the gap between the technical and policy aspects of EAFM, working closely with both the government and the NWG-EAFM. This consultant will be responsible for integrating national priorities, local realities, and scientific insights into actionable plans that promote sustainable fisheries management. The broad Terms of Reference (ToR) for the National Consultant include:

- *Support the NWG-EAFM in EAFM Planning and Implementation.*
- *Conduct a National Fisheries and Ecosystem Assessment;*
- *Stakeholder Engagement and Capacity Building;*
- *Legal and Institutional Framework Analysis;*
- *Develop a Comprehensive National EAFM Strategy and Action Plan;*
- *Monitoring, Evaluation, and Reporting;*

- Promote Regional and International Cooperation; and
- Advocate for Policy Reforms and Government Support;

3.3 Scoping Lhaviyani Atoll for MMA Plan Development and Implementation

3.3.1 Protected areas in Lhaviyani Atoll

The MMA group discussion was focused on Lhaviyani Atoll, which comprises seven protected areas and also important bait fishery sites. The list of 7 MPAs and livebait fisheries sites in Lhaviyani Atoll are given below (Figure 3-4, Table 5):



Figure 3. Seven Marine Protected Area (MPA) Sites in Lhaviyani Atoll and Potential OECM Site marked by pin (Source: MoCCEE)

Table 6. Details of MMA group participants

#	Name	Designation
1	Mr. Moosa Haleem	Maldivian Coast Guard Mobile: + 960 9115463
2	Mr. Hassan Irash	Sub-Inspector of Police, Marine police, Mobile: + 960 7775437 / 9992772
3	Mr. Abdul Raheem Nashid	Naifaru Juvenile, NGO Mobile: + 960 7500231
4	Ms. Aishath Amal	Senior Conservation Officer, Ministry of Environment, Email: aishath.amal@environment.gov.mv
6	Ms. Hawwa Junainath	Conservation Officer, Ministry of Environment Email: hawwa.junainath@environment.gov.mv
7	Mr. Mohamed Sharif	Reef Fishery Representative
8	Mr. Mohamed Alif Arif	Fisheries Officer, Ministry of Fisheries and Ocean Resources Mobile: + 960 7590432 Email: mohamed.alif@fisheries.gov.mv
9	Mr. Yasir Ahmed	Dive Instructor, Naifaru Scooba Dive Centre, Guest House / Dive Centre representatives, Mobile: + 960 7782232

3.3.3 Discussion points

The discussion focus was on clarifying the objectives and expected outcomes for the five-year BOBLME II project. Group work emphasized the need to evaluate atoll-level management, particularly concerning the seven MPAs in Lhaviyani Atoll. Discussions centered on the background and reasons for choosing these MPAs, including their current management status.

- **MMA Session:** Focused on the seven MPAs in Lhaviyani Atoll, totalling 4,911.5 hectares. Issues were raised about the lack of management plans and monitoring, and the disparity in the resource use between private resorts and other users. Public awareness and NGO support were deemed crucial for effective MPA management.
- **National Protected Area (PA) Selection Process:** The process involved identifying environmentally significant sites, consulting with councils and stakeholders to understand resource use, conducting ecological and social surveys to establish baselines. Despite the rigorous process, some sites have to be excluded due to competing priorities, such as economic development.
- **Other Donor Projects:** The World Bank's GEF-8 project aims to improve management effectiveness of Lhaviyani Atoll protected areas.
- **Stakeholder Mapping (Table 7):** Identified core values and challenges of various stakeholders, including EPA, MoCCEE, academic institutions, and NGOs. Emphasized the need for improved data sharing, capacity building, and long-term strategic planning.

Table 7. Stakeholder mapping by participants

Stakeholder	Core Value (Strength)	Challenges	Potential Areas for Further Exploration
Environmental Protection Agency (EPA- implementing agency)	Regulatory authority, marine research team, research vessel	Limited human and financial capacity	Identify innovative options for monitoring and enforcement Explore opportunities for collaboration with international research institutions.
Ministry of Climate Change, Environment, and Energy (MoCCEE)	Policy-making authority	Limited human and financial capacity	How to effectively implement and monitor marine conservation initiatives.
Maldives Marine Research Institute (MMRI)	Research capabilities National coral reef monitoring protocols		Explore potential partnerships with international research organizations to enhance research capacity.
Maldives National Defence Force (MNDF)- Coast Guard	Enforcement authority		Assess the capacity to effectively enforce marine conservation regulations.
Marine Police	Enforcement authority		Environmental training
Non-Governmental Organizations (NGOs)	Community engagement and outreach		Identify key NGOs with relevant expertise and facilitate collaboration among them. E.g. In Lhaviyani Atoll, Naifaru Juvenile works on turtle conservation and other related environmental activities
Local Councils	Local governance. Important group for enhancing capacity during MPA planning and implementation.		How to effectively participate in marine conservation planning and implementation.
University and Academia - Maldives National University (MNU)	Education and research: Maldives National University offers programs in Marine Science, Environmental Management, and is planning to start a program in Climate Change.	Limited resources, difficulty attracting students	Explore opportunities for collaborative research projects.
Recreational Divers	Citizen science potential: Participate in ecological surveys, observe patterns, and learn about species.	Limited training and capacity	Develop comprehensive training programs for recreational divers to enhance their involvement in marine conservation activities. Spatial Monitoring and Reporting Tool (SMART) Training: Provides

Stakeholder	Core Value (Strength)	Challenges	Potential Areas for Further Exploration
			training through a "train the trainers" approach to ensure ongoing capacity building.
EIA Consultants and Licensed Surveyors-	Capacity to conduct EIA assessments.		Opportunities may exist to utilize EIA process in broader data collection.
Resorts	MPA user		Engage in implementation of management measures for MPAs.

Significant gaps exist, including lack of comprehensive social and ecological baselines and the absence of a long-term strategic plan for the Marine Protected Areas (MPAs) in Lhaviyani Atoll. While the MPAs established in 2020 were accompanied by some initial ecological assessments, no baselines exist for sites designated before 2020. Additionally, there is currently no active management or monitoring of MPAs within the atoll.

In addition, MoCCEE noted that at a national level, priorities include conducting comprehensive ecological and social assessments, providing targeted training and capacity building, developing and implementing effective management plans, enhancing communication and awareness efforts, and adapting management effectiveness tracking tools such as Management Effectiveness Tracking Tool (METT) framework to the Maldivian context.

Threats: Local fishers' lack of awareness and incentives for MPAs were highlighted, with threats including bait fisheries, anchoring, and overall fishing activities. The importance of increasing cooperation and addressing data and strategic planning challenges was emphasized. Mr. Ali Faaiz, Reef fisher raised concerns about the Site No.1, Fushi Faru Thila, questioning why the site is used for tourism purposes despite the area's designation as a protected bird sanctuary. The site was rezoned in 2020 excluding the sand bank referred to in the question which demonstrates inadequate communication to the community.

From the community perspective, Site No. 1, Fushi faru Thila, is recognized as the most ecologically significant due to its importance for whale sharks and manta rays, although there are no available reports on this site, which was designated in 1995. Establishing a baseline assessment is recommended to determine its current ecological value. Site No. 4, Vavvaru, is also crucial due to its sandbanks and year-round sightings of manta rays, as well as seasonal whale shark sightings, making it an essential feeding ground. Key threats to these sites include bait fisheries and anchoring, with 10-12 areas in Lhaviyani Atoll being affected by bait fisheries, primarily in the central region of the atoll.

Reef fisheries in the area involve local fishers who catch a variety of species, including snapper, jackfish, and groupers, using their own boats and supplying the fish to local markets. There is concern that local fishers may not fully be aware of MPA boundaries and management directives of MPAs. Currently, there are no incentives for fishers to engage in conservation efforts, and managing MPAs is expected to be the government's responsibility.

Major threats to MPAs include anchoring and general fishing activities. Improved cooperation with marine policy and the Environmental Protection Agency (EPA) is needed. There is a lack of a long-term strategic plan, technical and financial capacity, and challenges with data sharing and navigation systems are also identified. Improving access to information are crucial for addressing these issues.

Recommendations and Next Steps:

- **OECD Workshop:** Organize a one-day workshop to focus on Other Effective Conservation Measures (OECMs) and their application in the country.
- **MPA Management Plans:** Prioritize developing an MPA management plan for a pilot MPA site in either Lhaviyani Atoll or Huvadoo Atoll. The MPA management plan process should be replicable across Lhaviyani Atoll (scaled up under the GEF-8 WB Project to cover all 7 MPA sites). MoCCEE will consider the pros and cons of selecting Lhaviyani Atoll or Huvadoo Atoll. Initial discussions will be held within MoEECC in the week following the National Consultative Workshop, followed by a meeting with IUCN to finalize the site selection decision.
- **Stakeholder Collaboration:** Enhance collaboration among stakeholders, including NGOs, Government agencies, and local communities, to ensure comprehensive support and engagement.
- **Capacity Building and Training:** Invest in national capacity development, based on the IUCN Green List framework and especially on ecological assessments, MPA planning, monitoring, and enforcement, to address current gaps and improve management effectiveness.

Session 4. Combatting Illegal, Unreported and Unregulated fishing (IUU fishing)

In this session, two presentations were made in the plenary. In the first presentation, Dr Hussain Sinan, Director General, MFOR focused on the National Policies and Challenges to Combat IUU Fishing in Maldives. The important MCS measures are

- Licensing the fishing vessels, fish processing facilities and fish collector vessels through the central Fisheries Information System – Keyolhu
- Fisheries catch data collection and logbook data submission as a licensing requirement; submission of purchase data by the processing facilities; collection of fish biological data by the MMRI and collection of socio-economic data through surveys
- Appointment of Fisheries Rangers in 9 islands (including Naifaru Island) to ensure compliance of the vessels and facilities with relevant regulations
- Installation of VLDs in all fishing vessels of 18 m length and above as VMS requirement
- Catch certification made mandatory for exported tuna, ensuring traceability of the catch
- Enforcing fisheries law and imposing penalties on fishing related offences to domestic and foreign fishing vessels
- National Plan of Action Plan – IUU Fishing was developed in 2019 and remains to be reviewed after 4 years.

The comprehensive presentation by Dr Sinan was followed by a presentation by Mr Rajdeep Mukherjee, International Consultant (IUU fishing), BOBP-IGO on the perspectives of BOBLME project on combatting IUU fishing. The thrust activities are to reduce IUU fishing by:

- *Implementing a Regional Plan of Action (RPOA) on IUU fishing*
- *Strengthening NPOA-IUU and NPOA-MCS and Vessel Monitoring System (VMS) strengthened*
- *Developing and implementing tools for promoting best practice to combat IUU; and developing and implementing policies and national actions to combat IUU fishing in national pilot/investment project*

- *Implementing regional capacity building program on port inspections, MCS, and traceability.*

The specific support needed from the Government of Maldives during the current year to implement the BOBLME perspectives identified by Mr Mukherjee is listed below:

- *Setting-up of National Working Group – IUU fishing*
- *Review of NPOA-IUU*
- *Review and endorsement of RPOA-IUU*
- *Assistance in data collection on IUU fishing*
- *Assistance in conducting capacity development programmes.*

The two presentations generated interaction with the participants. However, as there was a shortage of time, directions for the project activities could not be conceived. It was decided to arrange a follow-up meeting to take a decision on project-specific activities.

Session 5. Concluding Session

The National Consultative Workshop concluded with remarks from the President, Naifaru Island Council, Dr P Krishnan, Director, BOBP-IGO and Dr Hussain Sinan, DG, MFOR.

Post-workshop activities on 14.08.2024 & 15.08.2024

(Pictures will be added later)

i) Visit to Maldives Industrial Fisheries Company (MIFCO), Felivaru Island

The participants of NCW visited MIFCO on 14.08.2024. Felivaru tuna cannery is the first industrial processing operation setup in the Maldives in 1977. The EU approved cannery provides private labelled packing according to the customer's specifications. The public company has 4000 t cold storage facility, and capacity to process 100 t tuna, 200 t brine freezing facility per day and 80 t RSW freezing facility per day. All raw materials are directly purchased from local fishermen year-round and are caught by pole and line fishing method. Canned products are manufactured from cooked tuna fish, which is skinned, headed, eviscerated, trimmed of all blood meat, scorched and packed with a covering of oil or brine in hermetically sealed can and sterilized to achieve commercial sterility by application of heat. Tuna chunks are packed in cans and pouches. About 40% of canned products are used domestically and the rest are exported to the UK, Europe, Asia, the Middle East and Africa.

From the fish waste in the cannery, fish meal is prepared as a byproduct. It is used as a fertilizer as well as an essential ingredient in poultry and fish feed. The fish meal is exported to Bangladesh and Sri Lanka.

The participants could see all the activities in the cannery.

ii) Participation in reef fishing off Naifaru Island

The delegation participated in a fishing trip arranged by the island volunteers in a professional modern tuna fishing boat. The fishers demonstrated the modern navigation aids, safety gadgets, fishing gears used in the boat and also the reef fishing process, to the project team from BOBP and IUCN.

Though not many fishers were caught during the exercise, due to the bad weather, it provided reasonable exposure on the Maldivian pole and line fishing to the project team. The Ministry officials and the invited experts who attended the National Workshop also participated in the fishing trip.

iii) Visit to Atoll Marine Conservation Centre, Naifaru Island

The Centre is established by an NGO 'Naifaru Juvenile'. The Centre is undertaking sea turtle recovery programme. Turtles entangled in fishing nets illegally operated by other countries are rescued, treated and rehabilitated in a seawater holding facility. The surgery is performed by a qualified veterinary surgeon. After rearing for a specific period, they are maintained in a pen erected in the sea before releasing into the sea.

At the time of visit of BOBLME project team on 15.08.2024, 6 turtles (5 olive ridleys and one hawksbill) with amputated flippers (one or both) were treated in the facility.

The staff of the Centre are keenly interested in supporting the BOBLME project, in a suitable way.

iv) Visit to the school Madhrasathul Ifthithaah, Naifaru Island

The school is the second oldest academic institution in the country and has served the country with more than 75 years of educational excellence. It provides primary, secondary & higher secondary education in Naifaru. The BOBLME project team visited the school on 15.8.2024 and interacted with the principal, staff and higher secondary students of environmental/fisheries science. The staff and students showed great interest in getting associated with the awareness programmes on environment and fisheries sustainability under the BOBLME project.

v) Visit to a smoked tuna unit in Naifaru Island

Visited a smoked tuna (*valhomas*) unit on 15.08.204 and interacted with the woman-entrepreneur. Valhomas is a type of cured product and a staple food in the country. The project team could see the dried skipjack tuna in elevated racks. Although valhomas is now frequently made in large-scale fish factories for export, there are still those in the islands who have been keeping these traditional techniques alive. The process of making valhomas begins with gutting, filleting and cleaning freshly caught fish, removing the innards, gills, head, tail and backbone. Next in the process, the cleaned fish is cut into long pieces and boiled in salted water. This is traditionally done in big metal pots, over open fires made from coconut shells and wood. Once poached, the fish is removed from the pot and left to smoke over open fire pits on racks made from either dried coconut palm stalks, or metal. The fish is smoked over the fire overnight, after which it is left to dry out in the sun, usually for a period of three days.

Valhomas can be made with any type of sea fish, although tuna is the preferred variety.

The entrepreneur said that she gets only small-sized skipjack tuna. The products are exported mainly to Sri Lanka and Bangladesh.

vii) Meeting with the President and Secretary, Lhaviyani Atoll Council

The BOBLME project team met the President, Lhaviyani Atoll Council (also called Faadhippolhu Atoll Council) along with the Secretary and staff of the Council in the Secretariat of the Council in Naifaru Island on 16.08.2024.

In the meeting, the project team shared the information on the project seeking the support and engagement of the Council to execute the project in the Atoll. The proposed project activities and details of operationalizing were discussed with the Council. The Council assured us full support and cooperation to the project activities. The response of the Atoll Council and Island Council is an encouraging development to kick start the BOBLME project activities in Lhaviyani Atoll.

**National Consultative Workshop on
BOBLME Project Phase II Implementation in Maldives
Naifaru Island, Lhaviyani Atoll, Maldives
12-13 August 2024**

Agenda

Day 1 (12 August 2024)

Time	Agenda	Resource Person/Organisation
1100-1200	Session 1. Inaugural Session	
	Recitation of Holy Quran	
	Welcome Address	President, Naifaru Island Council
	Overview of BOBLME Project, Workshop Context & Components 1 & 3	P Krishnan, Director, BOBP-IGO
	Overview of Components 2, 4 & 5	Maeve Nightingale, Senior Programme Officer, IUCN
	Inaugural Address	Ahmed Shiyam, Honorable Minister, MFOR, Maldives
1200-1315	Lunch	
1315-1715	Session 2. Overview of EAFM & MMA Sites in Maldives	
1315-1340	Marine Managed Area (MMA: Overview & Scope of Work	Maeve Nightingale, IUCN
1340-1400	Overview of Protected and Conserved Areas in Maldives	Aishath Amal, Senior Conservation Officer, MoCCEE
1400-1420	EAFM: Overview and Scope of Work	E Vivekanandan, Senior Consultant, BOBLME, BOBP-IGO
1420-1440	Marine/Fisheries OECMs for the Maldives: Unlocking Conservation Potential	P Krishnan, BOBP-IGO
1440-1500	Fisheries management in the Maldives	Munshidha Ibrahim, Director (Fisheries Management), MFOR
1500-1530	Interaction	
1530-1600	Tea Break	
1600-1630	The Maldives Livebait Fisheries	A Riyaz Jauharee, Maldives Marine Research Institute, MFOR
1630-1700	An Overview of the General Reef Fishery in the Maldives	Mohamed Shimal, Director, MMRI, MFOR
1700-1715	Interaction	

Day 2 (13 August 2024)

Time	Agenda	Resource Person/Organisation
0915-1015	Session 4. Combating IUU Fishing	
0915-1000	National Policies and Challenges to Combat IUU Fishing in Maldives	Hussain Sinan, Director General, MFOR
1000-1015	Combating IUU Fishing – BOBLME II Perspective	Rajdeep Mukherjee, Policy Analyst, BOBP-IGO
1015-1030	Tea Break	
1100-1630	Session 3. Scoping Lhaviyani Atoll for EAFM & MMA Plan Development & Implementation	
1100-1200	Ecological Profiling of Livebait Fishery of Lhaviyani Atoll for EAFM	Participants: EAFM Group 1; Moderator: Riyaz Jauharee, DDG, MMRI
1100-1200	Ecological Profiling of Reef Fishery of Lhaviyani Atoll for EAFM	Participants: EAFM Group 2; Moderators: Shiham Adam, Ex DG, MMRI & Mohamed Shimal, Director, MMRI
1100-1200	Profiling Lhaviyani Atoll for MMA Plan Development & Implementation	Participants: MMA Group Moderator: Maeve Nightingale
1200-1315	Lunch	
1315-1500	Socio-economic Profiling of Livebait & Reef Fisheries in Lhaviyani Atoll for EAFM	Participants: EAFM Group 1; Moderator: Shiham Adam, Ex DG, MMRI
1315-1500	Legal & Institutional Profiling for EAFM	Participants: EAFM Group 2; Moderators: Munshidha Ibrahim, MFOR & Mohamed Shimal, Director, MMRI
1315-1500	Profiling Lhaviyani Atoll for MMA Plan Development & Implementation	Participants: MMA Group Moderator: Maeve Nightingale
1500-1600	EAFM Group Presentation & Interaction	Shiham Adam, Riyaz Jauharee, Munshidha Ibrahim, Rashid (fisher)
1600-1615	MMA Group Presentation & Interaction	Maeve Nightingale
	Session 5. Closing Session	
1615-1620	Way Forward	P Krishnan, Director, BOBP-IGO
1620-1625	Closing Remarks	Hussain Sinan, DG, MFOR
1625-1630	Vote of Thanks	President, Naifaru Island Council
1630-1645	Tea & Close of National Workshop	

**National Consultative Workshop on
BOBLME Project Phase II Implementation in Maldives
Naifaru Island, Lhaviyani Atoll, Maldives**

12-13 August 2024

List of Participants

#	Name	Designation/Organisation
1.	Ahmed Shiyam	Honorable Minister, Ministry of Fisheries and Ocean Resources
2.	Mohamed Inan Ali	Deputy Minister, MFOR
3.	Yaseen Abdullah	MP, Naifaru Island
4.	Mohamed Abdul Rahman	MP, Hinnavaru Island
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25.	Ahmed Ijlal	Assistance Maintenance Officer, Naifaru Island Council
26.	Shimaanath Rasheedha	Senior Council Officer, Naifaru Island Council
27.	Mariyam Azfa Ahmed	Assistance Council Executive, Naifaru Island Council
28.	Jawid Moosa	Superintendent, Marine Police
29.	Hassan Irash	Sub-Inspector, Marine Police
30.	Major Abdulla Naushad	Coast Guard
31.	Moosa Haleem	Coast Guard
32.	Mohamed Shiham Adam	Expert, Former DG, MMRI shiham.adam@ipnlf.org
33.	Hamid Nazeem	Maldives Seafood Processors and Exporters Association
34.	Adhnan Ali	Maldives Seafood Processors and Exporters Association
35.	Ahmed Zameer Ali	Kanneli Masaverikan kuraa faraa
36.	Yoosuf Ibrahim	Kanneli Masaverikan kuraa faraa
37.	Afraah Mohamed	Farumas verikan kuraa faraa
38.	Ali Faaiz	Farumas verikan kuraa faraa
39.	Hamid Abdulla	Farumas verikan kuraa faraa
40.	Mohamed Aiman	Naifaru Juvenile, NGO
41.	Ali Zaid	Naifaru Eco Youth, NGO
42.	Abdul Raheem Nashid	Aqua Inn Guest House
43.	Mohamed Ahmed	On the island Guest House
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Bay of Bengal Large Marine Ecosystem (BOBLME)

The Bay of Bengal Large Marine Ecosystem Project II (BOBLME-II: 2023-28) builds on the success of BOBLME-I (2009-15).

It strives to promote sustainable management of fisheries and marine life while conserving their habitats in the Bay of Bengal, with ecosystem services of approximately USD 240 billion over the next 25 years that will be protected and sustained. Funded by the Global Environment Facility (GEF) and the Norwegian Agency for Development Cooperation (NORAD), the project is being implemented by the Food and Agriculture Organization of the United Nations (FAO). The International Union for Conservation of Nature (IUCN), the Southeast Asian Fisheries Development Center (SEAFDEC), and the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) are the executing partners.

The BOBP-IGO is executing the project in South Asia for the benefit of its member countries.

