

# Livebait fishery related work undertaken in the Maldives over 2023 and 2024

Dr. Ahmed Riyaz Jauharee / Maldives Marine Research Institute – June 2024

---

## Introduction

Livebait fishing is an essential component of the tuna fishery and continues to be undertaken as part of tuna fishing operations. Unlike in many parts of the world where livebait is collected by separate vessels and then sold to tuna fishers, the livebait fishery in the Maldives is conducted at sea by pole-and-line and handline vessels as part of the tuna fishing operation and takes place prior to almost every tuna fishing trip.

In the past livebait fishing was undertaken during early mornings utilizing rectangular lift-nets deployed from the sides of boat. This live bait catching technique involves snorkelers in the water actively herding schools of fish onto the net. However, this method is time-consuming and requires many crew members. In recent years, as fishing vessels have developed technologically, the livebait fishery has evolved from the very labor-intensive daytime fishing to a more efficient method using lights at night. Lights are used to aggregate small fish, which can then be collected with a large net.

Government of Maldives have been working to address the challenges identified by MMRI in the bait fishery, including but not limited to minimize the post-harvest losses of livebait.

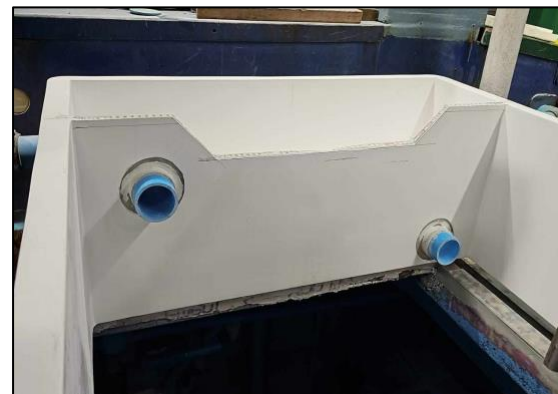
These include:

- Modifying the bait tank and improve water circulation inside bait tanks
- Improving the handling of livebait during transfer from net to tank with the introduction of wet scooping
- Creating awareness among fishers on proper handling of livebait through workshops and awareness materials
- Mapping livebait fishing grounds
- Trialing of livebait trap cages

## Initiatives

### 1. Modifying the bait tank and improve water circulation inside bait tanks

Field work carried by MMRI staff out on tuna fishing vessels revealed several issues with the bait tanks. These included poor circulation leading to inadequate aeration in the bait tank, instability of the water inside the bait tank while the vessel is moving especially in rough seas, and the need for frequent diving into the bait tank to remove dead bait. To address these issues the Ministry of Fisheries and Ocean Resources started an initiative to improve the condition of the bait tanks with the help of JICA. As part of the project funded by Japan, modifications are to be made to the bait tanks of three pole and line vessels. The bait tank of the first vessel – Kamana dhoani from GDh Madaveli – was modified in July 2023 and trials were conducted during the latter part of the 2023.



Since March 2025, the vessel (Kamana) has been undergoing additional modifications work and a change of the main engine in K. Gulhi boatyard. A study comparing the performance of this modified bait tank and the existing bait tank will begin in August 2024. The modification of the next two vessels is planned for September 2024.

## **2. Improving the handling of livebait during transfer from net to tank with the introduction of wet scooping.**

The scoops used to transfer bait from the bait net to tank are made from the same materials as the bait net. This ensures that they do not hold water, and the bait is out of the water during the transferring process.. To reduce injury and stress to the bait, a wet scooping method was introduced. Specially designed scoops, brought from Japan were distributed to vessels to encourage and made fishers aware of wet scooping.



Common scoop used by fishers

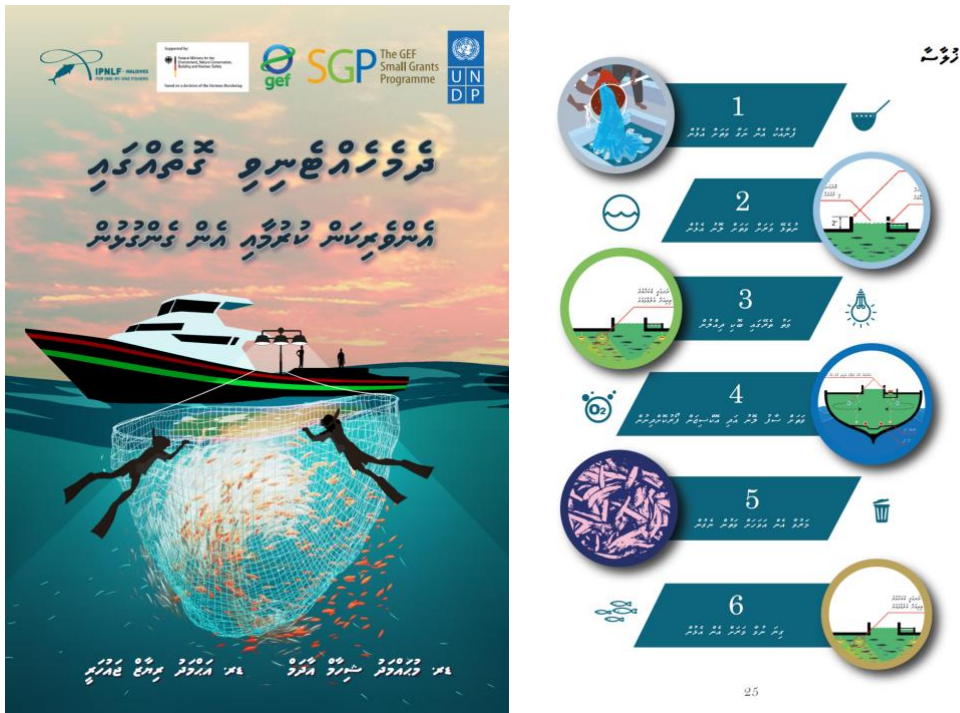


New scoop introduced

## **3. Creating awareness among fishers on proper handling of livebait through workshops and awareness materials**

- a) The vessels that received the wet-scoops and Kaman dhoani had awareness sessions as part of the JICA project.. Both video and photographic documentation of the modification work on Kamana dhoani was carried out during the physical changes brought to the bait tank. A short video documentary on the modification will be developed during 2024.
- b) A booklet addressing the issues related to bait fishing practices and best practices for handling live bait was developed through an initiative by IPNLF with financial support from UNDP. This was based on the best practices developed by the JICA project. The booklet has proven popular among fishers, who are using the information

to make necessary changes to their bait tanks and bait fishing practices. Furthermore, this information is being shared on social media.



Booklet to create awareness among tuna fishers on livebait related issues

- c) Fisher awareness programs were conducted for Thaa atoll fishers (8 vessels) during the launching of the above booklet in Veymandoo and fishers from Laamu atoll (18 fishers) during a 2 days workshop organized by Endheri project.



Photos from the training sessions held in Laamu atoll

#### 4. Mapping livebait fishing grounds

Through a Maldives National University grant fund all the livebait fishing grounds of the southern atolls (from Kaafu atoll to Seenu atoll) were mapped in 2023 and the document was

published in 2024. The report also provides an analysis of fisher perception on topical issues on livebait; their practice and views on how best to conserve and manage the resources including their willingness to pay for both wild caught and cultured livebait if they are readily available. In addition it provides some interesting confirmation to the perception survey from an exploratory analysis of the fishery observer data on livebait (for years 2014-2021).

This is a collaborative effort by MNU and IPNLF. MMRI contributed to this document as well. This document is now available as a soft copy on MNU website:

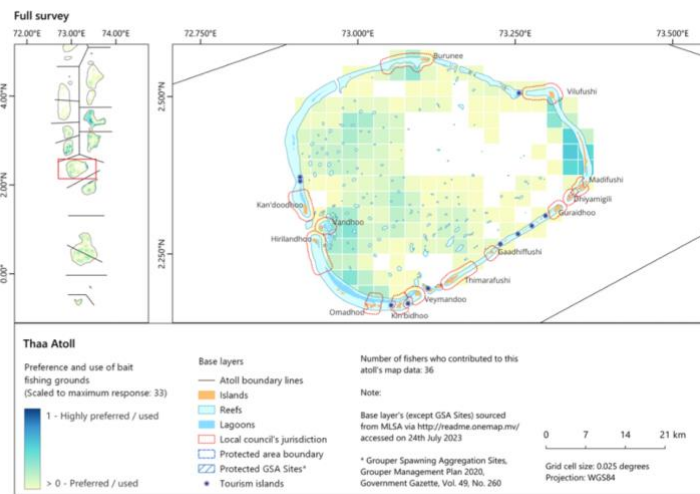
<https://mnu.edu.mv/wp-content/uploads/2024/04/Livebait-fishery-Maldives-current-trends-2023.pdf>.



Livebait Fishery of the Maldives  
Fishing Grounds in the Central and Southern Atolls,  
Fisher Perception and Current Trends in Fishery

MNU Research Grant URG-2021-L-AS04

September 2023



## 5. Trialing livebait fishing cages

Trap cages are used in Japan for aggregating and catching bait species. Through JICA assistance, for the first time such cages will be tried in the Maldives in 2024. If successful, this initiative could pave way for the introduction of livebait fishery as an independent fishery.

