



Term of Reference: Freshwater Fish Grow-Out Culture Expert

Type: Short-term, local

Reports to: Business Adviser, MDF Timor-Leste

Duration: Up to 48 input days from June to October 2022, with the possibility of extension

Location: Timor-Leste

About the Market Development Facility

Market Development Facility (MDF) is an Australian Government funded multi-country initiative which promotes sustainable economic development, through higher incomes for women and men, in our partner countries.

We connect individuals, businesses, governments and NGOs with each other, and with markets at home and abroad. This enhances investment and coordination and allows partnerships to flourish, strengthening inclusive economic growth.

MDF is funded by the Australian Department of Foreign Affairs (DFAT). It is implemented by Palladium in partnership with Swisscontact.

In Timor-Leste, MDF promotes economic diversification and poverty reduction through partnerships in agribusiness and tourism. The team also encourages entrepreneurship by providing financial and advisory support to innovative businesses.

Background

The National Aquaculture Development Strategy of Timor-Leste aims to increase the national per capita fish consumption. The government plans to increase national per capita consumption to 15 kg by 2020 with the expectation that aquaculture will contribute up to 40% of domestic fish supply by 2030. However, the target is still far behind. Average fish consumption per capita was increased from 6.1 kg in 2010 to only 7.7 kg in 2017. Per capita fish consumption in Timor-Leste, of only 7.7 kg per year in 2017, is substantially lower than the regional ASEAN average of 17 kg and global average of 20.2 kg per capita per year. There are signs that the demand for fish has grown, as the import of table fish in the past couple of years showed significant increase.

According to the most recent agriculture census in 2019, approximately 3.2 percent of all agriculture household in Timor-Leste, or 4,543 households, are engaged in fish farming. The most common production facility is pond culture, and the most common fish farmed are tilapia, catfish, and carp.

Currently, freshwater aquaculture in Timor-Leste functions largely without input of formulated feed system. This is one of the main contributing factors to low productivity in freshwater aquaculture, with an estimated yield of only one ton per hectare per cycle. Small-scale farming households or communities depend largely on natural food by fertilization and/or use supplementary feed to complement natural food. With introduction of commercial feed (including information of application), its expected yield per hectare could increase to over 5 tonnes per hectare per cycle.

The Opportunity

MDF's vision is to have a larger number of smallholder farmers practicing aquaculture with increasingly higher productivity. This can be achieved through better access of fingerlings,

commercial feed, and farming information. To support this work, MDF is seeking to engage a short-term adviser with expertise in freshwater aquaculture, especially grow-out pond culture, to work with input retailers and assist them to establish demonstration ponds to promote the use of inputs and better husbandry practices.

The objective of the assignment is to support better grow-out culture practices at twelve established demonstration ponds across three municipalities.

Key Responsibilities

The technical expert will be delivering training and monitor and provide advice on technical aspects of grow-out culture husbandry practices of freshwater fish ponds, to at least three input retailers and respective farmer groups within the municipalities of Ainaro, Baucau, and Dili.

Specific responsibilities include:

1. Working with MDF to draft new/adapt and/or update existing written training materials on grow-out culture husbandry practices for fish pond culture of tilapia and African catfish. This will include: (i) culture species of tilapia and catfish, (ii) culture system (extensive/ semi-intensive/ intensive systems), (iii) site selection, (iv) pond layout, (v) design of pond facilities, (vi) pond management (include: pond preparation/conditioning, stocking, feeding and/or fertilization, water management, pond maintenance, disease identification and prevention/treatment, and harvesting).
2. Assisting MDF in developing training and monitoring plan/schedule.
3. Travelling to locations to deliver trainings to demonstration ponds farmers.
4. Traveling to all demonstration ponds sites to monitor the progress and provide feedback to retailers' extension staff and farmers.
5. Providing written report to MDF upon the completion of training/monitoring at each demonstration pond. The report must include: (i) topics covered in the trainings/ monitoring, (ii) a timesheet of inputs, (iii) participant attendance list (sex-disaggregated), (iv) feedback from training participants (both retailer's staff and farmers); and (v) general feedback and recommendations for future.
6. Providing written report to MDF upon the completion of each demonstration pond activity. The report must include: (i) volume of input used (fingerling, feed, fertiliser, other), (ii) volume of harvest/yield, (iii) technical constraint or any social issue observed during the implementation, (iv) technical suggestion for better grow-out culture practices.

Experience/Qualifications/Requirements

1. Extensive knowledge and experience in aquaculture, preferably with freshwater species (degree/training in aquaculture preferred)
2. Experience in developing written training materials and delivering training to farmers
3. Ability and willingness to travel and work in remote, rural areas
4. Good verbal communications skills in Tetum or Bahasa Indonesia