

ORL-EB&C-10**Fishing Practices Assessment of Freshwater Prawn *Macrobrachium spp* Fishers in Ligawasan Marsh, Southern Philippines**

Zoren Francis A. Echevarria*, Ryan V. Fabay, Julmaherria M. Salipada, and Misael M. Sanguila

College of Fisheries and Aquatic Sciences
Mindanao State University
Fisheries Drive 001, Marawi City, Philippines, PH-9700
acebuque1990@gmail.com

This study probes into the socio-demographic characteristics and fishing practices of freshwater prawn *Macrobrachium spp* (Fig. 1) fishers in Ligawasan Marsh (Fig. 2), Southern Philippines. The focus is on developing effective breeder collection strategies for sustainable aquaculture. Ligawasan Marsh is a significant wetland, vital ecologically, and crucial for supporting the livelihoods of local communities due to its rich biodiversity and abundant aquatic resources.

The research uses a mixed-methods approach, combining quantitative surveys with qualitative interviews, to provide a comprehensive analysis of the fishers' socio-demographic profiles and their traditional fishing techniques. The majority of fishers are male, aged between 25 and 60 years, with limited formal education, often at the elementary level. Fishing is a generational occupation, with knowledge and skills passed down through families. It serves as the primary source of income for these communities, often supplemented by subsistence farming and seasonal labor.

The study identifies several traditional fishing methods used in Ligawasan Marsh, including traps (bubo), nets (pukot), and manual collection, particularly during nocturnal fishing expeditions. These methods illustrate the fishers' deep understanding of the marsh's hydrological cycles and prawn behavior, crucial for optimizing catch rates. Despite their expertise, fishers face significant challenges, including declining prawn populations due to overfishing, habitat degradation, and the adverse effects of climate change.

To address these issues and promote sustainable aquaculture, the study proposes strategies for effective breeder collection. These strategies are designed to align with the ecological and socio-economic realities of Ligawasan Marsh. Key recommendations include the implementation of community-based

management plans, habitat restoration initiatives, and educational programs to enhance fishers' awareness and skills in sustainable practices. By focusing on breeder collection, the study aims to ensure a continuous supply of high-quality prawn stock for



Figure 1. *Macrobrachium spp*.



Figure 2. Ligawasan Marsh

aquaculture, thereby supporting both ecological sustainability and economic resilience. The findings provide critical insights for policymakers and stakeholders involved in sustainable fisheries management. By adopting the proposed strategies, it is possible to balance the needs of local communities with the conservation of aquatic resources in Ligawasan Marsh. This approach not only aims to improve the socio-economic conditions of the fishers but also to establish a model for sustainable aquaculture that can be replicated in similar contexts globally