

# Inductive Content Analysis on the Live Reef Food Fish Trade (LRFFT) in Tun Mustapha Park (TMP), Sabah: Key stakeholders Interactions and Trade Operations

MITHOO-SINGH P.K.<sup>1\*</sup>, MANJAJI-MATSUMOTOB.M.<sup>2\*</sup>, SULEHAN J.<sup>3</sup>

<sup>1,2</sup> Borneo Marine Research Institute (BMRI), Universiti Malaysia Sabah (UMS), Kota Kinabalu, Sabah, Malaysia

<sup>3</sup> Institute of Borneo Studies, University College Sabah Foundation, Kota Kinabalu, Sabah, Malaysia

\*Corresponding Author: mabel@ums.edu.my

## ABSTRACT

The concept of 'seafood tourism' in relation to luxury species of fish targeted in the Live Reef Food Fish Trade (LRFFT) in Sabah is a cause for concern, as a dwindling supply of these key species can be observed. Globally, this relatively new luxury seafood commodity chain involves the extraction of high-value reef fish from source regions across Coral Triangle countries: Malaysia, Indonesia, and the Philippines that are then passed on to global consumer focal points of Hong Kong and mainland China. The World-Wide Fund for Nature (WWF) Coral Triangle Program (2009) has identified Kudat and Banggi Island to be under the jurisdiction of the Tun Mustapha Park (TMP), a multiple-use Marine Protected Area (MPA) in Northern Sabah as the primary source locations for Live Reef Fish (LRF) in the rich Sulu-Sulawesi waters of Malaysia. Across the shared maritime boundary with the Philippines, elements of illegal transboundary trade, illegal, unreported, and unregulated (IUU) fishing, and the development of transnational social networks are also apparent. Hence, in this article, we: 1) highlight key stakeholder interactions and transboundary trade operations, 2) add to the limited literature available for LRFFT in Sabah, Malaysia, and 3) discuss unsustainable fishing practices and perceptions of coastal communities involved in the LRFFT in TMP waters using a mixed-methods research methodology. Primary data collection was conducted via 92 semi-structured key informant interviews using the snowball and expert sampling methods, and participatory observations on the field in TMP from October 2018 to March 2020. Key stakeholders interviewed include trade-linked individuals /organizations (LRF fisherfolk, cage operators, cage caretakers, exporters, local seafood restaurant owners), local government offices, and civil society organizations (CSOs) involved in the management of TMP and its coastal communities. Meanwhile, secondary data collection involved literature review and analysis of raw data obtained from the Sabah Department of Fisheries (DOFS). The inductive content analysis approach was chosen; with open coding, creation of categories, and abstraction steps to organize data as prior knowledge of the phenomenon is limited and fragmented. Units of analysis included interview transcripts, researcher reports upon each field trip completion, and relevant published literature describing prior issues related to the LRFFT in TMP. The outcome of analysis disclosed several pressing issues, namely: destructive fishing methods (major categories: cyanide and juvenile fishing) and conflict, cooperation, and dependence relationships amongst key stakeholders (major categories: transboundary illegal trade, unequal income distribution, and indebted servitude). The information from this study will support efforts in the governance of the TMP maritime boundary, particularly management of the LRFFT.

**Keywords:** Coral Triangle, Live Reef Food Fish Trade (LRFFT), transdisciplinary research, local ecological knowledge (LEK), qualitative methodology, fisheries management, marine protected areas (MPAs), Tun Mustapha Park (TMP)

