

**A COMPARATIVE STUDY ON GILLNET AND
LONGLINE FISHING METHODS USED BY
MULTI-DAY FISHERMEN IN MATARA
FISHERIES DISTRICT**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
in partial fulfillment of the requirement of
the degree of
Bachelor of Science in Aquatic Resources Technology

By

MADUKA IROSHANI JATHUNGA

**Aquatic Resources Technology Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University**

2014

Abstract

The deep sea fisheries in Sri Lanka have been practiced since 1980s. It is mainly consisted with multi day fishing activities. In this study, three types of fishing methods were identified in Matara fisheries district, namely gillnet fishery, long line fishery and combination of gillnet and longline fishery. The study was carried out to compare, efficiency, economics and quality aspect of catches of gillnet and long line fishery. And also to recommend most suitable fishing method from gillnet and longline or suitable combination by concerning above aspects. In this study mainly concern three aspects, including total catch per boat day and species wise total catch per boat day, income of multiday fishermen in a one trip and quality of the fish of each boat.

The study revealed that, the total catches were not significantly different from each other in different fishing gear categories ($P>0.05$), but the total catches of tuna and tuna like species were significantly different from each other ($P<0.05$). Furthermore, the study estimates the gear categories which significantly effect on the income of the multiday fishermen ($P<0.05$). And also gear categories which significantly effect on quality of the fish ($P<0.05$). According to that the fish which were caught by long line fishing method has higher income (Rs. 1,251,567.00 \pm 1,111,334) and high quality fish (2.32 \pm 0.31). Though the catch in more or less similar, the income and quality of the fish is higher in longline fishing method. Therefore it is recommended as most suitable fishing method for Matara fisheries district.

Keywords: Deep sea fishery, Multi-day fishing activities, Matara fisheries district, Longline, Gillnet, Catch per boat day, Income, Quality.