

Fish Fauna and Fisheries in the Coastal Waters of Similajau, Bintulu, Sarawak, Malaysia

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Abstract

The coastal waters of Similajau serve as traditional fishing grounds for fishermen from Kuala Nyalau and for those from as far away as Bintulu. This study on fish fauna and fisheries in the area was carried out before the construction of Samalaju Industrial Park and Samalaju Port. It was aimed at documenting fish fauna composition and fisheries in the area so that data collected could provide future baseline information. Subjects for the study were collected using monofilament gill nets of three different mesh sizes and monofilament drift nets. A total 1,336 fish comprising 42 families and 120 species were caught from the area. The five dominant families were Carangidae (17.8%), Engraulidae (16.2%), Pristigasteridae (10.7%), Ariidae (8.3%) and Synodontidae (7.8%). The five dominant species collected were *Parastromateus niger* (13.1%), *Harpodon nehereus* (7.6%), *Setipinna taty* (4.3%), *Setipinna tenuifilis* (4.2%), and *Ilisha elongate* (3.9%). Fishing activities were carried out within 10 km of the coastline using a small size fiberglass boat powered by a 15 to 40 hp engine. Fishing methods employed included gill nets, drift nets, hooks and lines, long lines, trap nets, cast nets and push nets. The fishing season is from March to September, when the sea is calmer, and peaks in June and July. The quantity of fish caught ranged from 50 to 200 kg per fishing trip.

Key words: coastal fisheries, length-weight, Samalaju Port, Kuala Nyalau

Introduction

In Malaysia, marine fisheries contribute significantly to the national economy as they are an important source of protein, employment and foreign exchange. Landings from marine fisheries sector increased from 570,754 mt in 1985 to 1,373,105 mt valued at RM6.939 billion in 2011. This sector provided employment to 134,110 fishermen and contributed to about 1.1% to the gross domestic product of the nation in 2011 (DOF, 2011).

In Sarawak, landings from marine fisheries sector were 119,459 mt in 2011, and it provided employment for 16,000 people (DOF, 2011). However, the landings from marine fisheries started to decline from 2005.

The coastal waters of Similajau in Bintulu, Sarawak have always been traditional fishing grounds for fishermen from Kuala Nyalau. With development taking place along the coastal zone, especially the demarcation of Samalaju Industrial Park and the construction of

Samalaju Port within the area, potential changes in fish fauna and fisheries in the area are expected to occur in the next few years when the industrial park and the port start operation. This study on fish fauna and fisheries was carried out before the construction of the industrial park and port. It was aimed at documenting the fish fauna composition and the diversity and status of fisheries in the coastal waters of Similajau so that the results obtained could act as baseline data for future studies.

Materials and Methods

Study Sites and Fish Fauna Sampling

There is no official boundary of the coastal waters of Similajau. Nonetheless, in this study, the coastal waters of Similajau were identified as the aquatic environment stretching from the mouth of the Similajau river in the south to the Cape of Payong in the north. It is a straight coastal marine environment with a few small bays and

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