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# Issues with Data Collection of Tuna and Tuna like Species in Pakistan and Introduction of Logbook System for Small Scale Fisheries

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## ABSTRACT

At present, there is no fisheries data collection system in place in Pakistan. The data being published as Handbook of Fisheries Statistics of Pakistan is mainly based on mere speculation and extrapolation of the data of previous years. Considering these lacunae, it is planned to establish a logbook system for tuna gillnetters being operated in coastal and offshore waters. In addition, a data collection system will be established at four tuna landing centres including Karachi, Ibrahim Hayderi, Gwadar and Jiwani. WWF-Pakistan in collaboration with Federal Government will help in establishment of logbook and data collection systems and also train concerned officers and staff of Federal and Provincial Governments.

## INTRODUCTION

There is no fisheries data collection system in place in Pakistan and in most cases the fisheries statistical data are mere estimates. Fisheries data collection in Pakistan is responsibility of the maritime provincial governments (Sindh and Balochistan). Fisheries Department of Balochistan used to collect fisheries statistical data on regular basis from about 6 major and 30 small landing centres which used to be compiled and communicated annually to Federal Government. For last 4 decades data collection in province of Sindh is entrusted to Karachi Fisheries Harbour Authority which used to obtain data from Fishermen's Cooperative Society (based on highly under reported auction data). The information from other fish landing centres (35 landing sites) in Sindh is not collected. Data compiled by Karachi Fisheries Harbour Authority for Sindh Province is communicated to Federal Government on annual basis. Details of this data collection system are also given in Khan (2017).

Serious gaps in data of commercial fish species have previously been noted (Hornby et al., 2004; FBS, 2009; Khan, 2017; Moazzam and Ayub, 2017) and it was observed that in most cases under-reporting of commercial species is made. This may be mainly attributed to data collection mechanisms being adopted by the provincial fisheries departments. The paper discusses about the issues related to fisheries data collection in Pakistan and proposed a data collection system for, at least, tuna and tuna like species, in all major landing centres along the coast of Pakistan. It also proposes logbook data collection for tuna gillnet boats being operated in coastal and offshore waters of Pakistan.

## ISSUES WITH DATA COLLECTION

There is no coordinated and reliable fisheries data collection system in place at both federal and provincial government levels. Collection of statistical data is entrusted with the provincial governments under the provisions of Constitution of Pakistan. Whereas Federal Government is responsible for collection of data from the federal waters (EEZ of Pakistan) and to collate the data provided by the provincial governments and publish these in form for annual statistical book (Handbook of Fisheries Statistics of Pakistan). Collection of fish landings and other data was never given priority by the Fisheries Departments and although there are dedicated positions are available at Federal and Provincial (at least in Balochistan) but there is no system of data collection from any landing centre. The data, therefore, based mainly on the judgement of the field officers posted along Balochistan coast whereas for Sindh, these are mere estimates based mainly on the extrapolation of the data of previous years.

There is no logbook system in place for any category of the vessels operated under the control of Provincial Governments. Although, there is a provision for a logbook for the vessels operating in Federal waters (EEZ) but these were used only in case of "Deep Sea" vessels (mostly foreign flag) permitted by Federal Government during 1982 to 2009. However, there is some doubts about the credibility of the logbook data collected from these vessels. The main reason for absence of a logbook system in small scale fisheries is attributed to the fact that most of the fishermen are illiterate and cannot fill in the logbooks.

The statistical data collection is marred with a number of issues mainly because of non-existence of a regular data collection mechanism in Pakistan. Fisheries statistical data reported by Provincial Government, in most cases, provide information about 47 species groups. Data is not reported for each species in a particular group. For example, 8 species are landed in Pakistan but the data is reported in the annual Government statistical bulletin as 'tuna'. No information of as data of fish transshipped at high seas and those transferred from one fishing vessels to another is not recorded. Additionally no information about seasonality, size frequency and area of fishing is provided. The fisheries statistical data, therefore, has little or no value in fisheries management, planning and modelling.

Under the Indo-Pacific Tuna Programme (IPTP) a data collection system for gillnet operations at Karachi Fish Harbour was established in 1985 which continued till early 1990's (IPTP, 1991). The landings data during this period is recorded for 5 species of tuna (longtail, skipjack, yellowfin, kawakawa, frigate and tuna nei), 1 species of Spanish mackerel, 1 species of wahoo and 1 species of dolphinfish whereas sharks and billfishes were not identified to species level. The data was also collected only from Karachi Fish Harbour whereas there were 6 major tuna landing centres (Gaddani, Damb, Ormara, Pasni, Gwadar and Jiwani) during that period.

The landing data of tuna is being provided by Government of Pakistan to Indian Ocean Tuna Commission (IOTC), on annual basis, however, this data is beset with a number of issues. WWF-Pakistan initiated a Crew Based Observer Programme in 2012 which revealed that data reported by Government of Pakistan to IOTC is





## **Data Management**

WWF-Pakistan in collaboration with Marine Fisheries Department will train staff of Federal and Provincial Fisheries Department for collection of landing data as well as fishermen for filling in the paper based logbook. The trainings will be arranged in Karachi, Ibrahim Hayderi, Gwadar and Jiwani. A database of information collected through logbook system and landing data will be established in Marine Fisheries Department in collaboration with WWF-Pakistan. The collected information will be used for calculation of the annual catches of tuna and tuna like species. It is expected that establishment of the logbook system and landing data collection will help in improving of the statistical data system in Pakistan.

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