

**Data Collection on Tuna Fisheries in Thailand:**

The transition of the old practice to the modern technology development

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**Abstract**

Data collection on tuna fisheries in Thailand has been categorized into two themes. The first one is collecting of data from tuna foreign vessels landing their catch in Thailand and the second one is collecting of data from Thai neritic tuna purse seiners fishing within the national water. For many years of the history, both of fisheries data were mainly derived from interviewing of the vessel skippers and port sampling statistic, this required a lot of resources to dealing with while the receiving data and information was somewhat limited, particularly in terms of fishing grounds and fishing effort. Moreover, the data of these conditions required the more time to analyze before publishing or submission to the relevant organizations to benefit from. In 2015, there has been a lot of changing in Thailand fisheries management that might affect these practices. For national fisheries, it mainly started with the enforcement of the new Thai Fisheries Act 2015 (B.E. 2558) that the keys provisions is to control number of fishing vessels and their input fishing effort and equipped them with the vessel monitoring system (VMS). The logbook, marine catch purchasing document (MCPD), traceability and Port-In and Port-Out controls have been enforced to fulfill the gap of effective management. As a port State, the ports for landing of the foreign vessel have been designated and the key practices to control the landing of foreign fishing/carriers vessel at its ports have been practiced. Although it needs the more time of transition, this crucial changing of development might enhance the quality of data collection and that subsequently will widely benefit not only for the nation but also for the region as a whole.

**Key words:** VMS, Port-In Port-Out, logbook, port State, Thai Fisheries Act, enforcement

## 1. Introduction

For the past 30 years, the fisheries dependent data collection of Thailand were mainly base on the port sampling or the report of landing catch (IUU) of both Thai and foreign vessels. This created some gaps of the information between the actual catch and landing catch that might affect the production statistic and then national and regional fisheries management plan.

Therefore, the new national fisheries management plan (FMP) introduced in 2015 is the key factor of changing in the data collection practice. FMP is closely linked to the National Plan of Action for Illegal, unreported and unregulated fishing 2015 (NPOA-IUU) and the National Control Plan (NCP 2015). The policy and plans are enabled through the new Fisheries Act B.E. 2558 (2015). This FMP will operate from 2015 to 2019 inclusive. During this period the Thailand Department of Fisheries (DOF) will use this plan to implement the measures and to develop the regulations for the fishery. The FMP will be reviewed annually, based on the best scientific information available and on the performance of the fishery.

The FMP clearly categorize the fisheries species to be under governing which some had not been focused in the past but often leaved the management to be under a Regional Fisheries Management Organization (RFMO). The species categories includes the coastal pelagic and demersal species, highly migratory tuna and tuna-like species and other non-target, associate or dependent species taken while fishing, such as endangered and threatened species.

So, this report aims to extract the key components of the FMP that might enhance the data collection on the species under the IOTC responsible and lead for the best practice in this activity for Thailand in near future (See Information Document II Thailand FMP).

## 2. The Key Components of FMP to Improving Fisheries Data Collection of Thailand

### 2.1 The Co-team working agencies

Thailand's marine fisheries are managed by the Department of Fisheries (DOF) of the Ministry of Agriculture and Cooperatives (MOAC) who also have overall responsibility for MCS. The Marine Department is responsible new vessel registration, vessel permit renewal, change of vessel lists, seaman book. Management of the marine environment is the responsibility the Department of Marine and Coastal Resources (DMCR) under the Ministry of Natural Resources and Environment (MNRE). The Thailand Maritime Enforcement Coordinating Centre (TMECC), headed by the Royal Thai Navy, handles security issues and protection of the marine resources. They also carry out the inspection on maritime transport safety, identify zones, and issue the mechanic and captain certificates. In addition, the Command Center for Combating Illegal Fishing (CCCIF) has been established by the National Council for Peace and Order (NCPO) since May 2015. It is leading and coordinating the Thai government's efforts in tackling IUU fishing, including the formulation and implementation of the National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU) (See Information Document I Thailand NPOA-IUU (draft)).

## 2.2 Defining the Data collection as the key areas

The national observer program, port sampling and data collection have been included in the priority key areas in the FMP to be carried out by the co-team working agencies, DOF, DMCR, TMECC and the Marine Department. The key areas include:

- MCS operation;
- National observer program activities;
- Port sampling activities;
- Compliance and enforcement activities; and
- Data collection and management activities.

## 2.3 The MCS arrangement

The MCS is newly arrangement that Thailand employ as a mechanism to reduce the level of IUU fishing to a level that can be controlled. It has been driven by (i) through institutional changes and increased support and capacity for MCS; (ii) improved the registration and licensing system; (iii) increased surveillance through VMS and port State measures and coordination of patrol vessels and local community coast watch; (iv) improved collaboration and coordination among Thailand agencies; and (v) improved collaboration with other coastal States and regional and global fisheries and other organizations.

## 2.4 The Establishment of the National Fisheries Observer Scheme

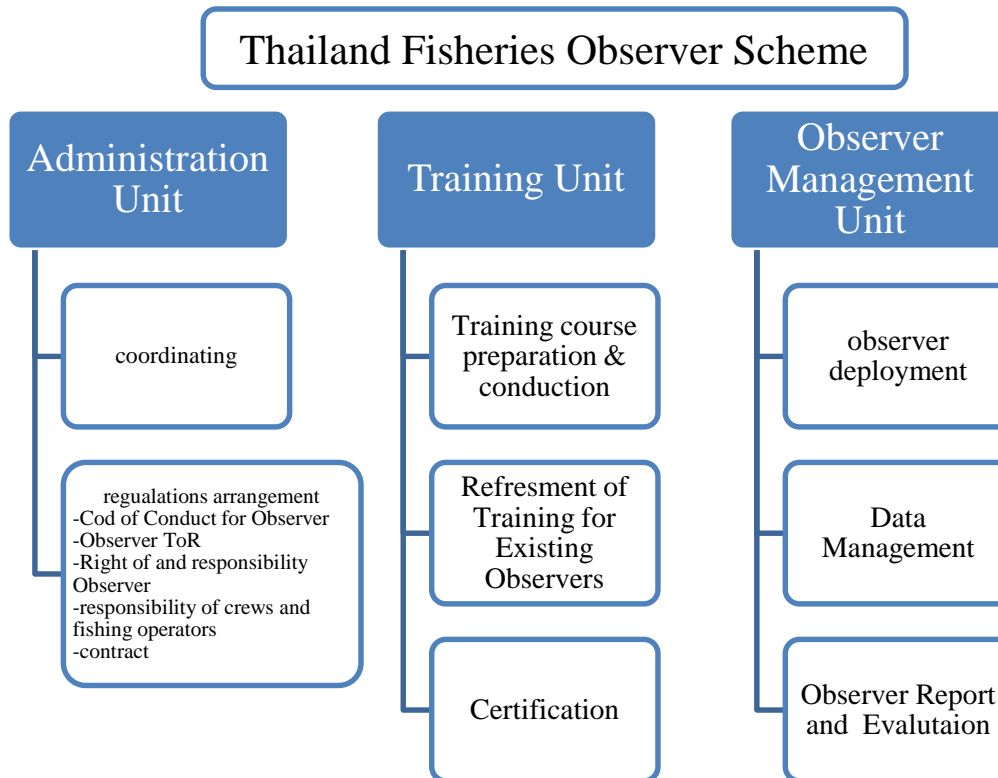
The national observer scheme has been newly develop in order to carry out the fisheries observer activity. Thailand started with the holding of Observer Onboard Program Orientation Workshop during 14-16 September, 2015. The DOF officers were introduced the Observer Scheme and the learned lesson and experience of implementation were shared by the key workshop conductors from the Philippines where the Observer Development program has taken place since 2009. Then, the national plan of implementation of the Fisheries Observer Scheme and draft of the observer training course has been arranged by DOF participants during the workshop. The drafts have been submitted to the DOF committee on Development of Observer Onboard Program in Thailand for approval.

In addition, the "Thailand Fisheries Observer Program Office" has been on the process establishment to be the "authority" to driving the observer program implementation for the Country (Figure 1). Its structure, human resource, mandates and roles are defining. The observer scheme will be the observer onboard and transshipment observer. For the observer onboard, the national scheme aim to produce the observers to deploy in two areas of fisheries including;

- In the high sea fisheries that the target fisheries are the six tuna longliners fishing in the in IOTC area; and
- Observer for deployment in fisheries and transshipment in Thailand national water and in national waters of other coastal States that the major fishing vessels are coastal trawlers and purse seiners which target multiple tropical species that included the neritic tunas)

In this regard, Thailand has requested the IOTC to assist and arrange the training for DOF officers who will be the first batch national observers in order to prepare them to be the future trainers for the next coming observers.

**Figure 1** The draft structure of Thailand Fisheries Observer Scheme



## 2.5 The Placement of Multiple Schemes to Control Catch and Fishing Activity Report

Thailand has clearly defined its roles as Coastal State, Flag State and Port State. The related laws (secondary) and regulations have been prepared to be revised. The controlling at port is very important. The draft Notification of 38 designated ports for landing of the foreign vessel is in the process for approval. The Port-In Port-Out Controlling Center has been established to control the In and Out of Thai 30 GT vessels or over. The landing vessels have to submit their fishing logbooks and related required documents at the designated port of landing or the PIPO. The staff and system for collecting fishing logbook has been set. The important action to strengthening the log book system is the giving the more skill for fishermen how to fill in the logbook. The logbook will be part of fisheries documentations control and cross-checking between the Port-In Port-Out Control Controlling Center, Port State Authority, VMS Control Center, marine catch purchasing document (MCPD), Port Sampling Activity and National Fisheries Statistical Unit. So, this multiple schemes work as a traceability control. The electronic logbook has been studied to be developed and employed.

## 3. Conclusion

There are recently crucial changes in the fisheries management in Thailand either in terms of law and regulation

or institutional development. Although it needs the more time of transition and adaptation before settle of the system, this crucial changing of development might enhance the quality of data collection and that subsequently will widely benefit not only for the Nation but also for the region as a whole.