Regional Fishing Vessels Record:
Option to Mitigate IUU Fishing in Southeast Asia

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The project on the Promotion of Sustainable Fisheries and IUU Fishing-related Countermeasures in Southeast Asia which is being implemented by SEAFDEC with funding support from the Japanese Trust Fund (JTF), includes the Promotion of Fishing License, Boats Registration, and Port State Measures in Southeast Asia to pave the way for the development of a regional record of fishing vessels starting with vessels measuring 24 meters in length and over during its first phase, and to be expanded later with the recording of vessels measuring less than 24 meters. Through this project, SEAFDEC has been extending assistance to the countries in the region in their endeavors of improving their respective fishing licensing systems to conform to regional and international requirements, and in combating IUU fishing in their respective waters. SEAFDEC envisions that the establishment of regional fishing vessels record together with the refined fishing licensing systems could be effectively used as fisheries management tools in combating IUU fishing in the Southeast Asian region. Based on a paper presented by SEAFDEC during the Regional Workshop on Public Information Campaign organized by the ASEAN in Manila, Philippines on 28 June 2013, this article focuses on the progress of the establishment of the RFVR starting with vessels measuring 24 m in length and over, as one of the IUU fishing-related countermeasures, and updates the previous information contained in Matsumoto *et al*. (2012).

The FAO Code of Conduct for Responsible Fisheries with its overall objective of achieving sustainable fisheries puts serious concern on the issue of illegal, unreported and unregulated (IUU) fishing worldwide considering that IUU fishing undermines all efforts to conserve and manage fish stocks in capture fisheries. When confronted with IUU fishing, national and regional fisheries management organizations can fail to achieve management goals, leading to the loss of both short- and long-term social and economic opportunities and to negative effects on food security and environmental protection. IUU fishing can also lead to the collapse of a fishery or seriously impair efforts to rebuild stocks that have already been depleted.

In the Southeast Asian region, issues on IUU fishing have been seriously discussed by SEAFDEC in many events and occasions with concerned stakeholders (Matsumoto *et al*., 2012), especially with the Indonesian-based "Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asian Region" of RPOA-IUU which plays an important role in addressing issues on IUU fishing. As one of the advisory bodies of RPOA-IUU, SEAFDEC has been collaborating closely with the ASEAN and RPOA-IUU since their respective mandates are almost parallel, *i.e.* to promote responsible fisheries for sustainability and food security, as well as support regional and international approaches to prevent, deter and eliminate IUU fishing in the Southeast Asian region. Moreover, SEAFDEC also implements collaborative activities under the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) that put priority on the direct and indirect impacts of IUU fishing on small-scale fisheries, including the development of a Regional Fishing Vessels Record (RFVR) as an option in coping with IUU fishing in the Southeast Asian region.

Occurrence of IUU Fishing in the Southeast Asian Region

Rapid growth of the fisheries industry in the Southeast Asian region had been noted especially in terms of increasing fishing capacity with higher efficiency of fishing gear such as trawlers and later purse seiners as well as the increasing number of processing plants since late 1970s. At the same time, fishing areas have also largely expanded covering the international waters of the South China Sea, and offshore areas within the Southeast Asian region when EEZs were only 12 nm. The adoption of 200 nm EEZ after 1982 made significant impacts to many countries in the region especially in terms of enhancing the capability to supply increased quantities of raw fish materials for the processing industries. However, without effective monitoring, control and surveillance (MCS) and fisheries management schemes (Yleaña and Velasco, 2012), the expansion of EEZ to 200 nm could drive the fishing industry to do illegal fishing, later known as IUU fishing. There are many types of IUU fishing, but the most common types include unlicensed fishing, landing of catch in neighboring states, double flagging of vessels, and conduct of illegal fishing methods and practices. The occurrence of IUU fishing activities in the Southeast Asian region is illustrated in **Fig. 1**. It should be noted that although Indonesia, the world's largest archipelago, has been monitoring its waters, illegal fishing

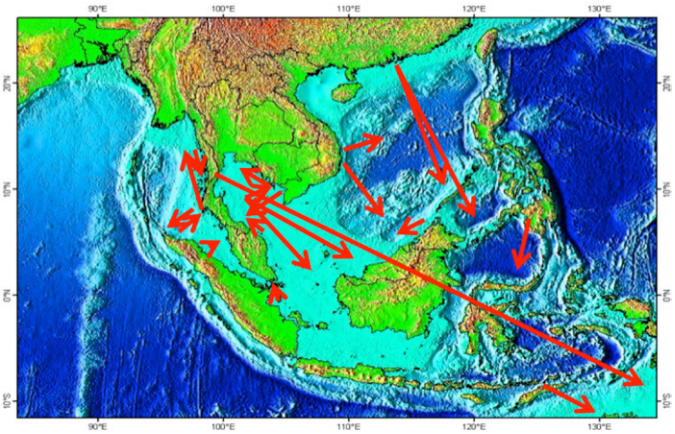

Fig. 1. Map of Southeast Asia showing the possible occurrence of IUU fishing

in its territory is still happening (Poernomo, *et al*., 2011). For instance, in 2008-2012 most of the illegal fishing boats were reported to have come from Vietnam, Thailand, and Malaysia, while a large vessel from China was apprehended for illegally fishing in Natuna Sea that spreads to the Strait of Karimata and Java Sea.

Impacts of IUU Fishing

Reports have indicated that the annual fisheries production from IUU fishing activities could be from 11 million to 26 million MT accounting for about 10 to 22% of the world's total fisheries production, and valued at about US$ 9 to 24 billion per year (MRAG, 2009). Nonetheless, some studies estimated that the value of IUU fishing in the Asia-Pacific region (including South Asian countries) could be around US$ 5.8 billion annually (Lungren *et al*., 2006). The impacts of IUU fishing is not only in terms of losses in revenues and resources, but also in the economic, social and environmental aspects.

For example, decreases in the contribution of EEZ fisheries to national economies could lead to reduced potential employment opportunities that local and locally-based fleets usually create, decreased local landings and potential export earnings, more budget needed for MCS/fisheries management, limited accuracy of stock assessment models, and reduced species richness and their diversity. In the case of Indonesia, it has been reported that its traditional fisherfolks are often left to deal with illegal fishers, especially in border areas such as in East Kalimantan and North Sumatra where Indonesian fisherfolks often encounter fish trawlers owned by foreigners, including those from the Philippines and Malaysia (Heriyanto, 2012).

Regional Approach to Prevent IUU Fishing/Illegal Fishing

Implementation of MCS has been considered as a catalyst in preventing IUU fishing particularly illegal fishing (Yleaña and Velasco, 2012). Under this circumstance, the implementation MCS could include such aspects as: joint marine patrol between navy, police and department of fisheries and marine departments, while vessels should be equipped with new engine technology and fast; increasing awareness on the use of advance technology such as coastal radar that can be installed in the vicinity of tracking illegal vessels; installation of vessel monitoring system (VMS) on fishing vessels that already have license whether local or foreign ships; and enhancing human resources to enable officers to carry out their duties, properly and professionally in their fields to avoid a breach or things that deviate from existing laws. In support of the implementation of MCS, SEAFDEC through a series of technical/expert consultations with the ASEAN Member States agreed in principle to establish a Regional Fishing Vessels Record as a tool to combat the IUU fishing in the Southeast Asian region.

Establishment of Regional Fishing Vessels Record

As SEAFDEC sustains its role in promoting sustainable fisheries in the region, its Training Department (TD) organized in October 2011 the Regional Core Experts Meeting in Fishing License, Boats Registration and Information on Export of Fisheries Products in Southeast Asia where information on the procedures for fishing licensing and boats registration in Southeast Asian countries

as well as the corresponding minimum requirements for obtaining fishing license and boats registration certificates were shared. It was during such Regional Core Experts Meeting that the development of regional guidelines on fishing licensing and boats registration was endorsed while the ways and means of preventing the trading of IUU fishing products from the region were initially identified (Matsumoto *et al*., 2012). In order to strengthen the regional networking and enhance the collaboration among the countries in the development of such guidelines as well as in future relevant activities, an electronic email group (*combat_iuu@seafdec.org*) was established which has since then, been actively used to exchange and update the necessary information. Subsequently, the Experts Group Meeting on Fishing Licensing and Boats Registration in Southeast Asia was convened by TD in June 2012 arrived at an agreement that the RFVR should be compiled focusing first on the information of larger fishing vessels with length from 24 meters and over. The proposed establishment of the RFVR was approved by the SEAFDEC Council during its 45th Meeting in April 2013 in the Philippines as well as by the ASEAN Sectoral Working Group on Fisheries (ASWGFi) during its meeting also in 2013.

Basic Requirements for Vessel Registration in Southeast Asian Countries

In launching the Establishment of Regional Fishing Vessels Record (Matsumoto *et al*., 2012), TD prepared a questionnaire which was sent to eight SEAFDEC Member Countries, *i.e.* Brunei Darussalam, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam, to explore the possibility of sharing data and identify the agreed basic information requirements for the compilation of information relevant to RFVR. From the responses, the concerned countries agreed on the basic requirements for vessel registration and the basic information that could be shared by the countries, as shown in **Box 1** and **Box 2**, respectively.

Moreover, the initial information on the respective number of national fishing vessels that measure 24 meters in length and over was also compiled (**Table 1**). Results of the analysis of the concerned countries' responses would be used as inputs during the proposed regional workshop to finalize the development and management of RFVR. In addition, obstacles with respect to the integration of the items in the basic requirements into the RFVR will also be considered during the finalization of the RFVR in 2014.

Box 1. Agreed basic requirements for compiling vessel registration in the Southeast Asian countries

- Name of vessel
- Type of fishing method/gear
- Port of registry
- Gross tonnage (G.T.)
- Length (L)
- Breadth (B)
- Depth (D)
- Engine Power
- Shipyard
- Date of launching
- International Radio Call Sign
- Engine Brand
- Serial number of engine
- Hull material
- Date of registration
- Area (country) of fishing operation
- Nationality of vessel (flag)
- Previous name (if any)
- Previous flag (if any)
- Name of captain/master
- Nationality of captain/master
- Number of crew (maximum/minimum)
- Nationality of crew

Table 1. Updated number of fishing vessels 24 meters in length and over (as of 2013)

Country	Total	less than 24 m in length	24 m and over in length
Brunei Darussalam	2,427	2,421	6
Cambodia	7,034	7,034	0
Indonesia	570,827	569,105	1,722
Malaysia	54,235	54,169	66
Myanmar	30,349	Powered 14,222 Non Powered 15,463	664
Philippines	473,400	472,804	596
Singapore	36	36	Nil
Thailand	40,742	39,995	747
Vietnam	123,124	122,812	312

Way Forward

The establishment of RFVR is being pursued at the regional level to ensure that relevant information could be shared between SEAFDEC, thus facilitating information sharing in the future.

Box 2. Agreed possible data that could be shared among the SEAFDEC Member Countries				
Information on fishing vessels	Accessible by			
	General public	SEAFDEC Member Countries	Exclusively for SEAFDEC database	Others (specify)
Name of vessel	BN, ID, MY, PH	TH, VN, SG	MM	MY (vessel number, not vessel name)
Type of fishing method/gear	BN, ID, MY, PH	TH, VN, SG	MM	
Port of registry	BN, MY, PH	TH, VN, SG	MM	ID (location of registry)
Gross tonnage (G.T.)(International gross tonnage/ registered gross tonnage)	BN, ID, MY	PH, TH, VN, SG	MM	MY (using GRT)
Length (L)	BN, ID, MY	PH, TH, VN, SG	MM	
Breadth (B)	BN, ID, MY	PH, TH, VN, SG	MM	
Depth (D)	BN, ID, MY	PH, TH, VN, SG	MM	
Engine Power	BN, ID, MY	PH, TH, VN, SG	MM	
Shipyard	BN, MY	PH, VN		ID (location of builder) MM (-) SG (not compiled) TH (data compiled by Marine Department)
Date of launching	ID, MY	PH, VN, SG		BN (no answer) MY (Same with date registered) MM (-) TH (data compiled by Marine Department)
International Radio Call Sign	BN	PH, TH, VN, SG		ID (-) MY (No answer) MM (-) TH (if data is available)
Engine Brand	BN, ID, MY	PH, TH, VN, SG	MM	
Hull material	BN, ID	PH, TH, VN, SG	MM	MY (optional)
Date of registration	BN, ID, MY	PH, TH, VN, SG	MM	
Serial number of engine	BN, ID, MY	PH, VN, SG	MM	TH (data compiled by Marine Department)
Area (country) of fishing operation	BN, ID, MY	TH, VN, SG	MM, PH	
Nationality of vessel (flag)	BN, MY, PH,	TH, VN	MM	ID (-)
Previous name (if any)	BN, ID, MY	PH, VN	MM	SG (not collected), TH (data compiled by Marine Department)
Previous flag (if any)	BN, MY	PH, VN	MM	ID (-) SG (not collected) TH (data compiled by Marine Department)
Name of captain/master	BN	PH, VN, SG	MM	ID (-), MY (optional) TH (data compiled by Marine Department)
Nationality of captain/master	BN	PH, VN, SG	MM	ID (-) MY (optional) TH (data compiled by Marine Department)
Number of crew (maximum/minimum)	BN, MY	PH, VN, SG	MM	ID (-) TH (data compiled by Marine Department)
Nationality of crew	BN, MY	PH, VN, SG	MM	ID (-) TH (data compiled by Marine Department)

Countries: Brunei Darussalam (BN), Indonesia (ID), Malaysia (MY), Myanmar (MM), Philippines (PH), Singapore (SG), Thailand (TH), Vietnam (VN)

In order to finalize the establishment of RFVR, SEAFDEC proposed to organize a regional workshop on RFVR database development and management in 2014, to enhance information sharing and integration of information on the basic requirements for the RFVR with the Member Countries concerned. Visit to the Member Countries concerned will also be organized to provide technical support and assistance during the introduction and implementation of the RFVR database.

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