

Regional Fishing Vessels Record: A Management Tool for Combating IUU Fishing in Southeast Asia

Kongpathai Saraphaivanich, Yanida Suthipol, Namfon Imsamrarn, Bundit Chokesanguan,
and Somboon Siriraksophon

SEAFDEC has been assisting the Southeast Asian countries in their efforts to combat IUU fishing, which includes promoting the implementation of Monitoring, Control and Surveillance (MCS) considered as a catalyst in preventing IUU fishing particularly illegal fishing. Under this circumstance, the implementation of MCS could include such aspects as joint marine patrol between navy, police, departments 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 licenses 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. Recognizing the severity of IUU fishing in the Southeast Asian region, the Ministers and Senior Officials responsible for fisheries from the ASEAN-SEAFDEC Member Countries adopted the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 in June 2011 (SEAFDEC, 2011), which includes provisions declaring the need to “Foster cooperation among ASEAN Member States and with international and regional organizations in combating IUU fishing” (Resolution No. 8); as well as encouraging the ASEAN Member States to: “Strengthen regional and national policy and legislation to implement measures and activities to combat IUU fishing, including the development and implementation of national plans of action to combat IUU fishing, and promote the awareness and understanding of international and regional instruments and agreements through information dissemination campaigns” (POA No. 21); “Establish and strengthen regional and sub-regional coordination on fisheries management and efforts to combat IUU fishing including the development of regional/sub-regional Monitoring, Control and Surveillance (MCS) networks” (POA No. 22); and “Facilitate consultative dialogue among fisheries legal officers to share, at the sub-regional/regional level, perspectives of the respective legal and regulatory framework in terms of developing MCS-networks and to implement efforts to combating IUU fishing” (POA No. 23). Guided by such agreements and in support of the implementation of MCS, SEAFDEC through a series of technical/expert consultations with the ASEAN Member States (AMSs) had been tasked to initiate the establishment of a Regional Fishing Vessels Record (RFVR) as a tool to combat the IUU fishing in the Southeast Asian region and to strengthen the promotion of MCS in the region. The development of the RFVR makes use of data on fishing vessels provided by the ASEAN Member States.

Recognizing the severity of the fishery resources degradation in the Southeast Asian region brought about by uncontrolled practice of illegal, unreported and unregulated (IUU) fishing, the ASEAN Member States (AMSs) has been promoting sustainable fisheries management at the national level in accordance with a provision in the Regional Guidelines for Responsible Fisheries in Southeast Asia: Responsible Fisheries Management that: “States should review the issues of excess fishing capacity at the national level and recommend where appropriate, measures to improve registration of fishing vessels, introduction of rights-based fisheries and reduction in the number of fishing boats and level of fishing effort using government incentives” (SEAFDEC, 2003). Raising such argument at the regional level, SEAFDEC with support from the Japanese Trust Fund (JTF) has been developing IUU fishing-related countermeasures under the JTF-supported Project on Promotion of Sustainable Fisheries and IUU Fishing-related Countermeasures in Southeast Asia (Matsumoto *et al.*, 2012).

Development of RFVR and RFVR Database for Vessels 24 m in Length and Over

Under the initial phase of aforementioned Project, SEAFDEC initiated in 2010 the activity on the Promotion of Fishing License, Boats Registration and Port State Measures in Southeast Asia which was meant to assist the AMSs in their efforts in combating IUU fishing in their respective waters. Specifically, the said activity was aimed at promoting fishing licensing, boats registration and port State measures as fisheries management tools to combat IUU fishing, promoting MCS management for sustainable fisheries in the region, preventing IUU fishing products from being exported, and assisting the countries in the application and implementation of IUU fishing-related countermeasures (Matsumoto *et al.*, 2012). In order to attain the objectives of the aforementioned activity, SEAFDEC convened several regional meetings and consultations in order to compile the information and inputs from the AMSs necessary for the development of the IUU fishing-related countermeasures.

With the outset of such development, SEAFDEC/TD organized the Regional Core Experts Meeting on Fishing License, Boats Registration and Information on Export of Fisheries Products in Southeast Asia in October 2011, where 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 discussed. The results of such Meeting were compiled in a database maintained by SEAFDEC/TD. The Regional Core Experts Meeting also considered the development of regional guidelines on fishing licensing and boats registration while the ways and means of preventing the export of IUU fishing products in the region were initially identified (SEAFDEC/TD, 2011). 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 SEAFDEC/TD in June 2012, where an agreement was reached by the SEAFDEC Member Countries on the compilation of the Regional Fishing Vessels Record (RFVR) initially focusing on the information of larger fishing vessels with length from 24 meters and over (SEAFDEC/TD, 2012). Based on the results of such meetings, SEAFDEC/TD submitted the proposed establishment of the RFVR to the 45th Meeting of the SEAFDEC Council in April 2013, which the SEAFDEC Council of Directors considered and endorsed (SEAFDEC, 2013). Later, the Special Senior Officials Meeting of the Thirty-Fourth Meeting of the ASEAN Ministers on Agriculture and Forestry also supported the establishment the RFVR as a tool to combat IUU fishing in the Southeast Asian region. To continue and follow-up on such endorsements, SEAFDEC/TD organized the “Technical Workshop on Regional Fishing Vessels Record (RFVR) Database Development and Management in Southeast Asia” in August 2014 which came out with policy recommendations and the way forward for the development and implementation of the RFVR Database (SEAFDEC/TD, 2014).

The RFVR Database, an online system, is a collaborative initiative of AMSs with the intention of sharing information among AMSs on fishing vessels identification and other relevant data and information. Through a series of Experts and Regional Technical Consultations, the AMSs agreed on the 28 elements that would comprise the basic information requirements to be shared with the RFVR Database, as shown in **Box 1**. As recommended by the SEAFDEC Council of Directors, the Initial Phase of the Database should focus on fishing vessels of 24 meters in length and over, and could be expanded later with the recording of vessels measuring less than 24 meters (Kawamura and Siriraksophon, 2014).

Access to the RFVR Database

Presently, the RFVR Database system is meant for the ASEAN Member States only. For security purposes, accessing the RFVR-24 m Database System requires Username and Password from SEAFDEC. The User’s Account (Username and Password) has been provided to each AMS during the 47th Meeting of the SEAFDEC Council in Chiang Rai, Thailand in 2015 (SEAFDEC, 2015). AMSs needing additional User’s Account could send a request to the Secretary-General of SEAFDEC for such purpose. Users from the AMSs can access the RFVR-24 m Database System through the web address (URL) www.seafdec.or.th/rfvr/index.php (**Fig. 1**)

Box 1. Information from the AMSs on fishing vessels 24 meters in length and over to be shared with the RFVR Database	
1. Name of vessel	15. International Radio Call sign
2. Vessel Registration Number	16. Engine Brand
3. Owner Name	17. Serial number of engine
4. Type of fishing method/gear	18. Hull material
5. Fishing License number	19. Date of registration
6. Expiration date of fishing licenses	20. Area (country) of fishing operation
7. Port of registry	21. Nationality of vessel (flag)
8. Gross tonnage (GRT/GT)	22. Previous name (if any)
9. Length (L)	23. Previous flag (if any)
10. Breadth (B)	24. Name of captain/master
11. Depth (D)	25. Nationality of captain/master
12. Engine Power	26. Number of crew (maximum/minimum)
13. Shipyard/Ship Builder	27. Nationality of crew
14. Date of launching/Year of built	28. IMO Number (if available)

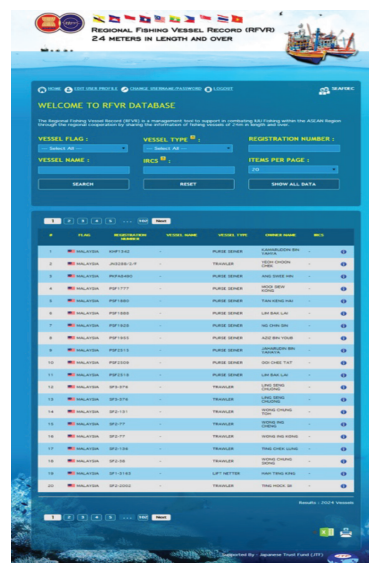


Fig. 1. Main Webpage of the RFVR Database for vessels 24 m in length and over

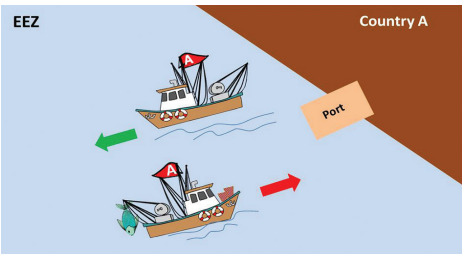
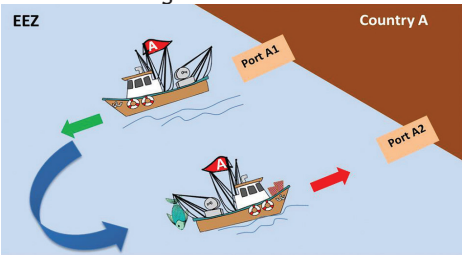
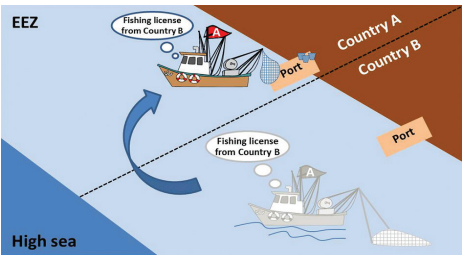
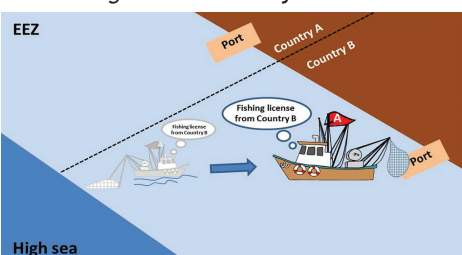
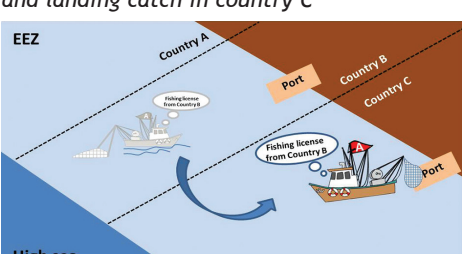
Usage and Application of the RFVR Database for 24 meters in Length and Over

The purpose of RFVR is to provide the AMSs with reliable and rapid tools to share information on AMS vessels engaged in “international fishing operations,” *i.e.* fishing operations in foreign country’s EEZ or in the high seas. It is envisioned that the RFVR would serve as a practical ways and means for related authorities of AMSs, to check and take corrective actions against inappropriate behavior of its fishing vessels,

thereby supporting the elimination of IUU fishing in the Southeast Asian region (Pongsri *et al.*, 2014). For example, the AMSs can take appropriate actions against “double-flagging vessels, IUU fishing vessels, port State control and poaching”

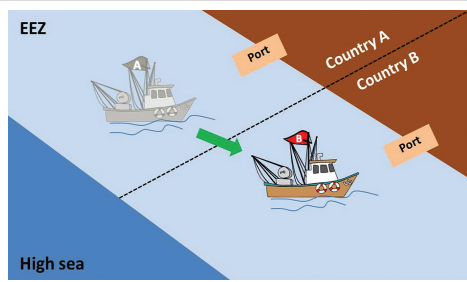
by sharing information and identifying problematic vessels through the information in the RFVR Database. Therefore, the RFVR can be described as a “Shared Tool for AMSs to Reduce IUU Fishing”, because RFVR could assist the AMSs

Box 2. Different scenarios in various cases where the RFVR Database could be used

Case 1: Vessel operates in the country's EEZ	
<p>Scenario 1: Vessel goes in and out from authorized home port</p> 	<p>Fishing vessels that go in and go out from the same fishing port</p> <ul style="list-style-type: none"> • Use RFVR Database for general checking of validated license/registration • Use RFVR Database for general checking, if found that vessels had operated in unauthorized fishing zones • Use RFVR Database during inspection of fishing vessels, when found that some data are incorrect • Refer to RFVR Database for implementing surveillance, when vessel operates in unauthorized fishing areas
<p>Scenario 2: Vessel goes out from Port A1 but enter through Port A2</p> 	<p>Fishing vessels go in and go out using different fishing ports, <i>i.e.</i> fishing vessel A go out from fishing port A1 and go in at fishing port A2</p> <ul style="list-style-type: none"> • Use RFVR Database for general checking of validated license/registration • Use RFVR Database for general checking, if found that vessels had operated in unauthorized fishing zones • Use RFVR Database to inspect the fishing vessels, when found that some data are incorrect • Refer to RFVR Database for implementing surveillance, when vessel operates in unauthorized fishing areas
Case 2: Vessel operating in another coastal State using authorized license	
<p>Scenario 1: Vessel A operates in country B and land in home port</p> 	<p>Vessel A originating from country A which got fishing license from country B to operate fishing in country B waters, but load the fish in the country of origin (country A)</p> <ul style="list-style-type: none"> • Use RFVR Database to pre-check the vessels, compare with applied form before fishing licenses are given by country B and use RFVR Database for general checking of validated license/ registration • Use RFVR Database to check type of fishing method/gear and area of fishing operation of the vessels before landing in fishing port • Refer to RFVR Database for implementing surveillance, when vessel A operates in un-authorized fishing areas and un-authorized gears and methods
<p>Scenario 2: Vessel A operates in country B and landing catch in country B</p> 	<p>Vessel A from country A which got the fishing license from country B to operate in waters of country B and lands catch in country B</p> <ul style="list-style-type: none"> • Requires fishing license given to vessel A • Use RFVR Database to pre-check the vessels and compare this with application form before fishing license is given by country B and use RFVR Database for general checking of the validated license/registration • Refer to RFVR Database for implementing surveillance, when vessel A operates in unauthorized fishing areas and unauthorized gears/methods • Requires bilateral agreement between country A and country B
<p>Scenario 3: Vessel A operates in country B and landing catch in country C</p> 	<p>Vessel A from country A which got the fishing license from country B to operate in country B waters, but takes the fish to land in country C</p> <ul style="list-style-type: none"> • Requires fishing license given to vessel A • Use RFVR Database to pre-check the vessel, compare with application form before fishing license is given by country B and use RFVR Database for general checking of the validated license/registration • Refer to RFVR Database for implementing surveillance, when vessel A operates in unauthorized fishing areas and unauthorized gears/methods • Use RFVR Database to check type of fishing method/gear and area of fishing operation of the vessel before landing in fishing port

Box 2. Different scenarios in various cases where the RFVR Database could be used (Cont'd)

Case 3: Double-flagged vessel

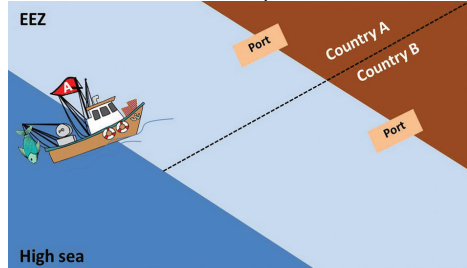


Fishing vessels register in 2 countries, they have two flag States. When they operate in country A water they show flag State A and when they operate in country B water they show flag State B. The RFVR Database could be used to:

- Check the status of vessel registration before vessel is allowed to register
- Propose for deregistration (requires deregistration document)
- Implement surveillance, when vessel is found operating in un-authorized fishing areas

Case 4: Vessels operating in the high seas

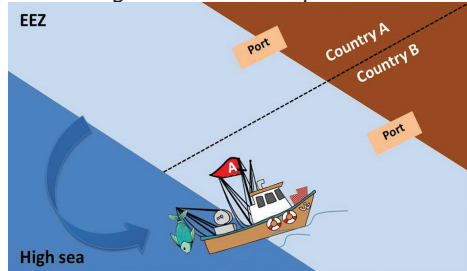
Scenario 1: Fishing in high seas and return to home port



Based on RFVR Database, Port Authority can make a list of vessels operating in the high seas

- Use RFVR Database to cross-check with catch documents to ensure that vessels operating in high seas have authorized management
- Requires fishing license and certificate of fishing registration
- Use RFVR Database to adopt appropriate surveillance

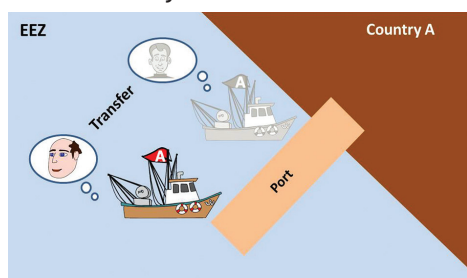
Scenario 2: Fishing in high seas but landing at another AMSs ports



- Use RFVR Database to check the status of vessel before giving permission to enter any AMSs' ports
- Use RFVR Database to cross-check with RFMOs database and with catch documents to ensure that vessels operate in high seas with authorized management
- Use RFVR Database to adopt appropriate surveillance
- Based on RFVR Database, Port Authority can make a list of vessels operating in the high seas

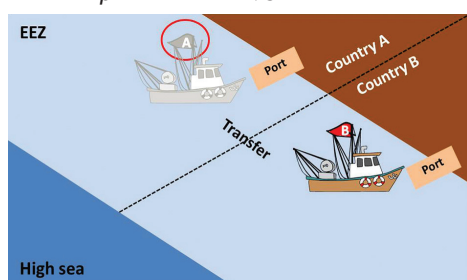
Case 5: Transferring of vessel's ownership

Scenario 1: Transferring of vessel's owner within a country



- Use RFVR Database to check the historical data related to ownership of vessels
- This implies that the RFVR Database should be updated annually for effective use

Scenario 2: Transferring of vessel's ownership to another AMSs

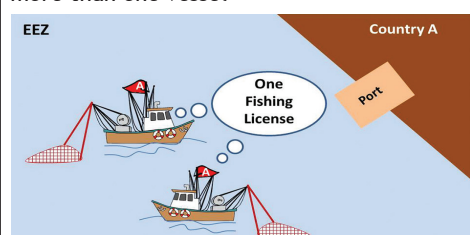


- Use RFVR Database to check the historical data related to ownership of vessels
- This implies that the RFVR Database should be updated annually for effective use

Box 2. Different scenarios in various cases where the RFVR Database could be used (Cont'd)

Case 6: Cloned vessel

Scenario 1: One fishing license applied for more than one vessel



- Use RFVR Database for flag State to take action in case a fishing vessel is arrested or inspected at sea by navy or coastguard
- Requires fishing license

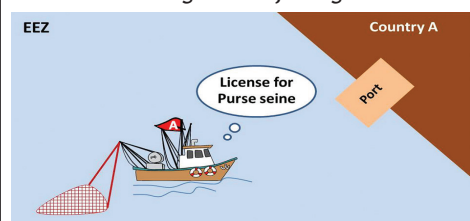
Scenario 2: One registration applied for more than one vessel



- Use RFVR Database to check the unauthorized license of vessel but if fake registration is used - check the engine number, and other relevant information
- Requires the certificate of vessel registration

Case 7: Disregard license and more than one fishing license

Scenario 1: Disregard the fishing license



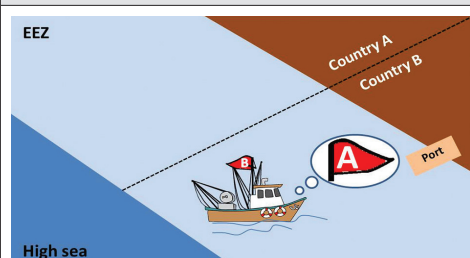
- Fishing vessel has fishing license for purse seine but operates using other gear.
- Use RFVR Database to check the unauthorized license gear
 - Requires fishing license
 - Refer to RFVR database for surveillance/enforcement

Scenario 2: Double or more than one fishing license



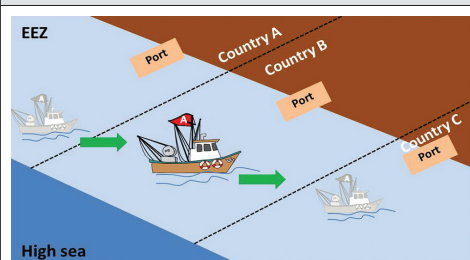
- Use RFVR Database to check for double fishing licenses to avoid double counting of number of vessels
- Requires fishing license
- Use RFVR Database to carefully check the registration and licensing documents
- Improve the electronic system used in the RFVR Database to avoid duplication of record

Case 8: Vessel uses fake flag, operates in other AMS



- Use RFVR Database to inspect the vessels, whether vessels are unauthorized or use fake licenses and fake flag
- In cases, fishing vessel A is poaching in country B waters and show fake flag State A, this would require certificate of vessel registration
- Refer to RFVR Database for implementing surveillance, when vessels operate in unauthorized fishing areas

Case 9: Vessel cruising country A to C (passing B)



- Coastal State to take action on this case
- Use RFVR Database to check data of fishing vessels when passing their country
- Requires certificate of vessel registration and fishing license

in taking coordinated countermeasures against IUU fishing. Furthermore, it is also expected that if AMSs could make full use of the RFVR Database, reduction of IUU fishing activities in the region could be achieved.

The target users of the RFVR Database are categorized into three groups, namely: coastal State, flag State, and port State, which involve many people such as enforcement officers, vessel inspectors, coastguards, marine polices, navy, vessel registration units, fishing license units, customs, immigration, quarantine units, ports authority, fisheries officers and managers, among others. SEAFDEC/TD has established that the RFVR Database for vessels 24 meters in length and over could be used and applied in monitoring fishing activities based on different scenarios and classified into eight different cases (**Box 2**).

Way Forward

In order to strengthen the monitoring and annual updating of the RFVR Database, the national focal points (NFP) in-charge of providing information from respective AMSs for the RFVR Database had been setup. The NFP meeting would be organized in an *ad hoc* basis for improvement of the Database system. Considering that RFVR is a tool to combat IUU fishing activities within the Southeast Asian region, the current RFVR Database system would be expanded to cover vessels less than 24 m, which would be carried out in 2017. In addition, the possibility of sharing the RFVR Database with other regional and/or international organizations would be discussed at the forthcoming Meeting of the SEAFDEC Council in 2017 for consideration and endorsement.

References

- Chumnarn Pongsri, Hajime Kawamura, Somboon Siriraksophon, and Bundit Chokesanguan. 2014. Regional Fishing Vessels Record: Option to Mitigate IUU Fishing in Southeast Asia. *In: Fish for the People*, Volume 12 No. 1 (2014); Southeast Asian Fisheries Development Center, Bangkok, Thailand; pp 11-15
- Hajime Kawamura and Somboon Siriraksophon. 2014. Sustained Promotion of Responsible Fisheries to Secure the Competitiveness of ASEAN Fish and Fishery Products in Intra- and Inter-regional Trade: SEAFDEC Initiative. *In: Fish for the People*, Volume 12 No. 3 (2014); Southeast Asian Fisheries Development Center, Bangkok, Thailand; pp 9-14
- Kenji Matsumoto, Bundit Chokesanguan, Virgilia Sulit, and Kongpathai Saraphaivanich. 2012. Development of Regional Fishing Vessels Record as Tool to Combat IUU Fishing in Southeast Asia. *In: Fish for the People*, Volume 10 No. 3 (2012); Southeast Asian Fisheries Development Center, Bangkok, Thailand; pp 12-16
- SEAFDEC. 2003. Regional Guidelines for Responsible Fisheries in Southeast Asia: Responsible Fisheries Management. Southeast Asian Fisheries Development Center, Bangkok, Thailand; 69 p

- SEAFDEC. 2011. Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020. Southeast Asian Fisheries Development Center, Bangkok, Thailand; 23 p
- SEAFDEC. 2013. Report of the Forty-Fifth Meeting of the Council of the Southeast Asian Fisheries Development Center. Southeast Asian Fisheries Development Center, Bangkok, Thailand; 232 p
- SEAFDEC. 2015. Report of the Forty-Seventh Meeting of the Council of the Southeast Asian Fisheries Development Center. Southeast Asian Fisheries Development Center, Bangkok, Thailand; 285 p
- SEAFDEC/TD. 2011. Report of the Regional Core Experts Meeting on Fishing License, Boats Registration and Information on Export of Fisheries Products in Southeast Asia, 4-7 October 2011, Bangkok, Thailand. SEAFDEC Training Department, Samut Prakan, Thailand; TD/RP/153; 111 p
- SEAFDEC/TD. 2012. Report of the Experts Group Meeting on Fishing License and Boats Registration in Southeast Asia, June 2012. SEAFDEC Training Department, Samut Prakan, Thailand; TD/RP/162; 102 p
- SEAFDEC/TD. 2014. Regional Technical Consultation on the Regional Fishing Vessels Record: Use and Way Forward of RFVR Database as a Management Tool to Reduce IUU Fishing in Southeast Asian Region. SEAFDEC Training Department, Samut Prakan, Thailand; TD/RP/183; 76 p

About the Authors

Mr. Kongpathai Saraphaivanich is the Head of Information and Communications Technology Section of SEAFDEC Training Department (TD) in Samut Prakan, Thailand. He is a member of the TD implementing team for the project on "Promotion of countermeasures to reduce IUU fishing."

Ms. Yanida Suthipol is an Information Officer under the Information and Communications Technology Section at TD. She is a member of the TD implementing team for the project on "Promotion of countermeasures to reduce IUU fishing."

Ms. Namfon Imsamrarn is an Information Technology Officer under the Information and Communications Technology Section at TD. She is a member of the TD implementing team for the project on "Promotion of countermeasures to reduce IUU fishing."

Mr. Bundit Chokesanguan is former Head of Information and Training Division of SEAFDEC/TD in Samut Prakan, Thailand. He is the Co-Adviser of the TD implementing team for the project on "Promotion of countermeasures to reduce IUU fishing."

Dr. Somboon Siriraksophon is the Policy and Program Coordinator of SEAFDEC based at SEAFDEC Secretariat Office in Bangkok, Thailand. He is also the Adviser of the TD implementing team for the project on "Promotion of countermeasures to reduce IUU fishing."