Reinforcing the ASEAN Member States to Combat IUU Fishing in Southeast Asia through Monitoring, Control, and Surveillance

JTF 6-2 Pillar I. Strengthening the promotion of sustainable fisheries in Southeast Asia

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The rapid development of fisheries in the Southeast Asian region from the 1970s to the early 1990s was driven by increased access to global markets and export liberalization policies. The region's vast bodies of water including the Bay of Bengal, South China Sea, Western Central Pacific, and Indian Ocean host diverse marine species and fishery resources. While fishing mainly occurs within exclusive economic zones (EEZs), some fleets operate under bilateral agreements in neighboring EEZs. However, the region is confronted with significant challenges from illegal, unreported and unregulated (IUU) fishing, which undermines conservation and management efforts, threatens fish stocks and economic opportunities, and could create a negative impact on food security. The persistence of IUU fishing, exacerbated by insufficient monitoring, control, and surveillance (MCS) management, necessitates a shift towards preventive measures for sustainable fisheries. This includes regulating fishing vessel numbers, implementing

rights-based fisheries systems, and improving fishers' compliance through community-based management, awareness programs, and voluntary groups.

This article provides a comprehensive overview of the implementation and challenges of MCS in combating IUU fishing in Southeast Asia, emphasizes the necessity of robust MCS systems for sustainable fisheries management, and outlines various regional and national efforts, including capacity-building initiatives, technology-based surveillance, and collaborative frameworks. Additionally, the article addresses the need for preventive measures, effective enforcement, community-based management, and regional cooperation to enhance MCS capabilities to combat IUU fishing, including the roles of international and regional organizations in supporting MCS activities and promoting sustainable fisheries management in Southeast Asia.

Fisheries in Southeast Asia developed rapidly from the 1970s to the early 1990s, and the driving force of which had mainly been the increasing accessibility of global markets for fish commodities and the export liberation policies in the region. Fishery resources that include those in the Bay of Bengal, South China Sea and its vicinities, Western Central Pacific, and Indian Ocean are believed to comprise a multitude of marine aquatic species. Although fishing fleets generally fish in their respective exclusive economic zones (EEZs) but some also fish in their neighboring EEZs under bilateral agreements.

However, in the midst of this regional fisheries situation and considering the uniqueness and variations of the region's fisheries, there is a growing concern about illegal, unreported and unregulated (IUU) fishing. It can take place in all phases of the capture fisheries value chain, whether within national jurisdiction or in the high seas. Efforts to conserve and manage fish stocks are undermined by IUU fishing and can lead to the collapse of a fishery or can seriously impair efforts to rebuild fish stocks that have already been depleted. This may lead to the loss of both short- and long-term social and economic opportunities and could create a negative impact on food security. The IUU concept, with more focus on illegal fishing, undermines national and regional efforts to conserve and manage fish stocks and, as a consequence, inhibits progress toward achieving the goals of long-term sustainability and responsibility. Moreover, IUU fishing greatly disadvantages and discriminates against those fishers who act responsibly, honestly, and in accordance with the terms of their fishing authorizations. This is a compelling reason why IUU fishing must be dealt with expeditiously and in a transparent manner. If IUU fishing is not curbed, and if IUU fishers target vulnerable stocks that are subject to strict management controls or moratoria, efforts to rebuild those stocks to healthy levels will not be achieved.

Every country in the Southeast Asian region is always confronted by increasing pressure on their fishery resources from illegal fishing. In many cases, IUU operation is more related to the lack of monitoring, control, and surveillance (MSC) management. Nevertheless, countries in Southeast



Asia should now focus on developing preventive measures in achieving sustainable fisheries rather than on fisheries management that focuses on mitigating resource conflicts. Such measures could include regulating the number of fishing vessels and overcapacity as well as an effective rights-based fisheries system.

The problem of the coastal and marine fisheries in the region lies in the depletion of fish stocks, overfishing, conflicts between many resource users, ignorance, and violations of laws and regulations by fishers, among others. Certain countries are making strenuous efforts to improve their fisheries management and improve their MCS systems. Some are successful while some have failed, which might be due to the nature of the fishery resources being common property, lack of strict implementation of limited entry policy and other policies, shortage of personnel and equipment to enforce the laws, and lack of coordination between the government agencies concerned, among others.

It can be understood that no MCS activities will be successful if there is an absence of understanding and acceptance by the fishers of the rationale behind the MCS actions being implemented. Other measures are also needed to help increase compliance from the fishermen. Thus, in combination with MCS activities, such measures as establishing communitybased fishery management, providing information to increase awareness among fishers and their family members of fishery conservation and responsible fisheries, establishing voluntary groups, and providing training programs for students. are still necessary. It is expected that these measures will help encourage fishers to operate more responsibly in the long run. Eventually, MCS are an important fisheries management tool to achieve sustainable fisheries in the region. Box 1 depicts the roles of international and regional organizations in implementing MCS at the regional level.

Implementation of MCS in Southeast Asia

In 2007, the ASEAN Charter was developed to ensure sustainable development for the benefit of present and future generations and to place the well-being, livelihood, and welfare of the people at the center of the ASEAN community-building process. The ASEAN Community Vision 2025, and the Vision and Strategic Plan for ASEAN Cooperation in Food, Agriculture and Forestry (2016–2025) are meant to achieve "A competitive, inclusive, resilient and sustainable Food, Agriculture, and Forestry (FAF) sector integrated with the global economy, based on a single market and production base contributing to food and nutrition security and prosperity in the ASEAN Community."

The ASEAN Member States (AMSs) ensure that the sustainable development of fisheries and aquaculture is in line with relevant international guidelines and agreements, *e.g.* the FAO Code of Conduct for Responsible Fisheries,

Regional Guidelines on Responsible Fisheries in Southeast Asia, Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA- IUU) framework, and ASEAN RPOA for the Management of Fishing Capacity. Therefore, in 2020, the ASEAN Senior Officials and Ministers during the Special Senior Officials' Meeting of the 41st Meeting of the ASEAN Ministers on Agriculture and Forestry and the 42nd Meeting of the ASEAN Ministers on Agriculture and Forestry, as well as the Senior Official and Minister responsible for fisheries of Japan *ad referendum* adopted the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030). The RES&POA-2030 serves as a policy framework and direction to guide the region's fisheries development towards sustainability and enhanced contribution of fisheries to food security and livelihood of peoples in the Southeast Asian region in the coming decade. the following are the relevant provisions of the RES&POA-2030 for fisheries management especially combating IUU fishing and MCS):

Box 1. International and regional organizations implementing MCS

Food and Agriculture Organization of the United Nations (FAO)

FAO has been implementing international instruments to support MCS including the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record) promoting the Agreement on Port State Measures (PSMA) through cooperation and information exchange at the national and regional levels via the PSMA Global Information Exchange System (GIES). Moreover, in 2023, the Voluntary Guidelines for Transshipment were adopted which address the regulation, monitoring, and control of the transshipment of fish, that have not been previously landed, whether processed or not. They are elaborate to complement and support existing and new efforts and policies recognizing that all available means under international law and other international instruments, should be used to prevent, deter, and eliminate IUU fishing and fishing related activities in support of IUU fishing. They build on the primary responsibility of the flag State of donors and receiving vessels to implement transshipment regulations and prevent the use of transshipment that supports IUU fishing and IUU fishing products from entering the seafood supply chain. They also recognize the role and responsibilities of the coastal States port States and regional fisheries management organizations and arrangements and constitute a valuable supplement to conservation and management measures in particular to port State measures and traceability schemes and provide support for addressing other issues of concern.

International MCS Network (IMCS Network)

IMCS Network has been conducting and supporting activities on information sharing, capacity development, and joint work to improve the effectiveness of MCS to its members. Moreover, the IMCS Network also promotes the utilization of innovative tools to combat fishing crimes such as the Joint Analytical Cell (JAC). JAC provides authorities with fisheries intelligence, data analysis, and capacity building to help combat IUU fishing. This initiative harnesses innovative technology and the complementary expertise of its collaborating organizations to improve the effectiveness of fisheries MCS.

Indian Ocean Tuna Commission (IOTC)

IOTC has been promoting cooperation among the Contracting Parties and Cooperating Non-Contracting Parties of the IOTC to ensure, through appropriate management, the conservation and optimum utilization of tuna stocks for sustainable management of tuna and tuna-like species in the Indian Ocean and adjacent seas. IOTC has been improving the measures related to the vessel monitoring system (VMS), IOTC catch documentation scheme (CDS), and IOTC high seas boarding and inspection scheme (HSBIS) to combat IUU fishing.

Southern Indian Ocean Fisheries Agreement (SIOFA)

SIOFA has MCS procedures which are driven by SIOFA Conservation and Management Measures (CMM) including vessel authorization, listing of IUU vessels, port inspection scheme, control of fishing activities, monitoring of fisheries, and high-sea boarding and inspection procedures.

Western and Central Pacific Fisheries Commission (WCPFC)

MCS and compliance monitoring are several elements of the Commission's MCS scheme. These included the WCPFC Record of Fishing Vessels and Authorizations to Fish on the High Seas in the Convention Area, Procedures for Cooperating Non-members, Specifications for the Marking and Identification of Fishing Vessels, WCPFC IUU List since 2008, Regulation on Transshipment, Port State Minimum Standards, Electronic reporting standards for logbook and observer data, as well as high seas transshipment reporting, and so on.

ASEAN Network for Combating IUU Fishing (AN-IUU)

The AN-IUU developed a platform for both effective information sharing and an operational network that enables easy and effective communication among the national authorities of the ASEAN Member States (AMSs). The AN-IUU interactive platform was developed, established, and introduced to the AMSs as a key tool to enhance and strengthen the exchange of related IUU activities among the AMSs to combat IUU fishing in the Southeast Asian region.

Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU)

The RPOA-IUU developed the Regional Guideline on Responsible Fisheries to Combat IUU Fishing, the MCS Capacity Building Program from the Australian Government, and a new technical support program from USAID Asia-TS. The RPOA-IUU implemented MCS activities of project components in RPOA-IUU sub-regional working groups including the Gulf of Thailand, Southern and Eastern Areas on the South China Seas and the Sulu-Sulawesi Seas, and the Arafura and Timor Seas. Moreover, the RPOA-IUU conducted a gap analysis of MCS components in the international instrument including FAO CCRF, IPOA-IUU, UNCLOS, and 1995 UNFSA which found the possible MCS implementation in RPOA-IUU to enhance RPOA-IUU MCS Sub-Regional Working Group coordination and cooperation.



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- Implement measures to prevent unauthorized fishing and eliminate illegal fishing practices, *e.g.* strengthening enforcement of laws and regulations, establishing monitoring control and surveillance (MCS) mechanisms and network, developing and promoting responsible fishing practices, encouraging supplementary livelihood options;
- Foster cooperation with other countries for the conduct of stock assessment on straddling, transboundary, highly migratory, and shared fishery resources as appropriate, to serve as inputs for formulating science-based fishery management plan; and strengthen sub-regional and bilateral cooperation including inter-agency cooperation for management of such resources;
- Strengthen the implementation of measures and activities to combat IUU fishing by ensuring compliance with national laws and regulations, and with the provisions of relevant international instruments; encourage the development and implementation of national plans of action to combat IUU fishing; promote inter-agency coordination for effective implementation of laws and regulations; and enhance awareness and understanding of applicable international and regional instruments and agreements through information dissemination campaigns;
- Establish and strengthen regional, sub-regional, and bilateral coordination on fisheries management and efforts to combat IUU fishing; and where appropriate promote the establishment of Monitoring, Control and Surveillance (MCS) network through inter-agency coordination and information sharing;
- Mobilize regional/sub-regional collaboration frameworks and tools for combating IUU fishing, *e.g.* Regional Plan of Action to Promote Responsible Fishing Practices including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU); ASEAN Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity); Regional Fishing Vessels Record (RFVR); ASEAN Catch Documentation Scheme (ACDS), and the use of technologies to support monitoring and surveillance of fishing activities, *e.g.* Vessel Monitoring System (VMS), traceability system;
- Support consultative dialogues at regional/sub-regional level among fisheries legal officers to share and exchange information on updated legal and regulatory frameworks in addressing issues in fisheries management; and
- Improve the capacity of relevant national authorities to effectively implement the requirements of port State measures and flag State responsibilities.

During the past ten years, Southeast Asian countries have focused their efforts on the promotion of sustainable fisheries management and the implementation of countermeasures to address IUU fishing. At the regional level, SEAFDEC has been



promoting the development of regional tools and supporting the AMSs in combating IUU fishing, such as the ASEAN Guidelines for Preventing the Entry of IUU Fish and Fishery Products into the Supply Chain, Regional Fishing Vessels Record (RFVR), ASEAN Catch Documentation Scheme, Regional Cooperation for Implementation of Port State Measures through Strengthening Sub-regional Cooperation to Enhance the Implementation of MCS in the region which concerns among others, the adoption of efficient MCS system for effective control of fishing capacity and combat IUU fishing, destructive fishing, and encroachment by larger fishing vessels in coastal waters. Otherwise, SEAFDEC coordination and cooperation with national/regional/international agencies such as FAO, USAID, NOAA, RPOA-IUU, IMCS, and others implemented MCS-related activities. In 2023, SEAFDEC became a member of the International MCS (IMCS) Network. The benefits of the SEAFDEC Member Countries as members of the IMCS are shown in **Box 2**.

Box 2. Benefits of SEAFDEC Member Countries from the IMCS Network

- Access to global expertise, resources, and information related to MCS to improve the capacity of fisheries and enforcement officers to combat IUU fishing effectively
- Improved coordination and cooperation to develop a more coordinated approach to combat IUU fishing, including sharing intelligence and data, conducting joint patrols, and developing a common approach to MCS
- Enhanced capacity building and training opportunities for fisheries and enforcement officers that cover a range of topics, including fisheries management, MCS techniques, and use of modern technology for monitoring and control of fishing activities
- Access to funding opportunities to support the development and implementation of effective MCS measures
- Improved compliance with international obligations including those set out in the United Nations Fish Stocks Agreement and the Port State Measures Agreement

Over the years, the programs and projects of SEAFDEC include a series of capacity-building and training for the AMSs to enhance their ability to combat IUU fishing and MCS covering fisheries management (co-management and ecosystem approach to fisheries management), and PSM inspection. Moreover, SEAFDEC is also promoting the implementation of sustainable fishery resources management by assisting the countries in defining the harvest reference points through organizing training courses on stock assessment, and other related works undertaken through the Scientific Working Group on neritic tunas, training courses on appropriate models *e.g.*, R-program, data collection for stock assessment, fish population dynamics for a poor data model.

SEAFDEC also supported the implementation of effective MCS measures for deterring IUU fishing considering the importance of a robust system for monitoring fishing activities, controlling access to fishing grounds, and conducting effective surveillance. The regional programs and activities of SEAFDEC focus on assisting the AMSs in developing and implementing effective MCS measures, including the use of satellite tracking systems which are a feature in eACDS applications. To support and facilitate the implementation of MCS through capacity building in the region, the Government of Australia partnered with fisheries agencies in Southeast Asia and initiated the program "Combating IUU Fishing and Promoting Sustainable Fisheries in Southeast Asia Program" during 2022–2026 with a focus on sustainable fish production and consumption in Southeast Asia which is critical to the livelihoods and food supply of people in the region. This Program aims to improve MCS capabilities, regional cooperation, and gender inclusivity in fisheries management within Southeast Asia which supports the AMSs and RPOA-

IUU member countries. The four program components include: 1) Targeted MCS capacity building, 2) Innovation fund supporting new ideas, 3) Fisheries officer exchange program, and 4) Accredited MCS training course.

Moreover, several training and workshop sessions have been conducted over the years such as the "Regional Workshop on Monitoring Control and Surveillance (MCS) for combating IUU fishing in Southeast Asia" in August 2022 under the project "Strengthening Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia" supported by the Japanese Trust Fund. The objectives of the Workshop were strengthening and updating information on MCS for combating IUU fishing by identifying the need for capacity building with relevant MCS. The Workshop identified the status of implementation in the AMSs (**Box 3**) as well as the challenges (**Box 4**) and needs (**Box 5**).



Regional Workshop on Monitoring Control and Surveillance for Combating IUU Fishing in Southeast Asia in August 2022

Box 3. Status of MCS implementation in the AMSs

Brunei Darussalam

- Developed suitable and relevant inter-agency arrangements to develop networks to quickly share information such as locations, names of vessels, ports used, species targeted, and other information
- Adopted an MCS strategy that would investigate the components of an MCS system that would be deemed appropriate for the type of fishing activities that occur in fishing zones
- Engaged the industry and other stakeholders to develop co-management responses in the fishing zones to prevent IUU fishing and ensure sustainable management of fisheries
- · Conducted more intense MCS activities in the area to prevent IUU fishing
- Investigated opportunities for cooperative MCS with its neighbors including coordinating patrols, hot pursuit arrangements, and reciprocal enforcement
- Enhanced the coordination and effectiveness of MCS efforts through the National Maritime Coordination Centre (NMCC)

Cambodia

- Enforced marine fisheries management measures
 - Monitor the prohibition of trawling in water shallower than 20 m deep
 - Inspect that only authorized fishing gears and restricted mesh sizes are used
 - Proclamation of the closed season for mackerels (January to March)
 - Prohibition of fishing in seagrass and coral reef areas
 - Inspect fishing vessels for registration and licensing
 - Set up the Marine Fisheries Management Areas
- Monitoring catch assessment and research on fishing gear, coral reefs, and seagrass areas
- Revised of fisheries law and proclamation of fishing gear, coral reefs, and seagrass areas
- Established the National Committee for Maritime Security (NCMS) which is an overall coordination body for state action at sea
- Implemented the monitoring and reporting technology through the Spatial Monitoring and Reporting Tool (SMART)



Box 3. Status of MCS implementation in the AMSs (Cont'd)

Indonesia

Implemented technology-based surveillance

- Data communication between the head/regional office and the sea and air fleet
- Web-based applications for easy data access (Information System of Surveillance, Data Sharing System for the fishing license, web for checking the activity of the VMS, web-track VMS)
- Mobile phone to improve the ability to obtain intelligence information related to violations in the field (SMS, POKMASWAS, etc.)
- Other technologies such as e-logbook, GIS, and coast radar as tools to facilitate surveillance activities
- Satellite-based technology (VMS, radar satellite, AIS)
- Set up MCS infrastructures (patrol vessel crews, airborne surveillance, fisheries monitoring center, and patrol vessels)
- Established POKMASWAS in 2001, a voluntary surveillance-based community to combat illegal fishing, for fishing surveillance activities such as patrolling, monitoring fishing sites, and reporting illegal fishing activities
- Implemented strict criteria for surveillance of fishing vessels before fishing, while fishing, during landing, and port landing
- Developed a mobile application SALMON to involve fisheries companies and owners in monitoring their fishing vessels for transparency
- Implemented information sharing mechanism in regional platforms (RPOA-IUU, SEAFDEC, ASEAN Network on Combating IUU fishing)
- Established the National Coordination Forum on fisheries crime investigation
- Ratified PSMA and Standard of Training, Certification, and Watchkeeping for Fishing Vessel Personnel (STCWF) and in the process of ratifying Cape Town Agreement 2012 and ILO-188
- Implemented conservation and management measures such as registration of fishing vessels as a member of RFMOs (IOTC, CCSBT, WCPFC) and non-contracting party (IATTC)
- Involved in three regional mechanisms to combat IUU (i.e. RPOA-IUU, SEAFDEC, and AN-IUU)
- Submitted and regularly updated data on fishing vessels for FAO Global Record, and SEAFDEC Regional Fishing Vessels Record (RFVR)
- Implemented traceability of fisheries products (Catch Certification System and electronic logbook)

Lao PDR

- Drafted the relevant laws and regulation
 - Designate a fisheries inspection officer
 - Draft the roles and responsibilities of the Fisherman Association and Fisheries Committee
 - Enforcement of fisheries laws
- Disseminated fisheries laws to District and Village levels
- Promoted the establishment of the Fisheries Management Committees
- Developed the Strategy Implement Plan 2025
- · Conducted fisheries management activities
 - Issuance of fisheries license, boat registration, and fish buyer license
 - Supply fisheries equipment such as boats, life jackets, etc.
 - Landing site management
 - Promotion of processed products
 - Survey and monitor fish species migration
 - Restocking program
 - Village patrolling unit
 - Capacity building

Malaysia

- Amended the Fisheries Act 1985 effective in 2019 that imposes a penalty six times heavier than that of the former provisions
- Established standard operating procedure (SOP) which involves multiple enforcement agencies for handling foreign fishing vessels that are suspected of engaging with IUU fishing
- Established the National Committee on IUU Fishing and National Plan of Control and Inspection (NPCI)
- Established the Special Task Force to Address Illegal Fishing Activities by Foreign Vessels cabinets order in 2019
- Synergized through strategic cooperation with other agencies including the Department of Fisheries Malaysia, Fisheries
- Development Authority Malaysia, Malaysian Quarantine and Inspection Services, Malaysian Maritime Enforcement Agency • Collaboration with RPOA-IUU, AN-IUU, and bilateral communications

Myanmar

- Improved of the legal framework for managing marine fishery in accordance with the following Fishery Laws and new fisheries law under process.
- Improved the MCS measures for the registration of local fishing vessels and carrier vessels with the Department of Marine Administration
- Improved the MCS measures for foreign vessels applying for prior permission from the Department of Fisheries to operate in the permitted fishing ground, inspected at designated checkpoints and land in designated landing sites in Myanmar, and install the vessel monitoring system (VMS)
- Strengthened the cooperation among the local community, relevant agencies such as NGOs and local and international organizations

Box 3. Status of MCS implementation in the AMSs (*Cont'd*)

Philippines

- The Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) through the Fisheries Protection Law Enforcement Group (FPLEG), in accordance with the Republic Act No. 10654-An Act to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, is mandated to address issues to all forms of illegal fishing as enumerated under such law
- Conducted land-based operations for market denial, importation, administrative fines, investigations, and seaborne operations
- The DA-BFAR in collaboration with the United States Agency for International Development (USAID) enhanced the IUU Fishing Index and Threat Assessment Tool (I-FIT) to measure IUU risk in municipal waters as well as in Fisheries Management Areas (FMAs)

Thailand

- Monitored the fishery resources
 - Data collection and analysis about the catch, MSY, species/size composition and by-catch, reproductive biology, spawning and nursing ground, and abundance and distribution.
 - Fishing status in fishing effort and fishing efficiency.
- Environment as water quality.
- Improved the regulatory measures
- Fishing effort management includes a limited number of fishing days, a limited number of fishing licenses, and the size or amount of fishing gear
- Technical measures include mesh size limitation, seasonal area closure, ban of destructive gears, fishing zone demarcation, and protected areas
- Catch management to control catch through total allowable catch (TAC)
- Restructured and enhanced the former Vessel Monitoring System (VMS) Center to the Fisheries Monitoring Center (FMC)
- Implemented Port State Measures for control of foreign-flagged vessels

Viet Nam

- Amended and supplemented legal regulations to tighten the management of fishing activities, combating IUU (Fisheries Law 2017, 02 Decrees and 08 guiding circulars)
- Regulated 14 IUU fishing acts and increased the level of penalties
- Allocated fishing license guotas based on stock assessments
- Mandated the installation of VMS devices on fishing vessels with a length of 15 m and over)
- · Controlled fishing vessels, conducted port-in and port-out activities, declared fish products, and collected fishing logs
- Set up a list of IUU fishing vessels for monitoring and handling
- · Prohibited the development of trawl net and did not issue more licenses
- · Complied with international treaties such as UNCLOS and ILO regulations on fishing labor
- Implemented the Agreement on Port State Measures and other regulations of EC on IUU fishing as the Council Regulation No. 1005/2008
- Completed the national fisheries database, including data on fishing vessel information, registration, registration, and fishing license.
- · Improved the information infrastructure for fisheries management and fisheries infrastructure at fishing ports
- Set up the VMS system to monitor and control fishing vessel activities.
- · Announced 53 fishing ports eligible for certification of the origin of fishing products
- Conducted the pilot project of an online logbook
- Announced 14 ports for foreign fishing vessels to dock as provisions of the PSMA Agreement
- Established the Committee against IUU fishing at the central level with the participation of leaders of ministries and the local level with the participation of provincial leaders, sub-department, and fishing port staff
- Set up a list of IUU fishing vessels that are likely to violate IUU regulations to monitor and control
- Checked the documents and equipment on board according to regulations such as fishing license, VMS device, and labor
- Monitored unloading activities at the fishing port
- · Imposed sanctions as regulations to violate IUU fishing vessels
- Controlled the operation of fishing vessels through the Fishing Vessel Monitoring System
- Established fisheries surveillance and other forces use patrol boats to inspect, control, and monitor the activities of fishing vessels



Regional Training on Port State Measures Inspection in Focus of Shipping Container for Fish and Fisheries Product in September 2022



Box 4. Challenges in MCS Implementation in the AMSs

Budget to conduct MCS activities such as e-logboo

- Limited budget
- Budget adjustment due to COVID-19 pandemic
- Number of MCS staff
- Limited the number of MCS staff

Skill of MCS staff

- Lack of understanding of MCS
- Lack of the MCS skills
- Limitations of information on MCS activities in inland fisheries

Technology/tools

- Lack of appropriate equipment such as VMS
- Limited skill of fishers to understand and use mobile devices
- · High cost for fishers and government

Law and regulation

- Weak enforcement
- Lack of collaboration with several agencies
- Lack of harmonized SOP among agencies

Box 5. Needs for capacity development in MCS in Southeast Asia

Immediate

- Technical assistance on NPOA capacity
- Capacity building on e-traceability such as e-logbook, eACDS, among others
- Sharing information on port inspection
- Training on inspection for foreign flag vessels (PSMA)
- Fisheries intelligence/technology/application with notification such as VMS, AIS, and other new technologies for surveillance and MCS integration

Long term

- Training on risk analysis of the pattern of fishing operation in each fishing gear by using VMS and AIS
- Technical assistance with scientific data collection, stock assessment, and research survey for marine resources

Way Forward

MCS is an important fisheries management tool to achieve sustainable fisheries in Southeast Asia. In the upcoming project under JTF 7, SEAFDEC will continue cooperating with national, regional, and international agencies to support capacity building on MCS-related activities in the region to enhance the knowledge and skills of fisheries officers from the AMSs.

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