

# Thailand's Achievement in Combating the Illegal, Unreported and Unregulated Fishing (IUU Fishing)

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# Thailand's Achievement in Combating the Illegal, Unreported and Unregulated Fishing (IUU Fishing)

- Overview
- Situation Before 2015 and Action Taken from 2015present
  - Legal framework
  - Fleet Management
  - Monitoring, Control and Surveillance (MCS)
  - Traceability
- Suggestion from Thailand's experience

# Overview Thailand's combating IUU Before 2015

- Inefficient legal framework
- No control of fishing licensing
- No control of fleet size
- Lack of national-international collaboration
- Ineffective operational systems
- No core agency for MCS, Weak MCS capability, no MCS system and technology
- No clear regulations and schemes guiding controls of foreign flagged vessels and no comprehensive inspection
- Ect.

# Overview Thailand's Combating IUU since 2015

- The Royal Ordinance on Fisheries B.E. 2558 (2015)
- Marine Fisheries Management Plan (FMP)
- Established the National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU)
- Established Command Center for Combating Illegal Fishing (CCCIF)
- Frozen registration of new fishing vessels
- Reform of the fishing license regime
- Eliminate overcapacity of the fishing fleet and overfishing
- Established IT systems such as e-license system, traceability system, Vessel Monitoring System (VMS), etc.

# Overview Thailand's Combating IUU since 2015

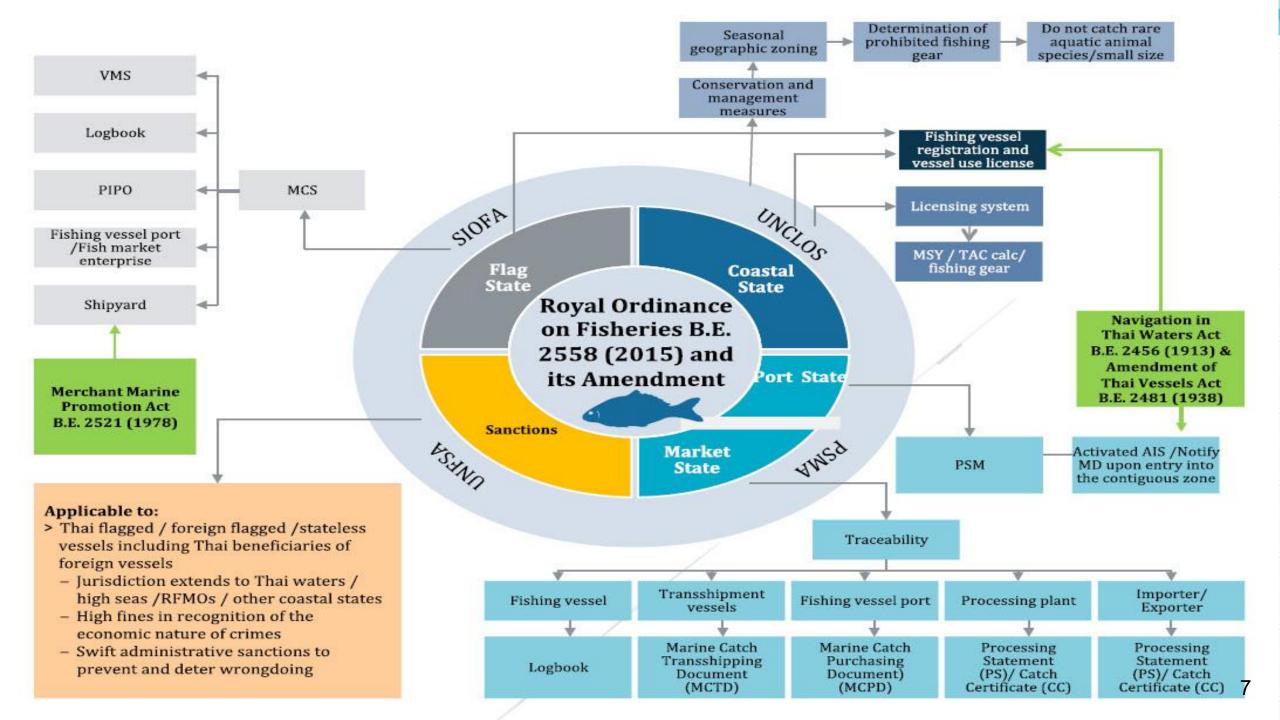
- Set up a Fisheries Monitoring Center (FMC)
- Set up Port In Port Out (PIPO) Control Centers
- Implement Port State Measures (PSM)
- Have Stricter rules and requirements for the issuance of overseas fishing license
- the Cabinet approved a budget of 810 million baht (about 22.5 million USD)
- Etc.

# Legal framework









# Legal requirement



# DOF



## MD





Navigation in Thai Waters Act



# Vessel registration

Royal Ordinance on Thai Vessels





> DOF needs to certify renewal of permit



> Renewal of vessel permit

> Issuance of permit

> Too many fishing vessels / vessel notified as IUU (section 46 RO on Fisheries)



> Moratorium on vessel registration

> DOF needs to certify request for alteration/ transfer of ownership/destruction



> MD to amend vessel registration

Joint inspection by DOF and MD

> Fishing licence issue



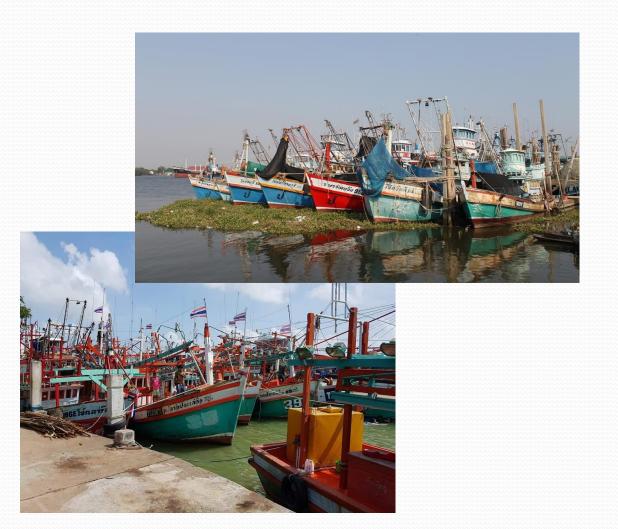
> Vessel must have valid permit and registration

> Fishing licence revoked or no new licence requested



> Vessel registration revocation

# Resources and Fleet Management





# **SITUATION BEFORE 2015**



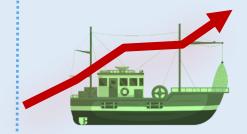
# Inefficient legal framework

- Fisheries Act of 1947, unregulated fishing effort
- > Thai Vessels Act of 1938, uncontrolled fishing vessel registrations



# No control of fishing licensing

- ➤ No catch limit
- No limitation on fishing gear



# No control of fleet size

- Open system : unsustainable growth
- Unknown Fleet figures
- > No UVI



# Poor national international collaboration

- Poor MD-DOF collaboration
- No international cooperation



# 5 Ineffective operational systems

- Paper-based operation
- ➤ Lack of data verification
- Delay in data processing
- > Inefficient operation

# 1. Inefficient legal framework

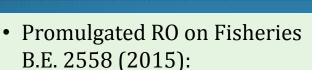
Situation



- Fisheries Act of 1947, unregulated fishing effort
- > Thai Vessels Act of 1938, uncontrolled fishing vessel registrations

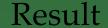
# 2015-2018

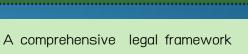




- ➤ Limiting allowable catch and fishing days
- > Fishing licensing criteria
- Promulgated RO on Thai Vessels B.E. 2561 (2018):
  - ➤ Controlling vessel registrations : Moratorium
  - > Regulating criteria for revocation of registrations
  - ➤ Joint MD-DOF workflows

Promulgate regulations to control sunk or damaged (grey) vessels in port and shipyard





and fleet Efficient operation and collaboration

to enable control of fishing effort

Amendments for Moratorium registration of fishing, support and carrier vessels

among DOF and MD















# 2. No control of fishing licensing

Situation



- > No catch limit
- No limitation on fishing gear

2015-2018

## Action taken





- Controlled fishing effort:
  - Limiting catch below MSY level
  - License combination programme
- Controlled size and number of fishing gears:
  - Controlling efficiency of fishing gears

# 2018



Reduced fishing effort

Pelagic fish

Anchovy

Demersal fish

Andaman Sea

Pelagic fish

> Anchovy

Demersal fish

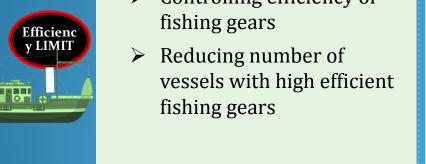
Gulf of Thailand

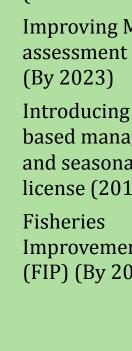
30%

62%



- **Improving** application of TAC (2020-2021)
- **Improving MSY** assessment method (By 2023)
- Introducing areabased management and seasonal fishing license (2019-2020)
- **Fisheries** Improvement Project (FIP) (By 2023)





# 3. No control of fleet size

# Before 2015

## Situation



- Open system : unsustainable growth
- Unknown Fleet figures
- > No UVI

# 2015-2018

## Action taken

- Controlled vessel registrations:
- > Two-year moratorium
- Verified vessel registrations:
- Revoking inactive vessel registrations (vessel use permits were expired)
- Comprehensive fleet surveys
  (5 times: 1 in 2015 and 4 in 2017)
- Investigating vessels reported as sunk, damaged, sold abroad
- P Operation purge to clarify status of remaining grey vessels
- Increased registration controls:
  - Applying IUU fishing eligibility: Banning vessels in the IUU list and grey vessels from registration
  - Establishing stringent measures on registrations throughout the vessel life cycle (from the construction to scrapping)
  - Screening vessels by Watch List and publishing White List
  - Monitoring shipyard and port activities
  - Controlling unregistered vessels and noncompliance vessels by locking and marking with white-orange stripe
  - Marking UVI on every vessel

# 2018

## Result

• Reduced fishing fleet by 26%



- Accurate and updated fleet data
- Registered vessels are under control with applicable law
- Expanded the monitoring of Watch List vessels from PIPO to ports and shipyards
- Over **1,100** unregistered vessels and non-compliance vessels have been locked
- More than **12,000** have been marked with UVI

# Future plan

- Employing Electronic UVI and Vessel Identification Plate (2019)
- Introducing an areabased painting system (2019)
- Introducing identification system for shipyards and ports (By 2019)
- Conducting MD-DOF regular review and assessment









# 4. Poor national and international collaboration

# Before 2015

Situation



- Poor MD-DOF collaboration
- No international cooperation

# 2015-2018

## Action taken

- Joint workflows
- Collaboration through out life cycle of the vessel:
  - o Building and registration
  - o Issuance of fishing license
  - o Change of vessel type
  - o Scrapping, dismantling or demolition





- International cooperation
- Collaborated with Myanmar and Cambodia
- ➤ Initiated regional cooperation on vessel registration in MTWG 36

# 2018

## Result

- Integrated collaboration between MD and DOF
- Reduced gaps in operations of MD and DOF significantly
- Information related to fisheries management of MD and DOF are accurate and consistent
- The status of 34 vessels sold or detained abroad are verified

# Future plan

 Proposing detailed discussion in MTWG 37 @ Singapore (2019)



# 5. Ineffective operational systems

# Before 2015

Situation



- Paper-based operation
- Lack of data verification
- > Delay in data processing
- Inefficient operation

# 2015-2018

# Action taken

- Employed electronic system:
  - ➤ Fishing licensing (E-License)
  - ➤ MD registration database
    - Verified and updated information in registration database
    - Developed data analysis system for operation and decision making (Business Intelligence System)
    - Developed operational control system (Automated Workflow Processing)

## Introduced an Electronic Monitoring (EM) system for locked vessels since Sep 2018

# 2018

## Result

- Electronic vessel registrations database
- Accurate number of vessels
  - Confirmation total number of fishing vessels, carrier and support vessels at

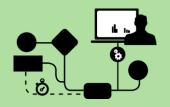
## 19,405

- Retrieve Fleet figure instantaneous and dailyupdated
- Reduce Administrative burden or human error by automated processing
- Real time and more effective control for locked vessel



# Future plan

 Linkage between MD system with DOF Administrative Sanctions database.





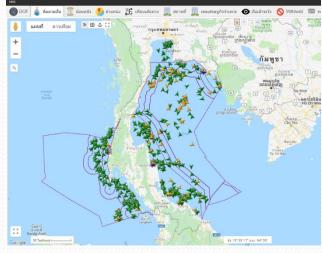


# Monitoring, Control and Surveillance (MCS)











# MCS

# Monitoring Control Surveillance

## SITUATION BEFORE 2015 OF MONITORING CONTROL AND SURVEILLANCE



# Lack of legal framework to allow MCS activities

- ➤ The out-of-date Fisheries Act (1947)
- Open-access system, no FMP



- No core MCS agency and no coordination among existing Agency
  - ➤ No national focal point
  - Weak and uncoordinated MCS activities among existing agencies
  - > No sharing information



Weak MCS capability

- human resources
- Lack of investigation mindset



No MCS system and technology

- ➤ No MCS system
- No technology, centralized database
- ➤ No procedure e.g. SOP

# MCS

# Monitoring Control Surveillance

1. Lack of legal framework to allow MCS activities

Situation

The out-of-date Fisheries Act (1947) OUT OF DATE



No FMP

2015-2018

Action taken

2018

Future plan

**Issued of the Royal Ordinance on** Fisheries B.E. 2558 (2015) together with amendments made in 2017 **Monitoring activities** 



- Developed FMP to manage of fishery resources e.g. MSY
- Benchmarks for issuance of licenses

## **Controls on fishing activities**

- Spatial control: MPA/zoning
- **Input control** (no. of license, fishing days, gears)
- **Technical control** (gear, mesh size)
- **Output control** (prohibited species)

## Surveillance on fishing activities

- > Set up surveillance system
- Introduced tool kits and technology (VMS/ERS/EM, logbook, observer, etc.)

A comprehensive legal framework to enable control and enforcement of MCS activities

# Monitoring Control Surveillance

2. No core MCS agency and no coordination among existing Agency

2015-2018

Action taken

2018



Future plan

Situation



- > No national focal point
- > Weak and uncoordinated MCS activities among existing agencies
- ➤ No sharing information



Set up The CCCIF

3,957<sub>officers</sub> > MCS > Closer inter-agency

- 208 CCCIF officers
- 2,482 DOF officers and 425 local temporary staff employed by DOF
- > 842 THAI-MECC officers (200 MP, 300 RTN, 54 DOF, 198 DMCR, 49 TCD and 41 MD)



new DOF's Divisions:

FFMD, OFTCD, FRMMDD, LAD, FQID



Port In Port Out Centers



Forward Inspection Points

- > Core agency to operate MCS
- coordination
- > Integrated system and database

# MCS Monitoring Control Surveillance

3. Weak MCS capability

Situation

- > Human resources
- ➤ Lack of investigation mindset

2015-2018

Action taken





- **FMC building :** THB 49.0 m (ca. USD 1,580,000)
- **VMS system** :THB 11.5 m (ca. USD 371,000)
- ERS & EM, server, EMA, Observer: THB 9.8 m (ca. USD 316,000)
- e-PIPO, FI, and CRA: THB 14.4 m (ca. USD 464,500)
- **Training:** THB 4.6 m (ca. USD 148,400)

2018

## Result

A robust and well-integrated Monitoring, Control and surveillance (MCS) system which allows Thailand to prevent, deter and prosecute any perpetrators involved in IUU fishing activities through closer inter-agency coordination

PIPO centers are periodical audit by **FITs** 

On going & Future plan

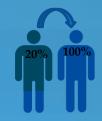
SAT will remain as a special task force (once per month operation)



Increasing manpower

3,957<sub>officers</sub>

**Training: Investigation** mindset (supported by Oceanmind)



Assessment of PIPO's operations by FITs



Compliment inspection by SATs and Air surveillance

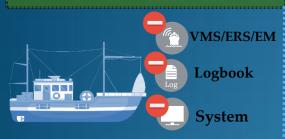


# MCS

# Monitoring Control Surveillance

4. No MCS system and technology in place

## Situation



- No MCS system
- No technology, centralized database
- > No procedure

2015-2018

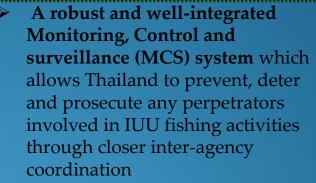
## Action taken



- Set up of MCS system
- Electronic surveillance
- Port inspections
- At sea inspections
- Introduced tool kits and technology to surveillance e.g.
  - VMS, AIS, ERS,EM
  - E-PIPO
  - Logbook
  - Transshipment control
  - Observer
  - pre-common risk assessment
  - behavior analysis software
  - FI, MISC
- Set up and improved operational procedure: SOP

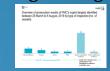
2018

## Result



- Cross-sectoral actions led concrete results
  - Port inspection Urgent targets





- At sea inspection

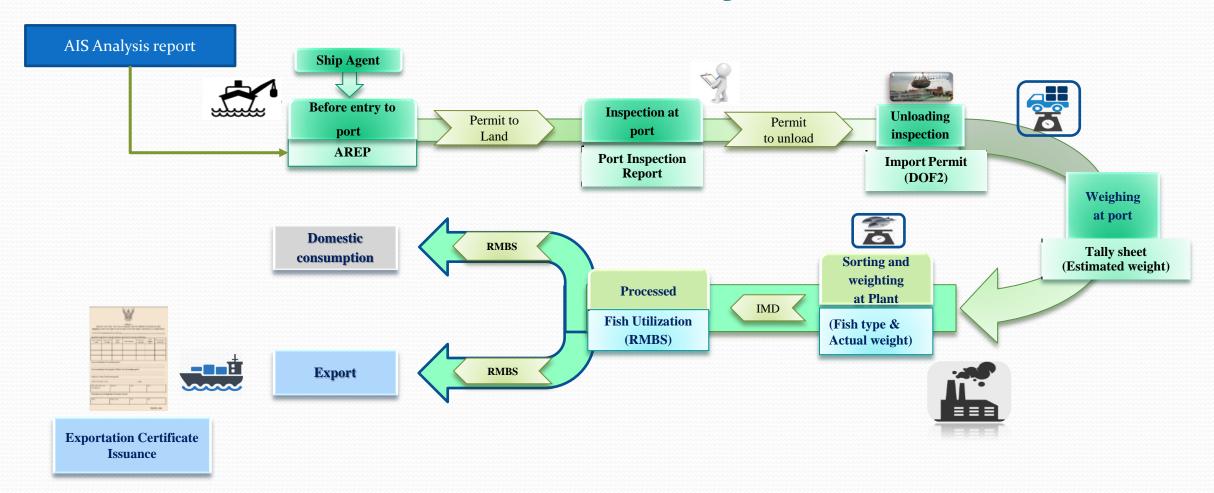


## On going & Future plan

> VMS anti-tampering safeguard device



- ➤ Complete system of the CRA
- > Surveillance of carrier less than 30 GT in TH water
- > Surveillance of FV 10- less than 30 GT
- ➤ More proactive international role in MCS activities



## SITUATION BEFORE 2015 OF TRACEABILITY



No comprehensive laws and regulations



No information system or electronic tracking infrastructure



Lack of sufficient inter-agency and international coordination



Insufficient control of Thai flagged vessels especially Thai flagged vessels fishing in waters of third countries



No clear regulations and schemes guiding controls of foreign flagged vessels, no comprehensive inspection

# Before 2015

2015-2018

Action taken

2018

Result



## Situation

1. No comprehensive laws and regulations



- ✓ Registration : fishing vessel, ports, processing establishments
- ✓ Control: ports, processing establishments, importer and exporter
- ✓ Implemented traceability system in processing establishments
- ✓ Power to confiscate and seize

Acceded to PSMA

## Fish from importation

- ✓ 8 stateless vessels were confiscated
- ✓ 1 IUU fishing vessel was confiscated
- ✓ 46 containers from IUU Fishing were rejected
- ✓ 1 truck was rejected

## Fish from Thai flagged vessels

✓ 12 infringements detected in 2017 and 21 infringements detected in 2018

Review the need for revisions of the laws and regulations to ensure effectiveness in preventing

and deterring illegal fishing

Future plan







2015-2018 2018 Action taken Situation Future plan Result Comprehensive Increase digitisation Develop and implement of 2. No information traceability across supply various electronic systems ✓ DOF will upgrade automatic system tracking or chain and all modes of ✓ PSM cross-checks of LD and logbook for electronic transport **✓**TF Thai flagged vessels fishing outside ✓ Data are systematically infrastructure ✓ Others IT system Thai waters collected and reliable e.g. Fishing Info, ERS/EM ✓ Launch the Offloading Control and ✓ Data are available for **Inspection Application** verification and control ✓ Develop a digitalized risk assessment ✓ Integrated IT-system guiding import inspection controll ✓ Consequence agencies ✓ Develop a paperless Catch Certificate have access to all available data **Upgrade Thai Flagged Catch Certification System and PPS** Increase transparency and reduce human error to allow CA in importing countries direct access for verification of CC and PS

# Before 2015

2015-2018

2018



## Situation

3. Lack of sufficient inter-agency and international coordination



## Action taken

# Strengthened the internal cooperation with MD and TCD

- ✓ MOU between DOF and MD
- ✓ MOA between DOF and TCD

# Enhanced cooperation with third countries and international agencies

- ✓ MOUs with flag states such as Marshall Island, Cambodia, Myanmar, etc.
- ✓ Draft MOU for several countries, such as Spain, New Zealand etc.



## Result

- Ensure the reliability, effectiveness and transparency of the control and inspection system
- Ensure the correction, accuracy of information in the certified document from flag, coastal states
- Rapidity, transparency in inspection
- Data and information sharing with flag states
- Networking for data/information exchange
- Coordination across government agencies

# Improve inter-agency and

international cooperation

Future plan

- ✓ Revise MOU and MOA with TCD and MD
- ✓ Accelerate signing of MOUs/IAs with encountered countries

2015-2018

Action taken

2018

Result



Situation

4. Insufficient control

especially Thai flagged

third countries

of Thai flagged vessels

vessels fishing in waters of

A comprehensive control system is implemented along the whole supply chain

- ✓ implemented a robust and riskbased inspection process
- ✓ Audited processing establishments' traceability systems
- ✓ Audited PIPO officers

**Implementation of various** (electronic) systems ensuring monitoring of all Thai fishing vessels both fishing in Thai waters and outside Thai waters

e.g. VMS, ERS/EM, observer on board, transshipment plan, Thai-Flagged Catch Certification System No IUU fish entering into the supply chain in Thailand

The result of reform Thai flagged vessels fishing in waters of third countries are shown in MCS

**Ensure process** optimisation through internal audits









# Before 2015

2015-2018

2018



Situation

Action taken

Result

Future plan

5. No clear regulations and schemes guiding controls of foreign flagged vessels, no comprehensive inspection

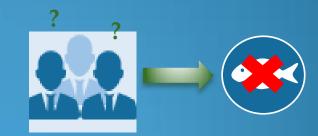




A comprehensive control system is implemented along the whole supply chain

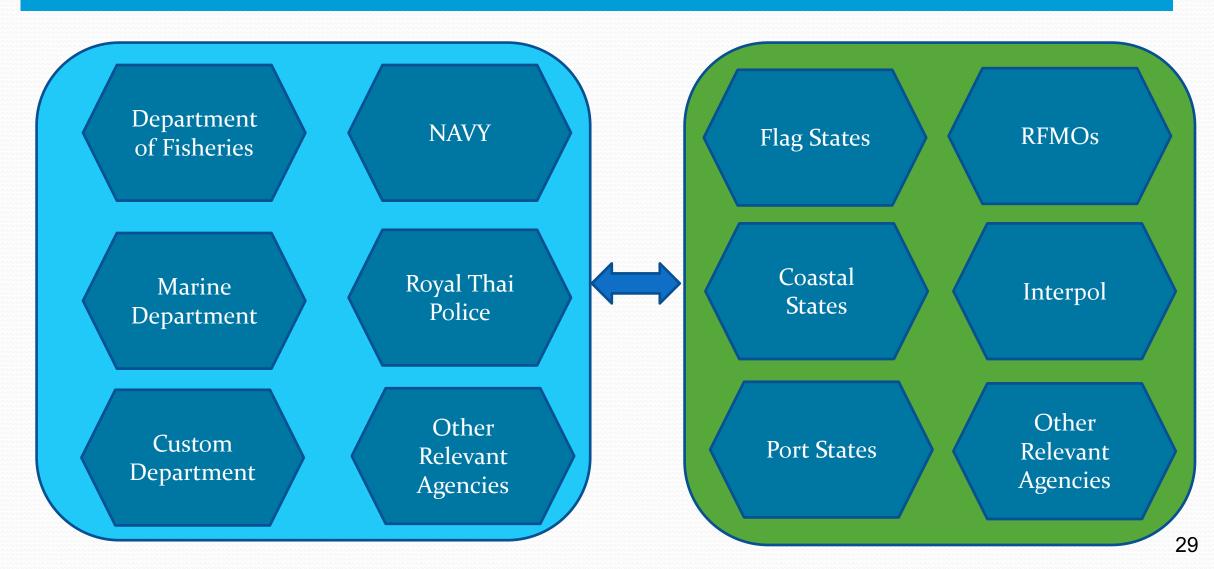
- ✓implemented a robust and risk-based inspection process verifying information provided by all stakeholders before arrival, at all entry points, during transport and at the processing establishments
- ✓ Audited processing establishments' traceability systems
- ✓ Audited PSM inspectors

No IUU fish entering into the supply chain in Thailand No non-cooperating countries fish (unauthorized fish) imported to the Market



Ensure process optimisation through internal audits

# Cooperation



# **Cooperation with Neighboring Countries PSM Network**





# Myanmar

- Verify the exportation documents issues from Myanmar
- Understand the procedure for inspection at port and EU Simplified Catch Certification issuance



	Product description			Flahing vessel (FV)				FV master	
no	Species	Estimated weight (kg)	Product form	Fishing vessel name	FV registration no.	Fishing license no. & valid to	Catch area	Name	Sign
1	Engroutts spp.	20,000 Kg.	Chillied	PP6.0246	P\$P\$6.0246	-	CAMBODIA	MOK CHHUNLENG	THE
2									-
3									
4									
5									
6									
7									
8									-
9									
10								_	
11					9				
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16					-				
17					Date on	defenatura	1	MMIGRAT	emp
	Flag State author	ity validation			(		ញៀ.ស៊ីន បន្ទ	PAK SHLA ARPIVE	D

# Cambodia

 Increasing the cooperation for Exportation Document (Certificate Fish and Fishery Product Obtaining)



# Malaysia

- Cooperate on Malaysian regulation for Fishing vessel
- Information Sharing on the vessel from Malaysia request to port in Thai ports

# **Cooperation with Regional PSM Network**





# **SEAFDEC**

- Training on ACDS
- Cooperation and information sharing on the fishing vessel in RFVR

# **RPOA**

- Information Sharing on the fishing vessel related to IUU fishing

# Cooperation with International PSM Network

# Flag States and Coastal States

- Cooperation on the Fishing vessel verification
- Transmit Port Inspection Report to Flag State

# **FFA**

- Cooperation on the Fishing vessel verification which operated in Pacific Ocean
- MOU for information sharing (planning)

# **PNG**

- Plan to sign MOU for information sharing on Dec 2017

# **Tuna partner countries**

 Cooperation with tuna partner countries such as China, Indonesia, Korea, Maldives, Philippines, Taiwan, USA, Vietnam, and PNA countries (Papua New Guinea and Solomon Islands) using actual weight from Thailand to fill in EU CC

# **PNA Countries**

- Cooperation on the Fishing vessel verification which operated in Pacific Ocean (PNA EEZ)

# **IOTC**

- Implement IOTC e-PSM since Jan 2017
- Cooperation on the Fishing vessel verification which operated in Indian Ocean

# Conclusion

- Political will on combating IUU
- Efficient legal framework comply with international obligation and standards
- Marine Fisheries Management Plan
- National Plan of Action -IUU comply with International and regional plan
- Standard operation procedures
- Administrative Resources; Budget, manpower, materials
- Scientific data for management

# Conclusion

- Re-organization
- Setup system; Operation system, electronic system, etc.
- Knowledge and technology
- Data sharing
- Core agency
- Cooperation and collaboration both National and International agencies

# Suggestion from Thailand's experience

- Cooperate with all ASEAN countries, in fostering sustainable fisheries within the ASEAN framework through organization of workshops for possibility for sharing information, experience, knowledge, technology, etc.
- Exploring possibilities of establishing the ASEAN IUU Task Force as an IUU-combating mechanism in the region









THANK YOU FOR YOUR ATTENTION

