



Sustainable Fisheries
PARTNERSHIP

FISHERY IMPROVEMENTS IN SOUTHEAST ASIA

IFFO INFOCUS WEBINAR

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Sustainable Fisheries Partnership (SFP) is

dedicated to delivering healthy marine and aquatic ecosystems and a secure seafood supply through the creation of a responsible seafood economy.

We are working toward a world where all seafood is produced sustainably.





30+

Partners

10+

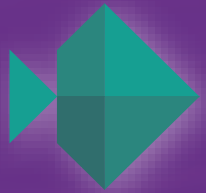
Supply Chain
Roundtables

(By Sector)

150+

Companies in Supply
Chain Roundtables

SFP TOOLS



FISHSOURCE



seafood

Metrics



**Ocean
Disclosure
Project**



Overview of Southeast Asian Fisheries

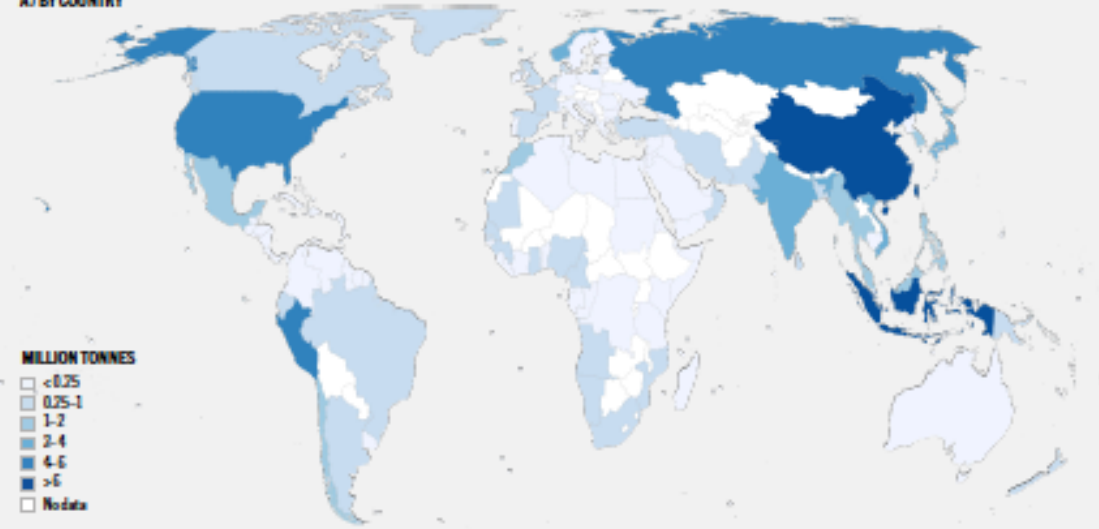


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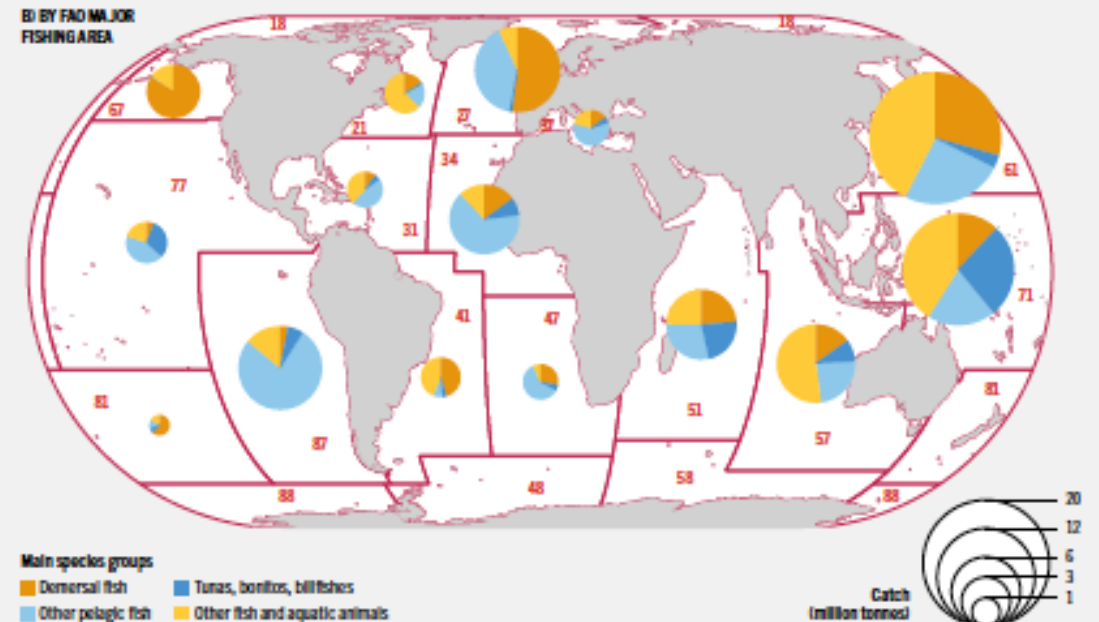
SE Asia is a leader in global seafood production

FIGURE 9 MARINE CAPTURE PRODUCTION, AVERAGE 2018–2020

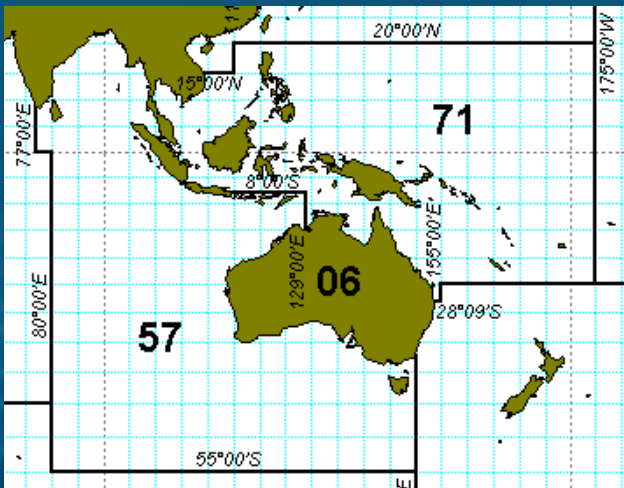
A) BY COUNTRY



B) BY FAO MAJOR FISHING AREA

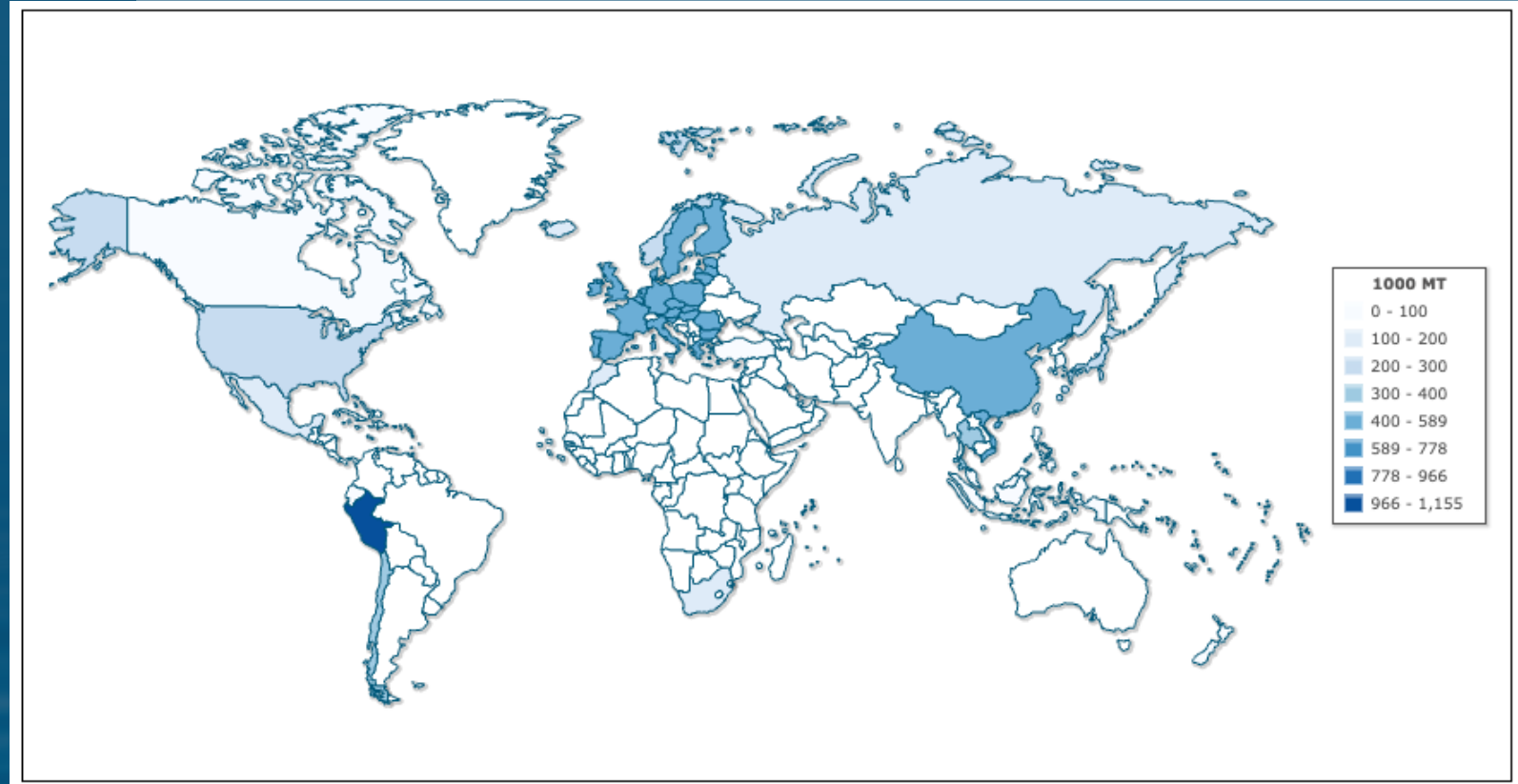


Key issues in fisheries management



- Indian Ocean, East (57)
 - Stock status info scarce
 - Stock status highly uncertain
- Western Central Pacific (61)
 - 50% of landings not identified by species
 - Limited data availability hinders stock assessments
 - High reported catches likely maintained through expanding fishing area and fishing down trophic levels

Key producers of fishmeal



Key producers of fishmeal

Country	year	tonnage (000 mt)
Peru	2022	1,003.4
Chile	2022	378.6
India	2022	347.2
Thailand	2022	285.4
China	2022	278.3
Vietnam	2022	275.0
U.S.A	2022	237.7
Japan	2022	202.5
Norway	2022	177.1
Iceland	2022	162.6

Key producers of aqua feed



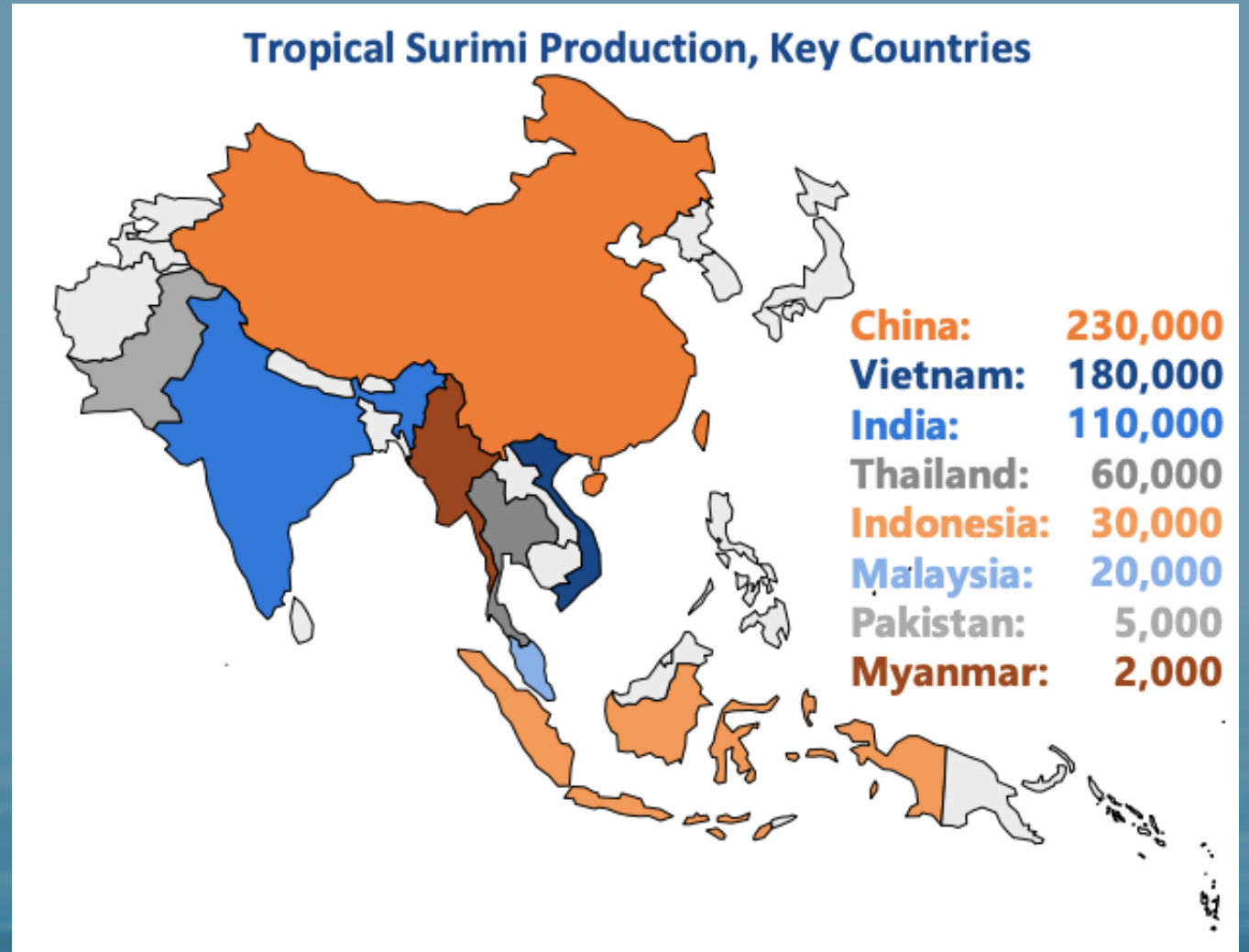
The top 10 aquafeed producing countries in 2022

Country	Sum of 2021 aquafeed tonnage (MMT*)	Sum of 2022 aquafeed tonnage (MMT)	Growth MMT	Growth %
China	21.703	23.815	(2.112)	9.730
Vietnam	6.012	4.556	1.456	(24.218)
India	2.344	2.520	(0.176)	7.490
Norway	2.015	2.013	0.002	(0.099)
Indonesia	1.690	1.650	0.040	(2.366)
Philippines	1.551	1.600	(0.049)	3.159
Brazil	1.450	1.480	(0.030)	2.068
Ecuador	1.200	1.400	(0.200)	16.666
Bangladesh	1.211	1.375	(0.164)	13.542
Chile	1.300	1.350	(0.050)	3.846

* Million Metric Tons

Altech Agri-Food Outlook | 2023

Surimi - “the other marine ingredient”



Key concerns in tropical surimi fisheries

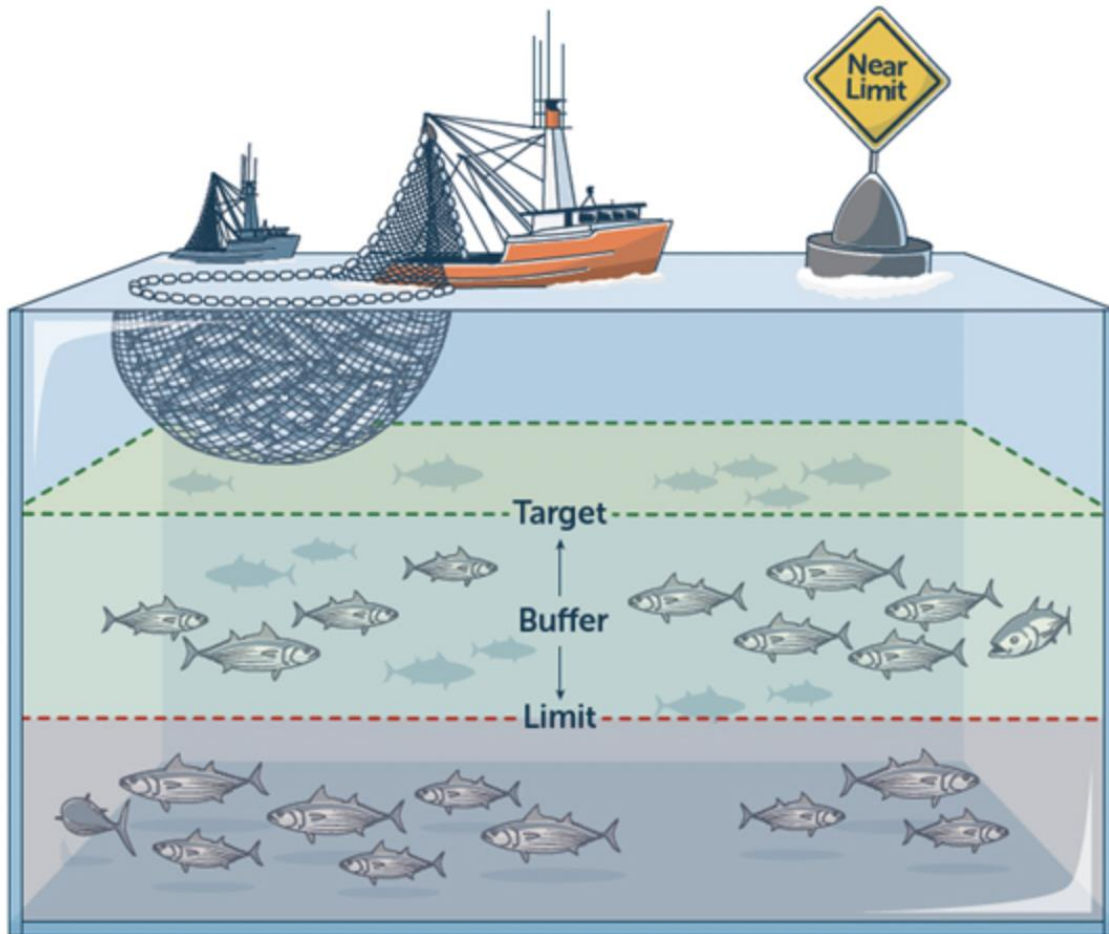
- Widespread evidence of overfishing
 - Declining catches of desirable species
 - shifting from one species to others
 - declining size of the fish
- Inadequate data collection and infrequent assessments of stocks
- Poor fisheries management – few fishery management plans and patchy control over fishing effort.
- Widespread illegal fishing
- Risk of labor abuses

The Unique Challenge of Multispecies Fisheries



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Harvest control rules



Stock Assessment: scientists figure out how many fish there are and how many they think we can harvest.

Total Allowable Catch (TAC): Managers set a cap on how many fish to harvest based (ideally) on advice from scientists. Based on fishery objectives and guided by reference points

Target reference point: Targeted level of fishing, basically the same as **MSY**.

Maximum Sustainable Yield: Maximum catch that can be removed from a population over time

Limit Reference Point: defines the beginning of the danger zone, where overfishing begins

Harvest Control Rules: provide pre-agreed automatic management response when reference point reached

Characteristics of multispecies fisheries

- Large number of species exploited and retained
- Too many species for traditional stock assessments
- “Target” vs. “non-target” concept no longer holds
- Not possible or desirable to manage all species at MSY
- More complex set of ecosystem interactions
- “Trash fish”

Why we need MMSY instead of MSY

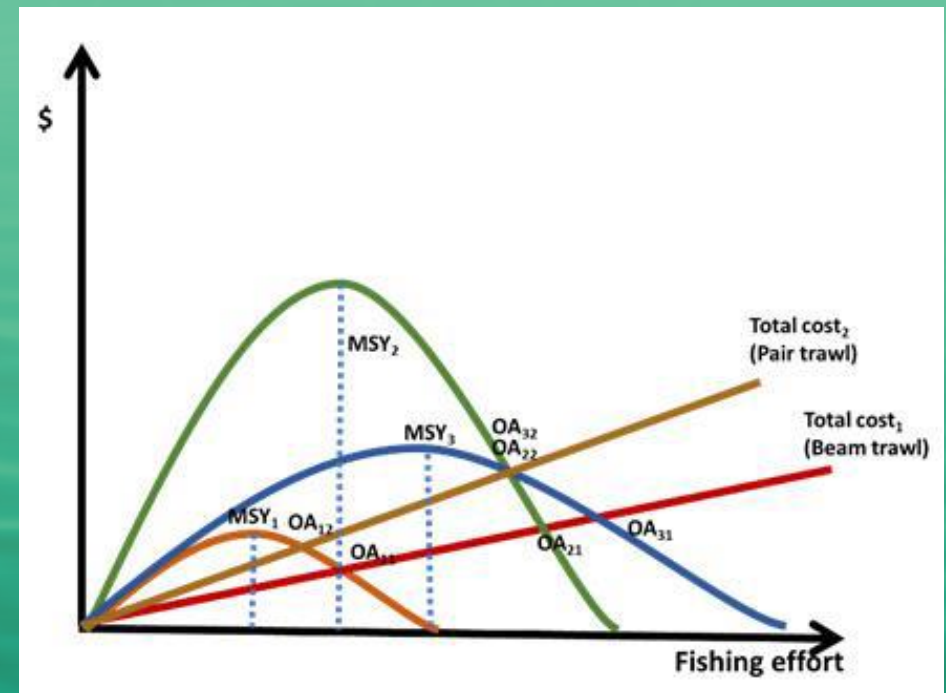
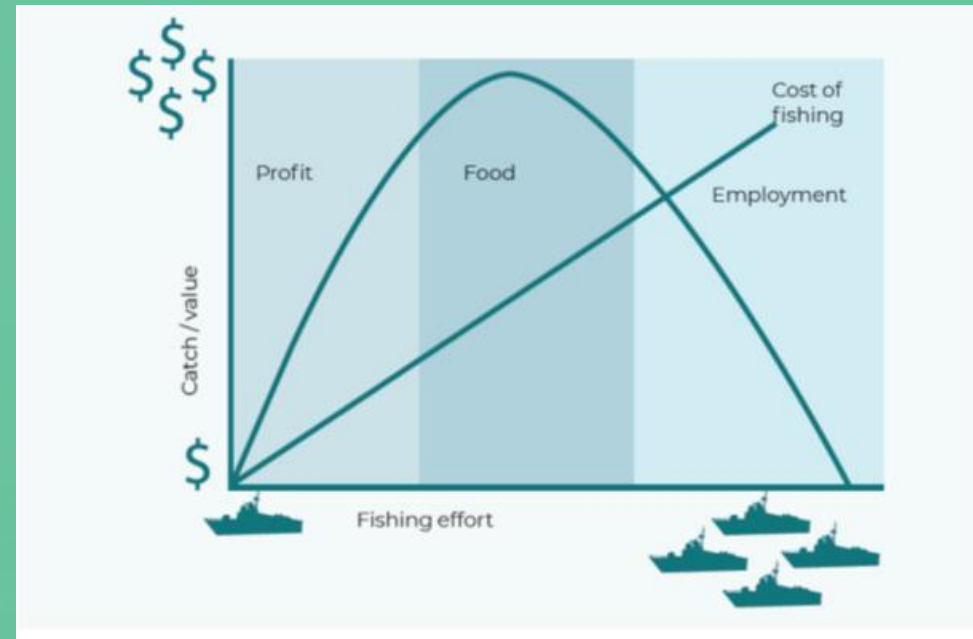
- The sum of independent MSY for a fished ecosystem is consistently higher than aggregate MMSY
- Multiple species have multiple markets; different species caught at different times in different areas for different markets
- Within limits, some ecosystem changes may be desirable because they benefit fisheries
- No single indicator is a reliable source

Basic steps for providing multispecies advice

(Rindorf et al. 2013)

- A description of the **ecosystem**, including species interactions
- A description of the main **environmental drivers and human pressures** affecting the ecosystem;
- A description of the **species composition** of different fisheries;
- An identification of the **most important interactions** which affect management of fisheries;
- A description of **how the interactions have changed** over time; and
- Advice on the **important trade-offs** which should be considered in fisheries management (e.g., what meeting the objectives for one fishery means for the objectives of other fisheries)

Tradeoffs in fishery management



Key messages for multispecies

- Improvements cannot be driven by one sector
- Objectives need to be set in consultation with a range of stakeholders
- Need to unpack “Trash fish”
- Data and tools needed to do this well are complex, but progress can be made in data-poor fisheries

Driving Improvements in SE Asian Fisheries



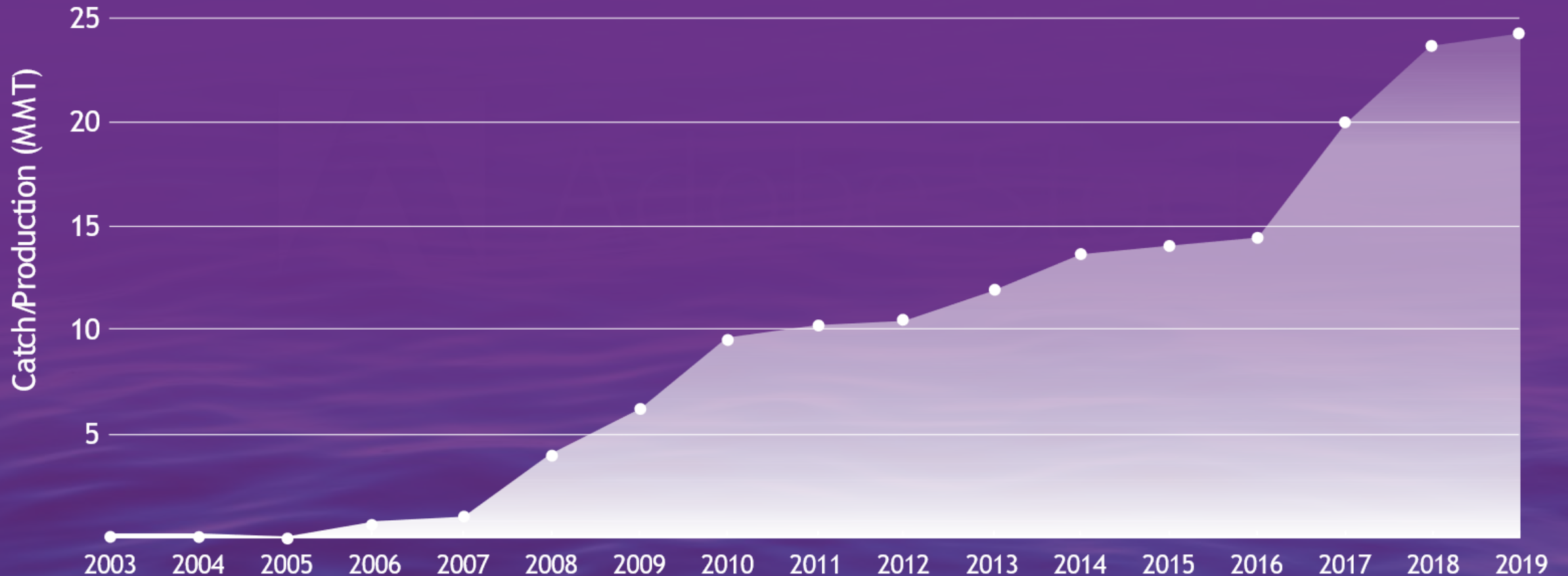
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WHAT IS A **FIP**?

- ✓ Fix all the problems in a fishery
- ✓ Engage government decision makers to act
- ✓ Industry-led, pre-competitive

Cumulative production from stocks associated to all FIPs, current and historical

(million tonnes)



FIP key elements and types (1)

	Basic FIP	Comprehensive FIP
Public evaluation	Needs assessment covering Stock Status, Management and Environment	Formal Marine Stewardship Council (MSC) Pre Assessment
Public workplan with timebound objectives	For SOME indicators	For ALL indicators
Public reporting	Update every 6 months	Update every 6 months + third party evaluation every 3 years

FIP key elements and types (2)

	Basic FIP	Marin Trust	Comprehensive FIP
Public evaluation	Needs assessment covering Stock Status, Management and Environment	Full Marin Trust Assessment	Formal Marine Stewardship Council (MSC) Pre Assessment
Public workplan with timebound objectives	For SOME objectives	Work plan and timeline to close all N/C, approved by IFFO committee	For ALL indicators
Public reporting	Update every 6 months	Annual third party review	Update every 6 months + third party evaluation every 3 years

*THE MARINTRUST MULTISPECIES
PILOT PROJECT*



History of development



2013

APFIC and FAO held a workshop to develop recommendations for tropical trawl fisheries.

2016

MarinTrust and NOAA held a meeting in Bangkok to encourage the adoption of the APFIC Guidelines.

2018

Baseline criteria and thresholds for the multispecies criteria were outlined.

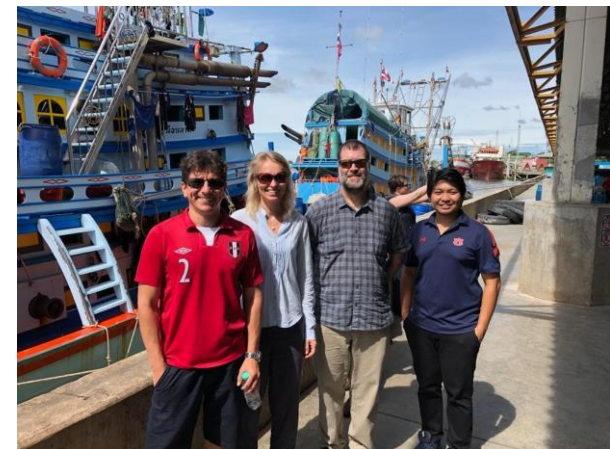
Pilot assessment process began.

2019

Training provided to assessors on the MarinTrust IP and fishery assessment process.

2020

Gulf of Thailand mixed-trawl fishery Accepted onto the Improver Programme as the first multispecies pilot project.



Multispecies pilot project



- The objective of the multispecies criteria is to enable the assessment of highly complex fisheries in region such as SE Asia, in which as many as 300 species are regularly caught. These fisheries do not fit the conventional approach to fishery assessment.
- Major adaptations are required for these regions and their fisheries if they are to meet expectations for the sustainable supply of fish for both direct consumption and for fishmeal and fish oil.
- The criteria have been developed by experts and are based on 'best practice' fisheries management as specified in international norms and guidance.

There are currently two Fishery Improvement Projects (FIPs) that are using this assessment approach and are Accepted as part of the MarinTrust Improver Programme:

- Gulf of Thailand mixed-trawl fishery (Thailand)
- Vung Tau multispecies fishery (Vietnam)

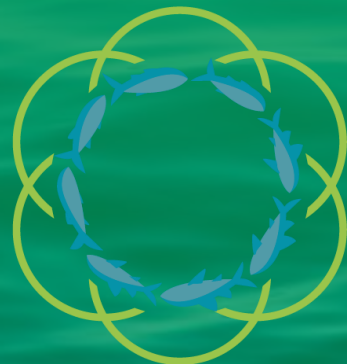
Opportunities for Engagement



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Global Roundtable on Marine Ingredients

- Joint initiative of IFFO and SFP launched in October 2021
- Independent Chair Arni Mathiesen
- Goal to drive environmental and social improvements in key fisheries
 - West Africa
 - SE Asia
- Facilitating improved LCA assessments for marine ingredients



Global Roundtable on marine ingredients





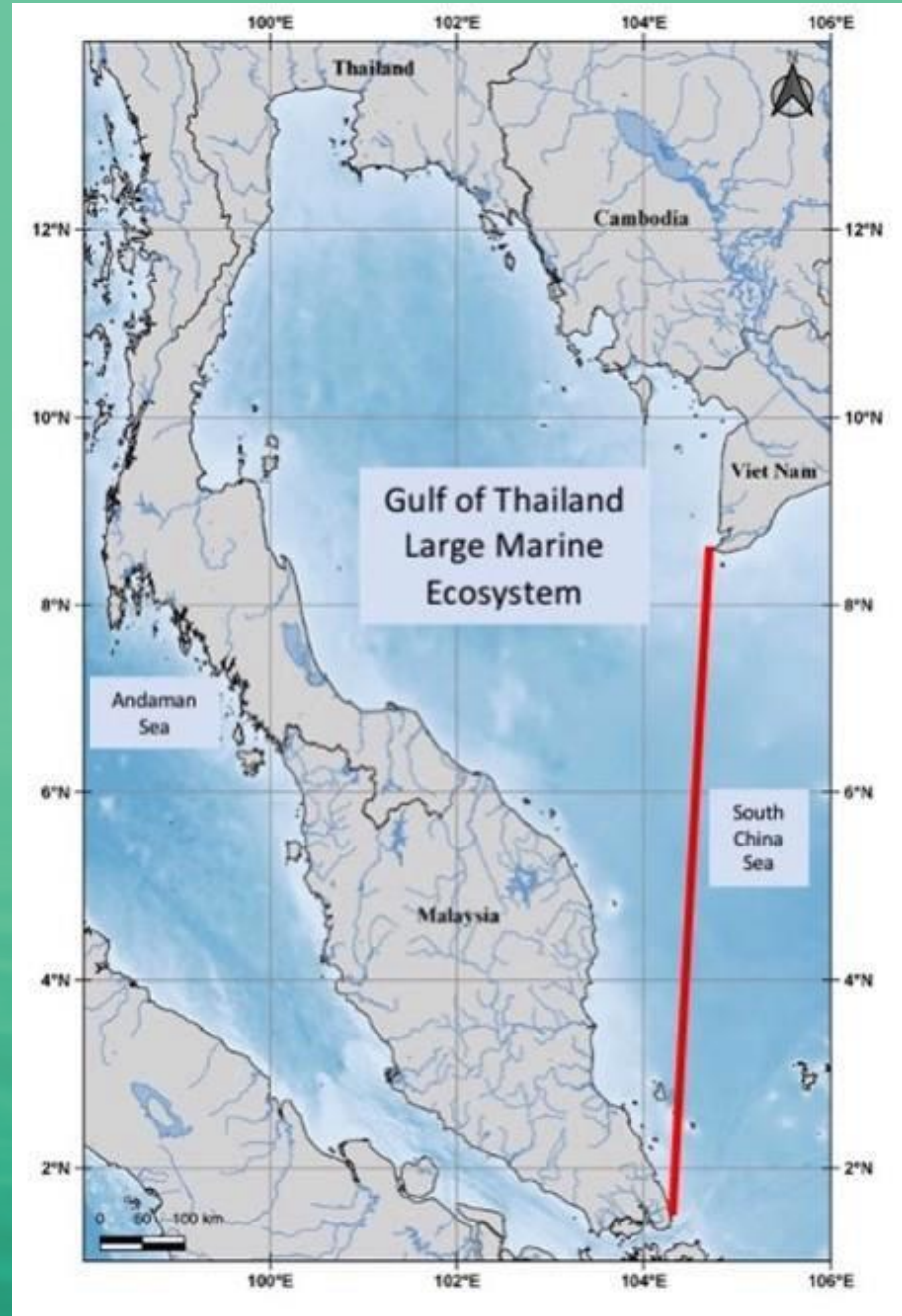
Food and Agriculture
Organization of the
United Nations

Promoting the blue economy and strengthening fisheries governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries (GoTFish Project)

PPG Regional Stakeholder Consultation
[Virtual] 5th April 2021

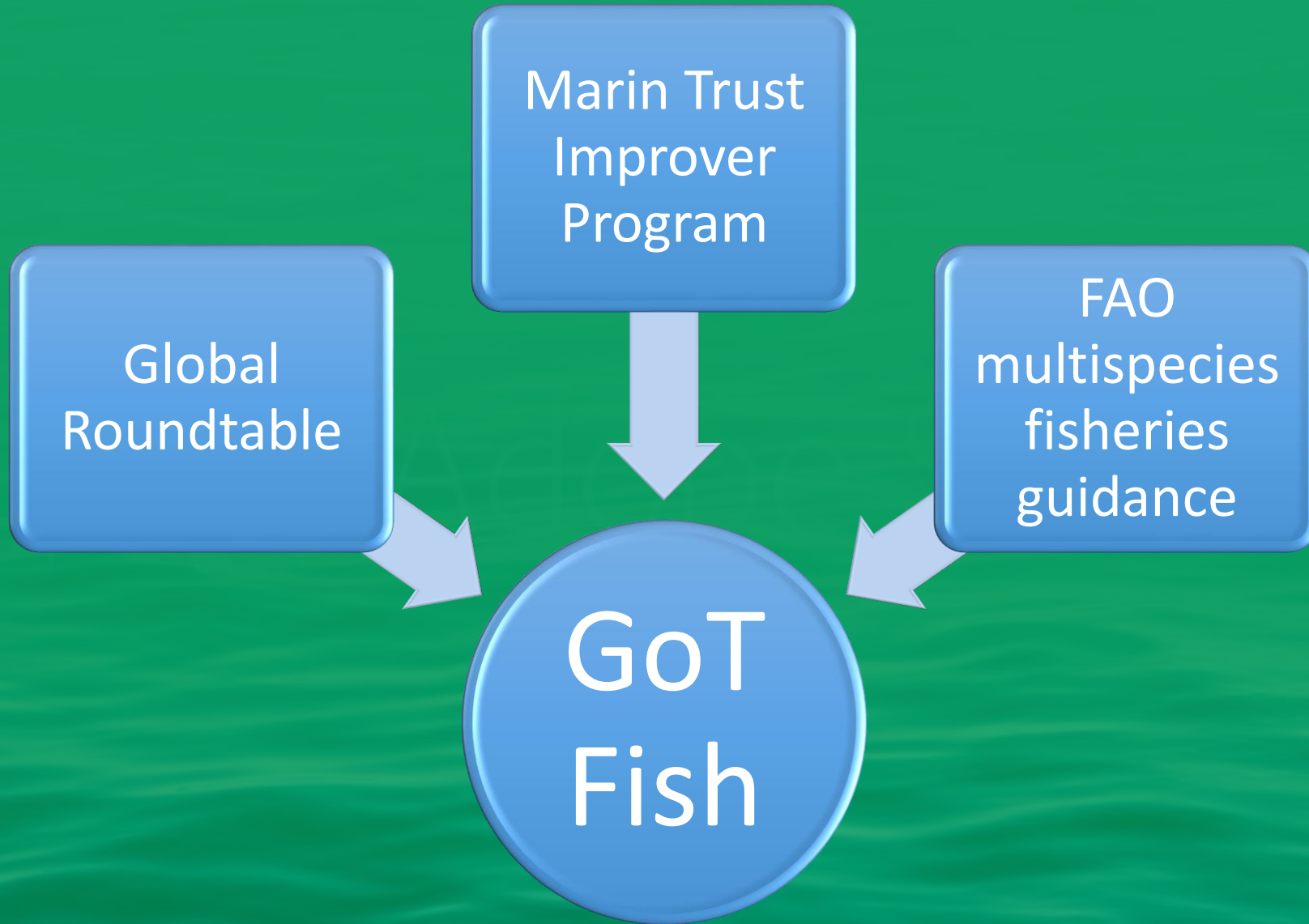


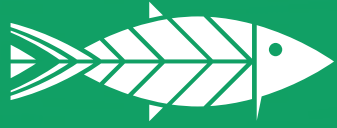
GoT Fish project area



GoT Fish key components

- **Component 1: Regional transboundary fishery governance and management strengthened**
 - Strengthening regional fisheries management
 - Implementing the Ecosystem Approach to Fisheries
- **Component 2: Alignment of incentive mechanisms**
 - Developing and using market incentives to drive improvements





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Thank you!

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