THE INDONESIA MSC Improvement Program

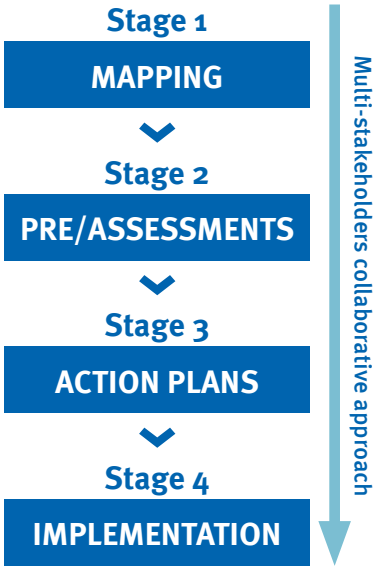
Why Indonesia?

Indonesian fisheries are working within some of the world's richest and most productive marine ecosystems. Indonesia is the second largest fish producer in the world and catch volumes continue to increase. Fish products account for 54% of the national animal protein intake.

However, some Indonesian fish stocks are being overfished and domestic food security, local socio-economics and marine biodiversity are at risk. To overcome these challenges, the Indonesian government has been working with stakeholders towards sustainable fisheries. Fish for Good supported these efforts and actively works with the Indonesian government, fisheries and other vital stakeholders towards more sustainable fishing practices.

Since 2019, the Indonesian Ministry of Marine Affairs and Fisheries (MMAF) and the MSC signed a Memorandum of Understanding (MoU), affirming a joint commitment to strengthening collaboration on sustainable fishing.

One of the tool used in Indonesia to achive this is MSC Improvement Program that supports fisheries to make measurable, independently verified progress towards certification



List of MSC Improvement Program and Location

Implementer	Location	Species	Gear	Volume (MT)	Year	FFG
Indonesia Blue Swimming Crab Processor Association (APRI)	Madura, East Java	Blue Swimming Crab (*Portunus pelagicus*)	Trap	4000	2021	Yes
The Happy Seafood Co. And PT Toba Surimi Industries	Medan, North Sumatra	Squid (*Urotheuthis chinensis*)	Handline	92	2021	Yes
Rekam Nusantara Foundation	Saleh Bay, West Nusa Tenggara	Leopard coral grouper (*Plectropomus leopardus*) Malabar blood snapper (*Lutjanus malabaricus*)	Handline and bottom longline	Grouper 142 And Snapper 380	2021	Yes

PT Sekar Laut Tbk	Kotabaru, South Kalimantan	Banana prawn (*Fenneropenaeus merguiensis*)	Trammel net	600	2021	Yes
PT Cassanatama Naturindo	Demak, Central Java	Banana prawn (Fenneropenaeus merguiensis)	Trammel net, Pot/ trap	111	2021	No
PT Karya Kencana Sumber Sari	Tanah Bumbu, South Kalimantan	Banana prawn (Fenneropenaeus merguiensis)	Trammel net,	227	2023	No
WWF Indonesia Foundation	Sorbay Bay, Maluku	Indo-Pacific swamp crab (Scylla serrata) Orange mud crab (Scylla olivacea)	Pot/trap	10	2021	Yes
Asosiasi Tuna Longline Indonesia	Indian Ocean	Albacore (Thunnus alalunga) Bigeye (Thunnus obesus) Yellowfin (Thunnus albacares) tuna Swordfish (Xiphias gladius).	Longline	3.714 MT 3.686 MT 7.300 1.845	2025	No

The volume number is estimated based on the data gained form ITM implementers shared at the National FIP Coordination Meeting 2024

INDONESIA

Numbers

8 ITM
~30 FIPS

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1. Blue Swimming Crab — The ITM Indonesian Blue Swimming Crab Assocation

Women's Participation in the Crab Fishery

In the ground in Madura, it's the women who are leading the way. There are around 185.000 women involve in this fishery. When the catch arrives at supplier cooking station, it's women job to inspect it, sort it and record it. Women are the dominant group in preparing and processing catch, collecting it from landing sites, cleaning it, sorting it, cooking it and taking it to market or packaging it.

Good data is the basis of effective fishery management, so she captures information on who the fishers are, how much they caught and the type of gear they used. To help ensure the catch is sustainable, she never accepts crabs less than 10cm in length or so-called berried females – those carrying eggs.

Blue swimmer crabs *Portunus swimcrabs nei* (*Portunus spp*) are among the highest export value commodities in Indonesia. To meet international demand, fisheries expanded rapidly during the 1990s, but since 2008 statistics show the stock has been heavily exploited. This threatens the local ecosystem, the national economy and the coastal communities that depended on the crabs for their livelihoods.

To reverse the effects of overfishing, the Indonesia Madura Island blue swimmer crab fishery collaborated with an NGO, the Indonesia Blue Swimmer Crab Association (APRI), to improve its environmental performance and meet the MSC Fisheries Standard. In 2020, the fishery joined the In-Transition to MSC program, which supports fisheries making verifiable progress towards MSC certification.

The fishery was awarded a Transition Assistance Fund grant in 2021 to rebuild stocks and improve awareness of and minimise "ghost fishing", which occurs through discarded gear. The grant also funded research protocols to reduce the fishery's interactions with Endangered, Threatened and Protected (ETP) species, and established committees for enhanced regional governance and compliance.

In late 2023 the fishery was granted its second grant, which it is using it to build on the quantifiable progress made.

Action Plan:

- Harvest Strategy & Control Rules: Continued focus on implementing Harvest Strategy and Harvest Control Rules for sustainable crab fishing.
- Stock Assessments & Rebuilding Program: Robust stock assessments and a rebuilding program to ensure crabs are fished sustainably.
- Vessel Tracking System: Development of a vessel tracking system to monitor fishing grounds, providing data on crab range and habitats.
- Conservation & Habitat Programs: Data from vessel tracking will inform conservation zones and habitat restoration/enhancement programs.
- Bycatch Reduction: Workshops on gear modifications and selectivity to reduce bycatch of non-target or ETP species.
- Post-Capture Handling: Introduction of new management measures to improve handling methods for non-target species.
- Co-Management Expansion: Expansion of local fishery management into a co-management program at both local and national levels to enhance enforcement and compliance.

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2. Squid – PT Toba Surimi

Strong Collaboration on Scientific Studies on Squid's Stock

The mitre squid (*Uroteuthis chinensis*) is a highly valuable resource in Indonesia, with almost half of all catch coming from the waters off northern Java and western Kalimantan. Exploitation of squid in this region has increased, but the impact on the stock is unknown.

A stock management strategy is urgently needed to prevent the squid from being overfished, protecting livelihoods and the wider ocean ecosystem. However, further information is needed on the stock and the structure of its population.

Since 2011, the main export market for the mitre squid (*Uroteuthis chinesis*) has been the UK. The importance consumers and retailers place on sustainability led the fisheries to engage and be supported by MSC's Fish for Good project, which helps small-scale fisheries in the Global South work towards MSC certification.

The main ITM goal of this fishery is to develop a fishery management plan for several squid fishing communities in Belawan, Medan, in Indonesia. This includes management tools, referred to as harvest strategy and harvest control rules, that will help fisheries in the region ensure their stock remains healthy far into the future.

The MSC support in this fishery focuses on the collaboration with IPB University to conduct research, alongside the Indonesia Ministry of Marine Affairs and Fisheries (MMAF), into where the squid stock gathers to spawn. This helps highlight any sensitive areas that fisheries should avoid to protect young squid, and ultimately their future stock.

The project collects information on the role of the stock in the wider food web, such as its role as a food source for other animals including shark, marine mammals and birds. It was also strengthen by two PhD students who conducted studies on squid population through MSC OSF Students Research Grants in 2023.

It were "Identification of squid populations to support the development of sustainable stock management measures" by Reza Alnanda and "Advancing understanding of squid population dynamics to develop strategies that will ensure stocks in North Sumatra are not overfished through DNA analysis" by Ahmad Zamroni.

> "Our research findings will give us a better understanding of the parameters we need to set in order for our fisheries to become sustainable and protect the marine environment"

Rosida Idris,
Technical Director
The Happy Seafood Co.

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3. Grouper & Snapper – Rekam Nusantara

Multi-species Improvement Program Towards Sustainability

Destructive and unsustainable fishing are major issues in small-scale fishery, including snapper-grouper. In West Nusa Tenggara Province, the Governor has established the WNT West Nusa Tenggara Regulation No. 8 of 2020 concerning Surveillance and Countermeasures against Fishing Activities that Damage Fishery Resources.

The project aims to develop strategies to help fish stocks recover and manage habitats and ecosystems in Saleh Bay, Indonesia. Snapper and grouper are important commodities in the province of West Nusa Tenggara and ensuring these stocks are fished sustainably is important for both food security and to maintain the ecosystem. Improving the sustainability of this fishery is also considered to be a priority for the provincial government.

The snapper and grouper fishery has been improving its practices and joined a fishery improvement project (FIP) in 2019. It received funding from Fish for Good, which helped small-scale fisheries in developing economies to work towards MSC certification. Various activities have also been carried out, including trainings, program synchronization and coordination forums, joint patrols, and evaluations for the implementation of surveillance activities.

4. Banana Prawn – PT Sekar Laut Tbk

Industry Lead (Public Company) For MSC Program

The fishery program aims to help to improve the collection of data in the shrimp fishery, including data on the different species caught and levels of bycatch. On-board time-lapse cameras will be installed to help identify whether or not the fishery is interacting with endangered, threatened and protected species. Tracking devices will also be added to vessels so that more data can be gathered on the different areas that the shrimp are harvested from.

The South Kalimantan shrimp fishery has been in a fishery improvement project since 2017, which is being implemented by pt. Sekar Laut, Tbk in collaboration with Yayasan WWF Indonesia and been verified through ITM program in 2021.

The project support the registration of hundreds of vessels operating in the fishery and ensure each vessel can be formally identified. This will make sure catch can be segregated and identified, allowing suppliers to provide food manufacturers with information on where the catch has come from.

It also focuses to enable the Indonesian South Kalimantan shrimp fishery to improve data collection and implement a system to record which vessels catch has come from. White prawn and spot prawn are caught by traditional fishers across South Kalimantan.

The catch is then collected by a middleman in each village before being sold to food manufacturer PT. Sekar Laut Tbk.

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5. Banana Prawn – PT Cassanatama Naturindo

Multi-Stakeholder Collaboration for Banana Shrimp Fishery

The fishery targets banana shrimp using trammel nets and pots. Indonesian shrimp fisheries provide an important source of seafood for both the domestic and export market so ensuring they operate sustainably is vital.

The Indonesian food processessing and export company PT Cassanatama Naturindo started the project (FIP) in 2017, in collaboration with the Yayasan WWF-Indonesia. The FIP is also supported by Diponegoro University and the Fisheries Research Center of the Ministry of Marine Affairs and Fisheries.

PT Cassanatama established fisher cooperative units in the fishing villages that supply the company. It aims to improve the fishers understanding of their own fishing activities, including impacts on habitats and stock status and receive training in how to collect analyse and interpret catch data. Fishers will also receive training in how to reduce impacts on endangered, threatened and protected species, including how to recognise such species and how to release them safely.

Training also be provided to help fishers become spokespeople in their communities and educate others in sustainable fishing practices.

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6. Banana Prawn – PT Karya Kencana Sumbersari

Industry Lead (Private Company) For MSC Program

PT Karya Kencana Sumber Sari is deeply committed to achieving MSC certification across its entire supply chain, with a particular focus on the shrimp fisheries in South Kalimantan. The shrimp fishery in this region is a vital part of the local economy, supporting thousands of livelihoods and contributing significantly to Indonesia's seafood exports. However, like many fisheries worldwide, it faces challenges related to sustainability, including overfishing, bycatch, and the impact on marine ecosystems.

Recognizing the importance of sustainable practices, PT Karya Kencana Sumber Sari has set an ambitious goal to ensure that all its suppliers meet MSC standards. To begin this journey, the company initiated a pre-assessment in 2022, conducted by an accredited Conformity Assessment Body (CAB). This pre-assessment was a critical first step in evaluating the current practices within the shrimp fishery and identifying areas that need improvement to align with MSC requirements.

The FIP developed by the company is centered around addressing these challenges. It focuses on developing and implementing management measures that are appropriately scaled to the fishery's size and ecological significance. These measures are designed to promote sustainable fishing practices that will help maintain healthy shrimp stock levels and protect the broader marine ecosystem in South Kalimantan.

The pre-assessment report provided a comprehensive set of recommendations, which have been meticulously tailored into a FIP action plan. This action plan outlines the specific steps that PT Karya Kencana Sumber Sari and its partners will take to improve fishery management, reduce environmental impact, and ultimately achieve MSC certification. The company's commitment to this process not only aims to secure the long-term viability of the shrimp fishery but also to enhance the

7. Mudcrab – WWF Indonesia Foundation

Managing Mudcrab Fishery Through Local Wisdom

Mud crab fishers in Evu Village, Maluku, under Wear Manun group fish throughout Sorbay Bay waters within the fisheries utilization zone of Coastal Conservation Area and Small Islands of Kei Kecil Islands. They never fish in the southern part to protect the condition and diversity of mangroves where fishing is not permitted.

WWF Indonesia feels that support from relevant stakeholders is the most important aspect to implement the ITM. All the stakeholders agree that this is not only about certification, but improvement to support sustainability on the ground are the most valuable goals.

At the beginning of this FIP, the fishery struggled to engage with the all the fishers in the community as it was a new concept (FIP) that they wanted them to be adopted. They were afraid if this program would prohibit their fishing activity which were their most income source for livelihood. However, through regular discussion and approach, the fishery were able to be on the same page in this program. The fishery realized respect to the importance of sustainable fishing practice and the implementation of improvement program towards the MSC certification.

Evu Village, Maluku

8. Tuna and Swordfish – Asosisasi Tuna Longline Indonesia

Enhancing observer programs

The Indonesia Indian Ocean tuna and large pelagics longline fishery is a group of 364 vessels whose catch comprises albacore (Thunnus alalunga), bigeye (Thunnus obesus), and yellowfin (Thunnus albacares) tuna, and swordfish (Xiphias gladius).

Using longline fishing gear, the vessels operate in the Indian Ocean, within Indonesia's Exclusive Economic Zone (EEZ). The fishery has been in a Fishery Improvement Project (FIP), led by Asosiasi Tuna Longline Indonesia (ATLI), since 2019 and is part of the MSC Improvement Program. The fishery has been awarded a Transition Assistance Fund grant to aid improvements and move it towards full assessment against the MSC Fisheries Standard in 2029.

Regional Fisheries Management Organisation (RFMO), The Indian Ocean Tuna Commission (IOTC), have mandated that scientific observers are present on at least 5% of fishing trips. Increased coverage for the longline fishery will provide effective monitoring of its environmental impacts including bycatch, discards, and interactions with endangered, threatened, and protected (ETP) species.

With technical guidance from the PSDI (Directorate of Fisheries Resources Management) and scientists from BRIN (National Research and Innovation Agency), the project will also conduct observer and enumerator workshops. This will ensure observers are well trained for high-quality, standardised data collection.