

Arafura, Aru and Timor Seas Snapper and Grouper Fishery Improvement Project

Archive Date: March 2014

The Arafura, Aru and Timor Seas Snapper and Grouper FIP was transitioned from SFP to Intan Seafood (formerly PT. Ilufa) in March 2014. The following FIP report reflects the status of the FIP at the time of transition. The current FIP public report can be found on the Fisheries Improvement Indonesia website, [here](#).

Species:

Malabar blood snapper (*Lutjanus malabaricus*)
crimson snapper (*Lutjanus erythropterus*)
goldband snapper (*Pristipomoides multidens*)
duskytail grouper (*Epinephelus bleekeri*)
dot-dash grouper (*Epinephelus poecilonotus*)
greasy grouper (*Epinephelus tauvina*)

FIP Scope/Scale: Fishery level

Fishery Location: [Indonesia](#)

FIP Participants:

[North Atlantic Inc.](#)

Hilo Fish

CV. Jala Karya Mandiri

CV. Karya Samudra

PT. Inti Lautan Fajar Abadi (Intan Seafood - formerly PT Ilufa)

FIP Stakeholders:

[Ministry of Marine Affairs and Fisheries \(MMAF\)](#)

[ATSEA \(Arafura and Timor Sea Ecosystem Action\) Program](#)

[LINI \(The Indonesian Nature Foundation\)](#)

World Wildlife Fund ([WWF](#)) Indonesia

The Nature Conservancy ([TNC](#))

Sustainability Information:

For sustainability information please see:

- [FishSource Sustainability Info - Snappers nei \(Arafura, Aru and Timor Sea\)](#)
- [FishSource Sustainability Info - Grouper nei \(Arafura, Aru and Timor Sea\)](#)

Date Publicly Announced: March 2012

FIP Stage: 4, FIP is delivering improvement in policies or practices

Current Improvement Recommendations:

- Encourage snapper and grouper producers (fishing fleet owners and processors) to participate in this fishery improvement project and develop FIPs for snappers and grouper in other fishing grounds they source from.
- Snapper and grouper buyers – support their suppliers’ fishery improvement efforts and improve procurement policies that favor fishery sustainability.
- Promote traceability to ensure that the origin and status of snapper and grouper products are well known and all products source from legal fisheries.
- Support research to define stock status of Indonesian snapper and grouper and improve the availability of accurate data on catches and bycatch.
- Support the government to improve management and policies encouraging sustainable snapper and grouper fisheries.

FIP Background

The FIP for Indonesian snapper and grouper in the Arafura, Aru, and Timor Seas is now industry driven, with PT. Inti Lautan Fajar Abadi (Intan Seafood, formerly Ilufa) playing a leading role. SFP started working with North Atlantic and their supplier (PT. Ilufa) to develop the FIP for bottom longline snapper and grouper fisheries in the Arafura, Aru, and Timor Seas in 2011. SFP was involved during the initial scoping and initiation phases of the project.

The FIP was launched in 2012 with main objectives to improve the availability of accurate data on catches, retained and bycatch; support the development of a fishery management plan; and promote traceability.

In 2013, the Indonesian industry formed [Fisheries Improvement Indonesia](#) and contracted a local NGO, LINI, to undertake secretariat and project management functions (including the creation and maintaining of a dedicated website for hosting FIP public reports).

In 2014, Fisheries Improvement Indonesia assumed a leadership position, with SFP continuing to provide technical advice and market engagement (via SFPs Snapper/Grouper Supplier Roundtable).

Fishery Background:

The Aru, Arafura, and Timor Seas are important fishing grounds for snapper and grouper fisheries. Snapper (or kakap merah or “*bambangan*”) is part of the family Lutjanidae and grouper (or kerapu) belongs to family Serranidae. Three species of snapper (*Lutjanus malabaricus*, *L. erythropterus*, and *Pristipomoides multidens* (locally known as “*kurisi*” or “*anggoli*”)) are the most economically important fish for export from Indonesia. While the three species of grouper (*Epinephelus bleekeri*, *Epinephelus tauvina*, and *Epinephelus poecilonotus*), which occupy the same habitat as snapper, are also exported from these areas.

Snapper and grouper fisheries are targeted by artisanal and larger vessels. This is a highly complex fishery as it has five different “gear types” and is spread out over a huge area of the Indonesian archipelago. The types of fishing gear currently being used for snapper are drop/handline (DL), bottom longline (BLL), bottom gillnet, bottom trawls, and traps. Shrimp trawlers in the Arafura and Aru Seas often also include snapper as part of their bycatch.

Probolinggo serves as a ‘transit’ fishing base of bottom longline (BLL) fisheries operated by their headquarters in Tanjung Balai Karimun. The BLL fishing boats stop in Mayangan Coastal Fishing Port, Probolinggo, for unloading the fish caught from the Timor and Arafura Seas. Data from Fishery Office at Probolinggo Regency suggests that at least 8 fishing companies are registered in Probolinggo Fishing Port, comprising about 130 fishing vessels.

Data from the Probolinggo Fishing Port Office shows that in 2011, red snapper (*Lutjanus spp.*) contributed the biggest portion (about 33 percent) of total landings from bottom longline (BLL), followed by goldband snapper (*P. multidentis*) with 26 percent, and grouper with 12 percent).

The distribution of snapper in Indonesia covers the vast area of the archipelago, with the major fishing grounds for this species in the Eastern Timor Sea, Aru Bay, and the Arafura Sea. Data from Indonesia Capture Fisheries Statistics show that in 2010 snapper from these waters contributed more than 30 percent of the total catch, with 46,236 tonnes landed (MMAF 2012).

The total landing of snapper in Indonesia was 118,608 tonnes in 2011, valued at USD 259,884. While the total landing of five grouper species was 74,359 tonnes, with the value of USD 194,614. The other important fishing grounds for snapper are in the Karimata Strait, Natuna Sea, and South China Sea, which together contributed 13.9 percent of the total catch; followed by Tolo Bay and Banda Sea (together 11.8%); Java Sea (10.5%); and the Makassar Strait, Bone Bay, Flores Sea, and Bali Sea (together 8.1%).

Key problems/issues:

The main challenges to this fishery include:

- Comprehensive nationwide biological stock assessments for snapper (*Lutjanus spp.*) and grouper (Serranidae) are not available. Therefore, the status of snapper and grouper populations in Indonesia cannot be determined against the biological reference points. It is difficult to improve the fishery management without knowing the status and condition of the fish stock.
- Data on the artisanal snapper and grouper fisheries are lacking.
- Illegal, unreported, and unregulated (IUU) fishing is a major issue in the Timor and Arafura Seas. It is estimated that between 1980 and 2005, more than 80 percent of demersal fish, mostly red snapper (*Lutjanus spp.*)

harvested from the Arafura Sea using bottom longline was defined as unreported (Wagey et al. 2009 in UNDP 2010).

- Trawls used in the wide shallow shelf of the Arafura Sea pull in bycatch that often exceeds the intended catch.
- On the market side, buyers encounter more regulation (including health and safety issues) and traceability issues for snapper purchases in this region than in other snapper fisheries.
- The existing annual catch data from capture fisheries statistics for Indonesia do not show the annual catch estimate for each species for each type of fishing gear. Retained and bycatch data are limited or not available.

Fisheries market:

Data from the Indonesian Ministry of Marine Affairs and Fisheries (MMAF) show that the export volume of snapper from Indonesia fluctuated and ranged from 1.5 to 2.7 thousand tonnes per year with the United States, EU countries, Japan, Hong Kong, Taiwan, Singapore, Malaysia, South Korea, Australia, Thailand, and the Middle East as main markets (WPI 2009). However, the precise volume and value of exported snapper to each destination country/region were not known.

Data from the Foreign Trade Data Base (NMFS) show that US snapper imports from Indonesia in 2012 reached 787 tonnes, valued at about USD 6 million, mostly in the form of frozen boneless fillet. This means that most of the snapper from Indonesia goes to the US market. Red snapper from Indonesia is also one of the most popular seafood products commonly found in fish markets in Singapore and Malaysia.

Meanwhile, for grouper, data from the Foreign Trade Data Base (NMFS) show that US grouper imports from Indonesia in 2012 reached 26 tonnes, valued at USD 59 thousands, mostly in the form of frozen fish.

FIP Objectives:

- Improve the availability of accurate data on catches, retained and bycatch, from both artisanal fisheries and larger vessels.
- Support the development of the fisheries management plan in Aru, Arafura, and Timor Seas.
- Promote traceability by engaging supply chains to ensure that the origin and status of snapper and grouper products are well known and all products source from legal fisheries.

Progress Update:

2011

Supply chain analysis data for snapper in the Arafura and Timor Seas were collected by visiting some main landing ports in Probolinggo (East Java) and in east Indonesia (including Papua, Maluku, and East Nusa Tenggara). The work was one of the supporting components of the Arafura and Timor Seas Ecosystem Action (ATSEA)

Program, a project funded by UNDP/GEF International Waters, to provide a thorough supply chain analysis to understand the snapper fisheries from the region. The project examined the scope of the market, challenges the fisheries are facing, and strategies for addressing these challenges via private-sector alliances and market-based incentives.

SFP was also in communication with PT Ilufa, one of the major Indonesian snapper processors and producers, to start the FIP process for their artisanal and larger vessels together with their main buyer (North Atlantic). Both PT Ilufa and North Atlantic expressed interest in developing a fishery improvement project for the snapper fishery they are sourcing from. PT Ilufa's snappers come from various locations, including the Aru, Arafura, and Timor Seas. SFP assisted potential FIP members to develop a workplan and provide guidance and advice on the implementing activities.

2012

Some studies and analysis were completed, including the white paper on the snapper fishery in the Arafura, Aru, and Timor Seas and a report on the supply chain analysis for snapper fisheries in the Arafura, Aru, and Timor Seas (under ATSEA). These two reports provide greater detail on our regional strategy to catalyze the improvement project for this fishery.

In March 2012, a FIP agreement was approved and signed by FIP participants (North Atlantic and PT Ilufa). In May 2012, a FIP workplan was drafted by FIP participants. The participants agreed to start with improvements such as verifying data collection, improving compliance for monitoring and reducing IUU, and supporting an onboard observer program. In August 2012, FIP members discussed FIP budget implementation.

FIP participants were involved in the meeting with the government (MMAF) on 12 October to update progress on the FIP implementation. The meeting was held in Jakarta and hosted by the office of the Ministry of Marine Affairs and Fisheries. Meeting attendees included the Indonesian Tuna Association; Tuna Longline Association; participants of the Arafura, Aru, and Timor Seas Snapper FIP and Indonesian Tuna FIP; fisheries staff; and SFP. The outputs of the meeting were discussion of the onboard observer program and how to improve the fishing vessels' logbook reporting.

FIP participants started collecting all required documentation concerning fishing regulations, including boat registration and fishing operation. Vessel registration completed for FIP participants and vessels of FIP participants confirmed that all VMS are switch on as requested by the regulators.

2013

FIP participants provided feedback on the snapper nei (“not elsewhere identified” group of species within the genus, often generically named “red snapper”) FishSource profile for Aru, Arafura, and Timor Seas.

On 20 February 2013, Ministry of Marine Affairs and Fisheries established a Ministerial Regulation regarding Implementation of Observers on Fishing Boats and Collecting Boats of 30 GT (gross tonnes) and above, operating within the Indonesian territory and in the high seas ([Permen No.1/PERMEN-KP/2013](#)). The issuance of this MMAF decree now mandates companies to take onboard observers.

In June, FIP participants reviewed FIP implementation and identified that catch data recording using logbook still needs to be improved. Workplan for 2013 was agreed; most of the activities were a continuation of the previous improvement implementation.

SFP facilitated the Indonesian Snapper Supplier Roundtable on 16 July 2013 in Surabaya, inviting the FIP participants, other companies that are interested in learning more about the FIP, scientists, and government officials. The snapper supplier roundtable provided a venue for the attending FIP participants to offer updates on Indonesian snapper FIP implementation (the progress and challenges) and to get guidance from the government regarding data and information management to support fisheries resource management. One of the issues discussed was the newly issued Ministerial Decree requesting that vessels above 30 GT have an online vessel monitoring system (VMS), previously only required for vessels above 60 GT.

On September 30, with help from SFP, FIP participants held a technical meeting to review data collection for the logbook. This technical meeting was targeted to the captains of bottom longline vessels that catch snapper in the Arafura, Aru, and Timor Seas. The meeting was hosted by the Fisheries District Office of Probolinggo, and took place in the Fishing Port in Probolinggo, East Java (where all the snapper bottom longliners land their catches). Meeting participants included the head of the fishing vessel association; captains of the bottom longline vessels who take part in the snapper and grouper FIP in Arafura, Aru, and Timor Seas; and SFP staff. The Head of Sub-directorate of Evaluation of Fishery Resource Management, Directorate of Fishery Resources, attended to provide technical assistance, and appreciated that the meeting provided a better understanding of the issues and challenges of the data recording process for the logbook. In the meeting, the FIP participants also discussed with the Head of Sub-directorate of Evaluation the plan for having observers on board bottom longliners.

In October, Hilo Fish joined as FIP participants and signed an agreement with PT Ilufa (now Intan Seafood).

FIP participants started to report on their FIP and their snapper production for 2012 and 2013 on their own [website](#).

2014

January – March

On 17 March, FIP leader PT Ilufa presented the FIP's progress, lessons learned, and next steps during the Indonesian Fisheries Meeting hosted by MMAF and SFP in Boston at the Seafood Expo North America.

FIP participants organized a FIP meeting on 18 March in Boston (PT. Ilufa, North Atlantic, and Hilo Fish) to discuss the FIP's 2014 workplan, budget, and leadership transition process. As of April 2014, Fisheries Improvement Indonesia assumed a project leadership position and agreed to host the FIP Public Report.

References:

Ministry of Marine Affairs and Fisheries (MMAF). 2012. Capture Fisheries Statistics of Indonesia. Directorate General of Capture Fisheries.

Wagey et al. 2009 in UNDP 2010. Final Project Document: Arafura and Timor Seas Ecosystem Action Programme. United Nations Development Programme.

WPI (Warta Pasar Ikan – Fish Market News). 2009. Exports of Indonesia's Snapper.

[***Click here***](#) for a comprehensive description of FIP results

Arafura, Aru and Timor Seas Snapper and Grouper FIP Detailed Information

This FIP is currently a partnership between North Atlantic, Hilo Fish, and their supplier (PT Ilufa – now Intan Seafood). These companies express an interest in developing a fishery improvement project for the snapper and grouper fishery they are sourcing from, starting with the snappers that come from the Arafura, Aru, and Timor Seas.

Fishery Problem:

Summary of Fishery Status

a. SFP own estimate, based on data from FishSource

Current Status

There are no set biological reference points, therefore the status of the Indonesian snapper population cannot be determined against the reference points. The only rather comprehensive stock assessment at the regional scale is a stock assessment of shared stock red snappers between Indonesia and Australia in the Arafura and Timor Seas that was conducted between 1999 and 2003. Pessimistically, the study concluded that the collapse of the Arafura Sea red snapper stock is under way, especially if high catch levels are maintained (Blaber et al. 2005).

b. Other ranking systems

The fishery has been ranked by other ranking systems, such as by Monterey Bay Aquarium (Seafood Watch) and Marine Conservation Society (FishOnline):

- [Monterey Bay Aquarium](#): All imported snapper has been included on the “Avoid” list in the Seafood Watch list
- [Marine Conservation Society](#): Red snapper (*Lutjanus* spp.) caught worldwide, including from Cuba, Southeast Asia, south Atlantic, Puerto Rico, and the Gulf of Maine, is listed as “Fish to Avoid”

Details of Fishery Status

A study conducted by the National Committee of Fisheries Stock Assessment in 2005 (MMAF 2010) shows that demersal fishes (including *Lutjanus* spp.) have continuously been overfished in the Malacca Strait. In the Arafura, Aru, and Eastern Timor Seas, demersal fishes are still fully exploited and are likely to move to overfished status. Meanwhile, in the South China Sea, Java Sea, Makassar Strait, Flores Sea, and Indian Ocean, demersal fishes have been fully exploited. In the Mollucas Sea, Tomini Bay, and Seram Sea, demersal fishes have been moderately exploited, while in the Banda Sea, Sulawesi Sea, and the Pacific Ocean, the status of demersal fishes is uncertain.

In addition, a multidisciplinary collaborative research project initiated by Australia and Indonesia (1999–2003) concluded that the stock of red snappers (shared stock) in the Arafura and Timor Seas had been overfished. The pessimistic conclusion, assuming a 2002 catch of 4,000 tonnes, with present biomass levels at 11 percent of the limit reference point (biomass in 1990), is that the collapse of the Arafura Sea red snapper stock is under way, especially if high catch levels are maintained. Under the more optimistic assumption of a catch of 2,000 tonnes, the 2002 biomass is at 31 percent of the limit reference level. If the future catch is kept at present levels, the resource will continue to slowly deteriorate to a 2010 biomass that is merely 23 percent of limit reference levels (Blaber et al. 2005). However, more recent studies found out that these assumptions did not happen. The data showed that the catch of snapper from bottom longline recorded in Kupang reached 1,673.5 tonnes in 2009, and this has not included the catch from fishnet that landed in Merauke, Tual and Ambon and other snappers that are transshipped in the sea (Prisantoso and Badrudin 2010).

FIP Progress Update:

Results/ FIP Stage	Indicator of Success	Scope/Sc ale	Specific Details	Date Achiev ed	List of Suppliers	Source
FIP is launched (Stage 1)	Sustainability evaluation is publicly available	Fishery level, Arafura, Aru, and Timor Seas	FishSource profile	January 2012		FishSource
		Fishery level, Arafura, Aru, and Timor Seas	Supply Chain Analysis of Indonesian Snapper in Arafura, Aru and Timor Seas	July 2012		
	Fisheries improvement recommendat ions publicly available	Fishery level, Arafura, Aru, and Timor Seas	White paper on Indonesian snapper focusing on Arafura and Timor Seas has been developed	January 2012		White paper: Indonesi a Sustaina ble Snapper Initiative in Aru, Arafura,

						and Timor Seas
FIP is formed (Stage 2)	Suppliers are organized	Fishery level, Arafura, Aru, and Timor Sea	Several meetings were held by North Atlantic and their supplier (PT. Ilufa) to discuss the development of a FIP for snapper from the Arufura, Aru, and Timor Seas. Both companies agree to form a FIP for the snapper fishery they are sourcing from.	December 2011 to February 2012	North Atlantic and PT. Ilufa	Meeting notes
		Fishery level, Arafura, Aru, and Timor Seas	Hilo Fish joined the FIP	October 2013	PT. Ilufa and Hilo Fish	FIP Agreement
FIP is encouraging improvement (Stage 3)	Workplan with annual improvement milestones is publicly available	Fishery level, Arafura, Aru, and Timor Seas	FIP agreement approved and signed by all FIP participants	March 2012	North Atlantic and PT Ilufa	FIP Agreement
		Fishery	FIP	May	North	FIP

		level, Arafura, Aru, and Timor Seas	participants agreed on workplan for 2012-2013	2012, revised in November 2012	Atlantic and PT Ilufa, and two fishing companies supplying PT Ilufa (Karya Samudera and Jala Karya Mandiri)	workplan Detailed workplan
		Fishery level, Arafura, Aru, and Timor Seas	FIP budget implementation was discussed, but has not yet been drafted, as more information is needed	August 2012	North Atlantic and PT Ilufa	
		<u>Fishery level, Arafura, Aru, and Timor Seas</u>	FIP meeting to review implementation	June 2013	PT Ilufa, Karya Samudera, Jala Karya Mandiri, and North Atlantic	Workplan for 2013
			FIP participants organized FIP meeting to discuss workplan and budget for 2014 and transition period.	March 2014	PT. Ilufa, North Atlantic, Hilo Fish	Meeting minutes 2014 FIP Workplan
	FIP members engaging regulators	<u>Fishery level, Arafura, Aru, and Timor</u>	FIP participants attended stakeholders meeting	October 2012	North Atlantic, PT Ilufa, Karya Samudera and Jala	Meeting notes

		<u>Seas</u>	facilitated by the Directorate of Fish Resources, the Ministry of Marine Affairs and Fisheries Office		Karya Mandiri	
		Fishery level, Arafura, Aru, and Timor Seas	Documents related to fishing regulation is in place	October 2012	PT Ilufa, Karya Samudera and Jala Karya Mandiri	Documents related to fishing regulation
		Fishery level, Arafura, Aru, and Timor Seas	Indonesian Snapper Supplier Roundtable meeting	July 2013	FIP participants, East Java based-seafood processors, and government representatives	Meeting Notes
		Fishery level, Arafura, Aru, and Timor Seas	Technical meeting to review the data collection for logbook	30 September 2013	North Atlantic, PT Ilufa, Karya Samudera and Jala Karya Mandiri	Meeting Notes
		Fishery level, Arafura, Aru, and Timor Seas	FIP presented progress, lessons learned and next steps during the North America Seafood Show in Boston	March 2014	PT Inti Luhur Fajar Abadi	Power point presentation

FIP is delivering improvement in policies or practices (Stage 4)	Fisheries policy changed	Fishery level Arafura, Aru, and Timor Seas	Ministry of Marine Affairs and Fisheries established Ministerial Regulation regarding Implementation of Observers on Fishing Boats and Collecting Boats (Permen No.1/PERMEN-KP/2013)	February 2013	Ministry of Marine Affairs and Fisheries	1 PERMEN-KP 2013
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References:

Blaber, S., C. Dichmont, R. Buckworth, Badrudin, B. Sumiono, S. Nurhakim, B. Iskandar, B. Fegan, D. Ramm, J. Salini. 2005. Shared Stocks of Snappers (*Lutjanidae*) in Australia and Indonesia: Integrating Biology, Population Dynamics and Socio-Economics to Examine Management Scenarios. *Reviews in Fish Biology and Fisheries*, Vol. 15, No. 1-2, p. 111–127.

Ministry of Marine Affairs and Fisheries (MMAF). 2010. *Capture Fisheries Statistics of Indonesia 2010*.

B. I. Prisantoso and Badrudin. 2010. Management measures for red snappers resources (*Lutjanus* spp.) in the Arafura Sea. *Ind. Fish. Policy Jour.* Vol.2 No.1 p. 71–78.