

# **Sustainable Indonesian Tuna Initiative**

## *White paper*

**Sustainable Fisheries Partnership**  
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### **Overview**

Indonesia is the biggest tuna-producing country in the world, contributing 15 percent of global tuna production in 2009, followed by the Philippines, China, Japan, Korea, Taiwan, and Spain. The main commercially caught tuna species in Indonesia are skipjack (62% of total tuna landings), yellowfin (29%), bigeye (7%), albacore (1%), and Southern bluefin (1%). The fishing grounds for Indonesian tuna fall under two convention areas, Indian Ocean and Western Central Pacific Ocean (WCPO). The Western Central Pacific Ocean currently supports the largest industrial tuna fishery in Indonesia, contributing almost 80 percent of total Indonesian commercial tuna production, while Eastern Indian Ocean contributes 20 percent (FAO 2010).

Indonesia became a member of the IOTC (Indian Ocean Tuna Convention) in 2007, and the CCSBT (Commission for the Conservation of Southern Bluefin Tuna) in 2008. Indonesia is still in the process of achieving full member status for the Western Central Pacific Fisheries Commission (WCPFC).

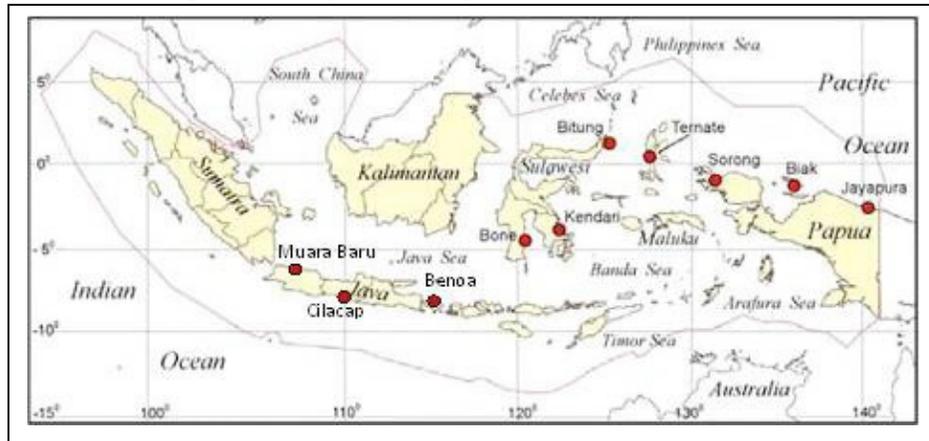
Tuna products are the second biggest Indonesian fishery product export, after shrimp, contributing 14 percent of total export value, about USD 352 million, in 2009. The main markets for tuna exported from Indonesia are Japan (35%), the United States (20%), Thailand (12%), European Union countries (9%), and Saudi Arabia (6%) (MMAF 2010).

Indonesian tuna fisheries are multi-gear and multi-species, and are largely artisanal in scale. Various levels of government license vessels according to size: district government (vessels < 10 GT), provincial government (10-30 GT), and national government (> 30 GT). The number of non-motorized fishing vessels in Indonesia is estimated at 220,000–250,000, while vessels with outboard and inboard motors number 160,000–180,000 and 80,000–90,000, respectively. Large industrial tuna fleets (purse seine and longline) operate throughout most of the WCPO east of Indonesia (Hamilton et al. 2011).

The predominant tuna fishing gears used are purse seines of various sizes, pole and line, troll, handline, and longline. Most of these gear types make sets on fish aggregating devices (FADs), which are artificial anchored or drifting floating structures deployed in the ocean to attract aggregations of fish. FADs have been used in Indonesia for centuries. Many of the FADs are installed at depths of 400 to 4,000 meters and located up to 50 nm from the coast, with exceptions in North Sulawesi where FADs are usually located within 10 to 20 nm of the coast. Animals living in the open ocean often gather underneath floating objects such as logs or artificial FADs. Handliners in Indonesia often fish on FADs owned by purse seine companies and are allowed to do so as long as they respect the FAD owners and their gear. Furthermore, allowing handliners to fish on FADs can give purse seine owners a good idea of the possible catch composition of the school aggregating around the device. The negative impacts of FADs on the tuna population has been well documented, including overfishing of bigeye tuna in the WCPO from a combination of purse seine fishing around FADs and longline fishing, decreased health of tuna caught near FADs compared with tuna caught in free schools, and high rates of bycatch (including sharks, sea turtles and juvenile tuna) (Morgan 2011).

In general, Maluku-Papua contributes the biggest landings of albacore, bigeye tuna, and yellowfin tuna, with 26 percent of total Indonesian tuna landings, followed by North Sulawesi (24%), Bali-Nusa Tenggara (16%), South Sulawesi (12%), North Java (10%), and West Sumatra (8%) (Note: for Bali-Nusa Tenggara, North Java, and West Sumatra, the landings also include Southern bluefin tuna). Since tuna resources are abundant and scattered around Indonesian waters, fishing grounds and landing areas of tuna in Indonesia are dispersed. A significant volume of tuna is unloaded in Muara Baru (Jakarta) and Bena (Bali); three other fishing ports that carry tuna are Bitung, Ambon, and Sorong (see Figure 1).

**Figure 1. Major Ports of Tuna Fisheries in Indonesia**



Indonesia contributes about 4 percent of total global fresh and frozen tuna exports, exporting about 65.5 thousand tonnes in 2007, valued at USD 150 million. Indonesia also contributes more than 4 percent of total global canned tuna exports, exporting about 52.4 thousand tonnes in 2007, valued at USD 151.9 million (Globefish 2010). Indonesia is also one of the major suppliers to markets in the United States and Japan. As the biggest fresh and frozen tuna supplier to the US, Indonesia contributes about 27 percent (or about 13 thousand tonnes) of the total US fresh and frozen tuna import in 2010, valued at USD 112 million (NMFS 2011). Indonesia was the leader of countries supplying tuna to Japan (mainly yellowfin and bigeye), sending about 20 thousand tonnes per year to Japan's market. Indonesia only contributes about 2 percent (9,800 tonnes in 2008) of total canned tuna imported to the EU market.

Indonesian tuna fisheries are responding the market requirements for sustainability, as shown by the number of fishing companies registered in OPRT (Organization for Promotion of Responsible of Tuna Fisheries) and the companies who hold dolphin safe labels as product of Earth Island Institute (EII).

## **The Challenges**

Yellowfin and other tuna species have been exploited extensively and intensively within the coastal and the exclusive economic zones of Indonesia for over 5 decades, both by the artisanal and larger-scale tuna fisheries, challenging the sustainability statuses of these fisheries.

At the regional level, yellowfin tuna stock in the Western Central Pacific Ocean is well above  $B_{MSY}$  and fishing mortality is below  $F_{MSY}$ . Therefore, the yellowfin tuna stock in the WCPO is *not in an overfished state*. However, that portion of the stock in region 3 (west of  $170^{\circ}E$ , and including Indonesia) of the

yellowfin tuna assessment is considered to be *significantly overfished*, with 65- to 70-percent depletion of total and adult biomass (WCPFC 2009). Meanwhile, in the Indian Ocean, the stock is likely currently *in or approaching an overfished state* and overfishing has likely been occurring in recent years (IOTC 2010).

Bigeye tuna in the Western Central Pacific Ocean is understood to be approaching an *overfished state* if it is not *already slightly overfished*. Meanwhile, in the Indian Ocean, the stock size of and fishing pressure on bigeye tuna are close to optimal, indicating that the stock is *fully utilized* or *exploited* (IOTC 2010).

The Indonesian tuna fisheries face challenges, including:

- Inaccurate, incomplete, and inconsistent catch data reporting
- No data on the artisanal tuna fisheries (the current available annual catch data for Indonesian tuna fisheries is collected from larger vessels)
- Existing annual catch data from Indonesian capture fisheries statistics do not show the annual catch estimate for each species for each type of fishing gear
- Retained and bycatch data is limited or not available at all
- Illegal, Unreported and Unregulated (IUU) catches remain a major problem faced by the tuna industry.

Through Indonesian tuna associations, the tuna fishing industries claim that they have complied with the catch data reporting standards required by both national and international regulations. The Indonesian Tuna Association (ASTUIN) claims that it has played an important role in helping government to provide data to be used in the international arena. Its members submit harvest data to the government. The catch data of the members of the Indonesian Tuna Longline Association (ATLI) are available through the association's website. The government also collects data independently through their district offices. The government produces yearly information about fisheries production statistics and the value of the fisheries.

## **The Role of the Sustainable Fisheries Partnership**

The Sustainable Fisheries Partnership (SFP) is interested in engaging with the tuna fishing communities – including catchers, producers, and buyers – in fishery improvement projects (FIPs), where collaboration is likely to yield measurable improvements and gains for assured supply. A fishery improvement project creates an alliance of buyers, suppliers, and producers to work together to improve a fishery by pressing for better policies and management while voluntarily changing purchasing and fishing practices to reduce problems such as illegal fishing and bycatch impacts.

The Sustainable Fisheries Partnership works with seafood buyers and producers to promote the long-term security of their own supply by improving fisheries management and marine conservation. We build the private sector's capacity to make a difference in two ways:

- By developing business practices and alliances that support sustainable sourcing of seafood
- By advocating stronger government fisheries and marine conservation policies.

Our strength in the disciplines of economics, marine science, communications, and well-balanced advocacy help buyers and suppliers exert their influence where it matters most: in their supply chains and among the key decision makers who govern fisheries.

The Partnership improves access to information that buyers rely on to guide responsible seafood sourcing. We recommend specific improvements in management. And we provide critical assistance to seafood

companies as they press governments for fisheries improvements—such as effective harvest regulations, monitoring and enforcement, and measures to cut off trade in illegally-caught seafood.

The Sustainable Fisheries Partnership helps seafood producers and buyers to promote the long-term security of their own supply by improving fisheries conservation. We help companies and other stakeholders advocate for appropriate regulation of fisheries, choose their sources wisely, and meet their own sustainability commitments.

### **The Sustainable Solution for Indonesian Tuna**

1. Post information on the fishery on FishSource and other necessary information on SFP's website ([www.sustainablefish.org](http://www.sustainablefish.org)). SFP's FishSource ([www.fishsource.org](http://www.fishsource.org)) posts available data on Indonesian tuna. A user advisory group will be formed to provide comments on the status of the fishery. Other important news regarding this fishery will also be updated on the SFP website ([www.sustainablefish.org](http://www.sustainablefish.org)) to engage broader audiences.
2. Develop an MOU between SFP and the tuna longline industries and/or associations.
3. Identify improvements required in consultation with the associations, with emphasis on improvements, including the need to meet the basic requirements for developing sound, sustainable tuna fisheries.
4. Identify pilot improvement projects (e.g., data collection/accurate catch reporting and bycatch monitoring and reduction).
5. Develop and strengthen communication with Indonesian tuna buyers in the US and EU. Through direct communication and informational meetings during major seafood trade shows and by posting information on SFP websites, buyers will be kept apprised of progress in Indonesian tuna improvements and guidance on which fisheries are moving toward sustainability.
6. Collaborate with other NGOs working on tuna fisheries issues in the country.
7. Support research to define the stock status of Indonesian tuna. A comprehensive nationwide biological stock assessment for tuna is not available. It is difficult to improve fishery management without knowing the status and condition of the fish stock. Therefore, initial steps should be taken to support the work of experts from local universities and other organizations to study the tuna population in some priority areas and to develop a conservation strategy for the tuna population. Also, we must support the harvest data collection conducted by the industries, which should be incorporated into stock assessment analysis.
8. Support the development of the tuna management plan to improve sustainability of the fisheries.

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