



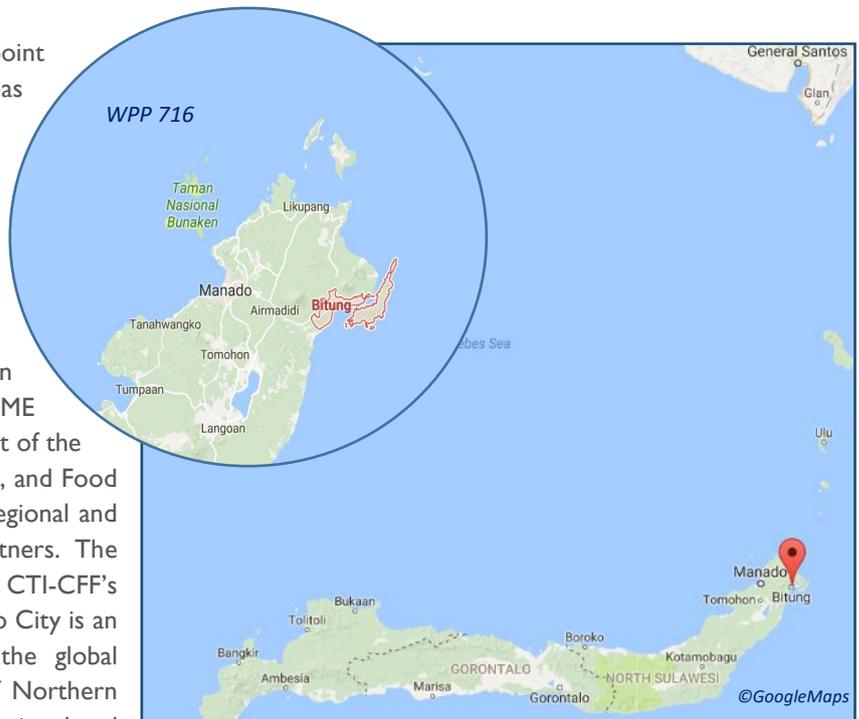
THE USAID OCEANS AND FISHERIES PARTNERSHIP

SITE PROFILE: BITUNG, INDONESIA

OVERVIEW

The USAID Oceans and Fisheries Partnership (USAID Oceans) works to strengthen regional cooperation to combat illegal, unreported, and unregulated (IUU) fishing, promote sustainable fisheries, and conserve marine biodiversity in the Asia-Pacific region. The partnership seeks to achieve these objectives through the development of a Catch Documentation and Traceability System (CDTS) that supports enhanced traceability, fisheries management, and human welfare. Working across ASEAN and Coral Triangle member countries, USAID Oceans has established two learning sites—General Santos City, Philippines and Bitung, Indonesia. These sites will support the development, implementation, and testing of the CDTS and will serve as a hub for regional knowledge sharing for replication and expansion.

Bitung, Indonesia. Bitung is situated at the point where the National Fisheries Management Areas (WPP) 715 and 716 meet. The waters of the Sulu-Sulawesi Marine Ecoregion (SSME) that surround Bitung are so globally significant that during the past two decades they have become a high priority for global conservation and sustainable development efforts. In 2003, the governments of Indonesia, Malaysia, and the Philippines developed an international ecoregion conservation plan for the SSME. By 2009, management of the SSME was formally prioritized through the establishment of the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF), supported through several regional and global governmental and non-governmental partners. The international agreement to create and cite CTI-CFF's International Headquarters in neighboring Manado City is an indication of the significant importance that the global community places on the marine biodiversity of Northern Sulawesi. Today, the area remains of significant regional and international policy interest in terms of both marine biodiversity conservation and fisheries management (particularly for tuna species). The strategic location of Bitung makes it an important area for the implementation and testing of Oceans' CDTS, demonstration of a sustainable tuna fisheries management plan, and a tremendous opportunity for traceability and value chain analysis studies.



BIODIVERSITY



Learning site ecosystem. WPP 716 is comprised of coastal areas with mangroves, coral reefs, and deep waters. More than 86 species of fish are harvested from this fishing area, which is extremely diverse and includes rare species such as the coelacanth, an ancient and rare order fish. In addition, more than nine species of crustaceans and more than 10 species of mollusks can be found in WPP 716 waters. Fisheries production from this fishing area, amounting of 255 thousand tons in 2012, consisted of large pelagic fish species (48.5%), small pelagic fish species (33.1%), demersal fish species (9.8%), reef fish species (5.2%), crustaceans (2.4%), and other living aquatic species (1.0%).



At-risk species present. In 2016, the United States Presidential Task Force on Combating IUU Fishing established a list of “at-risk species” that are particularly vulnerable and threatened by IUU activities. WPP 716 is home to 10 at-risk species, including blue swimming crab, dolphin fish, groupers, red snappers, sea cucumber, shark, shrimps, swordfish, and tuna species.

Priority biodiversity threats. IUU fishing practices, combined with overfishing, pose serious threats to the region’s biodiversity. Among other impacts, IUU fishing increases uncertainty regarding catch and fishing efforts. This uncertainty and lack of data to assess current fish stocks results in difficulties in formulating and implementing fisheries management plans.

SITUATIONAL ANALYSIS



Economic Profile

Annual Landings. Tuna comprise the majority of fish landed at Bitung Ocean Fishing Port, although over 60 species are notably landed at the port. In 2015, approximately 36,000 tons of fish products were landed in the Bitung Oceanic Fish Port, down from a high of 122,704 metric tons in 2014. The drop in landings is the result of a change in regulations which aim to eliminate illegal and harmful fishing practices.

Proportion of Fish Landed. Of the catch landed in Bitung in 2015, approximately 81% were tuna species—skipjack (40%), yellowfin and bigeye (21%), and frigate/mackerel tuna (19%). In addition to tuna, scad, squid, Spanish mackerel and marlin are also landed, but in volumes much less significant than those of tuna species.

Processing. Bitung is home to multiple tuna canneries that purchase fish landed at Bitung (including from pole-and-line and handline operators) as well as import frozen product from the Philippines and Papua New Guinea (PNG). Some canneries operate their own purse seine fleet, largely fishing in the western Pacific Ocean around PNG.

Primary tuna processing operations in Bitung focus on: (1) fresh or frozen tuna products, primarily for high-value international markets (Japan/Northern Asia, Europe, and the United States.); or (2) canned products for domestic and regional export markets. In 2015, most of Indonesia’s export products were either prepared/preserved (43%) or frozen (41%).

Export. Globally, Indonesia currently ranks as the sixth largest tuna exporting country by value, and Bitung is one of the main tuna fishing ports and processing centers in Indonesia. Between 2011 and 2015, tuna from Bitung was exported to 34 countries in total, but the top five market destinations, Germany, United Kingdom, Thailand, the United States, and Switzerland, comprise 79% of the total 116,662.33 metric tons of product exported. For the European Union, demand for traditional Fish Aggregating Device (FAD)-caught purse seine canned tuna products are sluggish, while demand for sustainable FAD-free Marine Stewardship Council (MSC)-labelled tuna and pole and line product is high and rapidly increasing. In Southeast Asian countries, demand for both raw material and processed tuna products has been rising, and increases in demand are expected from Middle-East, Latin America and Africa.

Supply Chain Overview

Vessel Types. Both small and large-scale fisheries operations are active in WPP 716, with both fishing households and commercial operations landing catch at Bitung Port from small, medium, and large-scale vessels. As of September 2016, there were 1,040 vessels registered in Bitung. Approximately 46% of the registered vessels use hand line as the main fishing gear, 32% use purse seine (off-shore tuna purse seiners as well as in-shore small pelagic purse seiners), 3% use pole and line and 19% of registered vessels utilize other gears.

Small vessels make up approximately 95% of the fleet, and include non-power and outboard motor boats (80%) as well as small vessels weighing under five gross tons (4.8%). Small scale vessels are not required to have fishing licenses to operate. Vessels between five and thirty gross tons are required to obtain a fishing license from the Provincial Fisheries Services, amounting to 4.8% of the current fleet.



Many women are employed in Bitung's port, serving a large role in post-landing transactions and processing.

Fisherfolk and Fishing Methods. There are approximately 6,700 people engaged in fishing activities around the Bitung Fishing Port, including fishers, factory workers, merchants. The average number of crew on a mini purse-seiner is 19, 20 on a large purse-seiner, six on a handliner, and 27 on a pole-and-line vessel.

Fisher interviews conducted by USAID Oceans indicated that the average overall trip distance of the vessel was 76 nautical miles (nm). The collection vessels travel the farthest, up to 250nm, spending and spend on average 15 days per trip at sea. Handline fishers went 16 day trips to 64 nm (6-200nm) on average. Pole and line vessels averaged 77nm (4-100nm) on seven day trips. Mini purse seiners travel to 59nm, while large purse seiners average much longer trips that span from 21-180 day trips and as far as 200nm. Fishing time varies, dependent on the type of fishing gear used, but on average is approximately seven hours per day.

Under current government regulations, vessel monitoring systems (VMS) and automatic identification systems (AIS) systems are in place for the vessels >30GT, covering only a small portion of Indonesia's active fishing fleet. Fishers interviewed indicated that 33.9% have GPS and radio and 23.3% have GPS, radio, and VMS.

Processing Operations. In Bitung, fish and fishery products are processed both on large and small scales. Large-scale processing includes canned, fresh frozen, and fresh chilled tuna, and is distributed to both domestic and export markets. There are 67 registered

processors in Bitung, performing processes such as loining, packaging, smoking, and freezing of tuna species. Combined, the processors have a production capacity of 939 tons per day and a total installed capacity of 17,756 tons of cold storage. There are seven registered tuna canning businesses with a combined total installed capacity to produce 585 tons of tuna per day, and store 8,600 tons of raw material.

Priority Challenges

Illegal and Overfishing. IUU fishing practices in WPP 716 have many harmful impacts, including overfishing and habitat destruction. Foreign fishing vessels that operate in the fishing zone increase the difficulty of regulation and enforcement, requiring action on a regional and international level. Collaborative, regional action to supplement national interventions, including increased trade regulations for fisheries products would support decreased prevalence of IUU activities.

Human Welfare. Human welfare concerns are present in Bitung's tuna fisheries. Based on surveys conducted with individuals working in Bitung tuna canneries, many are employed as contractual workers with very short-term employment (e.g., day laborers) who work without employment security and are not entitled to basic employee rights or benefits. Similarly, fishing boat laborers often operate as undocumented workers, without basic employee rights or benefits. There are reported instances where such fishing boat labors failed to return home to their families, without explanation. Ensuring a safe and transparent labor chain is central to human welfare priorities in the Bitung learning site.

Economic Development. Indonesia's National Medium-Term Development Plan for 2015-2019 aims to increase economic competitiveness, particularly through increasing the country's comparative advantage of natural resources. The Plan aims to increase the productivity and efficiency of fisheries, a goal that will require enhanced fisheries management to bolster the health and abundance of the region's fisheries resources. Fisheries management must be an integral part of enhancing the competitiveness of fisheries products to ensure a sustainable future for the country's marine ecosystems and biodiversity. As such, Indonesia is taking steps to develop and implement eco-certification and catch documentation and traceability to optimize fisheries management.

OPPORTUNITIES

Combating IUU fishing and enhancing the sustainability of marine resources presents many complex challenges. Bitung, and many other ports throughout the Asia-Pacific region face the issues of overfishing, increased demand for fisheries products, and complications in regulation and enforcement due to vast fishing territories and transboundary fishing, among others. With these challenges, however, come opportunities for intervention and enhancement. Three main areas of intervention with high-

impact results include: **ensuring tuna vessels comply with fisheries laws and regulations**, **enhancing fisheries management plans** to sustain fishery resources and optimize socioeconomic benefits, and **increasing regional collaboration** to establish coordinated efforts in fisheries management, regulatory design, and enforcement approaches.

As one of two USAID Oceans learning sites, the U.S. Agency for International Development, the Southeast Asia Fisheries Development Center (SEAFDEC), and the Indonesia Ministry of Marine Affairs and Fisheries will work together to:

- **Better understand supply chain value chains.** A value chain assessment will be conducted to identify the main export markets and articulate the cost, benefits, and return on equity.
- **Enhance fisheries management through an Ecosystem Approach to Fisheries Management.** An in-depth analyses will be performed to support EAFM plan development that links with broader Sulu-Sulawesi Sea Regional Frameworks.
- **Address human welfare concerns to support policy development and intervention.** Human welfare scoping will enable USAID Oceans to better understand human welfare issues, including instances of gender inequality and labor rights abuses in the fisheries sector.
- **Develop strategic partnerships that support CDT system implementation.** Engagement with the private sector will secure their strong support, thus ensuring a mutually beneficial and financially sustainable CDT system.
- **Implement and test the Catch Documentation and Traceability System** in the General Santos City Fish Port Complex, including use by both small and large-scale fishers.

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