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THE USAID OCEANS AND FISHERIES PARTNERSHIP

LEARNING SITE: BITUNG, INDONESIA

OVERVIEW

The USAID Oceans and Fisheries Partnership (USAID Oceans) conducted a study in late 2016 to assess the value chain in the Bitung tuna industry. The study was undertaken by Marine Change, an advisory firm focused on investments in the Asian marine sector that advances sustainable business. The value chain assessment (VCA) was conducted as a key first step to understand the catch documentation and traceability (CDT) processes and requirements along the value chain, identify the main exporting markets and explore market/buyer requirements and customer preferences. In turn, this study will support the CDT design approach, partnership development and industry engagement in Bitung and along the value chain.

FINDINGS

FISHERY OVERVIEW

Tuna Production at Bitung Oceanic Fish Port: 36,842 tons (2015); tuna species represent 81-90% of all fish caught and reported in Bitung between 2011-2014.

Vessel and Gear Types: 1,040 registered vessels: 80% < 30 GT and 32% < 5GT

- **Handline fishery:** 46% of registered vessels use hand line
- **Purse seine fishery:** 32% of registered vessels use purse seine gear
- **Pole and line fishery:** 3% of registered vessels use pole and line gear
- **Other fisheries:** 19% of registered vessels use other gear, including beach seine, gill net, rawai trawl and bottom longline

Fishers: The typology of fishers varies widely in Bitung, from small scale independent fishers who own and operate small vessels and conduct daily trips, to fishers employed by small, medium and large businesses that operate fishing boats taking longer trips to sea. There are approximately 6,700 people engaged in fishing activities around the Bitung Fishing Port.

Traders: 11 registered/licensed traders and an unknown number of informal traders play an aggregation and logistics role in Bitung, moving fish from landing point to processors for export or to local markets.

Processors: 67 processors are registered in Bitung, performing activities such as loining, packaging, smoking and freezing of tuna species. Combined, these processors have a production capacity of 939 tons/day and a total installed capacity of 17,756 tons of cold storage and 1,136 tons of Air Blast Freezer storage.

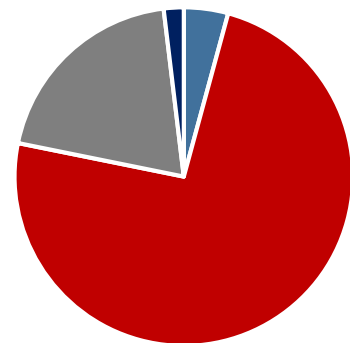
Canneries: 7 tuna canneries are registered in Bitung with a combined total installed capacity of 585 tons of tuna/day.

Export Markets: Germany, United Kingdom, Thailand, U.S. and Switzerland comprise 79% of the total product exported from Bitung between 2011-2015.

Production and Export Volumes (2015): 45,208.5 tons total

- **Yellowfin:** 9,662.7; 1,152.0 exported to U.S., 525.8 to Switzerland, 291.2 to Australia, 213.5 to Spain and smaller shipments to other international markets
- **Skipjack:** 18,263.1; 4,085.0 exported to UK, 3,352.3 to Germany, 283.2 to Netherlands, 219.4 to Switzerland and smaller shipments to other international markets
- **Eastern little tuna:** 53.9

Tuna Production Volume by Gear Type, Bitung (2015)



- Handline (46%)
- Purse Seine (32%)
- Pole and Line (3%)
- Other

- *Frigate*: 8,746.5
- *Bigeye*: 116.4
- *Other species*: 8,366.0

EXISTING CATCH DOCUMENTATION AND TRACEABILITY PRACTICES

Entities involved in capture fisheries in Indonesia are subject to various government requirements for business licenses, such as licenses to capture, transport fish or run a fish business. Similarly, fishing vessels, depending on size, are subject to licensing and documentation requirements, such as registration documentation. For fishing vessels <5GT, catch certificates, issued by the government, are required. The Port Authority is responsible for issuing Catch Certificates. There are two catch certificate documents: the initial sheet and the derivative sheet.

The Catch Certificate – Initial Sheet is a requirement for fishing boats above 5GT, and consists of the following documents:

- Application Form
- Photo identification of requesting party
- Draft SHTI (Sertifikasi Hasil Tangkapan Ikan – a Fisheries Catch Certificate statement containing information on the catch of fish landed from fishing vessels for the purpose of recording)
- Surat Izin penangkapan Ikan (SIPI, a license to capture fish)
- Pas Besar/Kecil
- Surat Tanda Bukti Laporan Kedatangan Kapal (STBLKK) - Letters of Evidence Reporting Ship Arrival
- Laporan Hasil Verifikasi Pendaratan Ikan (LHVPI) – Report of Fish Landing Verification, a report prepared by the Supervisory Fisheries after verifying the landing of fish as a condition of issuance SHTI.
- Copy of logbook
- SKPI Surat Keterangan Pendaratan Ikan (SKPI) – Certificate of Fish Landing (SPKI), if outside of Bitung

Once issued, the Catch Certificate – Initial Sheet contains: fish species, catch areas, dates, estimated live weight, estimated weight to be landed and verified weight landed.

The Catch Certificate – Derivative Sheet is requested by the exporter, which is typically the cannery or processor. It can only be issued with the approved Catch Certificate – Initial Sheet as an attachment, as some of the information will derive from the Initial Sheet. In order to obtain The Catch Certificate – Derivative Sheet, the requesting party must submit the following documents:

- Application form
- Photo identification of requesting party
- Derivative of SHTI
- Fish purchase receipt
- Laporan Hasil Verifikasi Pendaratan Ikan (LHVPI) – Report of Fish Landing Verification
- Photocopy of SIPI and Pas Kecil
- Photocopy of Surat Tanda Bukti Laporan Kedatangan Kapal (STBLKK) – Letters of Evidence Reporting Ship Arrival
- Vessel forms
- Packing list and invoice
- Bill of Lading
- Surat Keterangan Pendaratan Ikan (SKPI)
- Notification of export goods

Once issued, the Catch Certificate – Derivative Sheet contains a description of the product (e.g., fresh tuna, frozen loin, etc.), the species and verified landed weight, a list of vessels that provided raw material and volumes for each vessel (vessel name, registration number), the name and address of the importer, and transportation information (number of flight and bill number, vessel name and flag, container number, etc.).

In Bitung, tuna processors and canneries report that complying with catch certificate processes is cumbersome, time consuming, and costly. Furthermore, once the paperwork is submitted, there are long waits (at least 5 days) for catch certificates to be issued by the government.

OPPORTUNITIES AND CHALLENGES FOR CDT ALONG BITUNG'S SUPPLY CHAIN

The current information collection systems in Indonesia are complex and gather vast quantities of paper-based data. Through an electronic CDT system, however, this 'paper mountain' can be reduced and data collection integrated with the management systems of both businesses and government.

CHALLENGES

Anticipated challenges to implementing a CDT system include:

Lack of Financial/Price Incentives: In Bitung, local market players indicate that there is no financial incentive associated with fully traceable seafood products; no price premium is paid for product with catch certificates nor for additional information beyond that required for the catch certificate. Consequently, any electronic CDT system established in Bitung needs to incorporate other benefits to incentivize adoption.

Data Systems Managed by Different Government Agencies: Current data collection systems at point of harvest are managed by different government agencies, and there is limited cross-checking and validation. Data accuracy is a challenge for Bitung fisheries.

Limited Verification of Point of Harvest Data for Small-Scale Vessels: Currently, catch certificates and logbooks are not mandatory for small-scale vessels of <5GT and a catch certificate initial sheet is only required for catch exported to the EU. Since this information is not mandatory for small vessels, a significant number of the active artisanal fleet in Bitung does not provide any catch information.

At-Sea Monitoring Restricted to Large-Scale Vessels: Current regulations only require VMS and AIS systems for vessels >30GT, only a small portion of Indonesia's active fishing fleet. These systems are perceived to be costly, small-scale vessels, so cost effective and accurate systems will need to be developed and deployed.

Limited Connectivity and Automation Prevents Data Cross-checking: Current data management systems and processes in Indonesia do not enable local authorities that monitor and issue catch certificates to access VMS data to cross-check data accuracy prior to issuing catch certificates. Furthermore, no automated alerts exist to identify fishing grounds transgressions. Improved connectivity and automated alerts could empower authorities to better manage fleets and IUU fishing.

INCENTIVES

In Bitung, benefits and incentives can be incorporated in the design and roll out of an electronic CDT system to encourage its adoption, improve its market penetration, and ensure its usability and sustainability. Incentives include increased access to:

Stable Markets: Ensuring stable markets, which, in turn, provide stable/high prices, can help fishers create financial safety nets, traders with efficiency, and processors and canneries with efficiency and planning.

Financial Services: For fishers, and to a lesser extent traders and processors, access to financial services such as bank and savings accounts, tailored financial products for loans and investments, and long-term credit can incentivize compliance with traceability requirements.

Insurance: Providing access to insurance products, such as health insurance for fishers or property insurance for vessels or facilities, could incentivize participation in an electronic CDT system.

Other Services: Other services, such as training (on best fishing practices, product handling, book keeping, quality management, international practices, etc.) and subsidies could serve as incentives for compliance with a CDT system.

Information: Particularly for fishers with limited access at sea, providing essential information on topics such as safety, weather, prices, fishing groups, operating expenses, and changing government regulations or programs, would be a strong incentive to utilize an electronic CDT system. On-shore users would also welcome timely information on prices and government regulations in order to improve their bargaining power.

Efficiency Improvements: Streamlining data access and catch documentation processes for fishers can improve their efficiency. Similarly, streamlining paperwork, transactions, and report generation to remove redundancies will help trader, processors and canneries comply with traceability requirements, inform management decisions and speed up transition times.

INDONESIAN COASTAL TUNA SUSTAINABILITY ALLIANCE

Three organizations active in Indonesia, Masyarakat dan Perikanan Indonesia (MDPI), Asosiasi Perikanan Pole & Line Handline Indonesia (AP2HI) and the International Pole and line Foundation (IPNLF), share common objectives to enable Indonesian coastal tuna caught one-by-one to enter the market at a premium price under various certification schemes, with full traceability in place. They also aim to create benefits at the community level for the small-scale fishers involved.

In May 2016, the leadership of these three organizations, together with the USAID Oceans team, agreed on the need to develop an alliance, the Indonesian Coastal Tuna Sustainability Alliance (ICTSA), to work towards common goals, with a clear five-year strategy and plan for the 2016 – 2019 period. Marine Change and Future of Fish will provide key support for the development of the alliance and the partnership with USAID Oceans, in analyzing the traceability system and building a sustainable business model to scale and sustain the CDT system in the long-term.

ICTSA draft phased strategy:

- Phase 1 (September – December 2016): research and understand the traceability landscape, CDT system gaps assessment, value chain analysis, alliance business model development and initial design of the demonstration/testing phase (phase 2)
- Phase 2 (2017): deploy the CDT system demonstration, monitor and review performance, communication successes and challenges, identify resources and develop long-term expansion and scaling strategy for the wider tuna sector in Indonesia
- Phase 3 (2018-2019): scale the CDT system to other sites and incorporate more companies and features, and become self-funded by end of phase 3

METHODOLOGY

Marine Change conducted a rapid value chain assessment of the tuna sector in Indonesia, focusing on Bitung. Marine Change identified the main actors and stakeholders by determining the scope of the tuna value chains from point of catch to final consumer, developed a series of semi-quantitative interview tools to further capture data and views at the main value chain transaction points, and then conducted extensive ‘on the ground’ interviews with the main actors and stakeholders at the Bitung Oceanic Fish Port. The team identified priority end-markets, their export requirements and the perceived value of improved traceability in those markets. Finally, the team focused on the CDT requirements for different stakeholders in Bitung, highlighted leverage points for CDT and explored the business case for implementing a CDT system in Bitung. This was conducted through a mixture of desktop research and on the ground interviews.

The USAID Oceans and Fisheries Partnership (USAID Oceans), a partnership between the U.S. Agency for International Development and the Southeast Asian Fisheries Development Center (SEAFDEC), is working to strengthen regional cooperation to combat IUU fishing, promote sustainable fisheries, and conserve marine biodiversity in the Asia-Pacific region. The backbone of the program is the development and implementation of country-specific, financially sustainable CDT system. This CDT system will be integrated with existing government systems, will also incorporate human welfare data elements, and will be demonstrated within an Ecosystem Approach to Fisheries Management (EAFM) framework.

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