

The Value of Traceability for Business

Impacts and Lessons Learned | THE USAID OCEANS AND FISHERIES PARTNERSHIP

The [USAID Oceans and Fisheries Partnership \(USAID Oceans\)](#) is a five-year, regional program working throughout Southeast Asia to bridge the public and private sectors to develop fully transparent seafood traceability systems that combat illegal, unreported and unregulated (IUU) fishing. In Indonesia, the program has partnered with a range of supply chain actors for fully traceable tuna products that bring benefits to actors in Southeast Asia, as well as back to markets and consumers in the United States. The following case study presents the benefits of “bait-to-plate” electronic traceability systems, as seen through USAID Oceans’ partner, Nutrindo Fresfood Internasional.

In 2017, Nutrindo joined USAID Oceans’ network of partners to establish full-chain electronic catch documentation and traceability (eCDT) for tuna products harvested in Southeast Asia that are imported into international markets with seafood traceability requirements, like the United States and Japan. This is done by documenting the seafood’s journey from its point of catch to its final point of sale to consumers. To establish full chain traceability, partnerships are required throughout the seafood supply chain, from the fishers who are the first to touch the fish to those that process and export the fish. USAID Oceans, together with its partner and grantee, [Yayasan Masyarakat dan Perikanan Indonesia \(MDPI\)](#), have recruited small- and large-scale industry partners—like Nutrindo—in USAID Oceans’ learning site at Bitung, Indonesia to test “bait to plate” seafood traceability technology.

PARTNER PROFILE

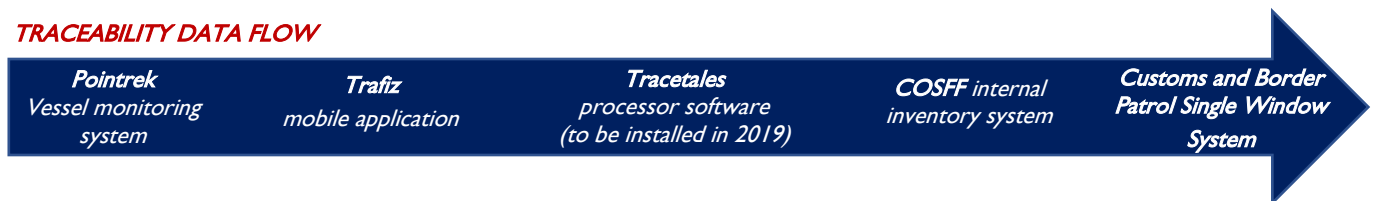
PT. Nutrindo Fresfood Internasional is a tuna fishing and processing company, established in 2002 in Bitung, North Sulawesi, Indonesia. Nutrindo processes several types of tuna products, from fresh sashimi tuna, called “Saku” to ultra-frozen sashimi tuna. Saku is processed and packed as a ready-to-eat sashimi product, sold daily at international super markets, including in the United States and Japan. The company supports one-by-one caught tuna fishing—the most sustainable method of fishing.

USAID Oceans-supported supply chain partners and traceability technologies

PRODUCT FLOW



TRACEABILITY DATA FLOW



Nutrindo both catches its own tuna, as well as collects and purchases tuna from small-scale fishers to supplement the product that the company catches itself using sustainable, small-scale methods. In June 2018, Nutrindo began using [Pointtrek](#) Vessel Monitoring System (VMS) technology, customized through USAID Oceans’ support to also enable at-sea capture and transmission of seafood traceability data, as well as two-way ship-to-shore communication. With the technology, Nutrindo can communicate with and track its fleet, reduce manual data entry and communications, as well as comply with national and international regulations. The company traces the tuna it sources from small-scale fishers and the fish suppliers who act as a middleman between the fishers and the company using [Trafiz](#), a mobile application that enables mobile data entry that is automatically shared with Nutrindo for “bait to plate” traceability.

Benefits of Traceability

Nutrindo has seen numerous benefits to its business since implementing the *Pointrek* and *Trafiz* traceability tools, including:

- **Increased Communication for Fleet and Plant Management** – Two-way, real-time communication has resulted in a host of benefits for fleet managers, captains and crew. Previously, communication was only available via radio on days with clear weather. Now, through messaging and vessel-tracking functions, it is easy to track ship position, catch results and routing plans. The on-board VMS system also offers optional add-on monitoring features for fishing, navigation and fleet management, such as temperature sensors, fuel consumption monitors and closed circuit TV.
- **Reduced Staff Reporting Time** – Paperwork has been reduced with real-time electronic reporting. Previously, catch information was relayed by radio, manually recorded, and then typed into a messaging application to inform company staff. Time spent by fleet managers to get in touch with the vessel, record, and relay information has now been eliminated.
- **Enhanced Ability to Manage, Record Raw Materials Received from Small-Scale Fishers** – From 2017 to 2018, the amount of tuna sourced from Nutrindo’s small-scale fisheries suppliers increased by 20 percent over that sourced from its own vessels—a trend that Nutrindo expects to continue. *Trafiz* enables Nutrindo to receive traceability data direct from its suppliers, aiding it to continue complying with market traceability requirements while reducing the burden of data-entry. *Trafiz* captures more information than previously possible through manual entry, such as departure, catch and landing area, vessel name, total quantity of catch, and personal fisherman data.
- **Increased Ease in Complying with National and International Market Requirements** – The eCDT tools have improved compliance and reduced the time required to meet record-keeping requirements, eliminating the need to make in-person visits to authority offices to file paperwork. *Pointrek* has allowed the company to send reports online, saving at least one day of staff time and reducing data recording negligence and errors.
- **Enhanced Captain and Crew Experience** – Captains and crew have reported increased comfort in knowing they can communicate to shore, less paperwork, and improved route planning as they can easily check their position, predict time of arrival, and prepare those receiving their catch on land.
- **Reduced Operational Costs** – With improved fleet management and weather information, Nutrindo has been able to make data-driven decisions on when vessels will set sail, which has reduced unproductive vessel trips due to bad weather. This has saved the company as much as seven to ten million Indonesian Rupiahs (approximately \$500-900) per vessel per trip cancelled due to bad weather (the operational cost of sending a vessel out to sea). Vessels larger than three gigatons can cost even more to send to sea.

“eCDT technology has helped us improve our efficiency, reporting accuracy, and at the same time ensures every fisherman is practicing legal, reported and regulated fishing activities. We strongly recommend this technology to others and hope that with continued expansion the technology will continue to become more affordable for use by all.” – Tedy Harmoko, Plant Manager, Nutrindo



Recommendations - Nutrindo recommends that the following improvements continue to be pursued by public and private sector actors working to advance and expand the use of eCDT:

Continued reduction of technology costs and creation of financing mechanisms - While eCDT technology is becoming more affordable, the price of hardware and connectivity/airtime charges can still be significant.

Continued public and private sector eCDT integration - Nutrindo hopes governments will accept data from private sector eCDT tools to eliminate technology duplication, such as vessels installed with both government-mandated VMS technology and other traceability devices used to collect data for company use.

In addition to traceability’s numerous business benefits, the adoption of eCDT tools and systems supports marine biodiversity conservation through enhanced fisheries management, as well as the potential to create more fair and equitable supply chains for those that work in them. Learn more at www.seafdec-oceanspartnership.org.