



OVERCOMING BARRIERS

Solutions for adopting electronic traceability

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Indirect Business Benefits of Electronic Traceability





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Introduction

The global nature of the seafood trade, coupled with the fact that many high-value species are captured far from shore, has enabled the proliferation of [illegal, unreported, and unregulated \(IUU\) fishing](#). IUU fishing damages fish stocks around the globe as illegal fishers plunder more than their fair share from our oceans. Additionally, illegal fishing practices can sometimes occur alongside human rights abuses, such as trapping workers on vessels at sea - either physically or through debt. But, the world is waking up to these injustices. Government import regulations are working to ensure illegal products don't enter their national markets, media are exposing egregious practices, and some consumers are voicing their preference for certified and sustainably harvested fish ¹.

Keeping up with increasing consumer demand and strengthened regulations for sustainable seafood is difficult for the seafood industry. Often, companies in seafood supply chains find themselves burdened by antiquated, paper-based means of collecting, storing, and transferring information about their products to supply chain partners, which can bar them from joining the rest of the modern global market. Substituting paper-based methods for digital and electronic recordkeeping can help industry pace themselves with market developments. The [Seafood Alliance for Legality & Traceability \(SALT\)](#) is here to share experiences, amplify resources, and foster collaboration to help with this process.

Electronic traceability is the recording and sharing of relevant seafood product information via electronic means². Full chain, electronic traceability entails the electronic capture and sharing of seafood product information from the point of catch until the point of sale. It has the potential to make it easier for the seafood industry to comply with regulations and meet consumer demands.

Transitioning from paper-based methods to electronic logging and reporting is not easy. In fact, the process can be riddled with intimidating barriers and challenges. Thankfully, companies deliberating making the switch now are not the first companies to undergo this conversion. The trailblazers who have piloted electronic traceability, along with their NGO partners, have written case studies, described solutions that helped them overcome obstacles, and created tools to make the process easier for others. Here, [SALT](#) has distilled this information to walk the seafood industry through the barriers to adopting electronic traceability and provide potential solutions to overcoming the challenges a company might face.

This blog is the first in the series - "Overcoming Barriers: Solutions for adopting electronic traceability". This series primarily speaks to the seafood industry and covers barriers such as prohibitive cost and unclear benefits, interoperability, behavior change, and technology issues, as well as providing a range of solutions.

¹[Sterling et al., 2015](#)


²[Future of Fish Seafood Traceability Glossary](#)




The idea of electronic traceability may sound enticing, but committing to and carrying it out can be daunting. Implementing electronic traceability is an investment for businesses. It costs both considerable time and money, so the question frequently arises: Is it worth it? The first two blogs in this series explore answers to this question by addressing the following barrier:

The benefits of implementing electronic traceability are unclear, and the cost can be intimidating.

However, the indirect benefits of electronic traceability are notable:



Reduce risk of human rights abuses in supply chains



Empower marginalized groups



Improve health of fish stocks and the ocean

There are two types of potential benefits to industry from electronic traceability: the more direct economic advantages and those that are more indirect, long-term, and difficult to quantify. The latter frequently include the ecological and social benefits garnered from traceability. This blog discusses those indirect benefits of electronic traceability.



Photo Courtesy of USAID Oceans and Fisheries

“Our goal is to connect information and people to create knowledge and understanding, so that it’s more than just data,” says Dr. Sylvia of Oregon State University⁷. “Analyzing the data can help people discover relationships and make better management decisions.”

Hidden Benefits

Universal adoption of electronic traceability would yield long-term benefits that help create a better world - for the environment, people, and businesses, as sustaining thriving fish stocks is important to supporting the seafood industry. While there are many direct economic benefits to industry from electronic traceability (which will be explored in the next blog), there are also indirect benefits that are more hidden and may be surprising.

Reducing risk of human rights abuses in supply chains

Using traceability systems to record social compliance information - such as worker age, nationality, and wages - can lead to an increased level of accountability regarding labor and human rights. When supply chain information related to worker welfare is made more transparent, providing that worker privacy and security are proactively considered and protected, there is the potential for improved social responsibility^{3,4}.

Empowering marginalized groups

Electronic traceability can help to empower women, improving their digital literacy and enabling greater access to economic independence. Women are a significant part of the seafood industry workforce. They can make up nearly half of the fisheries sector in some regions, and are often the first buyers of fish at landing⁵. Empowering women by equipping them with electronic methods to capture and view information about their products can improve data collection for fisheries management, as well as improve the livelihoods of women involved in the seafood industry⁶.

³ USAID Ocean’s [Thai Union eCDT and Crew Communications Pilot: Assessment Report](#)

⁴ [Roadmap for Improving Seafood Ethics \(RISE\)](#)

⁵ USAID & IUCN’s [Advancing Gender in The Environment: Gender in Fisheries—A Sea of Opportunities](#)

⁶ USAID Ocean’s [Gender Analysis of the Fisheries Sector: General Santos City, Philippines](#)

⁷ Future of Fish’s [The Business Wins of Seafood Traceability Technology](#)

Field Example:

What began as a mobile app for fishers soon also became the platform for business collaborations between women connected to small-scale fisheries in South Africa. Women are using [Abalobi](#), a suite of mobile apps co-designed for small-scale fisheries, in ingenious ways. They use the apps for supporting financial management services and also to monetize activities related to the fishing industry. They co-developed “Abalobi Pantry,” a new branch of Abalobi mobile apps, which women use to sell traditional coastal goods at markets. For instance, the women make and sell boutique items like seaweed, sea salt, or jam from ocean products and leverage the power of traceability and transparency to gain a higher demand and premium for these products. There is undiscovered potential for innovation when women are equipped with accessible technology.

Improving the health of fish stocks and the ocean

Another potential outcome of widespread adoption of full chain electronic traceability is ecological: data from systems can be used for more effective fisheries management. Fisheries management follows the rule of many information systems: “garbage in, garbage out,” meaning information that is not accurate, up to date, and comprehensive is not going to yield useful management decisions. Fisheries managers can make better management decisions when supplied with timely and accurate catch information - a handover potentially made easier with electronic traceability. With better data in hand, there is the opportunity to work more capably towards improving the health of the oceans. **Healthier oceans and more abundant fish stocks can increase profit for the seafood industry and prevent stock collapses that can devastate the sector.**

Up Next

The benefits described above are those reaped by everyone when electronic traceability is widely embraced. But, there are direct business benefits for companies as well. Read more about the direct business benefits [in the next blog in the series](#).

You can also jump right into the conversation about barriers to implementing electronic traceability on [LinkedIn](#).

Resources

Like what you’ve read so far? Here are key resources to dive deeper into the environmental and social benefits of traceability:

WHITE PAPER**Social Responsibility in the Global Seafood Industry; Background and Resources**

FishWise

2018

This document aims to create connections across businesses, organizations, and governments to spark conversation and action as to how the seafood stakeholders can collaborate to help eliminate human rights abuses and illegal products from supply chains.

**WEBSITE****Roadmap For Improving Seafood Ethics (RISE)**

FishWise

RISE is an open, free platform that was created to help move the seafood industry towards socially responsible practices through actionable guidance and set of tools that a wide range of stakeholders (for example – producers, processors, brands, and retailers) can use to evaluate, monitor, and improve in seafood supply chains.

**PEER REVIEWED ARTICLE****The Expanding Role of Traceability in Seafood: Tools and Key Initiatives**

Lewis S.G. & Boyle M.

2017

This article gives an overview of the issues motivating the expanse of traceability in the global seafood sector and reviews the range of traceability services, tools, software solutions and due diligence measures that are currently being used.

