

When you order red snapper at a restaurant, how do you know you're getting what you paid for? And how can you tell if it was caught legally in a sustainable fishery? While apps like Seafood Watch can help make choices, they're of no use if seafood is mislabeled or was caught illegally. Traceability systems are one answer to this problem.

Traceability systems track fish from vessel to table, allowing consumers to know where fish was caught, that it was caught legally, and that it is labeled accurately—and studies have shown that we're willing to pay a premium for that information. Consumers are not the only beneficiaries of traceability—these systems can also protect the environment and support the fishing economy.

Illegal, unreported, and unregulated (IUU) fishing is a major threat to long-term fishery sustainability, representing 20

percent or more of global catch. Currently, it is all too easy to catch and sell fish outside of legal channels—and once such fish are in global commodity supply chains, they can't be distinguished from their legally caught cousins.

Traceability systems address this problem by requiring a record to show that fish were harvested legally and reported to authorities in a well-regulated fishery, thereby making it harder and more expensive to sell illicit fish. And once IUU fishing is reduced, stocks can rebound, improving both fishery health and food security. Economically, larger stocks also provide for larger—but still sustainable—legal catches. In addition, fishermen should gain from price increases when the supply of IUU fish is shut off.

Despite these benefits, few fisheries currently include integrated traceability systems—and each gap in data collection or transmission presents an opportunity for fisheries fraud. ELI is working to identify and overcome the barriers to development and implementation of effective traceability systems both in the United States and globally.

Here at home, a variety of regulatory data-collection and reporting requirements have created an embryonic traceability system—but key data are not always transferred, while other data are (believe it or not) still collected in triplicate on carbon

paper. For example, U.S. fish buyers often must issue a "fish ticket" to record each purchase from a vessel—but the fish ticket is not referenced when the same fish are sold to a wholesaler or distributor, even though buyers may pass along other data related to origin, quality, or certification status.

By contrast, the private sector is far ahead, and a few groups have already developed tools to allow automatic data transfer and tracking across the entire supply chain. Gulf Wild and ThisFish, for example, provide online tools that allow customers to see which specific vessel landed their particular fish. Similarly, certification standards, such as the Marine Stewardship Council, have developed "chain of custody" systems to ensure that fish from certified fisheries are kept separate from non-certified fish.

By identifying regulatory data gaps and learning from ongoing nongovernmental traceability systems, ELI can help fisheries managers and regulators improve their data collection and reporting. With simple changes, we can move closer to a transparent, fraud-free supply chain for domestic fish without creating new bureaucratic requirements.

Traceability problems can be much worse outside the United States—and particularly in West Africa, where foreign "pirate trawlers" claim an estimated 37 percent of the catch. Developing countries often lack basic regulatory structures to manage their fisheries or the enforcement capacity to prevent foreign vessels from fishing illegally in their waters and shipping their booty to foreign markets.

The road to traceability in these countries is a long onebut ELI can help take an important step by assisting countries in building fisheries management systems and ensuring that their regulations provide for the collection and transmission of the key data needed to trace fish back to their origin. We have long collaborated with West African countries to address natural resource challenges from development of forestry laws in Liberia to design of an international commission for the Guinea Current ecosystem. Building on our past work, ELI hopes to provide the technical assistance and resources needed to address IUU fishing and protect threatened fishery resources.

When I go out to eat, I try to choose seafood from well-managed fisheries—but my knowledge of seafood doesn't help if "Florida red snapper" is really catfish from Vietnam. Traceability systems are not a magic bullet for ending seafood fraud—but they are an important tool in our ongoing battle to protect marine fisheries and livelihoods and enable consumers to take control of their plates.