

Your ECOLO.GICAL footprint—

Look for the Sustainability Label

Calculating whether your actions are sustainable is tricky. It may be possible for one person to consume environmental goods and services at a high rate, but what if everyone consumed them at the same rate? Equally complex, how can you, as an individual, determine whether your actions are sustainable? Assembling the relevant information is nearly impossible. To illustrate, suppose someone asked whether your weekly tuna sandwich is sustainable. Some of the information you would need to know includes where your tuna came from (a can is not the answer) and how many other people are eating sandwiches with tuna caught from the same fishery. Currently this information is not printed on the label.

Such information soon may be provided by the Marine Stewardship Council. The Marine Stewardship Council is a nonprofit, nongovernmental organization that was set up in 1996 by the World Wildlife Fund and Unilever, a multinational corporation that produces many goods, including processed foods made from fish, such as fish sticks. The goal of the Marine Stewardship Council is to provide information that allows consumers to purchase fish that are harvested in a sustainable manner. This information will appear as an "eco-label" that signifies that the seafood was harvested in a sustainable manner.

Decisions about whether a fishery is being managed in a sustainable fashion are based on three criteria:

Criterion 1: A fishery must be conducted in a manner that does not lead to overfishing or depletion of the exploited populations. For populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery.

Criterion 2: Fishing operations should allow for the maintenance of the structure, productivity, function, and diversity of the ecosystem (including the habitat and associated dependent and ecologically related species) on which the fishery depends.

Criterion 3: The fishery is subject to an effective management system that respects local, national, and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

These criteria are related to the expanded definition of carrying capacity in this chapter and the principles of sustainability from Chapter 1. The first criterion reads like the definition that is applied to nonhuman populations—resources cannot be used faster than they are replenished. The second criterion recognizes that people can modify the environment in a way that alters its carrying capacity—in this case, the methods used to catch the fish cannot disrupt the habitat and diversity (both functional diversity and the strength of linkages in the food chain, as discussed in Chapter 8) in a way that reduces the carrying capacity of the local environment. Criterion 3 recognizes that carrying capacity also has a cultural component—remember that sustainability principle 3 in Chapter 1 states that sustainable use of resources must promote equity. A fishery cannot be sustainable if it is managed in a way that benefits only a portion of society.

As of April 2004 the Marine Stewardship Council had certified ten fisheries as sustainable. These fisheries include an Alaska salmon fishery, the rock lobster fisheries in western Australia and Baja California, and the Thames Blackwater herring fishery. Certification means that the fish caught from these fisheries carry the Marine Stewardship Council eco-label. As of April 2004 this eco-label appeared on 195 products sold in seventeen countries.

How does the Marine Stewardship Council eco-label help consumers and producers? For producers, certification carries several potential benefits. After the Thames Blackwater herring fishery was certified, the price of its fish rose by nearly 50 percent. This price jump is essential to the financial health of the fishery—remember from sustainability principle 4 in Chapter 1 that both the biology and economics must be sustainable. For the Alaskan salmon fishery, the eco-label may allow sellers to differentiate wild fish from farmed fish. This separation may help sales: Over the past two decades the price and catch of Alaskan salmon declined due mostly to the availability of less expensive farmed fish. Many people feel that wild fish taste better than farmed fish, and some people are concerned about the environmental effects of fish farming. If the eco-label gives consumers confidence that the fish they are buying are wild, they may be willing to pay more.

The eco-label also may increase market access. Many developed nations have laws that require goods and services to be produced in environmentally friendly ways. These laws serve two purposes—to protect the environment and to protect domestic producers against less expensive imports. Often these laws are used to prohibit sales from developing nations. This excuse for banning imports may be thwarted by an objective measure of sustainable production. That is, a developing nation can use the eco-label to argue against any efforts to exclude its fish from markets in developed nations.

Eco-labels also benefit consumers and the environment. Labels allow consumers to determine whether their fish have been caught in a sustainable manner. This information is important to some consumers—sales of Marine Stewardship Council labeled fish and fish products are growing between 10 and 20 percent per year. And as retailers try to market Marine Stewardship Council fish, their efforts increase consumer awareness about the sustainability of current fishing practices. For example, one U.S. supermarket chain sponsored a marketing program titled "Fish for Our Future" in which it highlighted Alaskan salmon fishing practices. This effort probably reached more people than the total number of students taking environmental science classes in U.S. colleges and universities.

Ultimately, the degree to which your weekly tuna sandwich is sustainable depends on how the fish are caught. You, your children, and your grandchildren may be able to eat a weekly tuna sandwich if you are willing to spend a bit more for fish that are certified by the Marine Stewardship Council. Almost by definition, fish caught in a sustainable manner are more expensive because fewer fish are caught and the techniques are designed to reduce environmental impacts. Whether these benefits justify the higher price is up to you.

ADDITIONAL READING

Roheim, C.A. "Early Indications of Market Impacts from the Marine Stewardship Council's Eco-Labeling of Seafood." Mimeo.

STUDENT LEARNING OUTCOME

 Students will be able to explain how sustainable management goes beyond simply harvesting a resource in a manner consistent with the rate at which the environment generates new supplies.