True Cost Accounting for Sustainable Resource Management

Resource use makes life possible. Resources include food, materials, energy, water, space, and time. True cost accounting can improve the use and management of water, forests, farms, rangeland, and fisheries. The goal of resource use should be to improve the quality of life, but instead it is often to maximize short term profit for a distant corporation or greedy individual.

Ultimately, almost all resource issues are determined by financial considerations. Who benefits? Who pays? Many resource management failures are caused by perverse economic incentives (subsidies, taxes, external cost transfers) that are poorly understood or not acknowledged. In most cases poor resource management transfers costs to future generations and to society at large.

Developing a sustainable resource management plan requires answering many questions. What area will be covered? What are the objectives? What are the goals? Who are we working with? Typically goals will include good working conditions and gradually increasing value with a healthy, stable, and improving environment and community. Careful analysis of true costs can improve the effectiveness of each hour and dollar spent.

Undertaking a true cost analysis is not easy, so in beginning it can help to identify potential collaborating institutions, researchers, staff (inc. volunteers), and sponsors. Who can help provide technical information, guidance, financing, or support (family, friends, stakeholders).

An example:

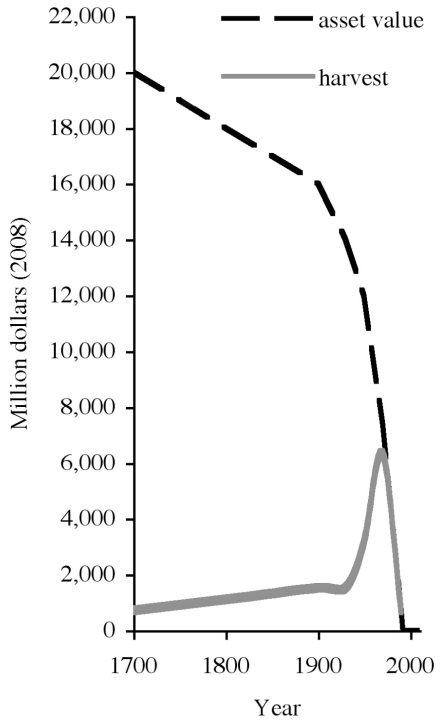
The Grand Bank cod fishery off Nova Scotia was first exploited by European fishermen as early as the 1400s and was very actively used by the 1500s. Cod were caught sustainably for 700 years with technology that remained virtually unchanged. Gorton's last schooner operated until 1950 using methods that a fisherman from 1800s would have recognized. Beginning in 1950, however, the technology changed dramatically. Larger ships could catch as many fish in one hour as a traditional ship would catch in the whole season. Fishing intensity and profits increased very dramatically and the cod harvest peaked in 1968 at 810,000 tons, roughly four times the typical historic catch. In 1974 it dropped to 34,000 tons. By 1991, the population of cod had dropped to less than 1 percent of its original size.

In 1992 the fishery was closed. The failure was primarily caused by the government policy and a failure to control foreign fishing boats. The Federal government controlled the number of fishermen through licensing systems, set quotas for different types of vessels, and, acting upon information from its own scientists, set the Total Allowable Catch (TAC). They got it wrong. Although some voices of protest were raised about the unsustainable harvest level (including

some fishermen) the government went ahead, eager to avoid being called too controlling or limiting fishing opportunities.

Faced with a similar crisis Norway acted fast and saved their cod fishery. They did it with much better data and an intent to maintain the value of the fishery. They knew that a healthy fish stock should have a spawning biomass significantly over any precautionary levels and a good variety in age and stock structure. They note that, “A healthy fishery should also be based on the principles of ecosystem management,

The use of true cost analysis would have helped avoid the Grand Banks cod catastrophe. Instead 35,000 people were put out of work. Government support has cost more than $500 million and billions of dollars of revenue have been lost. The loss of careers and income could only be partly mitigated by generous welfare payments. Fisherfolk losing their jobs and boats after multiple generations led to serious problems with depression, anger, substance abuse and violence. Community cohesion has been disrupted. The cod population has not recovered and in 2000 the World Wildlife Fund placed cod on the endangered species list



The Cod Fishery - Grand Banks