



The Sunken Billions

The Economic Justification for Fisheries Reform

Global marine capture fisheries are an underperforming global asset. The Sunken Billions study shows that **the difference between the potential and actual net economic benefits from marine fisheries is in the order of \$50 billion per year** – equivalent to more than half the value of the global seafood trade.

The cumulative economic loss to the global economy over the last three decades is estimated to be in the order of two trillion dollars. In many countries the catching operations are buoyed up by subsidies, so that the global fishery economy to the point of landing (the harvest sub-sector), is in deficit.

Improved governance can recapture a substantial proportion of the \$50 billion annual loss

With effective economic incentives, rather than being a net drain on the global economy, sustainable fisheries can create an economic surplus, be a driver of economic growth and a basis for livelihood opportunities.

The global marine catch has been stagnant for over a decade (producing 85 million tons in 2004, about the same quantity as in 1992), while the natural fish capital – the wealth of the oceans has declined (Fig.1). Most of the world's most valuable fish stocks are either fully, or overexploited. The 25 percent which remain under-exploited tend to comprise lower-value species, or the fisheries for such stocks are the least profitable.

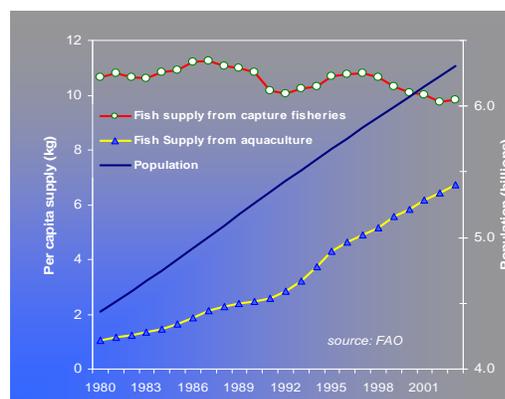
The economic health of fisheries

The focus on the declining biological health of the world's fisheries has tended to obscure the even more critical economic health of the fisheries. Economically, healthy fisheries are fundamental to achieving not only the restoration of fish stocks but also other accepted objectives for the fisheries sector, such as improved livelihoods, exports, fish food security and economic growth.

When fish stocks are fully exploited in the biological sense, the associated fisheries are almost invariably performing below their economic optimum. In some cases, fisheries may be biologically sustainable but still operate at an economic loss. The depletion in fish capital resulting from overexploitation is rarely reflected in the reckoning of a nation's overall capital and GDP growth.

For over three decades the world's marine fish stocks have come under increasing pressure from fishing, from loss of habitats and from pollution. Rising sea temperatures and the increasing acidity of the oceans is placing further stress on already stressed ecosystems. Illegal fishing and unreported catches undermine fishery science while some subsidies continue to support unsustainable fishing practices.

Figure 1. Stagnant capture fishery supply - growing aquaculture production



Key messages for fisheries reformers

- 1) Reform requires commitment and engagement by **political and economic decision-makers** – not just fisheries authorities.
- 2) The reform process requires a **long-term effort** to manage the political economy of change in a complex and dynamic sector.
- 3) Building broad-based **consensus** on reform vision and pathways is a vital element of reform.
- 4) Effectively remove the open access condition and strengthen fishing rights for fishers and fishing communities to provide **incentives** for sustainability and good stewardship.
- 5) Social safety nets and creation of **alternative livelihoods** can be an important element of reform.
- 6) Review fiscal policies to phase out **subsidies** that increase fishing effort and fishing capacity and redirect public support to strengthen fisheries management capability.
- 7) Regular public reporting on the state of nation's fish stocks and their contribution to national wealth promotes accountability and good governance.
- 8) Fisheries reforms can be **integrated** with poverty reduction programs and other instruments of economic and social reform.
- 9) The fisheries sector can draw on **lessons from reforms** in other sectors, such as mining, forests, or land reform.



Declining productivity -- increasing pressures

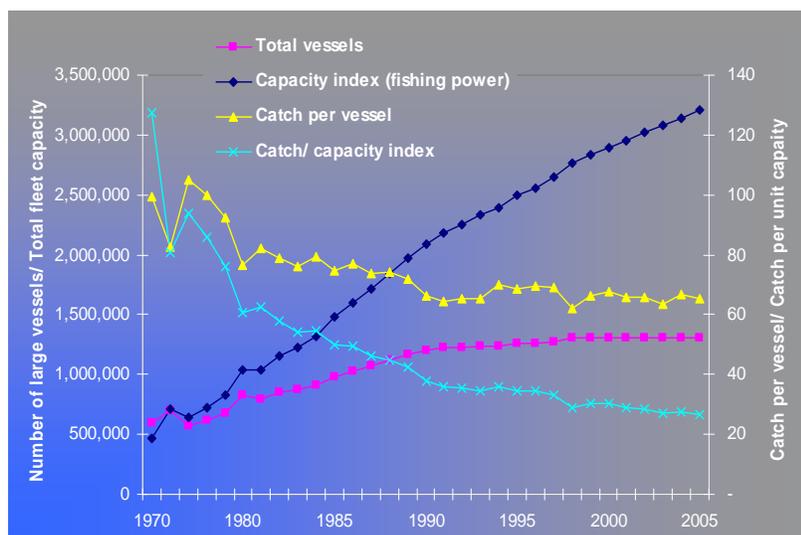
Long before the fuel price increases of 2008, the economic health of the world's marine fisheries has been in decline. The build-up of redundant fishing fleet capacity, deployment of more powerful fishing technologies and increasing pollution and habitat loss has depleted fish stocks worldwide. Despite this increased fishing effort, the global marine catch has been stagnant for over a decade, while the catch per fisher, or per fishing vessel has declined. In many cases the catching operations are buoyed up by subsidies, so that the global fishery economy to the point of landing (the harvest sub-sector), is in deficit. Figure 2 shows how labor and fleet productivity have declined even as fishing technology has advanced.

Half the fishing -- half the fuel

If fish stocks were rebuilt, the current marine catch could be achieved with approximately half of the current global fishing effort. This illustrates the massive overcapacity in the global fleet. The excess fleets competing for the limited fish resources results in stagnant productivity and economic inefficiency.

In response to the decline in physical productivity, the global fleet has attempted to maintain profitability by reducing labor costs, through subsidies and by increased investment in technology. Partly as a result of the poor economic performance, real income levels of fishers remain depressed as the costs per unit of harvest have increased.

Declining productivity, but increasing fishing fleet and fishing power



Declining real value and share of value

Over the last decade real landed fish prices have stagnated. The recent increases in food and fuel price have further depressed the fishery economy. The value of the marine capture seafood production at the point of harvest is some 20 percent of the \$400 billion global food fish market. The growing market strength of processors and retailers and the growth of aquaculture (Fig. 1), which now accounts for some 50 percent of food fish production, have contributed to the downward pressure on producer prices.

Reform of the fisheries sector can generate economic growth and alternative livelihoods

Marine fisheries reform can recapture a substantial proportion of the economic losses. Rather than being a net drain on the global economy, sustainable fisheries can create an economic surplus and be a driver of economic growth, both in the marine economy and other sectors. The biological sustainability of fish stocks has often occupied the centre stage of international efforts, for example, the Plan of Implementation of the WSSD makes specific reference to recovery of fish stocks. However sustainable fisheries are not only a problem of biology and ecology, but one of managing political and economic processes and replacing pernicious incentives with those which foster improved governance and responsible stewardship.

The comprehensive reforms required imply political, social and economic costs. Fisheries reform is a long-term process and will require political will founded on a consensus vision built through broad stakeholder dialogue.

First, a reduction in fishing effort would increase productivity, profitability, and net economic benefits. Second, rebuilding fish stocks would lead to increased sustainable yields and lower fishing costs.

At the same time, strengthened fishing rights can provide fishers and fishing communities with incentives to harvest responsibly and efficiently. Phasing out subsidies will improve efficiency in many cases. Greater transparency in allocation of fish resources and greater public accountability for the health of fish stocks will help private initiatives to certify sustainable fisheries.

Reforms will require investment in good governance, including measures to eliminate illegal fishing and reduce subsidies and direct public support to strengthen fisheries management capability.

The crisis in the world's marine fisheries is not only a fisheries problem, but one of the political economy of reform both in the developed and developing world. Fisheries reform requires broad-based political will founded on a social consensus. Building such a consensus may take time and require forging a common vision which endures changes of governments.

The alternative to reform – business as usual – is a continued decline in global fish wealth, harvest operations which become increasingly inefficient, growing poverty in fishery dependent communities, increased risks of fish stock collapses and compromised marine ecosystem. Business as usual means increasing political pressure for subsidies; growing public expenditure on fishery management and enforcement; and a sector which, rather than being a net contributor to global wealth, is an increasing drain on society.

The estimate of \$50 billion is a measure of the foregone economic rents. It is a mean from two models which considered the global marine fishery as a single bioeconomic unit.

