

Key messages

- Fisheries subsidies are direct and indirect payments made by governments to the fisheries sector, which result in a private benefit.
- Global fisheries subsidies are estimated at US\$ 30–34 billion annually, with capacity-enhancing and fuel subsidies accounting for US\$ 20–24 billion.
- Capacity-enhancing subsidies increase the capacity of fishing fleets artificially, resulting in over-exploitation of fish stocks and ultimately reduced industry profits and viability.
- Subsidies are being discussed in a range of international fora, in particular the World Trade Organisation talks, with the aim of restricting the type of subsidies that are allowed.
- There is an urgent need to reduce capacity-enhancing subsidies and focus on developing a profitable and sustainable industry that can adapt to changing economic and environmental conditions.

This brief examines subsidies in the fisheries sector and their impacts on fisheries and on developing countries, and reviews the current international processes that are tackling subsidies. This brief is part of a series concerning fisheries and development issues produced by MRAG and DFID.

Fisheries subsidies

Subsidies are financial contributions made by governments or public bodies which provide a private benefit [1]. Subsidies to the fisheries sector may be either direct (e.g. vessel buyback schemes) or indirect (e.g. foregone tax revenue on fuel), and may be provided for goods, services, income or price support.

Seventy-five percent of fish stocks worldwide are fully or overexploited. Part of the cause of this overexploitation are the subsidies that have been provided to fishing fleets. Subsidies, where they reduce the costs of fishing and increase profits for the industry, can lead to the build-up of excessive fishing capacity. This results in increased effort and overexploitation of fishery resources in the absence of effective management systems.

Global fisheries subsidies are estimated at US\$ 30–34 billion per year [2] (Box 1), representing 35–40 % of the value of total fisheries production [3]. Of this, fuel subsidies account for US\$ 4–8 billion [4], and other capacity-enhancing subsidies represent US\$ 16 billion.

The countries that provide the most subsidies are India (US\$ 4.3 billion), Japan (US\$ 4.0 billion) and the EU (US\$ 3.0 billion) (Sumaila and Pauly, 2006) [2]. Developed countries provide about 55 % of subsidies, and developing countries the remaining 45 %. However, on a per country basis, developed countries provide more than three times as much subsidies as developing countries.

There are a range of justifications made for providing subsidies to the fisheries sector, for example the protection of infant industries, national food security, prevention of fish spoilage and social arguments such as the preservation of livelihoods and poverty reduction [5]. In the 1980s and 1990s many countries were focussed on building up their fishing fleets and fishing sectors and provided subsidies for the build-up of new capacity and technology.

The result is that the net contribution of fisheries to the global economy is substantially negative, with total operating costs higher than gross revenue — part of the deficit is funded by subsidies. The World Bank estimated the cumulative global loss of potential economic benefits from fisheries at US\$ 2 trillion over the last three decades [5], as a result of the overexploitation of stocks and consequent loss in productivity.

However, not all subsidies are 'bad'. There are also subsidies that are considered necessary and positive — these are the payments and investments made for fisheries management, research and conservation programmes, and are valued at US\$ 7 billion annually, about 20 % of the total [3].



The provision of ports and port services is a common subsidy to the fisheries sector. Photo by: C.T.Barnes

Box 1: Value of global fisheries subsidies by type

Subsidy type	Developing countries (US\$ billion)	Developed countries (US\$ billion)	Global Total (US\$ billion)
Management programmes and services, research and development ('Good')	1.1	5.5	6.6
Boat construction, renewal and modernisation, Fishing port construction and renovation, marketing support, tax exemptions, access agreements and development projects ('Bad')	12.3	9.7	22.0
Vessel buyback schemes, fisher assistance programmes, community development programmes ('Ugly')	0.9	2.5	3.4
Total	14.3	17.7	32.0

Source: [2] Sumaila and Pauly classify subsidies as: 'Good', which lead to investments that maximise value to society as a whole; 'Bad', which lead to disinvestments in natural capital once fishing capacity exceeds that for maximum economic yield, leading to resource overexploitation; and 'Ugly', which have the potential to be good or bad, depending on the way and the context in which they are implemented

Types and amounts of fisheries subsidies

Cost-reducing subsidies

Vessel construction and modernisation

These subsidies may be in the form of government payments and tax incentives for building and modernising fishing vessels, as well as loan guarantees or preferential rates. Vessel construction subsidies are particularly damaging in terms of increasing capacity. Despite this, it was only in 2007 that the European Union removed this type of support to the fishing industry.

Vessel modernisation schemes have their supporters, as they include provisions for the purchase of more environmentally-friendly equipment or more efficient engines to help combat climate change. Nevertheless they help reduce operating costs. The economic advantages of modernisation and upgrading of vessels should be a sufficient incentive to stimulate private rather than public investment in a profitable industry.

Fuel price support

Fuel price support, such as tax exemption, is another type of subsidy reducing the costs of fishing activity. Fuel constitutes a significant component of fishing costs, up to 60% in some fisheries.

Market price support

This includes subsidies for market interventions, such as export promotion, value addition, storage of fishery products and price support, e.g. providing extra payments to fishers if the market price for particular fish drops below a specified level.

Direct payments

Price support mechanisms serve to increase incomes of fishers, and affect their competitive position. Payments may also be made for income support and unemployment insurance. However, this reduces the cost to firms of

keeping employees in the industry and can increase dependence on government support.

Payments for access to other countries' waters

Access agreements (see Policy Brief 6) involve access for the fleet of one country to another country's waters. They often involve payment in return for access, the transfer of fishing technology, assistance with improving fisheries management institutions, the provision of market access, or some combination of these. If the cost of access is not recouped by the government, it can be considered as a subsidy to the fishers benefiting from access under the agreement.

Capacity-reducing subsidies

Vessel buy-back or decommissioning schemes

Decommissioning payments have increasingly been used in developed countries to try to reduce the excessive fleet capacity that has been built up over the years. Although they can reduce capacity and fishing pressure, and consequently help stock recovery, decommissioning schemes need to be carefully designed.

Tying up aid

Temporary aid may be provided for fishers that must stop fishing as a result of bad weather or the implementation of conservation measures (e.g. fishery closures).

Infrastructure

Governments often provide a variety of infrastructure for the fisheries sector, such as harbour and port facilities, navigation services, and search and rescue support. Often no fees are charged, which decreases costs for industry. In some cases infrastructure may be shared with other sectors, but often the benefits for wider society are minimal.

Management, research and enforcement

Investments in management, research and enforcement activities are essential for fisheries to ensure that publically-owned fishery resources are used responsibly and sustainably. However, many countries do not attempt to recover the costs of these activities from the industry, which in itself is a form of subsidy. Payments for management, research and enforcement are estimated to represent one third of subsidies to the sector in OECD countries [6], and about one fifth of subsidies globally [2].

Impacts of fisheries subsidies

Increased fishing capacity

Subsidies tend to attract more capacity than necessary into the fishery, in the form of vessels, equipment and labour. Unless there are effective management restrictions in place, this results in excess capacity and profitability, and incomes are likely to be lower than they would be otherwise.

Overexploitation of fishery resources

Over-capacity in a fishery often leads to over-exploitation of the fish stocks. This causes reduced productivity and lower catches, and consequently lower incomes and profits for the industry.

Subsidies can insulate fishers from the economic signals in the fishery, countering the economic incentive to stop fishing when it is unprofitable. The effects of declining catches, as a result of overcapacity and overexploitation, can be masked by increasing support from the government, exacerbating the over-exploitation of resources and delaying the necessary industry adjustment.

Unfair competition

Fleets that receive subsidies and those that do not operate under different conditions are on an 'unlevel playing field'. Subsidies distort competition by lowering production costs for certain producers, giving them an artificial competitive advantage. This may allow them to undersell other producers who do not receive the benefit of such subsidies [1].

Reduced industry viability

Even though subsidies can increase short-term profits for the industry, they result in a reduction in its longer-term viability. By encouraging overcapacity and excess fishing effort, the sustainability of fisheries resources are threatened and catches (and therefore profits) are reduced. The over-capacity created can also inadvertently promote illegal fishing [6].

Trade-distorting impacts

If the subsidies affect fish supplies and prices, they can have an impact on trade in fish and fishery products, by

Box 2: WTO process

In Doha in 2001, the WTO undertook to 'clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries'.

Subsequently in the Johannesburg World Summit on Sustainable Development, there was a call to 'eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity'.

Negotiations are ongoing in the WTO and on 30 November 2007, the Chair of the WTO Negotiating Group on 'Rules' circulated a draft text which included fisheries subsidies. If adopted, this would prohibit subsidies that encourage overcapacity, while permitting subsidies that help to remove capacity in excess of available fish resources.

There is still considerable disagreement over the potential scope and content of the rules. The current state of play of the negotiations is outlined in the insert 'Fisheries subsidies and the WTO negotiations'.

increasing the amount of fish available from a particular country, or by reducing the price at which it can be sold.

Impacts depend on the management system

The impacts of subsidies depend on the management system in place, enforcement of its regulations and whether stocks are over- or under-fished. If management regulations are limited or absent, subsidies lead to overinvestment and a 'race to fish'. This may result in increased catches in the short term, but reduced fish stocks, lower catches, higher costs and lower revenues in the longer term.

If management is well implemented and enforced, subsidies will not necessarily have an impact on the target fish stocks. However, they may still affect the economic performance of the industry.

As such, there is an intertwined relationship between fisheries management and subsidies — 'bad management compounds the dangers of subsidies; and inappropriate subsidies contribute to bad management' [7]. Effective fisheries management is needed to limit the damage caused by subsidies. Good management is also likely to provide fewer subsidies to the industry, as a healthier industry is less likely to require them.

Expectations of subsidies

The expectation of future payments to the industry can become embedded and can impede management reforms. Decisions about whether to enter or leave a fishery can become based on expected net returns that are directly affected by the expectation of future subsidy payments, be they for income support, fuel price support, decommissioning or adjustment when profitability is low [1].

Priorities for future work

The priorities for future work to address subsidies and their impacts are:

- Agreement needs to be reached at the WTO Doha Round of talks (Box 2), to limit the acceptable range of subsidies that can be provided to fisheries, and restrict the use of capacity-enhancing subsidies;
- Although there are arguments for allowing special treatment for small-scale fisheries and fisheries in developing countries, it should be remembered that these fisheries can still have a significant impact on resources and therefore any subsidies should only be provided within a management framework that controls exploitation of the stocks;
- Fishing capacity should be brought into line with the available fish resources. In this way, there would not be such a need for the sector to be subsidised;
- Public aid should be channelled into decommissioning schemes and other alternative livelihood schemes to reduce capacity and ease the transition; such schemes should be carefully designed, time-limited, well-targeted and should avoid capacity re-entering the fishery or other fisheries;
- In an era of concerns over food security and increasing fuel prices, governments should resist calls for increased support, and instead focus on the development of a profitable and sustainable industry that can adapt to changing economic circumstances.



A number of countries want exemptions from rules on fisheries subsidies for developing countries and for small-scale fisheries. Photo by: T.Bostock

References

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- [7] Beddington *et al* (2007) Current problems in the management of marine fisheries. Science magazine: Vol. 316, pp.1713 et seq.

For more information:

Further information about fisheries and development issues can be obtained from the UK Department for International Development (DFID) and MRAG Ltd.

Department for International Development:

More information about DFID's work can be found at:

www.dfid.gov.uk

Department for Food, Environment and Rural Affairs (Defra):

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