

Healthier Oceans, Healthier Economies

By Oceana and ICTSD

What is the future of global fish consumption? For millennia people have relied on the bounty of the seas to feed themselves and to support economic growth. But the buildup in fleet capacity, particularly since World War II, and the deployment of increasingly powerful fishing technologies have depleted fish stocks worldwide. Fisheries resource management has been inadequate to forestall the global decline, with more than three quarters of all fish stocks now either fully exploited or over-exploited.¹ Less than one-fifth of the world's fisheries should be considered capable of any growth in catch,² but even this potential is short term. Many scientists have warned of widespread collapses in fish populations within decades.³

Reflecting the deterioration in fish stocks, the upward trend in global marine fish catch since 1950 has now ended and may even be in decline.⁴ As the United Nations Food and Agriculture Organization (FAO) points out, "the maximum long-term potential of the world marine capture fisheries has been reached."⁵ The current global catch of about 85 million MT also disguises the changing composition of the total, with catches of smaller and less desirable fish reflecting the decline in dominant species.

While larger fish are generally caught for human consumption, stocks of smaller fish such as sardines and menhaden, on which the larger fish feed, are being used for feed or fertilizer. Well over one-third of fish by weight taken from the ocean are such so-called forage fish, most of which are fed to farmed fish and to pigs and poultry.⁶ This not only has an impact on other fish, birds and marine mammals that depend on the smaller fish for survival, but also inefficiently uses large quantities of fish that could be directly consumed for human food.

A crucial opportunity for the WTO on fisheries subsidies

The World Trade Organization (WTO) has a crucial opportunity to address the problems of overfishing and overcapacity. The Doha Development Agenda set forth a negotiation to improve disciplines on fisheries subsidies. The WTO mandate from the Hong Kong Ministerial Declaration explicitly incorporates environmental concerns, with members agreeing to "strengthen disciplines on subsidies in the fisheries sector, including through the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and overfishing" providing "appropriate and effective special and differential treatment for developing and least-developed Members."⁷



International Centre for Trade and Sustainable Development

The Chair of the WTO Negotiating Group on Rules, which includes fisheries subsidies, recently offered a “roadmap” to guide negotiators in identifying subsidies that contribute to overcapacity or overfishing “with a view to determining which of these should and should not be prohibited, while considering at the same time how to effectively address the needs and particularities of developing members.”⁸ In the document, the Chair identified various reasons that countries have advanced for subsidizing fishing activities, including because such subsidies contribute only minimally to overcapacity or overfishing; because the effects of such subsidies could be adequately controlled by fisheries management or other means; or because of their importance to development priorities.⁹ These arguments must be assessed by WTO negotiators, but input from fisheries economists, development economists and fisheries managers is vital for an informed discussion.

The depletion of fisheries stocks has far-reaching socio-economic consequences

The future can be seen in West Africa, where fleets from the European Union, China and Russia have vacuumed the fish from the seas, severely disrupting coastal economies. With little alternative employment, many former fishermen attempt to emigrate.¹⁰ Even in the absence of foreign fleets, the coastal fisheries of many countries are becoming exhausted. Several countries in Asia are encouraging their fishermen to seek stocks further offshore and are subsidizing those efforts.¹¹ But only 17% of the world’s fisheries are capable of any growth in catch, with little or no room for growth in the fisheries of the western Indian Ocean, northeast Atlantic or central Atlantic.¹² The creation of additional fishing capacity will only hasten the depletion of already fully exploited stocks.

The economic incentives fundamental to fisheries resources motivate fishermen to target these diminishing resources wherever they may be found. Most fisheries management systems around the world remain open or quasi-open and are unable to effectively limit the “race for the last fish.” Fishermen’s short term quest for food and profits has undermined not only their longer term viability but also their current earnings. According to a recent World Bank study, an estimated \$50 billion annually is lost globally - equivalent to more than half the value of the global catch - because of poor fisheries governance and overexploitation.¹³ Other losses, including those from illegal fishing, loss of biodiversity and compromise of the ocean carbon cycle suggests that the losses to the global economy from unsustainable exploitation of living marine resources substantially exceed \$50 billion a year.

A zero-sum game: Subsidies increase fishing capacity for a declining catch

Despite the increased fishing effort, the global marine catch has been stagnant for over a decade, while the catch per fisherman, or per fishing vessel, has declined.¹⁴ In many cases fishermen are buoyed up by subsidies, so that the global fishing industry (the harvest sub-sector) would otherwise operate at a loss.¹⁵ As the World Bank stated in its recent report on the need for fisheries reform, subsidies “create perverse incentives for continued fishing in the face of declining catches. The result is overfishing, fleet overcapitalization, reduced economic efficiency of the sector and the failure to obtain the potential economic benefits from the resource.”¹⁶ Input subsidies, most significantly fuel subsidies, create perverse incentives for greater investment and fishing effort in over-stressed fisheries, reinforcing the sector’s poverty trap and preventing the creation of surplus wealth that can be invested in alternatives with greater social returns.¹⁷

Capacity-enhancing subsidies, which include fuel subsidies and support for boat construction and modernization and fishing sector infrastructure, total approximately 25 percent of the landed value of global catch.¹⁸ For example, the European Union has heavily subsidized its fishing industry, with subsidies in 2000 amounting to over 30% of the landed value of its catch. Many EU subsidies go to vessel modernization and to maintaining fishing effort through support for operating costs. A number of countries in Asia, including China and Japan, also provide significant subsidies to their fishing industries.¹⁹

Strengthening fisheries management is essential in both developed and developing countries

One concern with reliance on fisheries management to control the effects of subsidies is the fact that subsidies, by supporting uneconomic and unsustainable fishing activity, create strong political pressures that effectively undermine the ability of fisheries management to set sustainable fishing limits. Governments tend to take a short-term view and defer difficult management decisions, even in face of declining catches and financial returns. The United States, Australia and New Zealand noted in their July 2008 communication to the WTO (which argued for strong disciplines on fisheries subsidies) that “even developed countries with sophisticated management systems can find themselves caught in a spiral of subsidization,

overcapacity, overfishing and stock collapse.”²⁰ While there is some evidence that “catch share” schemes may ensure greater sustainability of fish resources, precious few fish stocks are managed well globally. In a world with inadequate management, the powerful economic incentive to overfish provided by massive government subsidies tips the scale towards stock collapse.

The ocean has tremendous productive capacity. Unless pushed to collapse,²¹ fish stocks have the ability to replenish themselves, producing higher catches and incomes. An effective fisheries management and enforcement system with limits on fishing established to ensure sustainability and maximize economic returns is critical to maintaining and restoring this capacity. Such a management plan does not need to be burdensome or unnecessarily costly for developing countries.

Initiatives taken in some developing countries such as Costa Rica, El Salvador and Tanzania among others, have demonstrated that when political will is present, national effort supported by international cooperation can contribute to strengthening management capacity that leads to greater sustainability and revenues from fisheries.

In Tanzania, for instance, the establishment of a monitoring, control and surveillance programme was instrumental in increasing vessel registration and licensing. In 2002, twelve foreign tuna boats were licensed to fish in the country’s waters, but the number increased to 84 when foreign fleets realized that Tanzania was regularly patrolling its exclusive economic zone. The registry system in turn resulted in reports from the registered purse-seiner fleet, which revealed that during the peak fishing season the weekly tuna catch in Tanzania’s Exclusive Economic Zone (EEZ) reached up to 10,000 tons.²² As a result of the programme, not only did the country increase its revenues from tuna vessel operations, it also gained access to useful data on the level of fishing effort in its EEZ.

In the absence of reliable information on the fishing effort and level of catches, which a proper management regime can generate, informed policy decisions can hardly be made. Where management systems are lacking, revenues are also likely to dwindle due to illegal and unreported fishing. A 2005 report by the British Marine Resources Assessment Group estimated that illegal, unreported and unregulated fishing in Africa could be valued at approximately US\$1 billion annually.

Fisheries management is a necessary step for sustainability and ultimate recovery of the oceans, but it is not sufficient.

As the OECD (Organisation for Economic Co-operation and Development) has noted, unless catch controls are “perfectly enforced,” government subsidies will lead to increased effort entering the fishery.²³ Furthermore, expectations of government support tend to increase dependence, reducing individual and community resilience and inhibiting adjustment to changing conditions.²⁴ In contrast, a reduction in financial support, particularly if combined with sustainability-oriented management reforms, can increase productivity, profitability and net economic benefits from a fishery.²⁵

The escalating demand for fish as human population grows and as people become more affluent will continue to place increasing pressures on fish stocks and marine ecosystems. Current levels of fish stocks and current management systems cannot meet this growing demand or answer the problems of food security. Yet if given a chance to rebuild, fish stocks will return over time, providing significant economic gains from fishing. But subsidies for fishing currently undermine fishing control programs and prevent depleted fish stocks from recovering.

Meeting development and sustainability objectives

Attention also needs to be given to the development and livelihood dimensions of fisheries in developing countries. The WTO negotiations seek to discipline fisheries subsidies that contribute to overcapacity and over-fishing “taking into account the importance of this sector to development priorities, poverty reduction, and livelihood and food security concerns.” Throughout the negotiations, developing countries have presented a wide range of views that reflect, in addition to the environmental dimension, the development aspect of fisheries.

In a joint statement on treatment of artisanal and small scale fisheries in fisheries subsidies negotiations from February 2008, India and the African, Caribbean and Pacific (ACP) Group of countries have emphasized the significance of artisanal and small-scale fishing to developing countries, underlining that “these types of fisheries are at the core of (their) development priorities for poverty reduction, the maintenance of livelihoods and food security.”²⁶ Other countries have made similar proposals, calling for Special and Differential Treatment (S&DT) provisions that effectively respond to the concerns of developing countries to be allowed flexibilities to pursue development goals in the fisheries sector, especially for artisanal and small-scale fishing that significantly contribute to livelihoods and poverty reduction.

In the experience of a number of countries in Latin America, the growth and expansion of the fisheries sector is sustainable “only if it is accompanied by adequate management measures to ensure the sustainability of resources. Failure to recognize this means a failure of responsibility vis-à-vis future generations who will also depend on fishing for their subsistence and development.”²⁷ In their July 2008 statement, Argentina, Chile, Columbia, Ecuador, Mexico and Peru noted the importance of proper management to ensure the sustainability of the fisheries resources and the fisheries sector in general, “but the main focus [of fisheries negotiations] is and must continue to be a prohibition of subsidies.”²⁸ For this reason, while flexibilities given to developing countries to support fishing activities will be a central element of future disciplines, “such flexibility cannot be a blank check.”²⁹

WTO negotiations will be required to take into account the respective capabilities and constraints that developing countries may face in implementing fishery management regimes. Many developing countries have indicated their adherence to the objective of conservation and management of fisheries and are signatories to relevant international instruments related to sustainable use and conservation, including the United Nations Convention on the Law of the Sea (UNCLOS) and the FAO Code of Conduct for Responsible Fisheries. While experience suggests that much can be done when the political will is present, and that the benefits from effective fisheries management and enforcement are significant, it remains a fact that many countries do face capacity and resources-related constraints in implementing the fishery management regimes that they have adopted. Nonetheless, as Argentina, Chile, Columbia, Ecuador, Mexico and Peru have noted, the cost and difficulty of fisheries management “should be no excuse for not requiring such management.”³⁰

In several submissions to the Negotiating Group on Rules during 2008, the ACP and Small, Vulnerable Economies (SVEs) Groups have made proposals seeking to associate compliance with the conditions and criteria related to fisheries management by developing country Members, especially least-developed countries and small, vulnerable economies, to “the effective and timely provision of technical assistance by Members to developing country Members in accordance with their demands and needs.”³¹ At the same time, other countries have argued that because of the need to ensure the sustainability of resources, fisheries management and subsidies disciplines cannot be made conditional on the granting of technical assistance.³² Defining the appropriate role for, and modalities of,

technical assistance for developing countries to implement future disciplines is an aspect of the negotiations deserving significant attention.

WTO action on fisheries subsidies is urgent

There is still a good deal of technical work to be done in the fisheries subsidies negotiations, particularly on the scope of the prohibition, special and differential treatment for developing countries, and sustainability conditions. However, a common understanding among participants of the global crisis of overfishing and the importance of subsidies in contributing to overcapacity and overfishing underlies a broad commitment to curtail these subsidies in order to ensure the sustainability of one of the world’s major resources.

A global agreement that effectively disciplines capacity-enhancing subsidies is critical for the survival of many fish stocks and the preservation of livelihoods that depend on them. As more and more reports emerge describing the dire state of the oceans’ fisheries, a successful conclusion to these negotiations becomes increasingly urgent.

Endnotes

- 1 FAO. (2006). The State of the World’s Fisheries and Aquaculture (SOFIA).
- 2 Too Few Fish, Oceana (2008). pp. 3.
- 3 Worm, B. et al. Impacts of Biodiversity Loss on Ocean Ecosystem Services. (November 3, 2006) Science Vol 314: 787-790.
- 4 Significant overreporting of catches from China in the 1990s have distorted FAO global landings and have complicated assessments for numerous stocks. Watson, R. and D. Pauly (2001). Systemic distortions in world fisheries catch trends. Nature. 414: 534-536.
- 5 FAO Marine Resources Service, Fishery Resources Division, Review of the state of the world marine fishery resources. FAO Fisheries Technical Paper. No. 457. (2005). Rome, FAO pp. 235.
- 6 Alder, J. et al. Forage Fish: From Ecosystems to Markets. Annual Review of Environment and Resources, Vol. 33: 153-166. (November 2008).
- 7 Hong Kong Ministerial Declaration, 22 December 2005, Annex D, para. 9.
- 8 New Draft Consolidated Chair Texts of the AD and SCM Agreements. TN/RL/W/236, 18 December 2008. p. 85.
- 9 Ibid.
- 10 Sharon Lafraniere, New York Times, Europe Takes Africa’s Fish, and Migrants Follow. January 14, 2008. Moustapha Kamal Gueye, Will the WTO Mandate Stand up Against the Tragedy of the Commons in Fisheries, Bridges Monthly Review, Vol. 12 NO. 13. May 2008. International Centre for Trade and Sustainable Development. Geneva: Switzerland.
- 11 Holland, J. India to join tuna exporting elite. May 9,

2008. <http://www.intrafish.no/global/newsarticle171572> Overfished Vietnam Subsidizes More Fishing Boats, Thursday, May 08, 2008; Posted: 07:27 PM May 08, 2008 (Voice of America News/ContentWorks via COMTEX) -- -- DATELINE: Hanoi. Flewelling, P. and G. Hosch. FAO. Review of fisheries management in the Pacific - Indonesia. Policy and Planning Division, Fisheries Department. August 2004. Gelchu, A. and Pauly, D., Growth and Distribution of port-based global fishing effort within countries' EEZs from 1950 to 1995, Fisheries Center Research Reports (2007). Volume 15 Number 4, Fisheries Center, University of British Columbia. pp. 41 and 44.
- 12 Too Few Fish, Oceana. (2008).
 - 13 World Bank. The Sunken Billions - The Economic Justification for Fisheries Reform. Agriculture and Rural Development Department. (2008). Advance Edition. The World Bank. Washington DC. pp. xiii. <http://siteresources.worldbank.org/EXTARD/Resources/336681-1215724937571/SunkenBillionsAdvanceWebEd.pdf>
 - 14 Ibid. pp. 13-14.
 - 15 Ibid. pp. ix.
 - 16 Ibid. pp. 18.
 - 17 Ibid. pp. xvi.
 - 18 Pauly, D. and R. Sumaila. (2006). Catching more bait: A bottom-up re-estimation of global fisheries subsidies. University of British Columbia, Fisheries Centre Research Report. Vol. 14, No. 6, 2nd Version. An estimated US\$ 22 billion in capacity enhancing subsidies were distributed in 2000; US\$ 15.7 billion in programs such as boat construction and fishing infrastructure and US\$ 6.3 billion in fuel subsidies.
 - 19 Ibid.
 - 20 Fisheries Subsidies, Communication from Australia, New Zealand and the United States, TN/RL/W/235, 18 July 2008.
 - 21 No Recovery for Atlantic Cod Population, ScienceNOW Daily News, November 25, 2008, reporting on a study by Douglas Swain and Ghislain Chouinard in the Canadian Journal of Fisheries and Aquatic Sciences.
 - 22 Fishing News International, June 2005.
 - 23 Financial Support to Fisheries: Implications for Sustainable Development, OECD (2006), pp. 10.
 - 24 Ibid. pp. 14.
 - 25 Ibid. pp. 14.
 - 26 TN/RL/W/217, 15 February 2008.
 - 27 Statement on the Negotiation of Fisheries Subsidies. Communication from Argentina, Chile, Columbia, Ecuador, Mexico and Peru. TN/RL/W/234, 17 July 2008. p. 2.
 - 28 Ibid. p. 2.
 - 29 Ibid, p.2.
 - 30 Ibid. p. 3.
 - 31 Negotiating Group on Rules - Drafting Proposal on Issues Relating to Article III:4 (Special and Differential Treatment of Developing Country Members) from the ACP and SVEs Groups, TN/RL/GEN/158, 22 May 2008.
 - 32 Statement on the Negotiation of Fisheries Subsidies. Communication from Argentina, Chile, Columbia, Ecuador, Mexico and Peru. TN/RL/W/234, 17 July 2008. p. 3.

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