



SMALL BOATS, BIG PROBLEMS

While most governments say they want to halt subsidies that contribute to overfishing and overcapacity, many demand the right to continue subsidizing fishing by “small” vessels. But small boats are already causing overfishing in fisheries around the world, and “small-scale” fleets can be major competitors in international trade. As governments discuss new WTO rules to limit fisheries subsidies, relaxing the rules for “small boats” would be a bad idea.

Trade negotiators gathered in Geneva are currently working to hammer out new WTO rules for eliminating subsidies that contribute to overfishing and the overcapacity of fishing fleets. It is a task that has been recognized as a top priority in the fight against overfishing worldwide.

There is good reason to hope that WTO members will do the right thing on fisheries subsidies. In November 2007, after nearly six years of talks as part of the Doha Round trade negotiations, a “chair’s draft” was tabled that proposes significant new fisheries subsidies rules, including a broad ban on many of the most harmful kinds of fisheries subsidies, alongside “special and differential treatment” (“S&DT”) for developing countries and mechanisms for ensuring that non-prohibited subsidies are subject to significant “sustainability criteria”.

But a number of governments appear reluctant to adopt the kind of WTO rules that would be truly effective, and instead are seeking carve-outs that would provide significant loopholes. One such loophole attracting some support at the negotiating table is a proposed relaxation of the rules for subsidies to “small-scale” fishing—or, to be more precise, for subsidies benefitting “small” fishing vessels. Governments defend this proposed loophole on the grounds that small-scale fishing communities are socially vital, economically vulnerable, and environmentally benign. They portray small-scale fishing as low-impact, near-shore activities with little international environmental or economic relevance.

There is no doubt that traditional fishing communities form an important part of society in many coastal states. Small-scale fishing is often (but not always!) a preferable alternative to large-scale industrial fishing, from both a social and environmental perspective. But to say simplistically that “small-scale” fisheries are “low impact” is a false and dangerous generalization. Governments proposing a “small-scale” carve out within WTO fisheries subsidies rules are ignoring the often harsh consequences of overfishing in small-scale fisheries and the cumulative sustainability impacts of fishing by the small-scale sector. Even if, in some regions, small-scale fishing communities need help to develop or to adjust to a changing world, these facts do not justify softening or eliminating WTO disciplines on subsidies to small-scale fisheries—especially when these are defined as “fishing by small vessels”.

DISTINGUISHING “SMALL-SCALE” FROM “ARTISANAL” FISHING AT THE WTO

Before looking at the realities of small-scale fishing, it is important to clarify the term—or at least acknowledge its lack of clarity.

In the literature and law of fisheries management, there is no single definition of “small-scale”. As the entry for “small-scale producers” in the FAO’s official glossary of fisheries terms states:

In truth, the line separating small and large scale producers is arbitrary. What is considered small-scale in one country or region may be considered large scale in another.¹

In general, “small-scale” is thought to have something to do with vessel size or power, and many countries do use vessel size in their domestic definitions.² The term also usually connotes relatively labor-intensive fishing operations. Beyond these broad generalities, however, usage of the term can vary widely. In some cases, it is employed as a synonym of “artisanal” fishing—a term that is itself highly ambiguous, but tends to mean traditional, “low tech” activity at the subsistence or near-subsistence level of economic activity level activity. In most cases, however, “small-scale” covers a much wider range of socio-economic characteristics, all of which generally involve some form of commercial activity, be it via barter or cash exchange.

Even if in the general science of fisheries management the distinction between “small-scale” and “artisanal” can be ambiguous (and often causes distracting debate), in the context of the WTO discussion the difference between these terms is now (or should be) fairly clear. Subsistence or near-subsistence level fishing has been a matter of special concern from the outset of the WTO negotiations,³ and the need for special (and softer) rules for fishing communities at the lowest end of the development scale appears to be broadly agreed. The Chair’s Draft of November 2007 clearly follows this line by proposing “carte blanche” treatment of subsidies to fishing activities that are:

- in-shore;
- non-mechanized;
- on owner-operated (or family-operated) vessels; and
- aimed at consumption principally by fishworkers or their families or at “small profit” trade.⁴

But while there may remain some overlap between the “artisanal” and “small-scale” discussions at the WTO, the underdeveloped fishing communities targeted by the Chair’s language are not the main subject of current proposals to relax WTO rules for small-scale (or “small vessel”) fishing. Rather, some governments now seek the right to subsidize commercial fishing far above subsistence levels of development—including fishing by trade-oriented corporate enterprises employing modern mechanized fishing and processing techniques.

In fact, the diverse range of fishery types that various WTO members seek to subsidize through a “small-scale” carve-out helps explain two facts about the small-scale discussion at the WTO: first, it has boiled down to proposals based purely on vessel size; second, it has included proposals for “small vessel” carve-outs from both developed and developing country members, representing very different interests.

The idea that fisheries subsidies disciplines should be relaxed for small vessels has unfortunately been part of the WTO discussion for some time, and has been proposed both for universal application and for application only to developing countries under S&DT.⁵ The Chair’s Draft itself makes limited use of this idea in the context of S&DT, proposing that developing countries should be allowed to employ subsidies to capital and operating costs for vessels under ten meters in length.⁶ This proposal has been met with calls from some members to extend the length limit up to 25 meters.⁷ Meanwhile, calls by some developed countries to extend a small vessel exemption to all WTO members remain on the table.⁸

DOES SIZE REALLY MATTER?

When simplistic rhetoric is put aside, it becomes clear that vessel size cannot provide a rational basis for special treatment under WTO fisheries subsidies rules. Consider the three arguments made in favor of relaxed rules for small vessels:

First, that small vessels are characteristic of fisheries that specially need public support in order to be economically viable;

Second, that small vessels are minor players in international commerce, and that subsidies to them carry only a very small risk of distorting competition; and

Third, that fishing by small vessels is generally “eco-friendly”, and much less likely to lead to depletion than “large-scale, industrial fishing.”

In the real world, these generalizations are frequently false. Small-scale fishers can be as economically viable as large scale operators. Many are already significant players in international commerce (with more arriving on the global scene each year). And just as with so-called large scale fleets, small-scale fishing activities can overexploit fish resources and cause environmental damage if they are not well managed.

“Small” Does Not Mean “Weak”

Regarding the question of economic viability, a recent FAO report found that small-scale fisheries are often less vulnerable to economic dislocation than large-scale operations.

[S]mall-scale fisheries can generate significant profits, prove resilient to shocks and crises, and make meaningful contributions to poverty alleviation and food security . . .⁹

The report went on to note that small-scale fisheries can enjoy significant comparative advantage precisely because they can be economically more efficient than industrial fisheries. While there are certainly many cases where large-scale industrial fleets are able to out-compete smaller-scale enterprises, small-scale fisheries cannot simply be regarded as economically handicapped as a class.

A good example is the case of **Senegal**. In the 1970s and 1980s, the government of Senegal pursued a policy of expanding its industrial fishing fleet, including through directly capacity- and effort-enhancing subsidies. Their efforts to create a robust large-scale sector, however, were frustrated because the small-scale fleet (with far fewer subsidies) proved more efficient. Indeed, a 2002 report prepared for UNEP by ENDA concluded that the negative environmental impacts of the subsidies to the industrial fleet were actually mitigated by the industrial fleet’s inability to compete with the small-scale sector.¹⁰ Only when the small-scale sector commercially outperformed the subsidized industrial fleet did the government eventually turn its development policies towards encouraging small-scale activities.

The comparative advantage of small-scale fishing is not limited to examples in the developing world. A 2001 UBC Fisheries Centre Report, for example, found that in **France and Spain** small-scale fleets were earning better returns on investment than large-scale fleets. Similarly, a recent study of fishing operations in the **New England** area of the USA concluded that small-scale vessels can achieve almost twice as much value per landed tonne as the large-scale sector in the same region for the fish they land (although the study did not analyze the respective net profitability of these sectors).¹¹

"Small" Does Not Mean "Local"

Nor do small-scale fisheries necessarily have small international footprints. In international competition both for catches and for markets, small-scale fleets are a significant and growing global force. Small-scale fisheries can have an international footprint in at least three ways:

First, small-scale fishers – like large scale fishers – can and do catch shared stocks (transboundary, straddling or highly migratory) within their own EEZs.

Second, given localized depletion (sometimes due to their own overfishing), small-scale vessels are increasingly venturing beyond territorial or even EEZ waters in order to exploit deep-sea or distant fisheries.

Third, the catches from small-scale fishers can make significant contributions to international fish trade.

The first of these practices—small-scale fishing on international stocks within (or relatively near) a fleet's own domestic waters—is significant. In **Chile**, for example, small-scale fishing has accounted for roughly 35-40% of landings of Patagonian Toothfish (1996-1999 data), 99% of which is exported to high value foreign markets.¹² In the **Indian Ocean**, it is estimated that about half the landings of large pelagic stocks (including billfish and all species of tuna) are captured by “non-industrial” vessels (generally under 24m in length).¹³ In fact, worldwide nearly 10% of all tuna are caught by “non-industrial” vessels¹⁴—a percentage that is sure to grow if the ambitions of many developing country governments and industries are achieved. **Indonesia**, with a tuna fleet that is heavily dominated by “non-industrial” boats, extracts more tuna from its own EEZ than any other country in the world.¹⁵ And in many regions, such as **West Africa**, small-scale fleets of neighboring countries often fish on shared stocks. The lucrative (and much contested) Gulf of Maine lobster fishery shared by **Canada** and the **United States** is similarly dominated by small-scale vessels.¹⁶

The international footprint of small-scale fishing is also found on the high seas, where small vessels venture beyond traditional in-shore fisheries. In fact, modern technologies have revolutionized the ability of small-scale fleets to move off-shore. As one leading expert has noted, a “tremendous expansion” of fishing capacity in small-scale fisheries in recent decades has allowed more small-scale fleets to take their operations “to deeper and more distant waters” than ever before.¹⁷ In many cases, these movements to off-shore fisheries are the consequence of depletion of inshore fisheries, at times caused by small-scale fleets themselves.

Examples of off-shore small-scale fishing include long-line shark fishers from **Mexico**, who go up to 200 nautical miles from shore in 7-meter fiber-reinforced plastic craft, and tuna and shark fishers from **Sri Lanka** who roam the extent of the Indian Ocean. The example of **India** is also instructive. By 2001, the Government of India had concluded that the marine capture fisheries of its in-shore waters had “reached a plateau” with “most of the major commercially exploited stocks . . . showing signs of over exploitation.”¹⁸ It also noted that its deep water fisheries (apart from shrimp) were essentially untouched. The government’s Commission thus concluded:

Of the many options to harness the deep sea fishery resources, diversification of the existing deep sea fishing fleet and introduction of resource specific vessels for long-lining, purse seining and squid jigging is necessary in the present circumstances. Introduction of modern fishing vessels in the intermediate range (15-19 m [over-all length]) is also essential to exploit areas between 70 m to about 150 m depth to harness both demersal and pelagic resources.

Finally, small-scale fishers can make significant contributions to international trade, both where target stocks are purely domestic and where small-scale fleets move offshore. This should come as no surprise, given the explicit policies of many countries to expand the commercial reach of their small-scale sectors into international markets. Whether it is tuna from **Indonesia**, hake from **South Africa**, or octopus from **Mauritania**, the drive to turn small-scale fisheries towards exports appears strong. **Senegal** is another leading example, with a small-scale sector of 12,000 dug-out canoes providing 60% of fishing exports and making a major contribution to the country's foreign exchange earnings.¹⁹ In **Uganda** and **Tanzania** small-scale fishermen catching Nile perch in the inland fisheries of Lake Victoria contribute significantly to the total exports of those countries.²⁰ In **Malaysia**, the lucrative prawn export fisheries of the Sabah province are dominated by small vessels.²¹

These are just a few specific examples of a trend that has made small-scale fisheries an important source of hard currency earnings for many coastal states. It should be noted, however, that recent studies have challenged the notion that export-oriented fisheries development is always the best solution for developing countries. Export-driven fisheries development can sometimes have unintended consequences, such as raising domestic fish prices and lowering the domestic availability of fish protein.²²

“Small” Does Not Mean “Sustainable”

Unfortunately, it should by now be clear to all observers that small-scale fisheries are not immune to overcapacity, overfishing, or destructive fishing practices. A brief list of examples illustrates this sad fact:

- In the **Azores**, small-scale fisheries are responsible for depleting commercially important fish stocks on sensitive sea mount habitats;²³
- In **Papua New Guinea**, reef fisheries are being overexploited by small-scale and artisanal fishing, especially where fishers have access to cash markets;²⁴
- In **Myanmar**, international trade opportunities have caused a recent “boom” in shrimp fishing by the small-scale sector, but “future prospects appear gloomy due to the possibility of over exploitation”²⁵
- In Baja California Sur (**Mexico**) small-scale fisheries are “among the greatest current threats” to critically endangered North Pacific Loggerhead sea turtles;²⁶
- In **Thailand**, overexploitation and destructive fishing practices in small-scale fisheries caused depletion and prevented communities from reaping the rewards of higher prices from the tourist market;²⁷
- In **Norway**, trawling by small-scale vessels has led to the depletion of local lobster fisheries and the destruction of sea-bed habitats;²⁸ and
- In northern **Peru**, small-scale longline fisheries have been found to have high seabird bycatch of threatened albatross populations.²⁹

The examples listed above refer to situations where the activities of the small-scale fleets themselves have been a root cause of depletion and environmental degradation. In many other cases, the difficulties faced by small-scale fleets have been compounded (or even initially caused) by the arrival of industrial-scale fleets in their traditional waters. In **Chile**, for example, export-driven small-scale fishing contributed to the overfishing of Patagonian Toothfish stocks, which was accelerated sharply by industrial fleets.³⁰

In short, small-scale fisheries—like large-scale fisheries—too often suffer from the twin evils of mismanagement and overcapacity. Moreover, several studies have concluded that inappropriate subsidies can compound, or even drive, these problems, leading to the depletion of small-scale fisheries.³¹

“Small” Does Not Even Mean “Small”

Considering the very large proportion of global fishing that is carried out by small-scale fleets, it may even be said that “small-scale” is in some important sense a misnomer. In the EU, 80% of fishing vessels are “small-scale”.³² In Norway, the figure is greater than 90%.³³ On a worldwide basis, the vast majority of vessels and people employed in fishing are active in small-scale fisheries. And even the absolute contribution of small-scale fisheries to world production is far from “*de minimis*”—one recent rough estimate concludes that small-scale fisheries likely account for between 25% and 33% of worldwide capture fisheries production.³⁴

IN SUM

From the perspective of subsidies policy, the implications are clear:

- (1) Relaxing WTO rules for “small-scale” fisheries—especially when these are defined purely by vessel size—has no basis in sound policy, and runs a very great risk of introducing a crippling loophole into WTO fisheries subsidies rules;
- (2) Artisanal fisheries (as defined for purposes of the WTO talks in terms of subsistence or near-subsistence activity) should be kept distinct from “small-scale”, and should be given special treatment as part of S&DT; and
- (3) Governments should remain free to assist their small-scale fishing communities in ways that are properly tailored to their socio-economic goals. Where the objective is to grow small-scale fishing (or at least make it relatively stronger in relation to industrial fishing), governments should consider using the allocation of sustainable fishing rights rather than subsidies to capital or operating costs. If the goal is simply to protect uncompetitive traditional communities from social dislocations, governments should turn to social safety nets and transitional arrangements rather than subsidies linked to production.

Endnotes

¹ The FAO Fisheries Glossary can be found online at <http://www.fao.org/fi/glossary/default.asp>.

² R. Chuenpagdee, et al, *Bottom-Up, Global Estimates of Small-Scale Marine Fisheries Catches*, Fisheries Centre Research Reports No. 14(8) (UBC 2006).

³ A detailed discussion of the “artisanal fishing” question within the WTO fisheries subsidies debate can be found in *Artisanal Fishing: Promoting Poverty Reduction and Community Development Through New WTO Rules on Fisheries Subsidies*, UNEP 2005

⁴ See *Draft Consolidated Chair Texts of the AD and SCM Agreement*, WTO Doc. No. TN/RL/W/213 (30 November 2007) (“Chair’s Draft”) Art. III.2(a). The approach proposed by the Chair departs from that favored by WWF. See *Fisheries Subsidies: WWF Statement on the Chairman’s Draft*, (WWF, 12 December 2007) (http://assets.panda.org/downloads/wwf_stmnt_on_fish_subs_text_111207.pdf). It is noteworthy that the Chair’s Draft avoids use of the term “artisanal” itself, probably in order to avoid the difficult definitional debates that have taken place during the negotiations. These debates—which are perhaps not yet over—arose in part because some delegations made early use of the term “artisanal” to defend the same interests now at issue in the “small-scale” discussion.

⁵ Proposals for a universal “small vessel” carve-out have included TN/RL/GEN/144 (Norway, 26 January 2007) and TN/RL/GEN/114/Rev.2 (Japan, Korea, & Taiwan, 5 June 2007). Proposals for making vessel size an element of S&DT for developing countries (based on mainly or exclusively on

vessel size, and not in the context of equating “small-scale” with “artisanal) have included TN/RL/GEN/79/Rev.1 (Brazil, 21 February 2006) (NB—Brazil later dropped this element of its S&DT proposal, see TN/RL/GEN/79/Rev.3 (2 June 2006) and TN/RL/GEN/150/Rev.1 (Indonesia, 10 September 2007).

⁶ Chair’s Draft, Art. III.2(b)(2). The Chair’s Draft would also allow subsidies to capital or operating costs for developing country vessels of any length operating within their national EEZs, if certain additional management conditions are met. Such subsidies would also be allowed without condition for the artisanal fisheries discussed above.

⁷ Personal communications with delegations; see also *Bridges Trade BioRes*, Vol. 8 No. 2, 8 February 2008.

⁸ The positions articulated by Norway and Japan/Korea/Taiwan in the papers mentioned in fn. 5 appear to remain current.

⁹ C. Béné et al, *Increasing the contribution of small-scale fisheries to poverty alleviation and food security*, FAO Fisheries Technical Paper. No. 481 (2007), p. 2.

¹⁰ K. Dahou & M. Dème, “Support Policies to Senegalese Fisheries”, in *Fisheries Subsidies and Marine Resources Management: Lessons learned from Studies in Argentina and Senegal* (UNEP 2002). Information about ENDA can be found at their website, <http://www.enda.sn>.

¹¹ N. Therkildsen, “Small- versus large-scale fishing operations in New England”, in *Fisheries Research* 83 (Elsevier 2006), p. 290.

¹² E.P. González et al., “Changes in Fleet Capacity and Ownership of Harvesting Rights in the Fishery for Patagonian Toothfish in Chile”, in Shotton (ed.), *Case Studies on the Effects of Transferable Fishing Rights on Fleet Capacity and Concentration of Quota Ownership*, FAO Fisheries Technical Paper. No. 412. (2001).

¹³ R. Gillett, “Global Study of Non-Industrial Tuna Fisheries”, § 6.2.6, in Bayliff et al, (eds.), Second Meeting of the Technical Advisory Committee of the FAO Project “Management of Tuna Fishing Capacity: Conservation and Socio-economics”. Madrid, Spain, 15-18 March 2004. FAO Fisheries Proceedings. No. 2. (2005).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Gulf of Maine Aquarium website, “Lobster Boats: Icons of the Maine Coast” (<http://octopus.gma.org/lobsters/boats.html>)

¹⁷ S. Mathew, “Small-scale Fisheries Perspectives on an Ecosystem-based Approach to Fisheries Management”, paper presented at the Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem, 1-4 October 2001 (<ftp://ftp.fao.org/fi/document/reykjavik/pdf/04Mathew.pdf>)

¹⁸ Government of India, *Report of the Working Group on Fisheries for the Tenth Five Year Plan* (2001) (<http://planningcommission.nic.in/aboutus/committee/wrkgrp/fishery.pdf>)

¹⁹ Agriflash November 2005 (Technical Centre for Agricultural and Rural Cooperation ACP-E) (<http://tv.cta.int/af0511.htm>)

²⁰ In Uganda, export fisheries based mainly on the small-scale Nile perch fisheries contributed 17% of the total value of exports in 2002, having grown from less than one percent in 1990. In Tanzania, Nile perch from small-scale fisheries contributed US\$77 million to a total fisheries export value of around US\$91 million in 2002. (C. Béné et al, *supra* n. 9.)

²¹ Town and Regional Planning Department of Sabah, *Sabah Coastal Zone Profile 1998*, (website), § 11.4 (<http://www.townplanning.sabah.gov.my/iczm/reports/Coastal%20Profile%20Sabah/ch11/11-FISHERIES.html#Figure%2049>)

²² See, e.g., Dahou, *supra* n. 10, p. 27; M. Allain, “Fillets for France, Fish heads for the Philippines: Trends in international fish trade”, presentation at the Seafood Choices Conference, Barcelona, Spain, January 28, 2008 (powerpoint slides at http://www.seafoodchoices.org/newsroom/documents/Allain_FeedWorld.pdf) See also S. Mathew, *supra* n. 17 (export orientation has sharpened inequalities among fishermen and denied supply to local female fish processors).

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- ²³ ICES 2008, "Seamounts – hotspots of marine life", online at <http://www.ices.dk/marineworld/seamounts.asp>
- ²⁴ J.E. Cinner, et al, "Socioeconomic factors that lead to overfishing in small-scale coral reef fisheries of Papua New Guinea," in *Environmental Conservation* vol. 33(1): 73–80 (Foundation for Environmental Conservation, 2006).
- ²⁵ I. Okamoto, "The Shrimp Export Boom and Small-Scale Fishermen in Myanmar", IDE Discussion Paper No. 135 (Institute Of Developing Economies, 2008) (http://www.ide.go.jp/English/Publish/Dp/pdf/135_okamoto.pdf)
- ²⁶ Peckham, et al, 2007, "Small-Scale Fisheries Bycatch Jeopardizes Endangered Pacific Loggerhead Turtles", PLoS ONE 2(10): e1041 (abstract at <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0001041>)
- ²⁷ K. Juntarashote, "Fishermen Income and Community-Based Fishery Management: Options for Improving Incomes of Fishing Communities in Phang-Nga Bay", in FAO, *Community-Based Fisheries Management in Phang-Nga Bay* (Proceedings of the National Workshop on Community-based Fisheries Management: Phuket, Thailand, 14-16 February 1996) (FAO 1998).
- ²⁸ WWF, "Langoustine Linguine The Issue", web article, http://www.panda.org/about_wwf/what_we_do/marine/help/seafood_lovers/fish_dishes/langoustine_linguine/issue_norway_lobster/index.cfm
- ²⁹ J. Jahncke et al, "Seabird By-Catch in Small-Scale Longline Fisheries in Northern Peru", in *Waterbirds: The International Journal of Waterbird Biology*, Vol. 24, No. 1 (Apr., 2001), pp. 137-141 (<http://www.jstor.org/pss/1522255>).
- ³⁰ E.P. González et al., supra n. 12.
- ³¹ C. Béné et al, supra n. 9, pp. 83-84. See also, Dahou, supra n. 10.
- ³² EU, "Arrangements for structural assistance to the fisheries sector 2007 – 2013", online at http://ec.europa.eu/fisheries/cfp/structural_measures/arrangements_2007_2013_en.htm. The EU states, however, that the small-scale sector accounts for less than 15% of total EU fishing capacity.
- ³³ FAO, "Fishery and Aquaculture Country Profile: Norway", online at http://www.fao.org/fishery/countrysector/FI-CP_NO/en.
- ³⁴ R. Chuenpagdee, et al, *Bottom-Up, Global Estimates of Small-Scale Marine Fisheries Catches*, Fisheries Centre Research Reports No. 14(8) (UBC 2006), p. 13.

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