Negotiating WTO Fisheries Subsidy Disciplines: Can Subsidy Transparency and Classification Provide the Means Towards an End to the Race for Fish?

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I. INTRODUCTION

> *[U]nless an effective control can be exercised over fishing vessels and fishermen . . . the great waters cannot continue to yield the constantly increasing tonnage of products taken by improved methods which is being supplied to markets ever widening as a result of quicker and better means of transportation.*[1]

Professor Chamberlain of Columbia University wrote these prophetic words in 1944.[2] Sixty years later, the sustainability of many of the world's most valuable fisheries is in an even more desperate state of crisis,[3] and the international community is still struggling to agree on the proper means to protect the global marine food supply.[4] Today, international society must face the sobering fact that an estimated "seventy-five percent of the world's major fisheries are overexploited, fully exploited or recovering from depletion."[5] In addition to the devastating impact of land-based pollution and coastal development on the marine ecosystem, the wild fisheries harvest increased five-fold from the 1950s to the late 1980s,[6] thus proving Professor Chamberlain's prediction ever so correct. Despite the knowledge within civil societies for more than half a century of the dire need for effective controls on global harvest levels, this pressing international issue remains a dilemma with an uncertain outcome.[7]

In the last decade, however, since the inception of the World Trade Organization (WTO), the global fisheries crisis has become even more pressing, and there is a growing consensus that subsidies are contributing significantly to the overfishing problem.[8] Though other international

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1. Joseph P. Chamberlain, *Foreword* to L. LARRY LEONARD, INTERNATIONAL REGULATION OF FISHERIES, at v (Carnegie Endowment for International Peace 1944).

2. *Id.*

3. *See Joint NGO Statement*, FAO COMM. ON FISHERIES, 25th Sess. (2003), *available at* http://archive.panda.org/downloads/policy/jointstatementfishingsubs.pdf (last visited Nov. 2, 2004) [hereinafter *Joint NGO Statement*].

4. 2 INT'L CTR. FOR TRADE AND SUSTAINABLE DEV. (ICTSD) & INT'L INST. FOR SUSTAINABLE DEV. (IISD), *Cancun Update, Doha Round Briefing Series, No. 7*, at 1 (Aug. 2003), *available at* http://www.ictsd.com/pubs/dohabriefings/cancun-updates/v2_07_rules.pdf [hereinafter *Cancun Update*].

5. *Joint NGO Statement*, *supra* note 3.

6. David Downes & Brennan Van Dyke, *Fisheries Conservation and Trade Rules: Ensuring that Trade Law Promotes Sustainable Fisheries*, at 13 (1998), *available at* http://www.ciel.org/Publications/fisheriesconservation.pdf (last visited Nov. 2, 2004).

7. *See* Chamberlain, *supra* note 1.

8. *See Joint NGO Statement*, *supra* note 3. The declines in catch levels are largely due to two types of overfishing: (1) "growth overfishing" when too many fish are taken before they reach a size where further growth is offset by natural predation and (2) "recruitment overfishing" when too few mature fish are left to produce enough eggs for future "recruits." Gareth Porter, *Fisheries Subsidies, Overfishing and Trade*, at 10, Sustainable Development Networking

institutions have traditionally dealt with fisheries,[9] the WTO's binding dispute resolution system has brought the issue to the WTO negotiating table, yet again.

During the Uruguay Round multilateral trade negotiations in 1994,[10] fisheries were specifically excluded from the Agreement on Agriculture,[11] primarily because the negotiating countries were unable to agree on the elimination of tariff quotas for fisheries products.[12] By default, more than anything else, fisheries subsidies therefore fall under the Agreement on Subsidies and Countervailing Measures (SCM Agreement).[13] The problem is that "subsidies," broadly defined as "a

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Programme, *available at* http://www.sdnbd.org/sdi/issues/environment/article/1.pdf (last visited Apr. 26, 2004). These two types of overfishing can result in the permanent depletion of fish stocks and can cause long-term changes to an entire ecosystem if the predator-prey balance or genetic diversity is altered. *Id.* at 11. When an entire ecosystem begins to collapse, smaller low- or no-value "trash fish" begin to dominate the marine community, with the larger high-value species becoming "commercially extinct" because there are so few remaining that it is no longer economically feasible to fish for them. *Id.* "As the more lucrative stocks have become depleted or disappeared, fishers have begun looking for species they once disdained—monkfish, skate, dogfish." The Honorable Frank E. Loy, *Keynote Address* to CURRENT FISHERIES ISSUES AND THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS 8 (Myron H. Nordquist & John Norton Moore eds., 2000).

9. *See Preliminary Report of the U.S. Commission on Ocean Policy—Governors' [sic] Draft*, at 366-71, U.S. Ocean Commission, *available at* http://www.oceancommission.gov/documents/prelimreport/00_complete_prelim_report.pdf (Apr. 20, 2004) [hereinafter *Preliminary Report*].

10. Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Apr. 15, 1994, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 1 (1994), 33 I.L.M. 1125 (1994) [hereinafter Final Act]. The Uruguay Round resulted in the Marrakesh Agreement establishing the World Trade Organization (WTO). *See* Final Act, *supra*, art. I.

11. Agreement on Agriculture, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Ann. 1A, LEGAL TEXTS—THE RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS (1999).

12. *See* DAVID SCHORR, WORLD WILDLIFE FUND, TOWARDS RATIONAL DISCIPLINES ON SUBSIDIES TO THE FISHERY SECTOR: A CALL FOR NEW INTERNATIONAL RULES AND MECHANISMS 169 n.30, *available at* http://worldwildlife.org/oceans/pdfs/discipline.pdf (last visited Nov. 2, 2004). The author is the Director of the Sustainable Commerce Program, World Wildlife Fund. *Id.*

13. *See* Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Ann. 1A, LEGAL TEXTS—THE RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS, *available at* http://www.wto.org/english/docs_e/legal_e/24-scm.pdf [hereinafter SCM Agreement]. The SCM Agreement provides the ground rules for when WTO members may take action against another member's subsidization of its industries. The agreement provides the legal vehicle for members to pursue multilateral action via the WTO Dispute Settlement Body, or the justification for the unilateral application of countervailing duties. Under the SCM Agreement, a subsidy exists where there is a financial contribution or any form of income or price support by a government and a benefit is thereby conferred. SCM Agreement art. 1.1. The agreement addresses only those defined subsidies that have been deemed to distort trade. *See* Seung Wha Chang, *WTO Disciplines on Fisheries Subsidies: A Historic Step Towards Sustainability?*, 6 J. INT'L ECON. L. 879, 885,

government-directed, market-distorting intervention which decreases the cost of producing a specific good or service, or increases the price which may be charged for it,"[14] are unlikely to fall within the narrow scope of the SCM Agreement's legal definition of a subsidy.[15] While this definition is broader than the SCM Agreement's legal definition, it still does not cover implicit subsidies, where governmental action or inaction allows environmental costs or other externalities to be charged to society instead of forcing those costs to be internalized into the costs of harvesting the resource.[16] In any event, most fisheries "subsidies" are neither prohibited nor actionable subsidies under the SCM Agreement because "one or more of the necessary elements is lacking . . . because there is no injury to the domestic industry of another Member, no nullification or impairment, or no serious prejudice, no benefit is conferred, or the subsidy is not specific."[17]

(2003). This includes, inter alia, direct government financial transfers, government forbearance of revenues otherwise due and government conveyance of goods or services. *See* SCM Agreement arts. 1.1(i), 1.1(iii). Additionally, in order to constitute an actionable subsidy, the benefit conferred must be bestowed upon a specific industry, enterprise, or group of enterprises ("certain enterprises"). SCM Agreement art. 2.1. The requisite specificity is found where a government expressly limits the availability of the subsidy to certain enterprises. *See* SCM Agreement art. 2.1(a). However, where a government identifies objective criteria to determine eligibility, which is legally verifiable, no specificity is deemed to exist. *See* SCM Agreement art. 2.1(b). Notwithstanding these basic rules, certain factors may be applied to determine whether a subsidy program is de facto specific. *See* SCM Agreement art. 2.1(c). Beyond these rules, the SCM Agreement applies a "traffic-light" approach to categorize types of subsidies. Those subsidies that WTO members have agreed are the most trade-distorting are per se prohibited, otherwise known as "red light" subsidies. *See* SCM Agreement art. 3.1. This category includes subsidies that are specifically contingent upon exporting as well as subsidies that are contingent upon the use of domestic goods rather than imported goods. *See* SCM Agreement art. 3.1(a)-(b). In addition to "red-light" prohibited subsidies, the Agreement covers "amber-light" subsidies, which are those that are not WTO illegal, but are countervailable. The least trade-restricting subsidies are considered "green-light" subsidies, or those that are non-specific. Though they may constitute a "subsidy" under a broad definition of the word, they do not fall within the umbrella of the SCM Agreement's legal definition of a subsidy, as defined in article 1.1, and, therefore, are not actionable under the Agreement. *See, e.g.*, Christina Schröder, *ACP/EU Fisheries Relations: Towards Mutual Benefits: Fisheries Subsidies in the WTO*, ¶ 17, Technical Centre for Agricultural and Rural Cooperation (presented at the WTO seminar for fisheries subsidies, Apr. 7-9, 2003), *available at* http://www.agricta.org/events2003/fisheries/Schröder-EN.doc.

14. Porter, *supra* note 8, at 4.

15. *See Preliminary Report*, *supra* note 9; *see also* Schröder, *supra* note 13, ¶ 1.

16. *See* Porter, *supra* note 8, at 5.

17. Schröder, *supra* note 13, ¶ 1. An APEC study found:

> Very few programs and subsidies would seem to be incompatible with the WTO SCM. Only ten out of 162 are assessed as being both potentially Actionable, and with a medium or high risk of challenge. Of the total 162, 29 are viewed as probably non-actionable. Of the remaining 133 that might conceivably be actionable, 123 have a very low or low risk of challenge. Accordingly, only 10 programs are viewed as both conceivably actionable, and with a medium or high risk of challenge. The risk of

For this reason, in 2001, as part of the WTO Ministerial Conference held in Doha, Qatar, WTO members agreed to negotiate clarifications to the existing rules under the SCM Agreement as they apply specifically to fisheries.[18] Thus far, however, WTO members have been unable to agree on the appropriate means to eliminate identified subsidies that contribute to overfishing.[19] Some WTO members, such as the "Friends of Fish" group, assert that fisheries subsidies have created a perverse incentive to overfish the high seas—that they are a major cause of overcapitalization, producing more entrants into the fisheries sector, among other things.[20] Among those members, the elimination of fisheries subsidies is seen as "possibly the greatest contribution the multilateral trading system could make to sustainable development."[21] Others, like Japan, however, maintain that fisheries subsidies are not the problem, but that the tighter enforcement of existing international agreements and fisheries management is the proper solution.[22]

The fisheries subsidies debate has materialized into a deadlocked dispute for three basic reasons: (1) the magnitude of global fisheries

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> challenge is a major determining factor. Many more subsidies and programs might in principle be Actionable, but are too small scale, excusable as regional development, or are some form of environmental adjustment, which is exempt.

PRICEWATERHOUSECOOPERS, *Study into the Nature and Extent of Subsidies in the Fisheries Sector of APEC Members Economies*, at 56-57 (prepared for the Fisheries Working Group, Asia Pacific Economic Co-operation (APEC)), *available at* http://www.apec.info/asia/00_fwg_subsidies.pdf (Oct. 16, 2000) [hereinafter *APEC Study*].

18. This agreement is reflected in the "Doha Development Agenda," (Doha Agenda) which was adopted at the conference. Specifically with respect to fisheries subsidies, it provides:

> In the light of experience and of the increasing application of these instruments by Members, we agree to negotiations aimed at clarifying and improving disciplines under the Agreements on Implementation of Article VI of the GATT 1994 and on Subsidies and Countervailing Measures, while preserving the basic concepts, principles and effectiveness of these Agreements and their instruments and objectives, and taking into account the needs of developing and least-developed participants. In the initial phase of the negotiations, participants will indicate the provisions, including disciplines on trade distorting practices, that they seek to clarify and improve in the subsequent phase. In the context of these negotiations, participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.

Ministerial Declaration, 4th Sess., Doha ¶ 28, WT/MIN/(01)/DEC/1, *adopted on* Nov. 14, 2001.

19. *See* Schröder, *supra* note 13, ¶ 16.

20. *See* WORLD TRADE ORGANIZATION, NEGOTIATING GROUP ON RULES, *Communication from the United States: Possible Approaches to Improved Disciplines on Fisheries Subsidies*, TN/RL/W/77 (Mar. 19, 2003) [hereinafter *U.S. Communication to the Negotiating Group on Rules*].

21. *Cancun Update*, *supra* note 4.

22. *See* WORLD TRADE ORGANIZATION, COMMITTEE ON TRADE AND ENVIRONMENT, *Japan's Basic Position on the Fishery Subsidy Issue*, WT/CTE/W/173 ¶ 6 (Oct. 23, 2000) [hereinafter *Japan's Basic Position*].

subsidies is substantial, estimated at approximately $15-20 billion annually, with Japan, the European Commission (EC), and the United States accounting for one-half; (2) a major share of harvested fish, about 40%, is traded internationally, with the primary importers being Japan, the EC, and the United States; and (3) many developing countries are significantly reliant upon the export of fisheries products, which often account for at least 50% of their total exports.[23] The specific dynamics of these international negotiations epitomize the difficulties of obtaining willing consent to regulation in a competitive pool situation.[24] Moreover, the entrenched negotiating positions of certain countries such as Japan and Korea suggest "rent-seeking rather than disagreement on the merits."[25] Further, with empirical data regarding both the environmental and economic causes of overfishing being rather flimsy, reaching a sufficient consensus may be years away.[26] This is particularly possible given the failure of the Cancun Ministerial in 2003; though further negotiations regarding fisheries subsidies are proceeding, progress is slow.[27]

This Article proposes that, in order to speed progress toward an international agreement in some form on fisheries subsidies, two interim steps should be taken. In tandem with continuing negotiations on fisheries subsidies, the first and immediate step in the negotiations must be a renewed commitment to transparency in fisheries subsidies. Increased transparency regarding the level of global fisheries subsidies will facilitate the formulation of more accurate data regarding the effects of fisheries subsidies. To further this objective, members should revise the SCM Agreement's notification obligations to more fully encompass the variety of fisheries subsidies that exist in the sector. Whether raised as an amendment to the SCM Agreement, pursuant to article X of the

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23. Justin Brown, *Fisheries Subsidies: International Initiatives to Identify, Measure and Establish Disciplines for Fisheries Subsidies* 1 (2002) (presented at the Australian Bureau of Agricultural and Resource Economics (ABARE) Outlook Conference), *available at* http://www.dfat.gov.au/trade/negotiations/environment/fisheries subsidies.html (last visited Nov. 2, 2004). Justin Brown is the Assistant Secretary, WTO Trade Law Branch, Department of Foreign Affairs and Trade. *Id.*

24. *See* Vincent Ostrom & Elinor Ostrom, *A Theory for Institutional Analysis of Common Pool Problem*, *in* MANAGING THE COMMONS (Garrett Hardin & John Baden eds., 1977); *infra* note 33 and accompanying text (defining "common pool resources").

25. *See* Jonathan Baert Wiener, *On the Political Economy of Global Environmental Regulation*, 87 GEO. L.J. 749, 751 (1999) (discussing parochial rent-seeking strategies in the climate change treaty negotiations); *see also Cancun Update*, *supra* note 4 (describing Japan's and Korea's longstanding resistance to fisheries discipline).

26. Telephone Interview with Roy Malmrose, U.S.T.R. lead subsidies negotiator (Apr. 21, 2004) (on file with author).

27. *Id.*

Agreement Establishing the World Trade Organization (Final Act),[28] or more simply, by clarifying the notification questionnaire through the Committee on Subsidies and Countervailing Measures and Subsidiary Bodies,[29] increased transparency should transcend the stalwart blockage that is preventing negotiation progress. Greater transparency should have the additional effect of boosting the Friends of Fish group's ability to apply coercive pressure to hold-out countries, thus shifting the negotiation model from one of willing consent to one of coercion.[30]

The second interim step, short of a full agreement on subsidy disciplines for the fisheries sector, should be to reach international consensus on a still unsettled fisheries subsidies classification system. Classifying the subsidies in the sector that enhance overfishing versus those that have the effect of reducing capacity is a fundamental question that has not been addressed.[31] Before further negotiation advancement can be made, it is arguably necessary to agree to the terms of reference. The challenge in reaching international consensus on subsidy classifications is due to the implications raised—agreement could create a slippery slope towards broader subsidy disciplines for the fisheries sector.[32] Moreover, it may be that increased transparency and research will be necessary before an agreement on a classification system can be reached. Nonetheless, such classifications could be revised as more research reveals the true trade effects of fisheries subsidies.

This Article first examines the critical nature of the global fish crisis as well as the economics behind overfishing. The positions taken by various WTO members are then reviewed, followed by an examination of the international negotiating strategies typically found with a proposal to regulate a global commons or a common pool resource.[33] This theory is then applied specifically to the WTO negotiations on the clarifications to the SCM Agreement relating to fisheries subsidies. An examination

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28. *See* Final Act, *supra* note 10.

29. This committee is established pursuant to article 24 of the SCM Agreement. Under article 25 of the agreement, the Committee is authorized to "establish a Working Party to review the contents and form of the questionnaire as contained in BISD 9S/193-194." SCM Agreement, art. 25.3 n.54.

30. *See generally* Ostrom & Ostrom, *supra* note 24.

31. *See, e.g.*, SCHORR, *supra* note 12, at 148.

32. *See, e.g.*, *id.*

33. Common pool resources are those resources "for which there are multiple owners (or a number of people who have rights to use the resource) and where one or a set of users can have adverse effects upon the interests of other users." John Baden, *A Primer for the Management of Common Pool Resources*, *in* MANAGING THE COMMONS, *supra* note 24, at 138-39. In those situations where there is "no agency with the power to coordinate or to ration use" of the common pool resource, the rational acts of individuals "can be collectively disastrous." *Id.* "This is the central point of the 'tragedy of the commons.'" *Id.*

follows of the gaps in information due to a lack of transparency in fisheries subsidies notification as well as the effects of specific types of fisheries subsidies and proper classification of those subsidies. This Article concludes that, to move toward an international agreement on fisheries subsidies, such information gaps must be closed to overcome the "tragedy of the commons" problem.[34]

II. THE TRAGEDY OF THE COMMONS EPITOMIZED

A. Open Access and Overcapitalization: Contributing to Declining Fish Stocks

> *People used to harpoon three-meter long swordfish in rowboats. Hemingway's Old Man and the Sea was for real.*[35]

Research indicates that only 10% of all large predatory fish, such as tuna, swordfish, blue marlin, cod, and halibut, among others, remain in the world's oceans, as compared to preindustrialized levels.[36] Moreover, "25% of all fishery resources are in severe danger of depletion and require major interventions to restore sustainable yields," meaning that, without major interventions, these valuable fishery resources will be gone for good.[37] Overfishing is the cause of serious declines in high-value fish stocks, affecting thirteen of fifteen of the world's major fishing grounds.[38] Research further shows that when industrialized fishing is introduced into a marine community, it takes a mere fifteen years to reduce the biomass of the community by 80%.[39]

Although the overall decline of marine ecosystems has been broadly accepted, there is still resistance to accepting the declines in any

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34. *See* WORLD TRADE ORGANIZATION, *Communication from Chile: Possible Approaches to Improved Disciplines on Fisheries Subsidies*, TN/RL/W/115 ¶ 2 (June 10, 2003) (characterizing the fisheries crisis as a classic example of the tragedy of the commons).

35. *Cover Study of Nature Provides Startling New Evidence that Only 10% of All Large Fish Are Left in Global Ocean*, SCIENCEDAILY.COM, (quoting Jeremy Jackson, Scripps Institution of Oceanography) *at* http://www.sciencedaily.com/releases/2003/05/030515075848.htm (last visited Nov. 2, 2004) [hereinafter *Nature Cover Study*].

36. Ransom Myers & Boris Worm, *Rapid Worldwide Depletion of Predatory Fish Communities*, NATURE MAGAZINE, May 15, 2003, at 280, *available at* http://www.nature.com/cgi-taf/DynaPage.
taf?file=/nature/Journal/v423/n6937/abs/nature01610_fs.html&dynoptions=doi1076518525.

37. UNITED NATIONS ENVIRONMENT PROGRAMME, *Workshop on the Impacts of Trade-Related Policies on Fisheries and Measures for Sustainable Fisheries Management*, Geneva, Annotation I, *available at* http://www.unep.ch/etu/etp/events/Fisheries/15Mar_Fisheries_agenda.pdf (Mar. 15, 2002) [hereinafter *UNEP Workshop*].

38. *See* Porter, *supra* note 8, at 10.

39. *See* Myers & Worm, *supra* note 36, at 280.

particular species.[40] It has been suggested that this is because fisheries managers have forgotten what the oceans used to yield—fish like blue marlin five times the size they are today.[41] This can also be explained by the fact that "[i]n a purely global problem, the locale of the source suffers no local impacts from the initial activity itself, but it feels the impact of its activities only as a fractional share of the overall global change to which it has contributed."[42] Such a blind eye is evidenced by the fact that, in spite of obvious declines, world catch levels "reached an all time high of 87 million tonnes of fish,"[43] while empirical data shows that eighty million tons is the maximum sustainable yield.[44]

The depletion of the world's fish stocks is an international crisis that clearly must be addressed without delay, not only for biodiversity, but also for social and economic reasons.[45] Almost one-sixth of the world's population, approximately 950 million people, relies upon fish for its primary source of protein, while it is an integral component of the diets of even more.[46] In international trade terms, approximately "195 countries export part of their production and some 180 countries have reported fishery imports of varying amounts."[47] Moreover, fishery exports have surpassed coffee, bananas, tea, and rice in developing countries, making it an invaluable export commodity in those countries.[48] In addition to the socioeconomic importance of marine resources, fish are crucial to the world's biodiversity, the health of marine ecosystems, and the welfare of the entire planet.[49] Nonetheless, global overfishing continues to be a growing threat to achieving sustainable global fisheries.[50]

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40. *See Nature Cover Story*, *supra* note 35.

41. *See id.*

42. Jonathan Baert Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 YALE L.J. 677, 690 (1999).

43. *Underwriting Overfishing*, WORLD WILDLIFE FUND, Sept. 1999, *available at* http://worldwildlife.org/oceans/pdfs/under_over.pdf.

44. Matteo Milazzo, *Subsidies in World Fisheries: A Reexamination*, World Bank Technical Paper No. 406, Apr. 1998, at 1, *available at* http://www.biodiv.org/doc/case-studies/inc/cs-inc-wb-01-en.pdf. A tonne, or metric ton, is 1000 kg or approximately 2204.62 lbs., while a ton, or "short-ton," is 2000 lbs. or approximately 907.185 kg.

45. *See* Thorir Ibsen, *Iceland's Proposals About Fisheries Subsidies*, *in* CURRENT FISHERIES ISSUES AND THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS 459 (Myron Nordquist & John Norton Moore eds., 2000).

46. *Id.*

47. *Id.* at 460.

48. Downes & Van Dyke, *supra* note 6, at 14.

49. *See* Myers & Worm, *supra* note 36.

50. *See UNEP Workshop*, *supra* note 37.

In 1944, Professor Chamberlain explained that overfishing was caused by better transportation and widening markets.[51] Today, the same thing is true, exponentially.[52] Fishing fleets in the twenty-first century have the capacity to catch far beyond sustainable levels.[53] Some estimate that the world fishing fleet is capable of catching two and one-half times more than the sustainable level.[54] Catching capacity is not measured simply by the worldwide number of fishing vessels, but by the "total increases in fleet tonnage, engine power, and other indicators of technological change."[55] While the number of vessels has increased significantly (87% between 1970 and 1989), the overcapacity[56] of the global fishing fleet is primarily caused by the tremendous advances in technology in the last thirty to forty years.[57] Not only are the vessels today larger and more powerful, they can range farther faster and in poorer weather.[58] In addition, spotter planes, satellites, and sonar systems enable 1000-ton "supertrawlers" to zero in on the location of dwindling fish populations, "making it possible for these trawlers to continue to make large catches even as the stock is depleted."[59]

B. Economic Analysis of Fisheries Sector and the Link to Overcapacity

> *Each man is locked into a system that compels him to increase his herd without limit—in a world that is limited.*[60]

If overfishing is the cause of declining fish stocks, what causes overfishing? Given that the world's oceans are perhaps the quintessential "global commons," particular problems predictably occur given the existence of certain conditions:

1. There is common ownership of the resource;
2. multiple owners have independent rights of use;

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51. Chamberlain, *supra* note 1.
52. Downes & Van Dyke, *supra* note 6, at 14.
53. Porter, *supra* note 8, at 11.
54. *Underwriting Overfishing*, *supra* note 43.
55. *See* Porter, *supra* note 8, at 12.
56. *See Chronicle of a Plunder Foretold*, Greenpeace, ¶ 3.3 n.6 (explaining that the proper definition of "[o]vercapacity" is "the capacity above what is needed to maintain an ecologically sustainable fishery. It is the sustainability in the harvest which should be decisive for the necessary capacity"), *at* http://archive.greenpeace.org/comms/fish/plun03.html.
57. Porter, *supra* note 8, at 12.
58. *See id.*
59. *Id.*
60. GARRETT HARDIN, THE TRAGEDY OF THE COMMONS 16 (Garret Hardin & John Baden eds., 1977).

3. control cannot be exerted by any one user, or, the willing consent of all users is necessary to reach a joint agreement regarding the resource use; and
4. the demand or use of the resource exceeds the supply.[61]

Though the Law of the Sea Convention[62] and other international rules do exist,[63] all countries have a right to fish in the high seas, limited only by their financial ability to acquire a fishing fleet and, more practically, by port access. Nonetheless, countries may generally fish without regard to the concerns of other countries. Clearly, as noted above, global demand for fish and other marine resources now exceeds supply.[64] Without international consensus in the form of international agreements, no control may be exercised over global fisheries. "[N]ations may do better under mutual cooperation but will face incentives to free-ride and defect from the cooperative solution."[65]

Simply put, regulating global fishing and fisheries subsidies is a multilateral game of prisoner's dilemma.[66] As John Baden explained in the late 1970s, where there is a common pool resource, for instance, salmon or whales, "with independent harvesters, each harvester has an incentive to maximize his catch."[67] Without "collective management" to ration the resource, the catch will predictably exceed the sustainable

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61. Ostrom & Ostrom, *supra* note 24, at 157.

62. *See Preliminary Report*, *supra* note 9, at 366.

> The LOS Convention is, in essence, a "constitution" for the oceans. It provides a comprehensive delineation of the rights, duties, and responsibilities of nations within the territorial sea, exclusive economic zone (EEZ), continental shelf, and high seas. It addresses specific subjects such as marine scientific research, seabed mining, and environmental protection. The Convention also creates institutions for managing ocean issues and provides mechanisms for settling disputes.

Id.

63. *See id.* at 366-71 (providing a comprehensive list of international agreements relating to marine resources).

64. Ostrom & Ostrom, *supra* note 24, at 157.

65. Wiener, *supra* note 25, at 762.

66. Prisoner's dilemma is defined as

> a type of non-zero-sum game. In this game theory problem, as in many others, it is assumed that each individual player is trying to maximize his own advantage, without concern for the well-being of the other player. This Nash equilibrium does not lead to a jointly optimum solution in the prisoner's dilemma; in the equilibrium, each prisoner chooses to defect even though the joint payoff of the players would be higher by cooperating. Unfortunately (for the prisoners), each player has an individual incentive to cheat even after promising to cooperate. This is the heart of the dilemma.

Prisoner's Dilemma, WIKIPEDIA, THE FREE ENCYCLOPEDIA, *at* http://en.wikipedia.org/wiki/Prisoner's_dilemma (last modified Oct. 31, 2004).

67. Baden, *supra* note 33, at 139.

yield.[68] Moreover, even after it is fully known and understood that the resource is in decline, overinvestment in harvesting technology typically occurs as each harvester seeks to maintain his catch levels in spite of diminishing resources.[69] Without clear multilateral rights and obligations regarding the resource "based on some rule other than that of willing consent, the resource will be unnecessarily depleted."[70]

The multilateral prisoner's dilemma of global fisheries can additionally be examined in economic terms. However, the traditional model for analyzing the effects of a subsidy—"producer and consumer surplus, government revenue, and employment, while generally assuming an upward-sloping supply curve"—does not capture the overfishing problem.[71] In a free trading system, "an economy will import where domestic demand exceeds domestic supply and export where domestic supply exceeds domestic demand."[72] Under the traditional model, if an exporting economy receives a subsidy that reduces the cost of production, a downward shift in the supply curve is created in both the domestic market and the foreign export market.[73] The subsidy has the effect of decreasing price and increasing trade.[74] As the world supply of fish products is increased and prices are decreased, profit margins for fish exports become depressed.[75] The economic consequences are particularly acute for developing countries that are heavily dependent upon fish exports, as noted above.[76]

The traditional economic trade analysis, however, fails to consider the effect on the natural resource.[77] As in the traditional model, as price is decreased both in the domestic and the foreign markets, consumption increases as well in both markets;[78] but there is an additional effect because, as consumption increases, so does overfishing.[79] Ultimately, fisheries subsidies cause the supply curve to be "backward bending rather than upward sloping."[80] Under a derivation of the logistics growth

68. *See id.*
69. *See id.*
70. *Id.*
71. *APEC Study*, *supra* note 17, at 41.
72. *Id.* at 42.
73. *See id.*
74. *See id.*
75. *Id.*
76. *See* Downes & Van Dyke, *supra* note 6, at 14.
77. *See APEC Study*, *supra* note 17, at 43.
78. *See id.*
79. Downes & Van Dyke, *supra* note 6, at 32.
80. *See id.*

model,[81] growth rates are assumed to increase at low stock levels until the maximum sustainable yield (MSY) is met, and then they will decline beyond the MSY equilibrium.[82] If a direct relationship can be derived between the fishing effort and the fish stock levels, "the yield stock curve can be directly transformed into a fishing yield-effort relationship."[83] With fishing effort generally quantified by the number of fishing days and the number of traps set or nets used, the yield-effort relationship can be converted into a profitability-effort relationship or a total-revenue to total-cost correlation.[84] With this model, total revenues are equal to harvest multiplied by price, while total cost remains a constant per-unit effort multiplied by the total fishing effort.[85] An equilibrium will be reached where the total revenues equal the total cost. Further increases in efforts beyond the equilibrium will not be sustainable because effort will only increase if there is a correlation to profits.[86] At the point where costs are greater than revenue, fishermen are forced out of the industry.[87]

In sum, where a fisheries subsidy is present, like the traditional model, the subsidy has the effect of decreasing price and increasing trade, thus also increasing consumption both domestically and abroad. The problem is that the subsidy will shift the equilibrium past the MSY for the short run until the subsidy no longer equalizes the profitability-effort relationship due to depleted fish stock levels. The greater the subsidy, the longer it remains profitable to fish beyond the MSY equilibrium.

It is important to note that some subsidies to the fisheries sector are designed to reduce overfishing or redirect entrants to more benign endeavors; they might be intended to enhance fisheries resources or

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81. A logistics growth model is used to model "populations which initially have rapid growth, followed by a declining rate of growth." Marcia Drost, Math150 Lecture Notes 4.5, at 7, *available at* www.math.tamu.edu/~marcia.drost/150lect45b.pdf (Oct. 21, 2002).

> [T]he logistics model begins with a slow growth, followed by a period of moderate growth, and then back to a period of slow growth. It has an upper limit that cannot be exceeded. The Logistics model can be used to approximate sales and advertising (a little advertising generates a little growth in sales, more advertising generates moderate growth in sales, and finally there reaches a point of saturation where additional advertising benefits little in terms of sales) or population growth where there is not the capacity for unlimited growth.

James Jones, 4.5—Exponential and Logarithmic Models, *available at* http://www.richland.edu/james/lecture/m116/logs/models.html (last visited Nov. 2, 2004).

82. *See* Drost, *supra* note 81.

83. *Id.*

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.*

hasten harvesting technology that is more environmentally sensitive.[88] For instance, most fishing nations provide subsidies that provide financial incentives to reduce overcapacity.[89] This commonly includes vessel buy-back programs, fishing permit repurchasing programs, or more elaborate restructuring programs designed to divert harvesters to other marine resources or reequip vessels for use in underutilized fisheries.[90] Distinguishing between "good" and "bad" subsidies in the environmental context is not a simple task, however, because many governments, notably the EC, combine subsidies that both promote and reduce harvesting capacity.[91]

Economically, increased production will result if fishing effort is reduced and fish stocks are increased. For this reason, even subsidy programs designed to improve the health of fisheries resources, such as vessel buy-back programs, can create a backward-bending supply curve.[92] Studies have shown that, in many cases, when governments buy back previously subsidized vessels or when fishing licenses are restricted in an attempt to equalize the supply curve, the total fishing effort did not decrease as newer vessels simply replaced less efficient ones, or because the remaining vessels increased labor, capital, and total effort.[93] At the same time, if implemented efficiently such that both employment in the industry and fishing effort are decreased, vessel buy-back programs can result in an adjustment to sustainable yields.[94]

Further complicating the economic analysis is that, with respect to the world's fishing nations, the concept of comparative advantage[95] plays a small role in determining what nations will produce fish. This is especially true as technology levels the playing field.[96] The result is that all nations are producing a dwindling resource at peak levels. Without adequate controls on access, "economically viable fisheries will continue to attract new entrants, eroding both the fisheries' profitability and the sustainability of the resource."[97] When profitability begins to decline,

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88. *See* Milazzo, *supra* note 44, at 13.
89. *See id.*
90. *See id.* at 13-14.
91. *Id.* at 14.
92. *Id.* at 47.
93. *Id.*
94. *Id.*
95. *See* Kenneth B. Davis, Jr., *Corporate Opportunity and Comparative Advantage*, 84 IOWA L. REV. 211, 215-16 (1999) (discussing the concept of comparative advantage in international trade).
96. *See Underwriting Overfishing*, *supra* note 43.
97. Milazzo, *supra* note 44, at 2.

fishermen press for subsidies, which results in a perverse solution that worsens the problem.[98]

While depleting domestic fish resources may be within the sovereign rights of WTO members, when the policies of one or more WTO members have a negative impact on the economic stability of other members, it seems a proper matter for WTO negotiations. Because the high-value fish that populate the high seas are a global commons resource, one nation's efforts to subsidize its own domestic fishery sector can have a direct economic impact on the ability of other nations to maintain their own fishing industries. Hence, this particular prisoner's dilemma has been termed the "race for fish."[99] As each nation maneuvers to support and expand its fishing sector, taking as much from the oceans as it can, all nations ultimately lose.

C. The Link Between Fisheries Subsidies and Overcapacity

> *Fisheries subsidies are widespread, trade distorting, and undermine the sustainable use of fish resources.*[100]

While the above economic analysis seems intuitive, the link between fisheries subsidies and overcapacity has been insufficiently studied empirically, which has led to some reluctance in the international community "to admit that subsidies constitute a significant obstacle to the achievement of sustainable fisheries."[101] Moreover, because the empirical data regarding the effects of fisheries subsidies on trade flows is even thinner, agreement regarding the WTO's role in addressing the fisheries crisis has been stymied.[102] Studies empirically proving the effects of fisheries subsidies on world trade flows are lacking, and such studies are impeded by the fact that little data is available regarding global assistance programs or other factors, like costs and prices.[103] Moreover, the heterogeneous and perishable nature of fish products further frustrates efforts to measure the trade impact of these subsidies.[104] Further clouding the issues is the fact that subsidies alone are certainly not the sole cause of the decline in fish stocks. Arguably, ineffective management, deteriorating ecosystems, overfishing, and overcapitali-

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98. *See id.*

99. *See, e.g.*, *Rules Negotiations: Friends of Fish Call for Altering Subsidy Disciplines*, 6 BRIDGES WKLY. TRADE NEWS DIG., May 7, 2002, *available at* http://www.ictsd.org/weekly/02-05-07/story1.htm [hereinafter *Rules Negotiations: Friends of Fish*].

100. *Underwriting Overfishing*, *supra* note 43 (quoting the WTO Secretariat).

101. SCHORR, *supra* note 12, at 148.

102. *See* Porter, *supra* note 8, at 32.

103. *See id.*

104. *See id.* at 32-33.

zation are all part of the problem.[105] Subsidies are, at a minimum, "an unfortunate by-product, or even symptom, of ineffective management," and they may even act as a direct causal factor.[106] In any event, substantial evidence does exist to suggest that subsidies do in fact have a deleterious effect on fish stock levels by perversely contributing to fleet overcapacity.[107]

Empirically proving the effects of fisheries subsidies on overfishing and trade may not be essential, except perhaps as a negotiating stick.[108] The rules of economics make the impact conspicuously clear. When billions of dollars are infused into an industry by the governments of developed countries, international trade is necessarily impacted. According to the World Bank, global fisheries subsidies vary between $14 and $20 billion, which would approximate 20% to 25% of turnover in this sector.[109] The Organisation for Economic Co-operation and Development (OECD) and the Asia Pacific Economic Co-operation (APEC) consider them somewhat smaller, at just over $12 billion or 17% of turnover.[110] The OECD estimated in 1999 the amount of subsidies in OECD countries alone was just short of $6 billion, with Japan's subsidies equaling $2.5 billion, followed by the EC with $1.2 billion, the United States with $1.1 billion, Canada with $500 million, and Korea with $400 million.[111] Further, it is estimated only 5% of these fisheries subsidies have "a positive environmental aim."[112]

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105. *See* Milazzo, *supra* note 44, at viii, 2.

106. *Id.* at 7.

107. *See UNEP Workshop*, *supra* note 37 (explaining that "[e]xcessive government support policies and especially subsidies to the fishing industry are suspected by many experts to have a direct causal relationship to recent trends in overcapacity and depletion of fish stocks, particularly in the absence of appropriate management regimes").

108. *See* Porter, *supra* note 8, at 33-34. It may be nearly impossible to conduct a fully accurate study, as evidenced by an FAO study on the "effects of subsidies to industrial fisheries on competition and trade," which commenced in 1995 but remains unfinished because researchers could not obtain meaningful data on the impact of such subsidies on developing countries' exports. *Id.*

109. *See Underwriting Overfishing*, *supra* note 43.

110. *See* ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, TRANSITION TO RESPONSIBLE FISHERIES: ECONOMIC AND POLICY IMPLICATIONS (2000), *available at* http://oecdpublications.gfi-nb.com/cgi-bin/OECDBookShop.storefront/ENproduct/ [hereinafter TRANSITION TO RESPONSIBLE FISHERIES]; *see also* Gareth Porter, *Subsidies and the Environment: The State of Knowledge*, *in* ENVIRONMENTALLY HARMFUL SUBSIDIES: POLICY ISSUES AND CHALLENGES 53 (Patricia Prinsen-Geerligs et al. eds., 2003). With some acknowledged fluctuation between 1996 and 1999, the OECD Directorate of Agriculture, Food and Fisheries noted that the overall trend indicated an increase to 20% in OECD countries. Anthony Cox, *OECD Work on Defining and Measuring Subsidies in Fisheries*, at 4-5, *available at* http://www.oecd.org/dataoecd/43/41/2507594.pdf (last visited Mar. 8, 2005).

111. Anthony Cox & Carl-Christian Schmidt, *Subsidies in the OECD Fisheries Sector: A Review of Recent Analysis and Future Directions*, at Annex Table A.4, Organisation for

Fishing subsidies range widely in terms of both purpose and form, but they are roughly estimated to constitute as much as 25% of the annual revenues for the global commercial fishing industry.[113] Subsidies may take the form of grants, low-cost loans, loan guarantees, or tax incentives for vessel construction, repair, or modernization.[114] Similar financial programs may subsidize the transportation or processing of fish products.[115] Various grant programs support the research and development of fishery technology and fisheries management.[116] Other programs directly subsidize fishermen, for example, special wage supports or other benefits, discounted or free marine insurance, and the construction and maintenance of housing and infrastructure specifically for fishermen.[117] The purposes of these subsidies range from encouraging investment and employment in struggling coastal regions to stimulating national economic development and reducing dependence on imports.[118] While these are all laudable goals, "unless and until we obtain a multilateral agreement, we are left with the usual free-rider problems that cause each party to overuse the natural resources held in common."[119]

III. NEGOTIATING STICKS IN THE USE OF COMMON POOL RESOURCES

> *To conjure up a conscience in others is tempting to anyone who wishes to extend his control beyond the legal limits.*[120]

A. Fisheries Subsidies and Member Negotiating Positions

Several international initiatives have attempted to address the problem of fisheries subsidies. In 1992, the Food and Agriculture Organization (FAO) recognized that severe overexploitation of global fisheries required that action be taken to eliminate harmful subsidies in fisheries.[121] This led to the 1999 International Plan of Action for the Management of Fishing Capacity (IPOA), a nonbinding agreement that

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Economic Co-operation and Development, *available at* http://www.oecd.org/dataoecd/43/40/2507604.pdf (last visited Mar. 8, 2005). Figures are rounded off to the nearest hundred million. *See id.*

112. *Underwriting Overfishing*, *supra* note 43 (referring to a study conducted by the World Bank).

113. *See* SCHORR, *supra* note 12, at 146.

114. *See id.*

115. *See id.*

116. *See id.*

117. *See id.*

118. *See APEC Study*, *supra* note 17, at 41.

119. Howard Chang, *An Economic Analysis of Trade Measures to Protect the Global Environment*, GEO. L.J. 2131, 2153 (1995).

120. HARDIN, *supra* note 60, at 25.

121. *See Underwriting Overfishing*, *supra* note 43.

suggests states assess the possible impact of factors, including subsidies, contributing to unsustainable fisheries practices.[122] In August 2002, governments reaffirmed their commitment to addressing the fisheries crisis at the World Summit on Sustainable Development, reaffirming the need to "eliminate subsidies that contribute to illegal, unreported and unregulated (IUU) fishing[123] and over-capacity, while completing the efforts undertaken at the WTO to clarify and improve its disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries."[124]

These international efforts, however, have not resulted in a binding obligation to reduce fisheries subsidies, nor have countries shown their willingness to reduce fisheries subsidies on their independent accord.[125] Certainly, international fisheries management mechanisms play a critical role in creating a sustainable global fisheries sector. Arguably, however, the coercive capabilities of the WTO may be necessary to assure that the collective decision of the international community can be enforced.[126]

At the WTO negotiating table, nine discussion papers illustrating various approaches and philosophies have been proposed by six members or groups of members, including the Friends of Fish group (comprised of Australia, Chile, Ecuador, Iceland, New Zealand, Peru, Philippines, and the United States),[127] and by China, Japan, Korea, New Zealand, and the United States independently.[128] The position of many countries indicates their political concerns and the potential impact that new disciplines on fisheries subsidies might have on the development and prosperity of their own fishing fleets.[129] The Friends of Fish group has advocated for the most comprehensive reforms, but these efforts have been stifled by Japan and Korea and, to a lesser extent, by the EC.

1. The Friends of Fish Position

The Friends of Fish group has taken the position that special WTO rules governing fisheries subsidies are necessary to protect marine

122. *Id.*

123. *See, e.g.*, Commission for the Conservation of Antarctic Marine Living Resources Web site (discussing IUU fishing), *at* http://www.ccamlr.org/pu/E/sc/fish-monit/iuu-intro.htm (last visited Nov. 2, 2004).

124. *Underwriting Overfishing*, *supra* note 43.

125. *See, e.g.*, *id.*

126. *See, e.g.*, Ostrom & Ostrom, *supra* note 24, at 159-60 (discussing the necessity of forgoing "willing consent" as the sole decision rule in managing a global commons, favoring instead collective coercion to ensure enforcement).

127. *See Rules Negotiations: Friends of Fish*, *supra* note 99.

128. *See* Schröder, *supra* note 13, ¶ 16.

129. *See* Brown, *supra* note 23.

resources.[130] The multicountry group has proposed the most ambitious reforms to reduce government transfers, arguing that subsidies are "boosting the 'race for fish,'" and that overcapacity and trade distortions resulting from subsidization "impede the sustainable development of many countries with significant fisheries resources."[131] Moreover, the group submits that distant water fishing fleet subsidization is a "disincentive for developing countries to establish their own fishing industries."[132]

In a separate submission, the United States explained to the WTO Secretariat that fisheries subsidies are distinctive because they "limit non-subsidized participants' access to shared fisheries resources."[133] They have the unique feature of limiting harvest levels for other members or depleting the resource altogether.[134] The United States emphasized that, under the SCM Agreement's current rules, demonstrating market distortions may be difficult, thus "[c]larifications and improvements in the rules are therefore needed to make disciplines on fisheries subsidies more effective."[135]

As a means to eliminate the most environmentally harmful fisheries subsidies, the United States has proposed that the SCM Agreement's article 3 "red-light" category of prohibited subsidies be expanded to expressly include "those fisheries subsidies that directly promote overcapacity and overfishing, or have other direct trade-distorting effects."[136] The United States suggests those subsidies that contribute to overfishing be categorized either by program type or by benefit to the fishing industry.[137] Alternatively, the United States has proposed a "dark amber" category be created under the SCM Agreement's existing traffic light approach.[138] This category would include subsidies that are rebuttably presumed to be harmful and causing "serious prejudice."[139] The presumption could be overcome if the respondent member "could affirmatively demonstrate that no overcapacity/overfishing or other adverse trade effects have resulted from the subsidy."[140] These subsidies

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130. *See Rules Negotiations: Friends of Fish*, *supra* note 99.
131. *Id.*
132. *Id.*
133. *U.S. Communication to the Negotiating Group on Rules*, *supra* note 20, ¶ 4.
134. *See id.*
135. *Id.*
136. *Id.* ¶ 5.
137. *See id.*
138. *See id.* ¶ 6.
139. *See id.*
140. *Id.* The United States proposed that the presumption could be overcome by the respondent by "showing that the subsidy was not being used to fish in a fishery that is overfished

could include those programs that "exceed a certain value of production."[141]

2. The European Commission Position

The EC agrees with the Friends of Fish group that overcapacity in the fisheries sector is a major cause of the overexploitation of marine resources.[142] On the other hand, the EC has proposed a more simplistic approach, one that would arguably produce less effective results. The EC proposes a "red-light" approach, subject to a transitional period for certain subsidies that have a capacity-enhancing effect.[143] These subsidies would include those for fishing fleet renewal, whether for vessel construction or modifications to increase vessel capacity.[144] Additionally, under this category, the EC proposes a complete prohibition on permanent fishing vessel transfers to third countries, including joint enterprises with third country partners.[145]

The EC is advocating for certain subsidies to be nonactionable with an emphasis on "mitigating social and economic consequences" to its fishing sector:

1. Subsidies for fishermen retraining, early retirement, and diversification;
2. Subsidies to fishermen and vessel owner income when (a) unforeseen circumstances such as natural disasters mandate work stoppages, or (b) when conservation measures permanently require capacity reduction for overexploited fish stocks;
3. Subsidies for modernization of vessels that specifically improve safety, product quality, or working conditions, or promote more environmentally friendly fishing methods; and
4. Subsidies for vessel decommissioning and capacity withdrawal.[146]

The EC additionally suggests both permitted and prohibited categories be reviewed for necessary modifications.[147] Such reviews would be based on research conducted by other fisheries management bodies, including

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or that effective restrictions were placed on the operation of the programme so that it does not result in overcapacity or overfishing." *Id.*

141. *Id.* ¶ 6.

142. *See* WORLD TRADE ORGANIZATION, NEGOTIATING GROUP ON RULES, *Submission of the European Communities to the Negotiating Group on Rules—Fisheries Subsidies*, TN/RL/W/82, ¶ 3 (Apr. 23, 2003) [hereinafter *Submission of the European Communities*].

143. *See id.* ¶ 4(i).

144. *See id.*

145. *See id.*

146. *Id.* ¶ 4(ii).

147. *See id.* ¶ 4(iii).

the FAO, and may indicate that revision of the categories is necessary to match fleet capacity with "sustainable exploitation."[148]

While the EC's proposal appears to be at least a step in the right direction, it has serious flaws. Research has shown that subsidies to income, especially for work stoppages due to fish stock depletion, are a significant contributor to overcapacity.[149] This is because such subsidies enable fishermen to stay in the fishing industry long after it is unprofitable to do so. As discussed above, vessel decommission programs can be effective, but only if fishing employment is also reduced.[150] The EC's proposal to allow subsidies to income could circumvent the advances that might be gained through vessel decommissioning. Secondly, it is unclear what is meant by subsidies for fishermen "diversification." Given that "retraining" is already proposed, diversification presumably means subsidies that enable fishermen to diversify into harvesting alternate fish stocks when previously harvested stocks are depleted. Again, as noted above, this also contributes to overfishing.[151] Moreover, while subsidies to improve working conditions, safety, product quality, or environmentally friendly methods appear reasonable, such exceptions could prove to be convenient loopholes. Given that the EC has placed this exception in the "green-box" category, a complainant would have great difficulty overcoming the presumption of nonactionability.

3. Japan's View

Japan has taken a classic negotiating position—it denies fisheries subsidies are causing a deleterious effect on global fish stocks.[152] Using the fact that accurate empirical data has been difficult to obtain, Japan appears to seek undeniable evidence that fisheries subsidies are the direct cause of declining fish stocks, as opposed to other contributing factors such as poor management regimes and IUU fishing activities.[153] Japan argues that "[t]hose who insist on special and separate treatment of fisheries subsidies have a burden of proof to fulfil."[154] In 2000, Japan acknowledged that the SCM Agreement does not appear to adequately

148. *See id.* ¶ 4(iii).
149. *See Underwriting Overfishing*, *supra* note 43.
150. *See id.*
151. *See id.*
152. *See Japan's Basic Position*, *supra* note 22, ¶ B.3.
153. *See id.* ¶ B.4.
154. *Rules Negotiations: Japan Questions Uniqueness of Fisheries Subsidies*, 6 BRIDGES WKLY. TRADE NEWS DIG., July 10, 2002, *available at* http://www.ictsd.org/weekly/02-07-10/story1.htm [hereinafter *Rules Negotiations: Japan Questions*].

address fisheries subsidies.[155] In 2002, however, Japan asserted that "[t]rade distortion caused by subsidies is not unique to the fisheries sector" and therefore "special disciplines" for fisheries subsidies are not required.[156] Japan's position is that fisheries management issues should be matters for coastal states, regional fisheries bodies, and the United Nations Convention on the Law of the Sea (UNCLOS).[157]

4. Small, Vulnerable Coastal States

The delegations of Antigua and Barbuda, Belize, Fiji Islands, Guyana, the Maldives, Papua New Guinea, Solomon Islands, and St. Kitts and Nevis, as small, vulnerable coastal states, have taken the view that "fisheries management issues are not an appropriate subject matter for the WTO and are best addressed in other, more appropriate forums such as the FAO."[158]

Their primary concern is that they receive special and differential treatment in that any modifications to the scope of the definition of a subsidy relating to fisheries shall specifically exclude: (1) access fees and development assistance, (2) fiscal incentives to domestication and fisheries development, and (3) artisanal fisheries.[159] These countries have stated they will maintain "an open position with regard to proposals regarding the fisheries subsidies architecture"; however, they intend to "oppose any new disciplines that, either directly or indirectly, undermine their development efforts in the fisheries sector."[160]

B. Theories in International Negotiation Strategies

The deadlock in negotiating new fisheries subsidy disciplines can be viewed from a negotiating strategy viewpoint. The primary rule for the game is willing consent. Under customary international law, a treaty is binding upon states only through their affirmative consent.[161] This is equally true when an amendment to an existing treaty is sought—"an amendment is a new agreement under international law."[162]

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155. *See Japan's Basic Position*, *supra* note 22, ¶ C.12.

156. WORLD TRADE ORGANIZATION, NEGOTIATING GROUP ON RULES, *Japan's Basic Position on the Fishery Subsidy Issue*, TN/RL/W/11, ¶ II.2 (July 2, 2002).

157. *See Rules Negotiations: Japan Questions*, *supra* note 154.

158. WORLD TRADE ORGANIZATION, NEGOTIATING GROUP ON RULES, *Fisheries Subsidies*, TN/RL/W/136 (July 14, 2003).

159. *Id.*

160. *Id.*

161. David A. Wirth, *Reexamining Decision-Making Processes in International Environmental Law*, 79 IOWA L. REV. 769, 792 (1994).

162. *Id.*

This rule of voluntary or willing consent is also the primary decision-making rule for the WTO.[163] Consensus is the rule: each country is entitled to one vote.[164] However, on important matters, decision-making authority is constrained such that "only the Ministerial Conference can adopt amendments to multilateral agreements, usually by a two-thirds vote."[165] Article X(3) of the Final Act provides that amendments to the Final Act or any of the Multilateral Trade Agreements in Annexes 1A and 1C, including the SCM Agreement, "that would alter the rights and obligations of the Members, shall take effect for the Members that have accepted them upon acceptance by two thirds of the Members and thereafter for each other Member upon acceptance by it."[166]

This is a difficult feat in international negotiations. Hence, the Final Act allows the Ministerial Conference to proceed with adoption of such amendments by a three-fourths majority if the amendment "is of such a nature that any Member which has not accepted it within a period specified by the Ministerial Conference in each case shall be free to withdraw from the WTO or to remain a Member with the consent of the Ministerial Conference."[167] Certain modifications or amendments to WTO obligations do, however, require unanimous approval.[168]

This is the backdrop of the fisheries subsidies debate. Without exception, this and other international negotiations can be viewed as "a noncooperative bargaining game played in the shadow of the 'default' rules that prevail in the absence of an agreement."[169] The ongoing WTO fisheries subsidies negotiations demonstrate the theory that "the dominant strategy of each party is to refuse to cooperate, even if each player would be better off under the cooperative solution than under the noncooperative equilibrium."[170] Many countries understate their own interests in preserving global fisheries, focusing instead on their interests in exploitation, in order to achieve the most lenient agreement for themselves in the negotiations.[171] With each member focusing on their own preferences, those countries pushing for more environmental

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163. *See* Final Act, *supra* note 10, art. IX(1).

164. *See id.*

165. John O. McGinnis & Mark L. Movsesian, *The World Trade Constitution*, 114 HARV. L. REV. 511, 533 (2000) (citing JOHN H. JACKSON ET AL., LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS: CASES, MATERIALS AND TEXT 312 (3d ed. 1995)).

166. Final Act, *supra* note 10, art. X(3).

167. *Id.*

168. *See* McGinnis & Movsesian, *supra* note 165, at 533.

169. Chang, *supra* note 119, at 2150.

170. *Id.* at 2151.

171. *Id.* at 2152.

protection face the difficult challenge of convincing the other members to bear their fair share of the burden of reducing fisheries subsidies.[172]

Moreover, in multilateral negotiations, the voluntary or willing consent rule often means, "coercive redistribution cannot occur."[173] Countries will only agree to a modification to the SCM Agreement if they view the agreement as a net gain for their country.[174] Moreover, when negotiating the use of a competitive common pool resource, the rule of willing consent and basic economics will lead nations using the resource to "accelerate their competitive race with one another for the limited supply."[175] Individual nations may adopt any or all of the following negotiating strategies or conduct:

1. To conceal or to minimize recourse to essential information.
2. To ignore adverse effects on the resource in the conduct of its own enterprise.
3. To follow a "holdout" strategy in relation to other parties drawing upon the same resource pool.[176]

Because the position of certain countries, such as Japan, can be viewed as the adoption of a "'holdout' strategy," as well as "ignor[ing] adverse effects on the resource," the primary tool that the Friends of Fish group can use to move negotiations forward is "recourse to essential information."[177] As noted, addressing global fisheries in any international fora presents the "multilateral version of the classic bilateral prisoner's dilemma game."[178] The prisoners win if they know what the other participants will do. With access to the other participants in the game or dilemma, they can mutually agree on the solution most advantageous for both. It logically follows that recourse to information regarding fellow WTO members' national subsidy programs in the fisheries sector will arm the Friends of Fish with the information necessary to coerce the opposition into a mutually beneficial reduction or elimination of fisheries subsidies.

Ultimately, the question comes down to what "should be deemed illegal under the [WTO] from the perspective of global economic welfare?"[179] The outcome of the fisheries subsidies debate must

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172. *Id.*
173. *Id.*
174. *See* Ostrom & Ostrom, *supra* note 24, at 158.
175. *Id.* at 159.
176. *Id.*
177. *Id.*
178. Chang, *supra* note 119, at 2151 (discussing international negotiations regarding natural resources in the global commons generally).
179. *Id.* at 2189.

determine whether the global economic benefits of new disciplines for fisheries subsidies will outweigh their global economic costs.[180] If new fisheries subsidy disciplines will genuinely enhance the sustainability of the oceans and the economic value associated with the new disciplines justifies the measure, "then it does not distort trade on balance."[181] But how can we get there from here?

IV. HOW TO OVERCOME NEGOTIATING DEADLOCK FOR FISHERIES SUBSIDIES?

Knowledge is power.[182]

A. The Need for Transparency

Article 25 of the SCM Agreement requires members to notify the WTO Secretariat of the subsidy programs in their respective countries that fit within the article 1 definition and are specific within the meaning of article 2.[183] This requirement is sufficient to cover many of the types of subsidies that occur in the fishing sector.[184]

Other than binding dispute resolution, transparency is the key tool that the WTO system can offer to the fisheries subsidy problem.[185] The evidence suggests, however, that an estimated "7-8 per cent of global fishery subsidies granted in 1996 that should have been notified to the WTO actually were notified."[186] In other words, less than one in ten subsidy dollars in the fishery sector is actually reported.[187] Moreover, only minimal information is provided in the majority of WTO notifications that have been submitted, in noncompliance with the WTO's standard questionnaire.[188] The worldwide "stunning disregard" for the SCM Agreement's notification requirements means "the vast majority of current fishery subsidies are maintained in outright violation of one of the WTO's central rules for disciplining them."[189]

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180. *Id.*
181. *Id.*
182. SIR FRANCIS BACON, RELIGIOUS MEDITATIONS, OF HERESIES (1597) ("*Ipsa Scientia Potestas Est.*").
183. *See* SCM Agreement, *supra* note 13, art. 25.2.
184. *See* Porter, *supra* note 8, at 35.
185. *See* SCHORR, *supra* note 12, at 154.
186. *Id.*
187. *See id.*
188. *Id.* at 155.
189. *Id.*

B. Defining and Categorizing Fisheries Subsidies

A contributing factor in the lack of transparency in national subsidy programs is likely that clear categories for the types of fisheries subsidies that exist have not been agreed upon. It has been suggested that an agreed upon set of categories could "further discussion of definitional and analytical issues."[190] Generally, it is agreed that the establishment of categories of fisheries subsidies is necessary and that the categories should reflect the differences in their impact.[191] This is because, in addition to a lack of transparency, without internationally established classifications, international discourse lacks an agreed upon vocabulary for meaningful negotiation and analysis.

Various categorization schemes have been proposed for the purpose of developing international fisheries subsidy policies.[192] "They aim to distinguish between those subsidies that support and those that undermine sustainable management of fisheries."[193] An APEC-sponsored study sought, among other things, to identify a comprehensive set of generic fisheries subsidies, though, which were not necessarily violative of the SCM Agreement.[194] The APEC study suggested the following categories: (1) fisheries management and conservation programs,[195] (2) capital and infrastructure support programs, (3) direct assistance to fishers and fisheries workers, (4) lending support programs, (5) tax preferences and insurance support programs, and (6) marketing and price support programs.[196] Under these categories, the study found that the majority of subsidies fell into the management and conservation category, as reflected in the chart below.[197]

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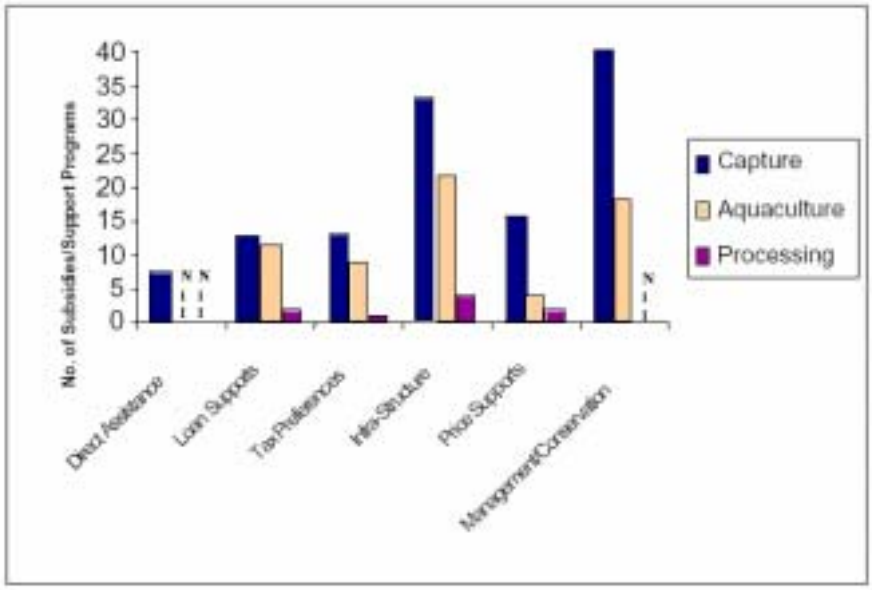
190. *UNEP Workshop*, *supra* note 37.
191. *Id.*
192. *See id.*
193. *Id.*
194. *See APEC Study*, *supra* note 17, at 56-57.
195. The APEC Study noted, however,

> that many economies do not consider fisheries management programs a subsidy. These economies are abiding to Article 61 of the United Nations Convention on the Law of the Sea, which states that each country shall through proper conservation and management measures that the maintenance of the living resources in the EEZ is not endangered by over-exploitation.

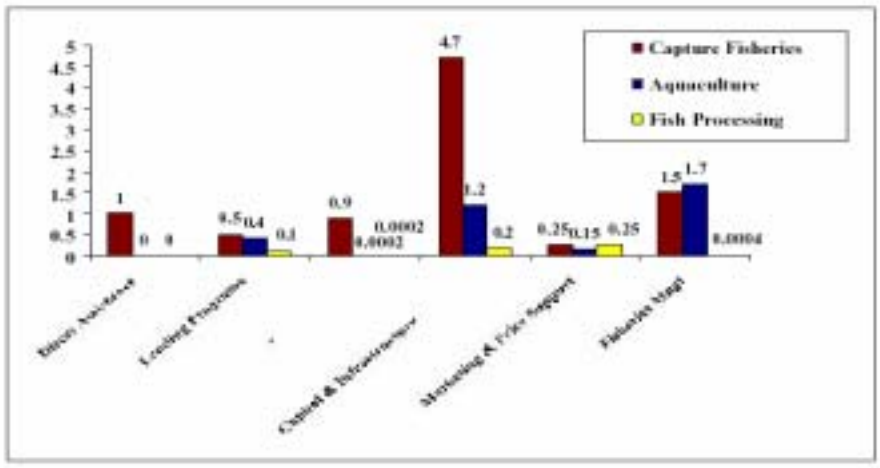
Id. at 21.
196. *See id.* at 6-7. Note that the order of the listed categories has been modified to correspond as closely as possible to other proposed categories.
197. *Id.* ex. 5-1, at 13.



When these subsidies are examined by dollar value, it becomes obvious that capital and infrastructure programs are a major problem.[198] In terms of government financial transfers, the study shows that capital and infrastructure subsidies in the capture fisheries sector are significantly greater than any other type of subsidy.[199]

198. *See id.*

199. This category included government-funded capital inputs and infrastructure investments such as: (1) Development Grants for fisheries enterprises; (2) "State Investments—in state-owned enterprises and cooperatives in the fisheries sector"; (3) "Fleet Renewal and Modernisation"; (4) "Foreign Access Payments—for deep sea fishing fleet access to foreign fishing waters"; (5) "Bait Services—provided to fishers"; (6) "Provision of fish auctions or other sales facilities and services"; (7) "Aid to Shipyards—to support fishing boat construction"; (8) "Fishing Port Infrastructure Enhancement—to provide port improvements for fishing fleets"; (9) "Harbour Facilities and Moorage—provided free or at low rates for fishing fleets"; and (10) "Other Capital and Infrastructure Support Programs." *Id.* at 6.



At the same time, the amount of money spent in each category may not be directly correlated with the amount of harm to the environment or its contribution to the overfishing problem. For example, while direct assistance subsidies may be relatively small in terms of dollar amount, such assistance can go a long way in maintaining a high number of fishermen even where profit margins would normally drive out market participants.[200] Additionally, price support programs may not require governments to expend a great deal of money because the subsidized costs are externalized by being passed on to consumers.

The OECD has suggested a slightly different set of categories based on government financial transfers in OECD countries.[201] Like the APEC categories, the OECD suggests a category for: (1) fisheries infrastructure subsidies; (2) subsidies for fisheries management, including fisheries research, enforcement, and enhancement; and (3) subsidies for fishermen's income, including employment insurance.[202] Unlike APEC, the OECD has proposed special classifications for (1) government-procured access to other countries' waters, (2) decommissioning of vessels and license retirement, and (3) taxation exemptions.[203]

The United States, on the other hand, has proposed categories based upon their economic or commercial impact.[204] Dividing subsidies into

200. *See id.* at 17.
201. *See* TRANSITION TO RESPONSIBLE FISHERIES, *supra* note 110, at 130, Box 1.
202. *See id.*
203. *See id.*
204. *See* WORLD TRADE ORGANIZATION, COMMITTEE IN TRADE AND ENVIRONMENT, *Communication from the United States: Environmentally-Harmful and Trade-Distorting*

two umbrella categories of either "cost reducing subsidies," or "subsidies that support incomes and prices," the United States has identified ten fisheries subsidy categories.[205] Under the first umbrella category are the following:

1. Commercially applicable research funding;
2. Capital cost-reducing subsidies;
3. Reduction of income and sales taxes;
4. Risk mitigation;
5. Government ownership and State trading if inconsistent with market terms;
6. Assistance to shipbuilding specifically for fishing vessels; and
7. Foreign access payments and assistance to foreign fishing ventures.[206]

As "subsidies that support incomes and prices," the United States identified the following three categories: (1) price support programs, (2) trade-promoting subsidies, and (3) sector-specific social assistance programs.[207] Interestingly, the United States specifically excluded fisheries management programs, research and development programs, enforcement regimes, publicly financed port and landing facilities, and transitional programs leading to sustainable fisheries.[208] Given that the APEC study revealed that the most significant amount of subsidization occurs for infrastructure, omitting this as a subsidy classification for WTO notification requirements would result in misleading information and possibly a continued lack of transparency as to amount of capital infusion in the fisheries sector.

The FAO suggested that fisheries subsidies be categorized more simply into four "sets of subsidies," as follows:

1. Government financial transfers that reduce costs and/or increase revenue of producers in the short-term;
2. Government interventions, regardless of whether they involve financial transfers, that reduce costs and/or increase revenues of producers in the short term;
3. Government interventions, regardless of whether they involve financial transfers, that reduce costs and/or increase revenues of producers in the short term, *plus* the short-term benefits to producers that result from the absence or lack of interventions by governments

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Subsidies in Fisheries, WT/CTE/W/154 at 3 (July 4, 2000) [hereinafter *U.S. Communication to the Committee on Trade and Environment*].

205. *See id.* at 3.
206. *See id.* at 4-5.
207. *See id.*
208. *See id.* at 3.

to correct distortions (imperfections) in production and markets that can potentially affect fisheries resources and trade; and

4. Government interventions, or the absence of correcting interventions, that affect the costs and/or revenues of producing and marketing fish and fish products in the short-, medium-, or long- term.[209]

Based on the above categorization schemes proposed by the APEC, OECD, United States, and FAO, the United Nations Environment Programme (UNEP) has suggested that fisheries subsidies each be categorized as one of the following:

1. Fisheries Management Services;
2. Subsidies To Capital Costs, Including Infrastructure;
3. Decommissioning And License Retirement;
4. Subsidies To Access To Foreign Fisheries;
5. Subsidies To Income; or
6. Subsidies to intermediate inputs.[210]

UNEP includes vessel decommissioning and fishing license retirement,[211] while APEC includes this in its "Fisheries Management and Conservation Programs" category.[212] Since it is likely that subsidies for fisheries management would be nonactionable under any international regime, this difference could prove significant, pointing to the importance of detailed notification information, beyond the level of categorization. Also notable is that tax preferences and insurance are excluded from the UNEP categories.[213] Moreover, while UNEP considers a government's facilitation of access to foreign fisheries to be a separate subsidy category,[214] the APEC report considers foreign access payments to be part of the "Capital and Infrastructure Support Programs" category.[215] Any categories that might be agreed upon will still require specificity and a carefully crafted notification questionnaire.

Clear classifications and a well-drafted questionnaire for reporting are important for a number of reasons. Not only will specified classification clarify reporting obligations among WTO members, but also it will increase transparency and further research. Moreover,

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209. WORLD TRADE ORGANIZATION, COMMITTEE ON TRADE AND ENVIRONMENT, Item 6 of the Work Programme, Note by the Secretariat, Addendum, *Environmental Benefits of Removing Trade Restrictions and Distortions: The Fisheries Sector*, WT/CTE/W/167/Add. 1 at 5 (June 19, 2001) (citing FAO Fisheries Report of the Expert Consultation on Economic Incentives and Responsible Fisheries, Rome 2000).

210. *UNEP Workshop*, *supra* note 37, at 5 n.4.

211. *See id.*

212. *See APEC Study*, *supra* note 17, at 6-7.

213. *See UNEP Workshop*, *supra* note 37, at 5 n.4.

214. *See id.*

215. *See APEC Study*, *supra* note 17, at 5-6.

without a well-crafted questionnaire, if a subsidy type such as foreign access payments is included in a broad category like infrastructure subsidies, then less information may ultimately be reported regarding that particular type of subsidy program. The key question, however, is: What are the necessary classifications?

C. Defining Fisheries Subsidies

The difficulty in agreeing on categories necessarily implies disagreement as to how to define a subsidy with respect to fisheries. Nonetheless, even without modification to the SCM Agreement, members are already obligated to notify the WTO of certain fisheries subsidies.[216] For this reason, the subsidies that are already within the scope of the SCM Agreement should be a departure point.

First, a review of article 1.1 of the SCM Agreement reveals that this would include direct government transfers through a funding mechanism or indirectly through a private body,[217] or in the form of "grants, loans, and equity infusions."[218] With respect to fisheries subsidies, this means that grants, low-cost loans, and equity infusions to both vessel owners and fishermen, or for the transportation or processing of fish or fish products, must be reported. Second, this would also include "potential direct transfers of funds or liabilities," such as loan guarantees.[219] In the fisheries sector, this would include loan guarantees for vessel construction, acquisition, modification, repair, or modernization of fishing gear. The third category of fisheries subsidies should be "government revenue that is otherwise . . . foregone" or fiscal incentives such as tax credits or exemptions.[220] This might include fuel or other tax credits or other rebates. The fourth category should be government-provided goods or services.[221] The fifth subsidy type that must be reported under the existing obligations is subsidies to "income or price supports."[222] This arguably includes unemployment or other social benefits for fishermen and their families. WTO members have already agreed to these classifications, and as such, there should be no difficulty in agreeing that these types of subsidies at least have trade-distorting

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216. *See* SCM Agreement, *supra* note 13, art. 25.
217. *See id.* art. 1.1(a)(1)(i)-(iv).
218. *Id.* art. 1.1(a)(1)(i).
219. *Id.*
220. *See id.* art. 1.1(a)(1)(ii).
221. *See generally id.* art. 1.1(a)(1)(iii).
222. *Id.* art. 1.1(a)(2).

effects. No further agreement regarding their effects on overfishing or the marine environment is necessarily required.

While these categories do not cover all the fisheries subsidies that are contributing to the global fisheries crisis, at least it is a sound beginning, weeding out those issues that need not be negotiated. These existing categories would, however, only cover the "subsidies to income" classification suggested by UNEP,[223] thereby excluding subsidies for:

1. Fisheries management services;
2. Subsidies to capital costs, including infrastructure;
3. Subsidies to intermediate inputs;
4. Decommissioning and license retirement; and
5. Subsidies to access to foreign fisheries.

With respect to the U.S. proposed categories, the existing requirements would arguably cover (1) reduction of income and sales taxes, (2) risk mitigation, (3) government ownership and state trading if inconsistent with market terms, and (4) assistance to shipbuilding specifically for fishing vessels. The following, however, would not be covered: (1) commercially applicable research funding, (2) certain capital cost-reducing subsidies, and (3) foreign access payments and assistance to foreign fishing ventures. Moreover, only the following APEC categories are not currently covered: (1) fisheries management and conservation programs and (2) capital infrastructure support programs.[224] UNEP, therefore, has identified the bulk of the fisheries subsidies that must be the subject of negotiations. The only additional category that is not reflected in UNEP's list is subsidies for commercially applicable research and development, as suggested by the United States.[225] Therefore, the UNEP categories that are not currently covered by the SCM Agreement, plus the commercial research and development category proposed by the United States, would appear to be the most comprehensive list of fisheries subsidies that are not covered by the existing agreement, and therefore should be the primary focus for possible new disciplines. A special agreement, in some form, is then necessary to ensure the transparency of these subsidies.

As an initial step in the negotiating strategy of the Friends of Fish group, it is proposed that an agreement should be reached to require

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223. *See generally UNEP Workshop*, *supra* note 37.

224. *See APEC Study*, *supra* note 17, at 6-7.

225. *See U.S. Communication to the Committee on Trade and Environment*, *supra* note 204, at 4.

WTO notification of these as yet unaccounted for subsidies.[226] As suggested by the World Wildlife Fund and Oceana, all fishing subsidies should be subjected to "effective public monitoring and notification."[227] A focus on these subsidy classifications, together with a WTO notification requirement for these classifications, would provide greater transparency and the mechanism necessary to enable other intergovernmental agencies and experts to focus their research efforts, thus adding to the likelihood that future subsidy disciplines for the fishing sector are appropriately designed to eliminate both trade distortion and environmental harms.

A further breakdown in these categories can be done by analyzing which subsidies have a positive environmental effect and which have a deleterious effect. Certainly, subsidies for fisheries management, conservation, and enforcement are likely to have a positive impact on the goal of achieving sustainable fisheries. Additionally, subsidies for decommissioning and license retirement can have a good effect as well if such a program is not merely a "shell game" and is properly managed to reduce employment. In some cases, research and development could produce environmentally constructive results, for instance, technology that reduced the capture of nontargeted species; dangerously, other research may be directed at technological advances to expand harvesting capacity.

Given the dire need for more information, research, and understanding about the effects of fisheries subsidies, it is suggested, at least initially, that all subsidies relating to the following categories be notified to the WTO—in addition to those fisheries subsidies for which notification is already required:

1. Fisheries management services;
2. Subsidies to capital costs, including infrastructure;
3. Subsidies to intermediate inputs;
4. Decommissioning and license retirement;
5. Subsidies to access to foreign fisheries; and
6. Commercially directed research and development.

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226. *See, e.g.*, *Rules Negotiations: Friends of Fish*, *supra* note 99 (stating that the SCM Agreement should also focus on trade and production distortion generated by subsidies).

227. Press Release, Oceana, WWF and Oceana Welcome WTO Progress on Fisheries Negotiations: U.S. Takes Progressive Lead (Mar. 21, 2003), *available at* http://www. oceanafund. com/index.cfm?sectionid=lo&fuseaction=35.detail&pressrealeseid=89.

Additionally, the WTO Committee on Trade and Environment (CTE) already groups fisheries subsidies by sector.[228] These sectors include: (1) harvesting, (2) processing, (3) shipbuilding, and (4) other sectors including research and development.[229] The categories discussed above should therefore also report the affected fishing sector. Aquaculture, or fish farming, which is a burgeoning industry, should be distinguished from "harvesting" and added as a fifth sector.

While the ultimate goal of many countries, including the Friends of Fish, is to negotiate binding disciplines for fisheries subsidies, it may be essential to first develop full transparency. Because many countries have not even reported the subsidies they are already obligated to report, a certain "asymmetry" exists at the negotiating table. Rectifying this lack of information regarding domestic policy is essential because asymmetric information implies that bargaining may fail.[230] Binding notification obligations could be used as the interim "stick" until a multilateral agreement to eliminate harmful fisheries subsidies is concluded.

V. CONCLUSION

> *In order to move ahead and finish the negotiations successfully we will need WTO Members to translate the current strong political will and support into practical negotiating flexibilities.*[231]

In part, the debate over whether the SCM Agreement requires clarification or modification appears to depend upon one's philosophy, wholly separate from the SCM Agreement analysis. Fundamentally, some argue that the SCM Agreement, as currently written, sufficiently deals with this issue and that the dispute settlement process will eventually produce a remedy. Others take the position that a bright line must be drawn so that fisheries subsidies disciplines are not left to the chance that inaction might leave fisheries sustainability uncertain. The perception is that the dispute settlement process may not ever directly clarify the matters and may impede sustainability, or simply, that the SCM Agreement as it stands sets too high a bar for what is at risk—the sustainability of the world's global marine food supply.

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228. GATT Secretariat, *GATT/WTO Rules on Subsidies and Aids Granted in the Fishing Industry*, WT/CTE/W/80 ¶ 31 (Mar. 9, 1998).

229. *Id.*

230. Chang, *supra* note 119, at 2160.

231. WORLD TRADE ORGANIZATION, *Multilateralism at a Crossroads*, Symposium, Doha Agenda (May 25-27, 2004) (quoting WTO Director-General Dr. Supachai Panitchpakdi), *available at* http://www.wto.org/english/tratop_e/dda_e/symp_devagenda_04_e.htm.

With respect to fisheries subsidies, the Doha Agenda provides that "[i]n the initial phase of the negotiations, participants will indicate the provisions, including disciplines on trade distorting practices, that they seek to clarify and improve in the subsequent phase."[232] In order to realize this agenda, WTO members should first agree to immediately notify the Secretariat of all the subsidies provided in the fishing sector that *do* fall under the SCM Agreement's notification requirement. Secondly, an agreement should be made to require notification of those subsidy programs noted above that do not fall within the scope of the current requirements. Given that the WTO already has the mechanisms in place to collect the information required under the SCM Agreement, it is the most practical intergovernmental body to be charged with collecting an expanded version of that information.

When transparency in national fisheries subsidies programs is truly achieved, the result will be a greater understanding of how these subsidy classifications affect both overfishing and trade. Most importantly, it will no longer be deniable that these harmful subsidies must be eliminated if we are truly to achieve the ultimate goal of sustainable global fisheries. In the meantime, one thing remains clear: while nations bicker and commentators analyze, the rate of depletion of the world fish stocks only increases.

232. *See* Ministerial Declaration, WT/MIN(01)/DEC/1 (Nov. 20, 2001); *see also supra* note 15 and accompanying text.