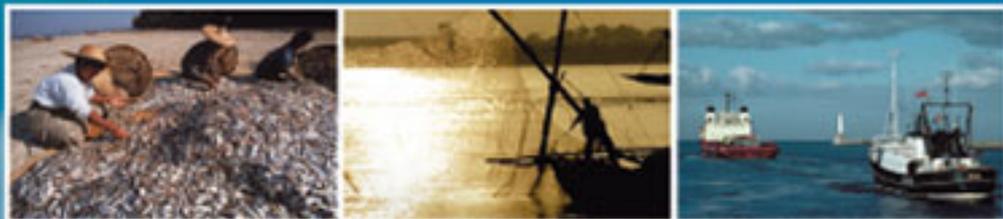




# INCORPORATING RESOURCE IMPACT into FISHERIES SUBSIDIES DISCIPLINES: ISSUES and OPTIONS

A Discussion Paper



**INCORPORATING RESOURCE IMPACT  
into FISHERIES SUBSIDIES DISCIPLINES:  
ISSUES and OPTIONS**

**A Discussion Paper**

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# Preface

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Current negotiation at the WTO aimed at clarifying and improving WTO rules on fisheries subsidies have drawn substantial international attention. Along with related developments in a variety of other intergovernmental fora, including the FAO, OECD and UNEP, the WTO talks raise new questions and pose important opportunities and challenges to policymakers concerned with the promotion of sustainable fisheries. The negotiations present a major opportunity for the WTO to deliver win-win outcomes contributing not only to the reduction of trade distortions but also to environmental and sustainable development goals.

Since 1997, UNEP has worked actively to promote integrated and well-informed responses to the need for fishing subsidies reform. Through a series of workshops, analytical papers, and case studies, UNEP seeks to act as a forum for interaction among policymakers and stakeholders.

In 2003, UNEP initiated a project addressing the impact of different types of fishery subsidies under various regulatory and environmental conditions. The resulting study “Analyzing the Resource Impact of Fisheries Subsidies: A Matrix Approach” has undergone an intensive review process and was published in 2004. It provides a classification of fisheries subsidies and offers a systematic assessment of the impact of eight categories of subsidies taking into account the specific characteristics of a fishery’s level of exploitation and its management regime.

Building on the results of that study, UNEP commissioned Gareth Porter to analyze and investigate options for incorporating impacts on resources into new WTO disciplines on fisheries subsidies. The paper is offered in the hopes of stimulating further dialogue and creative thinking about the environmental and resource aspects of new WTO fisheries subsidy disciplines.

# Acknowledgements

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This discussion paper is part of a larger project initiated and managed by the Economics and Trade Branch (ETB), Division of Trade, Industry and Economics (DTIE) of the United Nations Environment Programme (UNEP). UNEP would like to thank Gareth Porter, the lead author of this discussion paper. The paper has benefited from comments and suggestions received through a number of review rounds.

Special thanks go to Markus Lehmann (CBD Secretariat), Christina Schroder (WTO), Sabrina Shaw, Benjamin Simmons, and Ron Steenblik (OECD) for their written comments and suggestions at different drafting stages. Other members of the group of experts that informally met in Geneva on 16 July 2003 and contributed greatly to the paper included Hugo Cameron (ICTSD), Clare Coffey (IEEP), Anthony Cox (OECD), Karim Dahou (ENDA, Dipol), Ralf Döring (University of Greifswald), Maria Onestini (CEDEA, Argentina), Claudia Saladin (WWF), David Schorr, and Lena Westlund (FAO consultant).

After consideration and integration of the comments that were received at the expert meeting, the discussion paper was sent out for government review in December 2003. Comments were incorporated and the revision distributed to the UNEP Workshop on Fisheries Subsidies and Sustainable Fisheries Management, held in Geneva on 26-27 April 2004. The workshop was attended by more than 100 participants from 37 governments (including officials from environment, trade and fisheries agencies), a wide range of intergovernmental and non-governmental organizations, academic institutions and regional fisheries management organizations. UNEP would like to express its gratitude to all participants for the comments and the interactive discussion based on this discussion paper at the workshop.

UNEP would also like to thank the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety for the financial support that made the realization of this project possible. Special thanks go to Cornelia Quennet-Thielen, Ulf Jaeckel and Volker Fuerst.

## Incorporating Resource Impact into Fisheries Subsidies Disciplines: Issues and Options

At UNEP, Anja von Moltke, Economics Affairs Officer, was responsible for managing the project, coordinating review processes and editing the paper. She was supported by Minna Epps. Desirée Leon was responsible for administrative assistance.

# United Nations Environment Programme

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The United Nations Environment Programme (UNEP) is the overall coordinating environmental organization of the United Nations system. Its mission is to provide leadership and encourage partnerships in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations. In accordance with its mandate, UNEP works to observe, monitor and assess the state of the global environment, improve the scientific understanding of how environmental change occurs, and in turn, how such change can be managed by action-oriented national policies and international agreements. UNEP's capacity building work thus centers on helping countries strengthen environmental management in diverse areas that include freshwater and land resource management, the conservation and sustainable use of biodiversity, marine and coastal ecosystem management, and cleaner industrial production and eco-efficiency, among many others.

UNEP, which is headquartered in Nairobi, Kenya, marked its first 30 years of service in 2002. During this time, in partnership with a global array of collaborating organizations, UNEP has achieved major advances in the development of international environmental policy and law, environmental monitoring and assessment, and the understanding of the science of global change. This work also supports the successful development and implementation of the world's major environmental conventions. In parallel, UNEP administers several multilateral environmental agreements (MEAs) including the Vienna Convention's Montreal Protocol on Substances that Deplete the Ozone Layer, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (SBC), the Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention, PIC) and the Cartagena Protocol on Biosafety to the Convention on Biological Diversity as well as the Stockholm Convention on Persistent Organic Pollutants (POPs).

## **Division of Technology, Industry and Economics**

The mission of the Division of Technology, Industry and Economics (DTIE) is to encourage decision makers in government, local authorities and industry to develop and adopt policies, strategies and practices that are cleaner and safer, make efficient use of natural resources, ensure environmentally sound management of chemicals, and reduce pollution and risks for humans and the environment. In addition, it seeks to enable implementation of conventions and international agreements and encourage the internalization of environmental costs. UNEP DTIE's strategy in carrying out these objectives is to influence decision-making through partnerships with other international organizations, governmental authorities, business and industry, and non-governmental organizations; facilitate knowledge management through networks; support implementation of conventions; and work closely with UNEP regional offices. The Division, with its Director and Division Office in Paris, consists of one centre and five branches located in Paris, Geneva and Osaka.

## **Economics and Trade Branch**

The Economics and Trade Branch (ETB) is one of the five branches of DTIE. Its mission is to enhance the capacities of countries, especially of developing countries and countries with economies in transition, to integrate environmental considerations into development planning and macroeconomic policies, including trade policies. ETB helps countries to develop and use integrated assessment and incentive tools for sustainable development and poverty reduction. The Branch further works to improve the understanding of environmental, social and economic impacts of trade liberalization and the trade impacts of environmental policies, and to strengthen coherence between Multilateral Environmental Agreements and the World Trade Organization. Through its finance initiative, ETB helps enhance the role of the financial sector in moving towards sustainability.

In the field of environmental economics, ETB aims to promote the internalization of environmental costs and enhance the use of economic instruments to contribute to sustainable development and poverty reduction, including in the specific context of Multilateral Environmental Agreements. The UNEP Working Group on Economic Instruments serves as an advisory body to UNEP-ETB's work programme on economics.

United Nations Environment Programme

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# 1. Introduction

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## 1.1 Background

The declaration of the Fourth Session of the World Trade Organization (WTO) Ministerial Conference, which took place in Doha, Qatar in November 2001, includes a commitment to “clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.”<sup>1</sup> Discussions on how this commitment should be fulfilled began in 2002 within the WTO Negotiating Group on Rules. These negotiations represent an historic opportunity for the WTO to establish improved disciplines on fisheries subsidies that will deal not only with the trade distorting impacts of those subsidies, but also with their impacts on fishery resources.

In creating trade rules that also protect natural resources, the WTO would fulfill the pledges made more than a decade ago in the Earth Summit’s Agenda 21 to “make international trade and environmental policies mutually supportive in favour of sustainable development” and to “remove or reduce those subsidies that do not conform with sustainable development objectives.”<sup>2</sup>

Although negotiations on fisheries subsidies are currently taking place within the WTO, it should also be noted that discussions of the issue have taken place in the FAO, OECD, UNEP as well as in other multilateral fora, in the context of steps aimed at reducing global fishing capacity and making fisheries management more sustainable.

UNEP has long supported integrating environmental and resource sustainability considerations into the global trade regime, including in the fisheries sector. It has contributed to the discussion of international policy on fisheries subsidies and the environment by holding broad international consultations on the issue, by providing technical input into the debate,

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<sup>1</sup> WTO Ministerial Conference – Fourth Session, Doha, Qatar, 2001: Ministerial Declaration, WT/MIN(01)/DEC/1, Paragraph 28.

<sup>2</sup> Agenda 21, Section I, Chapter 2, paragraph 2.21(a) and Chapter 8, paragraph 8.32(b). United Nations Conference on Environment and Development, A/CONF.151/4 (Part I), 22 April 1992, pp. 12 and 101.

and by enhancing the capacities of countries to understand and develop mutually supportive trade and environment policies. UNEP's Economics and Trade Branch has addressed the need for greater understanding of the implications of fisheries subsidies by supporting case studies on the effects of fisheries subsidies in developing countries.<sup>3</sup> UNEP has also convened several international workshops and prepared analytical papers on fisheries subsidies and overexploitation of fisheries.<sup>4</sup> As a contribution to the policy debate over how to discipline fisheries subsidies, UNEP has commissioned a systematic analysis of the impacts of the major categories of fisheries subsidies on stocks.<sup>5</sup>

This paper has been prepared with the goal of providing input to the international discussion on the development of new rules and disciplines on fisheries subsidies. Specifically, this paper offers one view of several possible options for amending the existing WTO Subsidies and Countervailing Measures (SCM) Agreement to address the protection of fishery resources. The paper presents preliminary ideas with the hope that they will stimulate further thought, discussion and elaboration.

## 1.2 Impacts of Fisheries Subsidies

Fisheries subsidies often have dual impacts on trade and the environment. On the trade side, exporters of fish from subsidized fleets gain trade advantages over exporters of fish from unsubsidized fleets.<sup>6</sup> Furthermore, subsidized

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<sup>3</sup> UNEP, (2002) *Fisheries Subsidies and Marine Resource Management: Lessons Learned from Studies in Argentina and Senegal* Geneva, UNEP, (2004). *Fisheries Subsidies and Marine Resource Management: Lessons from Bangladesh* Geneva, UNEP, (2004). *Policy Implementation and Fisheries Resource Management: Lessons from Senegal*, Geneva. The studies are available online at: [www.unep.ch/etu/etp/index.htm](http://www.unep.ch/etu/etp/index.htm).

<sup>4</sup> Porter, G. (1998) *Fisheries Subsidies, Overfishing and Trade* UNEP Geneva, and Porter, G. (2002) *Fisheries Subsidies and Overfishing: Towards a Structured Discussion*, UNEP Geneva.

<sup>5</sup> Porter, G. (2004) *Analyzing the Resource Impact of Fisheries Subsidies: A Matrix Approach*. UNEP, Geneva.

<sup>6</sup> Surprisingly little systematic analysis and documentation of the trade-distorting effects of fisheries subsidies has been carried out. For a discussion of the issue, see Porter, G. (1998) *Fisheries Subsidies, Overfishing and Trade*, pp. 57-66 UNEP, Geneva. On the disadvantages to non-subsidizing countries of fisheries subsidies, see "Possible Approaches to Improved Disciplines on Fisheries Subsidies," Communication from Chile, June 10, 2003 (TN/RL/W/115).

distant water fleets may obtain fishing rights in developing countries at the expense of indigenous fishing industries.<sup>7</sup> On the environment side, it is well known that subsidies can create perverse incentives for increased exploitation of fisheries leading to a degradation of fishery resources. Given these dual impacts, any new disciplines on fisheries subsidies should not only address trade distortions, but also the protection of fishery resources.

It is well established in fisheries economics literature that subsidies can lead to increased exploitation of fisheries. The application of economic theory to the fisheries sector demonstrates that in an open-access fishery, a revenue enhancing or cost-reducing subsidy increases marginal profits at each existing level of fishing effort and therefore leads to an increase in fishing.<sup>8</sup>

Economic theory thus indicates that, in the absence of effective controls over catch, subsidies in a fully exploited or overexploited fishery will cause even greater depletion of fishery resources. In addition to the economics literature, a large body of case study literature documents the relationship between certain subsidy programs and the emergence of overcapacity and overfishing in a number of countries.<sup>9</sup> Most of the world's 200 major fish

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<sup>7</sup> On these points, see "The Doha Mandate to Address Fisheries Subsidies Issues," Submission from Australia, Ecuador, Iceland, New Zealand, Peru, Philippines and the United States, April 24, 2002 (TN/RL/W/3).

<sup>8</sup> For simple demonstrations of the effect of subsidies, see OECD Secretariat, (2000) "Modeling the Effects of Government Financial Transfer on Resource Sustainability and Fishing Capacity" In: *Transition to Responsible Fisheries, Government Financial Transfers and Resources Sustainability: Case Studies* Paris, OECD, pp. 227-39; Arnason, R. (1998) "Fisheries Subsidies, Overcapitalisation and Economic Losses" In: *Overcapacity, Overcapitalisation and Subsidies in European Fisheries, Proceedings of the First Workshop of the EU Concerted Action on Economics and the Common Fisheries Policy, October 28-30*. A. Hatcher and K. Robinson, eds. (Portsmouth, U.K.: CEMARE, University of Portsmouth, (1999); also see: Nordstrom, H. and Vaughan, S. (1999) *Special Study on Trade and Environment*, Geneva: World Trade Organization, p. 24; WTO Committee on Trade and Environment (2000), *Environmental Benefits of Removing Trade Restrictions and Distortions: The Fisheries Sector*. Note by the Secretariat. (WT/CTE/W/167), 16 October, WTO, Geneva, p. 32.

<sup>9</sup> See Mike Holden, (1994) *The Common Fisheries Policy* London: Fishing News Books; Porter, G. (1998) *Fisheries Subsidies Overfishing and Trade*, pp. 41-56 UNEP, Geneva; G. R. Munro, "The Economics of Overcapitalization and Fishery Resource Management: A Review", *Overcapacity, Overcapitalisation and Subsidies* ; G. R. Munro and U. R. Sumaila, "Subsidies and Their Potential Impact on the Management of the Ecosystems of the North Atlantic," In: T. Pitcher, U. R. Sumaila and D. Pauly (eds.), *Fisheries Impacts on North Atlantic Ecosystems: Evaluations and Policy Explorations*. Research Report No. 9:5 (Vancouver, B.C.: University of British Columbia Fisheries Centre, 1999), pp. 10-27; OECD (2000) *Transition to Responsible Fisheries, Government Financial Transfers and Resource Sustainability: Case Studies*. AGR/FI 10/FINAL OECD, Paris.

stocks are already fully exploited or overexploited.<sup>10</sup>

No one has challenged the fact that certain subsidies may create incentives for overfishing under certain circumstances. Rather, the main debate on fisheries subsidies has been over how to structure a sound policy response to avert these negative effects on fish stocks. The UNEP-commissioned study on the impacts of subsidies on fishery resources found that those impacts vary significantly under various scenarios of fishery management and levels of fishery exploitation. In constructing an effective fisheries subsidies regime, therefore, it is important to take into account different combinations of management conditions and bio-economic conditions.

The study on the impact of subsidies on fishery resources uses a matrix approach to ensure that all relevant distinctions in the conditions of the fishery are taken into account in analyzing impacts.<sup>11</sup> The study builds on the matrix approach suggested by the OECD in the early 1990s and advocated in a paper commissioned by UNEP in 2002. It develops the approach further by using an analytical framework that reflects both different combinations of management systems (including catch control and incentive systems) and different levels of exploitation in the fishery.<sup>12</sup>

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<sup>10</sup> In 1998, FAO estimated that 69 per cent of the 200 “major fish stocks” were either fully exploited, overfished, depleted or recovering slowly from depletion. See *The State of World Fisheries and Aquaculture 1998* (Rome: FAO, 1998), Part 1. This figure may well underestimate the actual proportion of major stocks that are fully or over-exploited, however. Evidence presented by FAO indicates that catch and stock status data from FAO member states in FAO marine areas that have shown continued growth in catch over the past two decades (Western and Eastern Indian Ocean, Western Central Pacific, Southeast and Southwest Pacific, are often inaccurate and probably underestimate the actual degree of resource exploitation in the fishery). For graphs showing catch trends in these marine areas from 1970 through 2000, see *The State of the World Fisheries and Aquaculture 2002*, Part 1, Figure 7 (Rome: FAO, 2002). For analyses of fisheries management in these same marine areas indicating overexploitation or unreliable catch statistics on key stocks, see *Review of the State of World Fishery Resources: Marine Fisheries*, FAO Fisheries Circular No. 920 (Rome: FAO, 1997).

<sup>11</sup> Porter, G. (2004) *Analyzing the Resource Impact of Fisheries Subsidies: A Matrix Approach*. UNEP Geneva. Available online at: [www.unep.ch/etu/Fisheries%20Meeting/matrixPaperDraft.doc](http://www.unep.ch/etu/Fisheries%20Meeting/matrixPaperDraft.doc).

<sup>12</sup> See OECD, (1989), *Measuring Economic Assistance*, OECD, Paris, online at: [www.oecd.org/agr/fish](http://www.oecd.org/agr/fish); Porter, G (1998) *Fisheries Subsidies and Overfishing*, pp. 34-35; Hannesson, R. (2001) *Effects of Liberalizing Trade in Fish, Fishing Services and Investment in Fishing Vessels*, OECD Papers Offprint No. 8 OECD, Paris; and OECD, (2003), *Liberalizing Fisheries Markets: Scope and Effects*, OECD, Paris.

In order to be useful for international policy making, an analysis of different management systems should be grounded in the realities of these systems as they actually function, not as they would work in an idealized model. In an ideal fisheries management system, catch quotas set at biologically sustainable levels, effort controls through seasonal closures, adequate monitoring and surveillance and tough enforcement of regulations would be sufficient to prevent the incentive effects of subsidies from causing any higher level of fishing mortality. In the real world, however, fisheries management systems are very far from being effective in preventing overexploitation of fishery resources. Experiences in the management of fisheries in OECD countries have shown that overcapitalized fisheries tend to create powerful pressures on fisheries managers to set catch quotas too high and to impose effort limits that are not strict enough and that are too late to prevent serious resource depletion.<sup>13</sup> They also show that management controls in such overcapitalized fisheries without individual catch rights have not been able to prevent high levels of illegal landings in violation of catch limits and widespread underreporting of catch.<sup>14</sup> A statement in 2002 by European Commissioner for Fisheries, Franz Fischler, that a number of fish stocks had been persistently overfished because data on catches had been systematically misreported is a dramatic illustration of the failure of systems of catch control in even the wealthiest nations' fisheries.<sup>15</sup>

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<sup>13</sup> See OECD, (2000) *Transition to Responsible Fisheries: Government Financial Transfers and Resource Sustainability*. p. 129, OECD Paris.

<sup>14</sup> A large volume of literature exists on the incidence of underreported and illegal landings fisheries, primarily in the OECD countries. For a selection of such analyses see the Commission of the European Communities, *Report 1991 from the Commission to the Council and the European Parliament on the Common Fisheries Policy* (Brussels, 1991); Sutinen, J., Rieser, A. and Gauvin, J.R. (1990), "Measuring and Explaining Noncompliance in Federally Managed Fisheries," *Ocean Development and International Law* 21.: 335-372; Karagiannakos, A. (1996) "Total Allowable Catch and Quota Management in the European Union," *Marine Policy* 20/3: 224-234; Nielsen, J.R. and Joker, L. (1995) "Fisheries Management and Enforcement in Danish Perspective," Paper prepared for the Fifth Annual Conference of the International Society for the Study of Common Property, Bodo, Norway, 24-28 May 1995; and Jensen, F. and Vestergaard, N. (2000) "Moral Hazard Problems in Fisheries Regulation: The Case of Illegal Landings," SOM Publication no. 40, AFK Forlaget, Denmark.

<sup>15</sup> "Government Blamed for Cod Crisis," BBC News, October 28, 2002, online at: <http://news.bbc.co.uk/1/hi/Europe/22369297.stm>.

In practice, therefore, management regimes in fisheries which have high levels of fleet capacity in relation to the resources and no incentive for sustainable harvesting will be unable to protect resources from some degree of additional overexploitation caused by certain fisheries subsidies. Subsidies to fishing fleets in fisheries that are already fully exploited or overexploited are very likely to exacerbate the problem of overfishing, in spite of the existence of catch quotas and monitoring and surveillance systems. This reality has been taken into account in the UNEP-commissioned examination of impacts of fisheries subsidies under a variety of combination of management systems and degrees of exploitation of the fishery. The results of that analysis provide the basis for the options related to disciplining fisheries subsidies discussed in this paper.

## **2. Designing a Fisheries Subsidies Regime for Resource Protection**

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### **2.1 Overview of the WTO Subsidies and Countervailing Measures Agreement**

The WTO Subsidies and Countervailing Measures (SCM) Agreement defines two basic categories of subsidies: prohibited subsidies and actionable subsidies. The SCM Agreement originally included a third category of subsidies, non-actionable subsidies. However, this category expired on 1 January 2000 and has not been reinstated.

Prohibited subsidies under the SCM Agreement are divided into two broad categories. The first category, defined under Article 3.1(a), consists of subsidies contingent, “in law or in fact,” whether entirely or as one of several other conditions, upon export performance. Annex I to the SCM Agreement provides a detailed list describing such subsidies. The second category of prohibited subsidies, defined under Article 3.1(b), consists of subsidies contingent, whether entirely or as one of several other conditions, upon the use of domestic over imported goods.

Actionable subsidies, on the other hand, are not prohibited, but are subject to challenge through the dispute settlement process if thought to cause adverse effects to the interests of another Member. Article 5 of the SCM Agreement describes three types of adverse effects that would make a subsidy actionable: (1) injury to the domestic industry of a Member caused by subsidized imports; (2) nullification or impairment of the benefits accruing to a Member under the GATT 1994; or (3) serious prejudice to the interests of a Member.

## **2.2 Prohibited Subsidies**

### ***2.2.1 Criteria for Prohibition vs. List of Prohibited Categories***

One way to improve disciplines on fisheries subsidies would be to create an additional category for prohibited fisheries subsidies. However, one fundamental question facing negotiators with regard to such a category would be whether to base it on a set of general criteria or to designate specific categories of subsidies to be prohibited.

Under the first option, one possible approach would be to define a criterion or set of criteria for subsidies to be prohibited based on whether the subsidies lead to an increase in fishing capacity. One approach could involve using the existing language in Article 3.1(a) of the SCM Agreement, or something similar, to broadly describe the category of prohibited subsidies. Thus the criterion for prohibited subsidies could be whether such subsidies “in law or in fact” increase capacity or fishing effort. An illustrative list of such subsidies could then be included in an Annex, similar to the current Annex I in the SCM Agreement.

The danger of using the “in law or in fact” language would be that the WTO Member challenging a subsidy would have to prove that the subsidy increases fishing capacity. However, proving such cause and effect relationships in a specific fishery would require considerable time and budgetary resources, which would constitute a strong deterrent to a Member taking on such a burden of proof. One major reason that the present SCM disciplines have not been effective on fisheries subsidies is that proving harm to a Member’s trade interest from a specific subsidy is so costly and difficult.

The alternative to the criteria approach would be to establish a list of specific categories of fisheries subsidies to be prohibited. The prohibited types of subsidies would be based on categories of fisheries subsidies that have been demonstrated – through case studies and economic analyses – to have negative impacts on fishery resources.

Based on the UNEP-commissioned study of the impacts of fisheries subsidies on fishery resources, the following categories of subsidies could possibly be included in a list of prohibited categories given their potential to negatively impact fishery resources. *Subsidies to infrastructure* make fishing more profitable than would be the case in the absence of the subsidies, thus discouraging exit from the industry and making it more difficult to reduce overcapitalization. *Subsidies to access to foreign countries' waters* reduce the costs of fishing per unit of effort for the distant water fishing fleet and thus provide an incentive for greater fishing effort in the fishing zone of the coastal state in question. *Subsidies to capital costs* used for the purchase of fishing vessels, fishing gear, engines or other fixed cost equipment directly cause increases to fishing capacity. *Subsidies to variable costs* reduce the operating expenses of fishing vessel owners. The most harmful of these is the subsidy to fuel use, which makes each fishing trip less expensive, thus inducing fishermen to adopt more powerful engines increasing fishing effort and catch. *Price support subsidies* increase the income and profits of vessel owners in direct proportion to the level of catch and therefore provide a strong incentive to increase pressure on fishery resources.

### **2.2.2 Adopting Exceptions to Prohibited Subsidies**

The study on the impacts of subsidies on fishery resources shows that no category of subsidies is damaging to fisheries under all conceivable combinations of management and bio-economic (i.e., degree of exploitation) conditions. Reflecting this fact, any additional category of prohibited fisheries subsidies should provide for exceptions based on sustainable management systems or particular bio-economic conditions. Given that the current provision on prohibited subsidies in the SCM Agreement already creates a broad exception for export subsidies addressed in the WTO Agreement on Agriculture, there is no reason why additional exceptions could not be adopted.

An exception could be established for subsidies provided in fisheries under management systems that provide incentives for sustainable levels of fishing capacity and effort, either through property rights for all fishermen active in the fishery or through community-based, face-to-face management institutions. As noted in the analysis of impacts, a subsidy provided in a fishery that has such incentives built into the fishery will not have the same negative impacts as one in a fishery without such incentives.

A separate exception could be established for subsidies that impact fisheries that are not fully exploited. The problem of determining whether fishing overcapacity exists in a given fishery need not involve debate over different approaches to defining and measuring “overcapacity”. In a challenge to the use of this exception, a WTO dispute settlement panel could look to certain indicators to determine the state of exploitation in a fishery.<sup>16</sup> For example, biomass data based on standard sampling techniques – either from a government- or university-based scientific institution or from government stock assessments – could be used as evidence in determining the level of exploitation.<sup>17</sup>

In the case of a subsidy to fleets operating in a high seas fishery, determining whether the fishery is overexploited could be based on evidence from Regional Fisheries Management Organizations (RFMOs) where available. Some RFMOs have already made statements or taken actions indicating that fisheries over which they have authority already have too much fleet capacity. The Northwest Atlantic Fisheries Organization, for example, has established fishing moratoria on 8 of 13 species under its jurisdiction.<sup>18</sup> Thus, a dispute settlement panel could request information from an RFMO on overcapacity in the fishery in question or statistical data on the biologically safe catch level that has been established in the fishery and compare it with the actual annual levels of catch. Such information could help a dispute settlement panel reach its decision on whether the subsidy should be prohibited.

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16 For an inventory of management measures used in OECD countries that serve as indicators of overexploitation of fisheries, such as area closures, time closures and measures aimed at fleet reduction, along with the years adopted in specific fisheries, see OECD, (1997) *Towards Sustainable Fisheries: Economic Aspects of the Management of Living Resources*, OECD, Paris. (esp. Table 4.7, and Table 4.9, pp. 109-1100).

17 Some developing countries may lack the data necessary to prove that certain fisheries are underexploited and do not have the resources necessary to do the required stock assessments. The international community should encourage such countries to develop this information prior to implementing fisheries subsidies. Indeed, in the absence of stock assessments fish biomass could be compromised. Moreover, such stock assessments are called for in the 1995 FAO Code of Conduct for Responsible Fisheries and should be considered as a minimum acceptable condition for fisheries management.

18 U.S. National Marine Fisheries Service, International Fisheries Division, Office of Sustainable Fisheries, “International Agreements Concerning Living Marine Resources of Interest to NOAA Fisheries,” 1998 on the internet at: <http://www.nmfs.gov/onagreee.html>.

## 2.3 Actionable Subsidies

A second option for improving disciplines on fisheries subsidies would be to designate certain categories of subsidies as “actionable,” meaning that they would be challengeable if they have negative effects on fishery resources. One way to craft an actionable fisheries subsidies provision would be to use language similar to that used in the existing category of actionable subsidies in the SCM Agreement.

As previously noted, Article 5 currently defines three kinds of adverse effects. One possibility would be to add a fourth definition to adverse effects based on impacts to fishery resources. In essence, this would impose an “effects test” for determining whether the subsidy in question was in fact harmful to the fisheries.

The burden of proof in a WTO dispute settlement panel considering a case involving adverse effects on fisheries resources would be on the Member challenging the use of the subsidy. Experience with disputes under the SCM Agreement thus far has shown that demonstrating causal relationships between a specific subsidy and adverse trade-distorting effects has involved such data and analysis requirements that potential challengers have often been discouraged from bringing cases. A similar problem would certainly arise if the same adverse effects test were applied to the issue of impacts on fisheries resources. A Member challenging a subsidy would be required to devote considerable time and budgetary resources to gather the data necessary to demonstrate the impact of a specific subsidy on a fishery. This would be further complicated by the fact that in many cases a challenging Member may not have access to information and data related to the level of current exploitation of a fishery. It is doubtful that subsidising countries would believe that other members would challenge their subsidies on the basis of a provision that requires the showing of “adverse effects” of the subsidy on fish stocks.

Moreover, even assuming the challenging Member gathered the necessary data, the case would be too late to protect the fisheries resources from harm done by the subsidy in question. Members would have no reason to bring a challenge before having collected the data, which means that the case

would come only *after* adverse, and potentially irreparable, impacts on the resources had taken place. Using an adverse effects provision would also put a WTO dispute settlement panel in the position of exercising significant discretion about whether a particular subsidy has had adverse effects on the environment. One option for dealing with this problem would be to consult with an existing multilateral institution with the expertise to make such judgments, such as, the FAO or UNEP.

Another approach for developing a fisheries subsidies provision would be to apply the concept of “serious prejudice.” As noted above, one of the three types of “adverse effects” described in Article 5 is “serious prejudice to the interests of another Member.” Prior to its expiration on 1 January 2000, Article 6 (1) of the SCM Agreement listed specific types of subsidies under which a presumption of serious prejudice could be made. Similar language could be adopted for fisheries subsidies. In this case, serious prejudice would be deemed to exist for specific types of fisheries subsidies. Such a list could be confined to those fisheries subsidies that have the greatest impact on fisheries resources, such as subsidies for capital costs or subsidies for price support.

The use of a “serious prejudice” presumption might be preferable to a general provision under adverse effects because it shifts the burden to the subsidising Member to show that the subsidy does not harm fishery resources. However, assuming the subsidising Member was able to meet its burden, the challenging Member would still be required to rebut the subsidising Member’s evidence, raising the problematic issues related to demonstrating a causal relationship between the subsidy and harm to the fishery. In the event of uncertainty about the impact of subsidies on a specific fishery, a panel could have recourse to consultation with experts or relevant international organisations on the matter.

## **2.4 Non-Actionable Subsidies**

A major issue facing the establishment of new disciplines on fishing subsidies is whether to create a non-actionable category for certain fisheries subsidies that are alleged to be beneficial to the health of fisheries and fish stocks. Such classification would have the effect of protecting such subsidies

from challenge either on environmental grounds or on trade-distorting grounds. As previously noted, the SCM Agreement originally included a non-actionable category of subsidies, but this category lapsed on 1 January 2000 and has not been reinstated.

The analysis of subsidy impacts on resources shows that there are certain subsidies, such as for management services and research, which typically have no negative impacts on fisheries resources. However, the study also found that some fisheries subsidies that are often thought of as “good” subsidies to the fisheries sector, however well intentioned, often have unintended harmful effects.<sup>19</sup> A number of subsidies have been proposed as candidates for non-actionable status, including subsidies to compensate temporary cessation of fishing in relation to natural disasters or capacity-reduction schemes, subsidies for decommissioning vessels and license retirement, subsidies for retraining, subsidies for modernization of fishing vessels to improve safety, product quality or working conditions, subsidies to promote more environmentally friendly fishing methods, and subsidies for infrastructure construction.<sup>20</sup> Nonetheless, many of these candidates for inclusion in a non-actionable category of fisheries subsidies carry the risk of creating perverse incentives. Each category proposed should therefore be analyzed on the basis of likely actual effects rather than on its declared objective.

Exempting subsidies to compensate for temporary cessation carries substantial risks. As the European Community Court of Auditors found upon investigating them in the early 1990s, temporary fishing cessation subsidies do not actually reduce fishing effort, because they are invariably drafted so as to allow owners to receive compensation for days on which they would not have fished in any case.<sup>21</sup> Furthermore, by increasing fishing profitability, they are an additional economic inducement to maintain existing levels of capacity investment. Creating such an exemption would create an incentive for vastly increasing the incidence and size of such schemes.

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<sup>19</sup> See Porter, G. (2004) *Analyzing the Resource Impact of Fisheries Subsidies: A Matrix Approach*, UNEP, Geneva.

<sup>20</sup> See, for example, Submission of the European Communities, April 23, 2003 (TN/RL/W/82), Proposal from the People’s Republic of China on Fisheries Subsidies, June 20, 2002 (TN/RL/W/9).

<sup>21</sup> European Court of Auditors, “Common Policy on Fisheries and the Sea,” Chapter 4, *Official Journal of the European Communities*, December 15, 1992, pp. 107-115.

Exempting subsidies for the adoption of more selective fishing technologies is also more complicated than it first appears. A number of selective fishing devices are already on the market, or have been tested and found to be effective. Subsidizing their adoption by fishermen is one way of promoting much wider use. But the alternative of making their adoption mandatory is arguably more effective, and given the critical state of fisheries (in large part because of excessive by-catch and catch of immature fish) may represent the preferred alternative. Moreover, simply granting protected status to subsidization of fishing technologies may create a competitive disadvantage for those states that have already done the most to promote selective technologies through regulatory means rather than with subsidies. Some states have already decided to make some selective fishing gear mandatory. Argentina, for example, decided a few years ago to make the utilization of selective devices on trawls for the escapement of juvenile fish compulsory.<sup>22</sup>

## **2.5 Subsidies Allowed Only under Specific Policy Conditions**

Not all fisheries subsidies fall clearly into the category of subsidies that should either be prohibited or allowed. Another legal category of subsidies could be created for those which have been found to be harmful under certain policy conditions but not under others. The one set of fisheries subsidies that would fall within such a category are subsidies for the decommissioning of vessels and license withdrawal. These types of subsidies are extremely popular with governments and fishing industries, but as the UNEP-commissioned study documents, they have generally failed to reduce fishing effort and have in some instances resulted in increased capacity or effort in the fishery because of their unintended consequences, such as discouraging exits from the fishing industry and increasing the amount of capital available for modernization of vessels or even purchase of new ones.

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<sup>22</sup> Prado, J. and Drew, S. (1999) *Research and Development in Fishing Technology in Latin America*, FAO Fisheries Circular No. 944, FAO, Rome. <http://www.fao.org/docrep/X2173E/x2173E00.htm>.

Such unintended consequences of subsidies for decommissioning of vessels and licence withdrawal could be avoided or minimized by a combination of stringent regulations. Those conditions could include the following:

- Mandatory physical scrapping or verifiable conversion to non-fishing uses of vessels decommissioned under the scheme.
- Strict prohibitions on the introduction of any new vessel into the fishery or improvement of existing vessel in the fishery with new catch-enhancing fishing technology.
- Evidence of rigorous application of controls over fishing trips to prevent increased effort.
- Commitment to a reasonable time-limit (e.g., three years) on the duration of the programme and to not repeat the programme in the future.

If use of decommissioning subsidies were conditioned on adoption of certain policy conditions, then Members would be able to challenge their use by providing evidence that the necessary policy conditions had not been adopted. By the same token, the subsidising Member could overcome the challenge by presenting evidence showing that the necessary policy conditions were in place.

The question would then be whether the burden of proof should be on the subsidizing Member or on the Member challenging the subsidy. The underlying assumption would be that the subsidy would be harmful in the absence of the necessary policies. It would be logical, therefore, for the burden of proof to shift to the subsidising Member. However, it should be noted that developing evidence to show that certain policies were in effect would be much less onerous than the burden a Member would carry in an actionable subsidies challenge.

### 3. The Issue of Special Consideration for Developing Countries

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Developing countries face unique challenges with regard to fisheries that make fisheries policies a matter of particular concern in the development process. For most developing countries, fishing is a much larger contributor to both food supply and employment than in industrialized countries, and the vast majority of fishing is either small-scale or artisanal. For a number of least developed countries, moreover, income from fishing access agreements represents a significant contribution to national budgets.

One issue to be considered in crafting improved disciplines on fisheries subsidies is whether and how to extend special and differential treatment with regard to any new disciplines to developing countries. As previously noted, the Doha commitments on fisheries subsidies include the clause “taking into account the importance of this sector to developing countries.”<sup>23</sup> This has been interpreted by some WTO Members as meaning that “special and differential treatment” should be extended to developing countries in any new disciplines on fisheries subsidies.

The SCM Agreement itself, like the 1994 Uruguay Round Agreement on Agriculture, already includes provisions for special and differential treatment to developing countries with regard to disciplines on subsidies. Article 27 provides an exemption from the prohibition on export subsidies for the least developed countries and an eight-year phase-out period for other developing countries. Moreover, Article 27 (8) also provides that there should be no presumption under Article 6 (1) that a subsidy granted by a developing country results in “serious prejudice.” Instead, such “serious prejudice” must be “demonstrated by positive evidence.”<sup>24</sup>

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<sup>23</sup> *Ministerial Declaration* (WT/MIN(01)/DEC1, 20 November 2001), para. 28.

<sup>24</sup> As previously noted, Article 6(1) of the SCM Agreement lapsed on 1 January 2000 and has not been reinstated.

In determining whether to adopt a special and differential treatment provision related to fisheries subsidies, it is important to realize that overfishing affects not only industrialized countries, but also the vast majority of developing countries. In fact, all seven of the developing countries that were among the fishing states with the largest fish catch, for which data was available in the late 1990s, had fisheries that were already seriously overexploited.<sup>25</sup> In countries where fisheries are already overexploited, the use of capacity-enhancing subsidies would provide only temporary benefits to fishing industries at the expense of future fish supplies and food security. Restrictions on fisheries subsidies in these cases would therefore be in the long-term domestic socio-economic and environmental interest of these countries.

As has been noted, new disciplines on fisheries subsidies on environmental grounds could exempt fisheries that are not fully exploited. Although no official data exists on the status of exploitation for fisheries, it appears that the relatively few underexploited fisheries in exclusive economic zones that still exist belong overwhelmingly to developing countries, and primarily to the least developed countries of the world.<sup>26</sup> For example, Mauritius still has fisheries for deep water shrimps, swordfish, small pelagics and tuna that are not fully exploited. Such an exception, therefore, would benefit developing countries in regard to trade interests and would also be consistent with their sustainable development interests. Regular stock assessments would need to be conducted to avoid leaps from less than to full exploitation of the fishery.

One additional consideration in whether to extend special and differential treatment to developing countries for any new disciplines on fisheries subsidies is that the use of some subsidies by developing countries, particularly subsidies to capital costs for distant water fleets, would likely negatively effect other developing countries.

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<sup>25</sup> For evidence of the overcapacity in the national fleets of eight major developing countries, see Porter, G. (1998) *Estimating Overcapacity in the Global Fleet*, pp. 13-18, WWF, Washington D.C.

<sup>26</sup> See Ministry of Fisheries, Mauritius, "Elaboration of a ten year development plan for the fisheries sector", TCP/MAR/6712 (A), Table S.1, online at: <http://ncb.intnet.mu/fish>.

One proposal related to, but distinct from, the adoption of a special and differential treatment provision for developing countries, is the adoption of a provision that exempts artisanal fisheries from any new disciplines on fisheries subsidies. Although this may appear at first glance to favour developing countries in general, and least developed countries in particular, it could have the unintended consequence of encouraging unsustainable practices rather than supporting the development needs of poor countries.

Most artisanal fisheries in the world are already heavily overexploited and need stronger management systems rather than subsidies to production or inputs to make them more profitable and sustainable. Motorization of these small-scale fleets, often with heavy government assistance, has contributed to serious resource depletion, as noted in UNEP's study of fisheries management in Senegal. India, where non-mechanized and small scale mechanized fisheries fleets (roughly equivalent to the artisanal sector) have experienced dwindling catch per unit of effort similar to that in the mechanized deep-sea sector, is another example of developing country artisanal fleets that are suffering from severe overcapacity.<sup>27</sup>

Furthermore, there is no basis for assuming that artisanal fishing fleets are any less competitive than industrial fleets. Indeed, it has been observed that in some developing countries the artisanal fleet is more profitable than the industrial fleet because labour productivity is much higher in relation to capital costs, and that it represents a much larger proportion of the total marine catch.<sup>28</sup>

A critical question in this regard is whether the fishery is managed by a community-based institution, which has an incentive to maintain sustainable levels of fishing effort. In contrast, subsidies provided to artisanal fleets in fisheries that are still subject to "race for fish" incentives will have the perverse effect of increasing effort while also reducing overall welfare. The

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<sup>27</sup> Remarks by Sebastian Mathew, International Collective in Support of Fishworkers, at WWF Conference "Creating a Sea Change: Resolving the Global Fisheries Crisis", Lisbon, Portugal, 13-14 September, 1998; Karim Dahou and M. Deme, with A. Dioum, "Support Policies to Senegalese Fisheries," in *Fisheries Subsidies and Marine Resource Management: Lessons Learned from Studies in Argentina and Senegal* (Geneva: UNEP, 2002), pp. 27-50; K. A. Martin, "Investments in marine sector at Rs 3,100", *Financial Express* (Bombay), 1 February 1999).

<sup>28</sup> Karim Dahou, pers. Comm., July 16, 2003.

character of the management regime, therefore, is a key distinction to be considered in any special and differential treatment for artisanal fisheries. Any exemption from prohibited subsidies for the artisanal sector, therefore, should be limited to subsidies that are not harmful to fishery resources.

One type of special and differential treatment that in most cases would be consistent with improved disciplines for fisheries subsidies would be longer phase-out periods for any subsidies that are prohibited under the disciplines. A longer phase-out would allow developing countries to make adjustments to existing subsidies over time. However, care would need to be taken to ensure that the longer phase-out would not lead to irreversible damage to the fishery resources.

A special problem arises in the case of a least developed country island or coastal state that depends heavily on income from bilateral fishing agreements that involve payments by distant water fishing states for access to the fisheries. In some cases the income derived from such agreements has been significant in relation to the total economy; in other cases, it is significant in relation to the total revenues from the fishery sector. Such cases of special dependency need to be taken into account in the development of disciplines for fishery subsidies and their exceptions.