



How government funds are killing oceans and forests and why the CBD rather than the WTO should stop this perverse use of public money

DEADLY SUBSIDIES

by Juergen KNIRSCH, Daniel MITTLER, Martin KAISER, Karen SACK, Christoph THIES, Larry EDWARDS



The authors wish to thank Scott Paul and Pam Wellner of Greenpeace USA and Elisabeth Lemke of Greenpeace Germany for their support with this study.

GREENPEACE INTERNATIONAL

and the second second

Con the second

Ottho Heldringstraat 5 1066 AZ Amsterdam The Netherlands Tel: +31 20 7182000 Fax: +31 20 5148151 Email: daniel.mittler@int.greenpeace.org

How government funds are killing oceans and forests and why the CBD rather than the WTO should stop this perverse use of public money

DEADLY SUBSIDIES

by Juergen KNIRSCH, Daniel MITTLER, Martin KAISER, Karen SACK, Christoph THIES, Larry EDWARDS



ACRONYMS	.5
INSTEAD OF A FOREWORD	.7
1. INTRODUCTION	.9
2. SUBSIDIES: DEFINITIONS, TRADE EFFECTS, EXAMPLES	13
2.1 Subsidies, government financial transfers or incentives: Is there a universally accepted definition?	13
2.2 Subsidies and international trade	17
2.3 Examples of subsidies in the fisheries sector	
2.4 Examples of subsidies in the forestry sector	18
3. THE SCALE OF SUBSIDIES	21
3.1 Perverse subsidies	23
3.2 Situation and subsidies in fisheries products sector	24
3.2.1 Reduction of catches and fleet capacity	25
3.3 Situation and subsidies in the forest products sector	28
3.3.1 Subsidies related activities of intergovernmental organisations	34
4. EFFECTS OF SUBSIDIES	35
4.1 Effects on fisheries	35
4.2 Effects on forests	35
4.3 Assessment of relationship between subsidies and the environment	36
4.4 Proposals for tools and policy options as discussed in the literature	37
5. CAN THE WTO PLAY A ROLE IN REDUCING OR ABOLISHING ENVIRONMENTALLY HARMFUL SUBSIDIES?	41
5.1 Subsidies in the WTO	41
5.1 Subsidies in the WTO	
	41
5.1.1 Subsidy definition from WTO SCM Agreement	41 44
5.1.1 Subsidy definition from WTO SCM Agreement	41 44 45
5.1.1 Subsidy definition from WTO SCM Agreement	41 44 45 46
5.1.1 Subsidy definition from WTO SCM Agreement	41 44 45 46 47
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 	41 44 45 46 47 51
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 	41 44 45 46 47 51 53
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 6. CONCLUSIONS AND POLICY OPTIONS 	41 44 45 46 47 51 53 57
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 6. CONCLUSIONS AND POLICY OPTIONS SUMMARY 	41 45 46 47 51 53 57 59
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 6. CONCLUSIONS AND POLICY OPTIONS SUMMARY ANNEX I: Examples of different categories of financial transfers to the marine capture fisheries sector in OECD countries 	41 45 46 47 51 53 57 59 61
 5.1.1 Subsidy definition from WTO SCM Agreement	41 45 46 47 51 53 57 59 61
 5.1.1 Subsidy definition from WTO SCM Agreement	41 45 46 47 51 53 57 59 61 61
 5.1.1 Subsidy definition from WTO SCM Agreement	41 45 46 47 51 53 57 61 61 61 62
 5.1.1 Subsidy definition from WTO SCM Agreement	41 44 45 46 47 51 53 57 61 61 61 62 62
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 6. CONCLUSIONS AND POLICY OPTIONS SUMMARY ANNEX I: Examples of different categories of financial transfers to the marine capture fisheries sector in OECD countries ANNEX II: Definitions in the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the World Trade Organization (WTO) Prohibited Subsidies Actionable Subsidies The SCM criteria of specificity 	41 44 45 47 51 53 57 61 61 61 61 62 62 63
 5.1.1 Subsidy definition from WTO SCM Agreement 5.2 Challenges for subsidy reduction under the SCM Agreement 5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement? 5.3.1 Forests and the WTO subsidies negotiations 5.3.2 Fisheries and the WTO subsidies negotiations 5.4 WTO and subsidies - the broader picture 6. CONCLUSIONS AND POLICY OPTIONS SUMMARY ANNEX I: Examples of different categories of financial transfers to the marine capture fisheries sector in OECD countries ANNEX II: Definitions in the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the World Trade Organization (WTO) Prohibited Subsidies Actionable subsidies The SCM criteria of specificity ANNEX III: WTO, OECD AND APEC MEMBERS 	41 44 45 47 51 53 57 57 61 61 61 62 62 62 63 69

Acronyms

AoA Agreement on Agriculture (of the WTO)
APEC Asia-Pacific Economic Cooperation
CBD Convention on Biological Diversity
CTE Committee on Trade and Environment (of the WTO)
DAC Development Assistance Committee (of the OECD)
DMD Doha Ministerial Declaration (of the WTO)
DSB Dispute Settlement Body (of the WTO)
DSU Dispute Settlement Understanding (of the WTO)
EU European Union
EU (15) European Union with 15 member states (till 30 April 2004)
EU (25) European Union with 25 member states (since 1 May 2004)
EUR Euro
FAO Food and Agriculture Organization of the United Nations
FIFG Financial Instrument for Fisheries Guidance (of the EU)
FLEGT Forest Law Enforcement, Governance and Trade
GATS General Agreement on Trade in Services (of the WTO)
GATT General Agreement on Tariffs and Trade (of the WTO)
GFT Government Financial Transfers
GDP Gross Domestic Product
GNP Gross National Product
ITTA International Tropical Timber Agreement
ITTO International Tropical Timber Organization
MDGs Millennium Development Goals (of the UN)
MEA(s) Multilateral Environment Agreement(s)
MFN Most Favoured Nation Treatment
NAFO Northwest Atlantic Fisheries Organisation
NAFTA North American Free Trade Agreement
NAMA Non-Agricultural Market Access
NT National Treatment
NTB(s) Non-Tariff Barrier(s)
NTM(s) Non-Tariff Measure(s)

ODAOfficial Development Assistance (of OECD members) **OECD**Organisation for Economic Co-Operation and Development **PSE**Producer Support Estimate **PPM(s)**Process and Production Method(s) **RFMO**Regional Fisheries Management Organisations SBSTTA Subsidiary Body on Scientific, Technical and Technological Advice **SCM**Agreement on Subsidies and Countervailing Measures (of the WTO) TEVTotal Economic Value UNCLOS United Nations Convention on the Law of the Sea UNCTAD United Nations Conference on Trade and Development **UNEP**United Nations Environment Programme UNFFUnited Nations Forum on Forests USD United States Dollars **VPA(s)**Voluntary Partnership Agreement(s) WBGU German Advisory Council on Global Change WRIWorld Resources Institute WTOWorld Trade Organization WWFWorld Wide Fund for Nature

Instead of a foreword

Stalking the elusive subsidy (a guide to the nature of the beast)

There is nothing inherently bad about subsidies. They can encourage the development of solar power, accelerate the adoption of less polluting technologies by industry and direct money efficiently to society's poorest. They could, in effect, play a crucial role in helping development around the globe become more sustainable.

But largely they don't. Many of today's subsidies encourage practices that are economically perverse or trade-distorting or ecologically destructive or socially inequitable. Sometimes several of these harmful things at once. And most subsidies hinder progress towards sustainable development, the Brundtland Commission goal of meeting the needs of the present generation without compromising the needs of future generations.

Yet far too few people are aware of this dominant dark side of subsidies. Partly that's because of their natural camouflage, what Barbara Ward and René Dubois once called "disguisedly subsidized consumption"¹. Partly it's because many subsidies were originally intended for goals that were beneficial, even laudable. And partly it's because the world is addicted to subsidies, and denial is a sure mark of addiction.

It's a serious addiction.

Andre de Moor and Peter Calamai²

1 Ward and Dubois 1972: 143

² de Moor and Calamai 1997: 1



1. Introduction

e are living in a world full of contradictions: On the one hand a lot of public money is spent as subsidies sometimes only benefiting a handful of people but causing harm for many others, their social structures and the environment. On the other hand there is a huge demand to finance global development goals like the reduction of poverty and hunger or the protection of the environment. These figures have been published for years and are really horrifying: governments are paying around USD 1 to 2 trillion per year worldwide for subsidies causing social and environmental negative impacts³. Compared with this USD 1- 2 trillion the financial resources actually given for the Official Development Assistance (ODA) of USD 79.5 billion in 2004⁴ or the needed money for an ODA meeting the Millennium Development Goals (MDG) of USD 73 billion (2006) to USD135 billion (2015) are relatively low⁵. Even if we add the estimated annual costs to establish and manage a representative global system of marine and terrestrial protected areas of between USD 30-35 billion and at least USD 20 billion for terrestrial protected areas⁶ only a small portion of the USD 1 to 2 trillion would be needed. So the money for financing global development seems to be available but spent in a wrong way damaging human rights, global justice and the environment. And this "money spent in a wrong way problem" has another dimension: It is minimizing the future global financial returns. We know that a comprehensive global network of protected areas could provide estimated financial returns of between USD 4.4 to 5.2 trillion in terms of annual value of goods and services, such as clean water, food security, medicine, disaster prevention and climate regulation⁷. And if we think about the returns of a mankind really enjoying the benefits of human rights and global justice we could add another trillion-dollar figure.

Another failure of the global institutions is the missing coherence in dealing with development and environmental problems. The non-coherence is not a question of missing knowledge; it is lack of political will which prevents the governments from establishing a coherent global policy framework. We know at least since the Earth Summit, the United Nations Conference on Environment and Development in Rio 1992, that development and environment are interlinked. Klaus Toepfer, Executive Director of the UN Environment Programme (UNEP) until April 2006, was never tired of saying that poverty is a major cause of environment degradation⁸ and any new publication on global environmental issues is showing concrete aspects of that linkage. The German Advisory Council on Global Change recommends "fighting poverty through environmental policy" and demonstrates "systemic links between poverty (income poverty, diseases, malnutrition, and lack of education, social stability and social capital) and environmental changes (climate change, water pollution and lack of water resources, soil degradation, loss of biological diversity and resources, and air pollution)"⁹. For the World Resources Institute the three essential elements of sus-

³ van Beers and de Moor 2001; Myers and Kent 2001: 189

⁴ OECD 2006

⁵ Sachs 2005: 240

⁶ Balmford et al. 2004

⁷ Balmford et al. 2002

⁸ Toepfer 2000

⁹ WBGU 2004: 2

tainable economic growth, namely ecosystem management, democratic governance, and poverty reduction, are "inextricably linked. More than 1.3 billion people depend on fisheries, forests, and agriculture for employment—close to half of all jobs worldwide"¹⁰. Or to put it in the words of Millennium Ecosystem Assessment: "... the harmful effects of the degradation of ecosystem services (the persistent decrease in the capacity of an ecosystem to deliver services) are being borne disproportionately by the poor, are contributing to growing inequities and disparities across groups of people, and are sometimes the principal factor causing poverty and social conflict¹¹".

This is the background for the ongoing discussion of the benefits and drawbacks of subsidies: The global community needs money to solve urgent development and environmental problems¹². One possible source for the financial resources necessary to deal with these problems could be the huge amount of around USD 1 to 2 trillion per year now spent as subsidies causing social and environmental damage. This is not to say that it would be easy to shift the money. And this is not to give the impression that all subsidies are bad, contrariwise subsidies can be used to solve development and environmental problems. But unfortunately if we are looking on the six main subsidised areas, namely agriculture, fossils fuels and nuclear energy, road transportation, water, fisheries and forestry, we have to note that between 60¹³ and 78¹⁴ percent of the subsidies are qualified as social and environmentally damaging.

Who is acting, who is responsible? The subsidies issue is under discussion on the national as well as the international level: Intergovernmental organisations such as the Organisation for Economic Co-Operation and Development (OECD), the International Energy Agency, the Food and Agriculture Organization (FAO), the United Nations Conferencene on Trade and Development (UNCTAD) and the World Bank, entities for regional economic integration like the European Union and the Asia-Pacific Economic Cooperation (APEC) and conferences like the International Conference Financing for Development (2002) and the World Summit on Sustainable Development (2002) intensively debate the distortive effects and social costs of subsidies in agriculture, coal, energy, fisheries, forestry, manufacturing industry and transport.

In spite of the fact that many organizations are dealing with the various aspects of subsidies the World Trade Organization (WTO) is the only international body that regulates subsidies on a multilateral level. The three WTO agreements, the Agreement on Agriculture (AoA), the Agreement on Subsidies and Countervailing Measures (SCM Agreement) and the General Agreement on Trade in Services (GATS) in conjunction with the general trade principles of non-discrimination and national treatment as well as Article VI (Anti-dumping and Countervailing Duties), and Article XVI (Subsidies) of the General Agreement on Tariffs and Trade (GATT) lay down rules on subsidies that are mandatory for all WTO members (see Box 1).

Box 1: WTO agreements dealing with subsidies

Agreement on Agriculture (AoA)

Agreement on Subsidies and Countervailing Measures (SCM Agreement)

General Agreement on Trade in Services (GATS): Article 15 (Subsidies)

General Agreement on Tariffs and Trade (GATT): Article VI (Anti-Dumping and Countervailing Duties), and Article XVI (Subsidies)

¹⁰ WRI 2005: 4

¹¹ Millennium Ecosystem Assessment 2005: 17

¹² Verweij and de Man 2005; Sachs 2005: 240

¹³ van Beers and de Moor 2001

¹⁴ Myers and Kent 2001

The Agreement on Agriculture regulates export subsidies for agricultural goods and domestic support measures for agriculture. The General Agreement on Trade in Services (GATS) encourages WTO Members to enter into negotiations about how to avoid the trade-distortive effects of subsidies. The SCM Agreement "addresses two separate but closely related topics: multilateral disciplines regulating the provision of subsidies, and the use of countervailing measures to offset injury caused by subsidized imports"¹⁵ This means the SCM does two things: it disciplines the use of subsidies, and it regulates the actions countries can take to counter the effects of subsidies. It says a country can use the WTO's dispute settlement procedure to seek the withdrawal of the subsidy or the removal of its adverse effects. Or the country can launch its own investigation and ultimately charge extra duty (known as "countervailing duty") on subsidised imports that are found to be hurting domestic producers¹⁶. Therefore "the SCM is currently the only international agreement that defines subsidies with a view of distinguishing between subsidies that are trade distortive and therefore illegal in the context of international trade rules and those that are trade neutral because they do not affect market access or the prices of export products"¹⁷.

The 4th WTO Ministerial Conference in Doha initiated a new round of trade negotiations in 2001 that combines the re-negotiation of existing agreements like the Agreement on Agriculture (AoA) [1], the General Agreement on Trade in Services and the Agreement on Subsidies and Countervailing Measures (SCM) [2] with new topics like trade and environment or market access for non-agricultural goods (NAMA). While for the first time in the history of the WTO the Doha Ministerial Declaration (DMD) included the task to clarify the relationship of WTO rules with specific environmental measures, WTO members also agreed to liberalize industrial goods. Among these non-agricultural or industrial goods are environmentally sensitive products originating from the marine environment (fish), forests (timber and paper) and from mining (minerals). Furthermore the Doha mandate covers the clarification of the environmental impacts of fisheries subsidies with a view to reducing negative environmental impacts due to specific forms of subsidisation. Some commentators assessed the fact that fisheries subsidies have been mentioned twice in the DMD, under "rules" and again under the heading of "trade and environment", as a possibility for an agreement on a more environmentally sustainable fisheries subsidy regime in the WTO¹⁸. [3]

Subsidies have long been recognised as promoting the unsustainable use of natural resources because they protect economic actors from paying the full or at least the market price of production factors and natural resources¹⁹. Nevertheless, subsidies have increased rather than decreased during the last decade. From the point of view of the WTO many subsidies are barriers to trade and therefore the WTO negotiations could offer a chance to reverse these trends.

The fact that WTO negotiations are completed through a mechanism called "single undertaking" [4] makes it impossible to have an isolated look at only one issue, which is currently negotiated in the package of the Doha Development Agenda. What Kurien states for fisheries subsidies is also true for any other issue of the current trade negotiations: "WTO members are not negotiating fisheries subsidies in isolation of their strategic interests in other sectors. Given the unequal importance of fishery in the trade basket of member states, they can use the negotiations pertaining to fisheries subsidies to achieve gains in other sectors. The initial negotiations for a greater understanding of subsidies and production-distorting concerns in fisheries may be handled at national and regional levels before being 'resolved' at the global multilateral level of the WTO"²⁰.

¹⁵ WTO "SCM Overview" at: http://www.wto.org/english/tratop_e/scm_e/subs_e.htm.

¹⁶ WTO "Understanding the WTO" at: http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm8_e.htm#subsidies

¹⁷ Steenblik 2003: 104

¹⁸ Schorr 2004

¹⁹ See FAO 1993

²⁰ Kurien 2005

Up to now the negotiations on non-agricultural goods focusses on the tariff aspects trying to find a universal formula to cut tariffs for industrial goods and to go for sectorial initiatives for specific industrial goods sectors like the fish and fish products sector²¹ or the forest products sector²²[5]. The second part of the NAMA negotiations to reduce or as appropriate eliminate non-tariff barriers (NTBs) has - with a view on subsidies - not started yet. Given the ongoing difficulties to agree on a formula for tariff cuts its seems to be unlikely that there will be a debate on subsidies as NTBs in the next future. Therefore the possible NAMA debate on subsidies is neglected in this study.



21 WTO 2005g

22 WTO 2005h

2. Subsidies: definitions, trade effects, examples

he issue of subsidies is well discussed in different fora on national, regional and international level, but as the OECD states and box 2 demonstrates "there is no definition of a subsidy that is universally accepted by all who use the term — national account statisticians, trade negotiators, environmental economists and the general public"^{23.}

2.1 Subsidies, government financial transfers or incentives: Is there a universally accepted definition?

Subsidies are a form of government support that promotes activities that governments consider beneficial to the economy, a sector, or the society as a whole²⁴. As such, they are presumed capable of overcoming market deficiencies, and of promoting, for example, specific economic activities or environmental technologies and supporting members of society that are or might be or claim to be disadvantaged in one form or another.

A subsidy is support in money or in kind by governments to producers or exporters conferring a benefit for them. There are two general types of subsidies: An export subsidy is a benefit conferred on a firm by the government that is contingent on exports. A domestic subsidy is a benefit not directly linked to exports.

A subsidy can also be defined as any measure that keeps consumer prices below market levels, keeps producer prices above market levels, or reduces costs for consumers and producers by giving direct or indirect support to a particular sector²⁵. On a general or theoretical level, this is a comprehensive definition. However, at the policy level, the issue of determining which measures constitute a subsidy becomes rather complicated, and depends on whether a broad or narrow definition of this term is adopted.

For example, disagreement remains as to whether indirect action or omissions fit the definition of a subsidy, or whether the definition of a subsidy is limited to direct financial transfers or direct payments. For instance, some would argue that neglecting to tax aviation fuel constitutes a subsidy that puts air travel at an economic advantage against road transportation where fuel is taxed. Others would assert that this is not so. Alternatively, it is disputed as to whether the costs of acid rain in Scandinavia are a subsidy for Great Britain, the country largely responsible for the acid fall-out in Scandinavia. These questions suggest that subsidies can be understood in a narrow and in a broad sense. Whereas the first set of subsidies comprise monetary transfers, the second set comprises monetary and non-monetary benefits like the pollution absorption function of nature²⁶.

²³ OECD 2005a: 7, 16

²⁴ Myers and Kent 2001: 5

²⁵ de Moor and Calamai 1997

²⁶ Templet 1995

Thus, the question is whether indirect, implicit or hidden economic advantages for specific actors or sectors can also be understood as subsidies. This is a problem insofar as indirect subsidies or foregone government revenue, (i.e. taxes or charges governments should have generated in the context of resource use), are very difficult to measure in monetary or economic terms. Consequently, a full and reliable costbenefit analysis of the impacts of subsidies on societies is extremely difficult to achieve.

The OECD work on subsidies circumvents this definitional problem by speaking of "government financial transfers" (GFTs) which can be narrowed down to actual cash or monetary transfers because subsidies obviously "encompass more than just the explicit transfer of money from the public purse to [a] sector. Since subsidies in general also include implicit transfers from consumers to the industry, government financial transfers are considered to be a subset of the whole range of subsidies"²⁷. With regard to fishing subsidies, GFTs are subsequently defined as "the monetary values of interventions associated with fishery policies, whether they are from central, regional, or local governments. GFTs include both on-budget and off-budget transfers to [a] sector"²⁸.

'On-budget' and 'off-budget' is another important distinction that exemplifies the broad range of the term subsidy or GFT. On-budget subsidies relate to all expenditures and financial transfers that show up in the government budget. Off-budget subsidies do not affect the budget, but change financial assets and liabilities - like a government regulation asking companies to supply specific goods or commodities below the market price or a loan²⁹.

It is important to look beyond direct payments because from the perspective of environmental protection or resource conservation, it is indispensable to take account of all those factors that may encourage, for example, over-fishing [6]. For example, in the fisheries sector, government payments for the access to foreign fisheries, publicly funded fisheries management services (e.g. stock assessment), or publicly funded construction and improvement of ports should be considered as fisheries subsidies³⁰.

Furthermore, this complexity is enhanced by the fact that subsidies – direct or indirect - take the forms of various policy instruments and financial transfers and can differ quite substantially across sectors³¹. Therefore, it is helpful to draw up typologies to categorise subsidies according to their forms and goals. In the context of fisheries subsidies the OECD categorises subsidies as either:

- direct payments to economic actors,
- financial transfers that reduce the cost of production or consumption, and
- general services that reduce the costs for the sector as a whole32.

According to the Convention on Biological Diversity (CBD) subsidies are an incentive and could be distinguished as positive or perverse incentives. In the CBD work programme related to article 11 of the Convention [7] dealing with incentives the CBD is focussing on "proposals for the application of ways and means to remove or mitigate perverse incentives"³³. So far, attention on perverse incentives has tended to be focussed on subsidies. "The CBD has encouraged this development through its view that considerable progress can, and should, be made in this area"³⁴: "Government subsidies that encourage biodiversity decline can be quantified financially, and represent a clear opportunity for policy reform to promote the objectives of the Convention. Notwithstanding the need to address all perverse incentives, in the first instance it is recommended to concentrate on identifying government subsidies with perverse effects on biological diversity"³⁵.

- 29 de Moor and Calamai 1997: 5
- 30 WWF 2001: 7
- 31 Porter 2002a
- 32 OECD 2000
- 33 CBD/SBSTTA 2003, CBD 2003
- 34 CBD/SBSTTA 2003: 7
- 35 CBD/SCBD 2000: 11

²⁷ Cox 2002: 1

²⁸ Cox 2002: 2

The cross-cutting issue "incentive measures: development of proposals on the removal or mitigation of perverse incentives, on positive incentives and on valuation tools" is on the agenda of the eighth meeting of the Conference of the parties to the Convention on Biological Diversity (COP-8, Curitiba, Brazil, 20-31 March 2006)³⁶. The COP-8 discussion is based on recommendations delivered by the tenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice of the CBD (Bangkok, Thailand, 7 - 11 February 2005). In its recommendation X/8 the CBD advisory body made proposals on the "further refinement and consideration of the proposals for the application of ways and means to remove or mitigate perverse incentives"³⁷. In a recent paper prepared for the COP-8 the CBD compiled suggestions received from parties, governments and relevant international organisations on the development of definitions on incentives measures³⁸.

As shown above there is no universally accepted definition of subsidies. In addition the WTO definition has to be seen in the very specific context of the WTO Agreement of Subsidies and Countervailing Measures and is not generalizable. Subsidies are not only relevant for forests and fisheries, the two areas covered in this study, but for all working areas of Greenpeace. Nevertheless the focus of Greenpeace's work is not to add the variety of definitions with another one but put an end to deadly subsidies.

Box 2: Definitions for subsidies and incentives

Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) describes perverse incentives as "a policy or practice that encourages, either directly or indirectly, resource uses leading to the degradation of biological diversity. Hence, such policies or practices induce unsustainable behaviour that reduces biodiversity, often as unanticipated side effects as they were initially designed to attain other objectives. Several common types of perverse incentives are usually identified as: environmentally perverse government subsidies; persistence of environmental externalities; and, laws or customary practices governing resource use"³⁹.

Institute for Miljøvurdering (Environmental Assessment Institute)

"Subsidy: Policy intervention that allows consumers to purchase goods and services at prices lower than those offered by a perfectly competitive private sector, or raises producers' incomes beyond those that would be earned without this intervention.

Environmental harmful subsidy: An environmental harmful subsidy increases production or use of a product/substance with environmentalharmful effects.

Perverse subsidy: A subsidy that is harmful to the environment as well as to the economy even though it may represent some benefits to the receivers of the subsidy".⁴⁰

36 CBD 2005

³⁷ CBD/SBSTTA 2005

³⁸ CBD 2006

³⁹ SCBD 2000: 11

⁴⁰ IMV 2005: 14

OECD

"In general, a subsidy is a result of a government action that confers an advantage on consumers or producers, in order to supplement their income or lower their costs... [T]he more detailed definitions differ between sectors and, sometimes, between countries, organisations and analysts for given sectors. Agriculture is the sector which is the most advanced in using a widely accepted definition, with the total producer support estimate (PSE) providing a measure that is produced by one organisation (OECD) and is comparable across countries".⁴¹

OECD defines "incentives to broadly include those measures that make use of the price system and market forces to achieve their objectives. Governments use incentive measures in a variety of public policy contexts to achieve socially desirable outcomes as efficiently as possible. In many instances, those incentives will have unforeseen consequences — some of which may be harmful. For such cases, the incentive can be considered 'perverse'. For biodiversity, perverse incentives are important issues that have been identified as being particularly relevant to its conservation and sustainable use"⁴².

World Resources Institute

"A perverse subsidy in the context of forests is one that causes forest loss or degradation and has no lasting positive impact on economic development. Such subsidies undermine commitments to sustainable development".⁴³

World Trade Organization

"A subsidy shall be deemed to exist if [8]:

(a) (1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as "government"), i.e. where:

(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);

(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits) [9] ;

(iii) a government provides goods or services other than general infrastructure, or purchases goods;

(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;

or (a)(2) there is any form of income or price support in the sense of Article XVI of GATT 1994; and

(b) a benefit is thereby conferred"44.

⁴¹ OECD 2005: 16

⁴² CBD / SBSTTA 2003: 11

⁴³ Sizer 2000

⁴⁴ WTO 1994b

2.2 Subsidies and international trade

Not all subsidies are necessarily trade distortive or in violation of WTO rules. Subsidies for training in sustainable fishing practices or sustainable forest management and for infrastructure projects (port and landing facilities), for example, are generally considered as trade neutral. Trade distortive subsidies are typically directed at export industries in order to increase their competitiveness on international markets or domestic sectors that compete against import products. Therefore, subsidies that are relevant in the context of international trade generally influence or lower the final price of products that are traded internationally or compete against imported products.

Interestingly, despite the economic relevance of subsidies and the general opinion that most of them are not only socially and environmentally but also economically damaging, there is not much analytical literature on subsidies in the context of the world trading system. It is also remarkable that the WTO itself has not yet taken up a systematic analysis of how to reduce subsidies. The Doha Development Round of trade negotiations is actually the first round of negotiations that addresses subsidy reduction in specific sectors [10]. There are at least two reasons for this. First of all, policies supporting economic or industrial development usually rely considerably on subsidies. Governments could hardly complain about such policies in other countries and risk becoming a target of similar complaints by their trading partners. Moreover, it is politically very difficult to cut subsidies, since that may have direct implications for job markets and the economic performance of entire sectors. Secondly, in reality it is very difficult to establish the case for how specific subsidies hurt export industries or domestic suppliers⁴⁶.

2.3 Examples of subsidies in the fisheries sector

The following examples of different categories of financial transfers to the marine capture fisheries sector in OECD countries highlight the variety and number of subsidies and also the potential difficulties in determining their trade implications if they are not directly related to exports (for a more complete list of examples see Annex I):

• direct payments such as price support payments to fishers, grants for new vessels, grants for modernisation, vessel decommissioning payments, buyouts of licences and permits, buyouts of quota and catch history, income support, and the like

• cost-reducing transfers such as fuel tax exemptions, subsidised loans for vessel construction, subsidised loans for vessel modernisation, payments to reduce accounting costs, provision of bait services, loan guarantees, and the like

• general services such as research expenditure, management expenditure, enforcement expenditure, market intervention schemes, regional development grants, support to build port facilities for commercial fishers, protection of marine areas, and the like.

There are other categories of subsidies. In the context of the discussion on fisheries subsidies at the WTO, the US suggested differentiating between⁴⁷:

⁴⁵ von Moltke 2003: 6; Trebilcock and Howse 1999: 190ff

⁴⁶ See Trebilcock and Howse 1999: 207ff; Schrank 2003

⁴⁷ WTO 2000

• cost-reducing subsidies (e.g. commercially applicable research funding, capital cost-reducing subsidies, reduction of income and sales taxes, risk mitigation, assistance to ship-building, foreign access payments), and

• subsidies to support incomes and prices (price support programmes, trade-promoting subsidies, sector specific social assistance programmes).

In addition, the Fisheries Working Group of the Asia-Pacific Economic Cooperation (APEC) identified the following subsidy types as those that are commonly applied in the APEC region:

- Direct assistance to fishers and fisheries workers,
- lending support programmes,

And a start

- tax preferences and insurance support programmes,
- capital and infrastructure support programmes,
- marketing and price support programmes,
- fisheries management and conservation programmes⁴⁸.

In an introductory text regarding subsidies in the fisheries sector published by the FAO, the following general categories are mentioned: direct government payments to industry, tax waivers and deferrals, government loans, loan guarantees and insurance, implicit payments to or charges against the industry, and general payments that affect industry. This text also classifies governmental payments for fishing rights in foreign territories as a form of subsidisation⁴⁹. Payments by the EU to African countries to gain access to their fishing grounds in the context of bilateral fishing agreements can be classified as such subsidies for European fishing fleets.

2.4 Examples of subsidies in the forestry sector

A comprehensive study on non-tariff barriers in the forestry sector in APEC countries also included a listing of subsidies⁵⁰:

- export promotion funds,
- governmental fees for right to harvest,
- compensation for planting or afforestation costs,
- tax reduction for timber products shipped through special free trade zones,
- tax exemptions for timber producers,
- plantation loans,
- investment programmes for developing new forest lands and forestry related industries,

⁴⁸ APEC 2000

⁴⁹ See Schrank 2003: 18

⁵⁰ Forest Research 1999: 21ff

- development assistance for forest management and domestic processing,
- lower interest rates on loans for timber exporters,
- reduced property taxes,
- financial and institutional assistance for export marketing.

Sizer⁵¹ lists those subsidies that are closely linked to forest loss and degradation and which are very often less direct than the subsidies listed above:

- Construction of roads by governments at no costs for the users (logging companies),
- costs of public administration of forest lands logged by private companies,
- direct grants to logging companies to cover planning costs,
- public funding for the clean-up for the reforestation costs to mitigate the impacts of the forest products and wood processing industries,
- provision of energy and water at lower rates than commercial rates,
- duty allowances on imports of machinery and spare parts,
- insurance by government agencies for companies operating overseas.

The OECD and APEC definitions for fisheries subsidies are insofar remarkable as they are fairly broad and include government aid for rather unspecific support measures like research, infrastructure or even aquaculture or the fish processing industry. Despite these many categories and different typologies one important form of economic benefit that specific sectors or economic actors are granted by governments - or societies pay for - and many critics understand as subsidies⁵² has not been included. Sizer's listing points at these subsidies, i.e. the costs of resource depletion and destruction caused by economic development and specific industrial policies which societies or the tax payers have to cover.

Health hazards and lack of clean water in areas of intensive crop and meat production is just one example where subsidies for farmers lead to considerable external costs producers hardly pay for. Or in the case of fisheries, heavily subsidised fishing fleets are still receiving funds despite the fact that most fish stocks are depleted or collapsed to the point that they are no longer commercially exploitable.

However, in the scientific literature it is still disputed whether government or taxpayer coverage of environmental services or external environmental costs constitute a subsidy. According to Pearce⁵³ paying someone to do something he or she would otherwise not do, clearly is a subsidy. But bearing the costs for a voluntarily provided external environmental benefit could be thought of as a "beneficiary pays principle". Unfortunately, he does not go into any details regarding the question as to what extent these external environmental benefits are actually being provided voluntarily or who actually benefits from these services.

The lack of resource conservation measures and the neglect of monitoring of resource conservation objectives can be understood as another form of subsidisation, which can contribute to severe resource

⁵¹ Sizer 2000: 2

⁵² See de Moor and Calamai 1997

⁵³ Pearce 2003: 12

depletion as it encourages illegal activities. Especially in the forestry and fisheries sectors illegal harvesting has developed into a major problem for resource conservation. The scientific literature does not yet account for these illegal activities as a form of subsidy. But the rising scale of illegal fishing⁵⁴ or illegal logging⁵⁵ and the growing external costs of these activities that societies have to bear, could be categorised as a form of subsidisation.



54 OECD 2003

55 RIIA/FERN 2002, Greenpeace International 2005a

3. The scale of subsidies

Because of the many different forms of subsidies and the fact that many of them are off-budget transfers, it is extremely difficult if not impossible to present precise global figures regarding their monetary value. In addition, the literature review revealed that most studies rely on FAO and OECD figures generated in the 1990s and it seems as if – with the exception of the agricultural sector – these figures have hardly been updated in a comprehensive manner. Nevertheless, the following section will give a brief overview of "best estimates" on the amounts spent on subsidies.

Table 1 gives a first impression of the huge amounts of funds spent on subsidies and identifies the sectors that benefit most from government support. The dimensions are enormous. But Table 1 also demonstrates the difficulty getting precise figures on subsidies: two studies published in the same year present data which differ widely:

Van Beers and de Moor (see Table 1a) estimate that approximately USD 1 trillion per year is spent on subsidies⁵⁶, of which two thirds accrue in OECD countries, where agriculture alone receives 30 percent of the annual subsidies⁵⁷. Considering that agriculture, energy and transport are those sectors that receive the majority of subsidy funding in order to enhance economic development and resource use, the environmental dimension of subsidies becomes very clear. On a global scale, subsidies account for 4 percent of world GDP. This is only slightly less than the total exports of all developing countries in 1999, which amounted to USD 1,648.787 million⁵⁸.

Natural resource se	OECD ectors:	Non-OECD	World	OECD as % of World
Agriculture	335	65	400	84
Water	15	45	60	25
Forestry	5	30	35	14
Fisheries	10	10	20	50
Mining	25	5	30	83
Subtotal	390	155	545	72
Energy/industry see	ctors:			
Energy	80	160	240	33
Road transport	200	25	225	89
Manufacturing	55	negligible	55	100
Subtotal	335	185	520	64
Total	725	340	1.065	68
Total in % GDP	3.4	6.3	4.0	

56 van Beers and de Moor 2001: 32

57 Pearce 2003: 4

57 Pearce 2003: 4

58 UNCTAD 2000: 12

According to Myers and Kent (see Table 1b) conventional subsidies in six sectors amount to USD 1,420 billion and if we add the externalities to a total of USD 2,510 billion (see Table 1b).

Table 1b: Subsidies worldwide (in USD billion)						
	Conventional Subsidies (a)	Externatilies Documented/ Quantified (b)	Total Subsidies			
Agriculture	385	250	635			
Water	67	180	247			
Forestry	14	78	92			
Fisheries	25	no data	25			
Fossil fuels, nuclear energy	131	200	331			
Road transportation	800	380	1,180			
Total (rounded)	1,420	1,090	2,510			

Remarks: (a) Established and readily recognized subsidies, including both direct financial transfers and indirect supports such as tax credits. Perverse subsidies as a proportion of conventional subsidies are 66 percent for agriculture; 75 percent for fossil fuels/nuclear energy, and water; 50 percent for roads; and 100 percent for fisheries and forests. (b) These are 100 percent perverse. Source: Myers and Kent 2001: 188

Table 1a seems to be the most up-to-date compilation of data available for various sectors. However, there is more recent data for the agricultural sector, for more recent data on fisheries see below. Since subsidies provide preferential treatment for particular actors, encourage specific activities that would otherwise not be undertaken, or ensure the survival and stability of specific industries that are important to a government or a society, there is also the danger of economically inefficient resource allocation or the creation of overcapacities. Specific economic behaviour remains attractive for a number of private actors, who benefit from government support and do not need to alter their behaviour because they do not have to pay for the full costs of resources. For example, intensification of agricultural production or fishing always seem to go hand in hand with the depletion of soil, water and fish stocks because environmental externalities are not factored into the production costs.

As has been pointed out by Myers and Kent⁵⁹ and recently by UNCTAD⁶⁰ rising incomes do not necessarily raise living standards, because economic growth does not tell the full story of the actual quality of life [11]. First of all, in many countries, especially in developing countries, the benefits of economic growth are not spread evenly across society. And moreover, economic "growth" also entails the funds spent on mitigating its negative effects.

In relation to the environment there have recently been attempts to estimate the total economic value (TEV) of services the environment provides to get an idea of what societies lose due to resource destruction. These environmental services comprise elements like flood protection, watershed functions, recreation, maintenance of carbon stocks and endangered species. One estimate puts the annual global total economic value of nature's services at an rough average of around USD 38 trillion⁶¹. With regard to subsidies, a study on the subsidised conversion of wetlands into farmland in Canada found that the total economic value (arising from sustainable hunting, fishing and trapping) of wetlands surmounts the value of agricultural lands by 60 percent or USD 8,800 per hectare compared to USD 3,700 per hectare. Similar

⁵⁹ Myers and Kent 2001: 15

⁶⁰ UNCTAD 2005b

⁶¹ Constanza et al. 1997, cited in Balmford et al. 2002: 950

calculations have been undertaken in the context of tropical forest conversion. In Indonesia for example, the value obtained from timber and non-timber products under a sustainable management scheme are some 14 percent higher than the value obtained from intensive logging (USD 13,000 per ha compared to USD 11,200). In Cameroon, the conversion of tropical forests even yielded negative private benefits once the forest had been converted into palm oil and rubber plantations⁶².

3.1 Perverse subsidies

Subsidies are perverse when the (financial) input is higher than their (economic) output [12]. The figures in the table above, suggest that subsidies for the exploitation of natural resources tend to lead to environmentally, socially and also economically negative results. Such subsidies have also been defined as "perverse" subsidies, i.e. subsidies that exert effects that are demonstrably and significantly adverse in economic and environmental (or social) fields⁶³. The subsidisation of American agriculture is a good example for how perverse government support can be. In terms of labour input in relation to output, American agricultural production is probably the most efficient in the world. However, from the perspective of subsidised energy supply for agricultural production the picture changes completely. It has been estimated that nine calories of fossil fuel are needed to produce one calorie of food energy⁶⁴. And as far as the EU is concerned, it has been often pointed out that every cow is subsidised by 3 EUR or 2 Dollars per day⁶⁵ twice the amount of money the poorest people have at their daily disposal or more than the income of half the world's population⁶⁶[13].

The literature contains some estimates of the total subsidies granted to the specific sectors worldwide, as shown below. Some very rough estimates (guesstimates) of the share which perverse subsidies represents of the total subsidies are also shown in Table 2 which demonstrates again the differences between different sources.

Table 2a: Conventional and perverse subsidies (in USD billion and percent)							
	total conventional subsidies [in USD billion]	OECD percentage (of total) [in percent]	perverse subsidies [in USD billion]	Percentage (perverse of total) [in percent]			
Agriculture	376	92	207	56			
Energy	85-244	33	64-216	75-89			
Road transporta	ation 225-300	94	110-150	49-50			
Water	69	22	50	72			
Forestry	35	14	35	100			
Fisheries	20	50	19	95			
Total	810-1,044	73	485-677	56-65			

Source: IMV 2005: 102, based on van Beers and de Moor 2001

While according to van Beers and de Moor 56 to 65 percent of subsidies are perverse, Myers and Kent qualify 78 percent of the subsidies as perverse and state: "This large proportion results from the fact that many activities feature many externalities, usually environmental. While these do not rank as subsidies in any formal or conventional sense, they are increasingly recognized by economists as subsidies insofar as

⁶² Balmford et al. 2002: 950f

⁶³ Myers and Kent 2001: 22

⁶⁴ Cited in Myers and Kent 2001: 23

⁶⁵ See FAO 2003

⁶⁶ Oxfam 2002: 2

they represent uncompensated costs imposed by a sector on society at large; hence, they are effectively subsidies, and perverse ones too. Indeed, if we were to document all externalities - not just environmental but social externalities as well - we would find that the total would be all the greater, probably much greater, again⁶⁷. Both studies come in one point to the same conclusion: subsidies for fisheries and forestry are almost hundred percent perverse.

Table 2b: Perverse subsidies worldwide (in USD billion and percent)						
	Total subsidies [in USD billion]	Perverse subsidies [in USD billion]	Percentage (perverse of total)[in percent]			
Agriculture	635	510	80			
Water	247	230	93			
Forestry	92	92	100			
Fisheries	25	25	100			
Fossil fuels, nuclear ener	rgy 331	300	91			
Road transport	1,800	780	66			
Total	2,510	1,950	78			

Remarks: Total subsidies is the sum of conventional subsidies and documented/quantified externalities Source: Myers and Kent 2001: 188

Since all industrialised countries heavily subsidise their agricultural sectors, these figures will be similar for most other OECD countries. And apart from the direct negative environmental impact of inefficient energy use, the subsidies prevent the transition to more environmentally sustainable energy sources because of the lack of economic pressure to use energy more efficiently.

Some of the most environmentally dangerous – or perverse - subsidies occur in the fisheries and forestry sectors. An overview of perverse subsidies as well as their overall cost to these sectors is presented below. Since Myers and Kent presents the most comprehensive account of these trends and costs, the section heavily relies on this work⁶⁸.

3.2 Situation and subsidies in fisheries products sector

The state of the world's wild capture fisheries is one of the most visible examples of declining resources that seem to be directly linked to the increase in subsidies to this sector. Between 1970 and 1990 the catch fell by one third despite, or because of growing fishing fleets. In 1970 585,000 fishing vessels [14] had been registered worldwide. By 1999, this number had risen to 3.5 million⁶⁹. Subsidies have played a major role in this expansion, and the resulting resource depletion: as subsidies to the fishing sector grew, stocks declined. The FAO has calculated that the (wild) catch in 1989 was worth USD 70 billion at dockside. At the same time, the cost of fishing (boats, crews, equipment, infrastructure etc.) accrued to around USD 124 billion! The cost difference was entirely covered by government subsidies comprising fuel tax exemptions, low-interest loans and price controls. In other words, each USD 1 earned by fishers cost the taxpayer USD 1.77⁷⁰.

⁶⁷ Myers and Kent 2001: 187

⁶⁸ See Myers and Kent 2001

⁶⁹ Myers and Kent 2001: 152

⁷⁰ Myers and Kent 2001: 153

Recent figures indicate that in 2003 world fisheries production amounted to 132.2 million tonnes. To this total marine capture contributed 81.3 million tonnes, inland capture 9 million tonnes; marine aquaculture 16.7 million tonnes and 25.2 million tonnes came from inland aquaculture. Between 1990 and 2003 world fish production grew at an annual rate of 2.3 percent. It is also notable that capture fishing reached a maximum and then remained stable since the early 1990s, aquaculture, however, expanded continuously and accounts for this steady growth rate of production. Aquaculture expansion is higher than for any other animal production for human consumption. Moreover, aquaculture production in fresh water for human food represents 58 percent of aquaculture production, and 90 percent of it comes from developing countries. Whereas in 1970 molluscs and crustaceans accounted for only 3.9 percent of total production of fish its aquaculture production reached 30 percent in 2002. China, with 71.2 percent of aquaculture production, is by far the largest producer⁷¹.

World exports of fish and fish products reached a value of U\$ 64 billion in 2003 and an increase of 54 percent compared to 1993. While developed countries are responsible for 80 percent of the fish imports, around half the world's export comes from developing countries for which fish is a very important foreign exchange earner. In 2003, for example, the value of fish and fish products exported from developing countries was higher than the combined total net value of exports of coffee, cocoa, bananas, rubber, sugar, tea and rice⁷².

UNEP describes the situation as follows: "This economic importance extends across developing countries as a whole, with net foreign exchange receipts from the sector amounting to USD \$17.4 billion per annum, and providing livelihoods for 200 million people. Fisheries also make a huge contribution to food security, with more than a billion people relying on fish as their primary source of protein. However, the limits of sustainable exploitation of many fish species have now been surpassed. Three quarters of global marine fisheries are harvested at their maximum rate or beyond sustainable levels"⁷³.

3.2.1 Reduction of catches and fleet capacity

World fleet capacity is measured with several indicators: number of decked and undecked vessels, number of powered and unpowered vessels, and gross tonnage. The number of decked vessels remains stable at around 1.3 million, while undecked vessels engaged in fishing activities are around 2.8 million, of which 65 percent are not powered. Asia has 85 percent of the decked vessels, 50 percent of the powered undecked vessels and 83 percent of total non-powered boats. The rest of the decked vessels (15 percent) are spread among Europe (8.9 percent), North and Central America (4.5 percent), Africa (1 percent), South America (0.6 percent) and Oceania (0.2 percent)⁷⁴.

The world capture capacity is too large compared to fish stocks available. Subsidies to fishermen that act as incentives to increase fishing capacity are the main cause. Examples of fishery subsidies include subsidies for fishery infrastructure, for renewal and modernization of the fishing fleet, for price support and for marketing. There is no particular regime for regulating fisheries subsidies in the WTO agreements. However, in the Doha round negotiations, some Member States propose a "traffic light" approach similar to the one used for agricultural subsidies, with different liberalization objectives for different categories of subsidies. Other Member States consider that there is no need for a special fisheries subsidies regime, arguing that the fisheries sector is not different from other sectors and that the problem of overexploitation has more to do with management of the resources than with subsidies. Nevertheless, several countries have already taken steps toward the reduction

⁷¹ UNCTAD 2005: 4f

⁷² WTO 2005a: 2

⁷³ UNEP 2005

⁷⁴ FAO 2005, cited in UNCTAD 2005: 5

or the reorientation of subsidies. For instance, since the reform of its common fishery policy in 2002, the EU has oriented its subsidies towards improving working conditions on board⁷⁵ and to reach new markets by improving product quality, to promote products produced using environment-friendly methods, and to find markets for surpluses and under-exploited species rather than the renewal and modernization of its fleet⁷⁶.

capture fisheries in OECD countries, 1996-99 (in USD million)						
	1996	1997	1998	1999		
Cost-reducing transfers	789	740	772	799		
Direct payments	838	702	758	865		
General services	5,171	4,856	3,9143	4,263		
Total GFTs	6,799	6,298	5,481	5,970		
% of value of landings	18	17	19	20		

The latest figures on fisheries-related subsidies to OECD countries are summarized in Table 3.

Table 3. Estimates of subsidies (GET - Government Financial Transfers) to marine

Source: Cox 2002

The most recent data collection by the OECD introduces a new differentiation of subsidies: i.e. general services, capacity adjustment, social measures, producer support, investment and modernization, and cost recovery. As such, Table 3 cannot be complemented with the most recent OECD data referring to the years 2000 and 2001. The most relevant general development in recent years is the increase of subsidies in the area of general services (fisheries research, management, enforcement and infrastructure), because at the outset they are trade and capacity – in terms of fishing yields – neutral. With regard to the WTO negotiations subsidies in the category of 'general services' are essential. In 2001, 98 percent of Japan's fisheries subsidies fell into this category, as did 90 percent of US fisheries subsidies⁷⁷.

While the EU spent only 25 percent of its fisheries subsidies on "general services" in 2001, subsidies to this sector have contributed to 40-60 percent overcapacity in fishing fleets. The EU has also spent EUR 137.4 million on agreements with third countries that provide access for EU fishers to foreign fishing grounds⁷⁸. Thus, the unsustainable European fishing industry expands their unsustainable fishing methods even further.

Table 4 shows that while the number of vessels in the EU fleet has steadily decreased since 1995, it is only since 2002 and the implementation of the new fishery common policy that the total tonnage has started to decrease.

⁷⁵ UNCTAD 2005: 5

⁷⁶ UNCTAD 2005a: 6

⁷⁷ OECD 2003b: 30-31

⁷⁸ IEEP 2002

Table 4: EU policies for the fish sector: Vessels and catches							
Number of vessel (EU 15 members)							
Year	1995	2000	2001	2002	2003	2004	
EU (15)	103,633	95,381	92,328	90,129	88,122	82,351	
Iceland		1,997	2,016	1,939	1,876	1,828	
Norway		13,014	11,951	10,651	9,933	8,183	
	Gross tonnage (EU 15 members)						
Year	1995	2000	2001	2002	2003	2004	
EU (15)	1,998,391	2,007,262	2,005,765	1,965,484	1,911,696	1,845,486	
Iceland		180,203	191,487	191,629	183,773	191,267	
Norway		392,281	407,010	394,482	395,327	394,846	

Source: UNCTAD 2005a: 6, based on New Cronos, EUROSTAT data

All in all, the EU's Financial Instrument for Fisheries Guidance (FIFG) has annual budget of around EUR 1,253 million. These funds are complemented by member state contributions that accompany all payments made from the FIFG. As a result, it can be assumed that the total amount of money spent on fishing subsidies by the EU and its member states between 2000 and 2006 [15], amounts to EUR 8.8 billion⁷⁹. This means that every tonne of fish landed by EU fishers is subsidised by around EUR 130. The level of subsidisation and the kind of subsidies vary considerably across member states, however, it is clear that Spain as the largest fishing nation in the EU receives the majority of these financial transfers⁸⁰.

It is nearly an impossible mission to get a real picture of the actual amount of global subsidies for fisheries. One reason is the question: What is a subsidy? Another reason is the question which subsidies are officially reported or notified and which are not. Thirdly the fact that the two intergovernmental organisations publishing subsidies figures, the OECD and APEC, have overlapping membership (see Annex III), a simple addition of their data is therefore misleading.

Based on the analysis of officially reported fishing subsidies, WWF calculated the combined totals and regional expenditures on fishing subsidies in 1996 and 1997 (see Table 5). The combined total in 1997 was estimated to fall at around USD 8 billion from more than USD 13 billion in the previous year. The reason for this decline might not be a real reduction of the spent amount but rather a problem of the availability of data or the non-notification of given subsidies. By 2001, the WWF estimated that approximately USD 15 billion was spent on fishing subsidies for the fishing industry worldwide. This figure has recently been confirmed by UNEP. Regarding "the role of subsidies in fisheries depletion" a UNEP spokesperson stated in December 2005: "While fisheries subsidies are not the only cause of this depletion, they are an important contributory factor, exceeding USD 15 billion per year, and amounting to roughly 20% of fishing industry revenues worldwide"⁸¹.

⁷⁹ IEEP 2002: 3

⁸⁰ See OECD 2003b: 30f

⁸¹ UNEP 2005

Table 5: Officially reported fishing subsidies in USD billion						
Source (scope) / Year 1996 1997						
OECD report (industrialised countries)	6.95	6.38				
APEC report (Pacific Rim countries)	1.91	4.45				
WTO notifications	5.85	0.82				
Combined total	13.36 – 13.53	8.00 - 8.32				

Source: WWF 2001: 2

Although the dramatic decline in fish stocks led to significant changes and increased the subsidies for resource conservation or the reduction of capacity and direct income support for fishers, these measures have not yet yielded positive conservation results. In the APEC region, for example, it has been observed that currently almost equal amounts are spent on resource management and conservation as on capital and infrastructure support programmes that aim at the expansion of the fishing industry. The total amount of subsidies spent in the APEC region reached USD 12.5 billion in the late 1990s⁸². The most recent figures by the OECD report fishing subsidies by OECD governments amount to 6.2 billion USD in 2000, USD 5.5 billion in 2001⁸³ and estimated USD 6.3 billion in 2003⁸⁴. The last available figure of USD 6.3 billion is probably too low. The OECD states: "Because the types of support are so varied across OECD countries, and in some cases difficult to identify, the USD 6.3 billion figure is probably an underestimate"⁸⁵. One third of the total of USD 6.3 billion is used for research and management of fisheries and enforcing regulations, another third goes on fisheries infrastructure, such as ports. Direct payments and cost-reducing transfers, such as grant or subsidised loans to build or modernise fishing vessels, or to decommission ships as part of efforts to reduce overcapacity, or straightforward income support and cost subsidies (such as fuel tax exemptions) constitute the final third⁸⁶.

As Table 2 shows 95-100 percent of the global fishing subsidies can be characterised as perverse for at least three reasons:

- 1. They are the principal cause of over-fishing,
- 2. They contribute to the deteriorating state of fisheries,
- 3. They have adverse economic repercussions as fisheries decline.

3.3 Situation and subsidies in the forest products sector

A recent WTO communication from countries having an interest in the tariff liberalization in the forest product sector portrays the global trends for this sector: the forests products industry is one of the world's largest industrial sectors, with reported annual sales of USD 950 billion and a gross value-added estimated at about USD 354 billion. World trade in forest products has quadrupled over the last three decades and is valued at approximately USD 200 billion⁸⁷.

The environmental services provided by forests, containing three-quarters of all species and regulating the global climate as well as water supply and nutrient cycles in many regions, are very often not taken into account and thus are not protected. Consequently, every year the forest cover diminishes by the

87 WTO 2005h: 1

⁸² PWC 2000

⁸³ See OECD 2003b: 30f

⁸⁴ OECD 2005b: 5

⁸⁵ OECD 2005b: 6

⁸⁶ OECD 2005b: 5f

exorbitant net rate of 94,000 square kilometres and about 150,000 square kilometres gross rate of mostly natural forests respectively. In the Amazon region of Brazil a 40 percent increase in annual forest clearance has been registered between 2001 and 2002, which amounts to 25,500 square kilometres⁸⁸. Even this high figure was topped during the period of August 2003 to August 2004 when the deforestation rate reached 27,200 square kilometres, while the period from August 2004 to August 2005 saw a slowing down of the deforestation to 18,900 square kilometres, a drop of 31 percent [16] in comparison with the previous period⁸⁹. Between 1994 and 2004, the Brazilian Amazon has lost 200,000 square kilometres, – an area the size of England and Scotland together due to logging, road building, forest fires, human settlements and the recent burst of conversion of Amazonian lands to cattle farming and agriculture primarily for soya production⁹⁰.

The statistics for deforestation in Indonesia are also shocking: "Forest loss in Indonesia doubled during the 1990's to 38,000 square kilometres lost in 2000"⁹¹. Indonesia's wood processing industry was built up in the 1980's and 1990's with the assistance of foreign finance, including loans and export credit guarantees from many Western governments. Today, the forestry industry in Indonesia is out of control with the consequence that the remaining lowland forests of Indonesia will be destroyed in the coming decade unless the logging industry can be brought under control. Up to 90 percent of all industrial wood extraction is illegal⁹².

According to Sizer⁹³ deforestation is responsible for roughly half of the human-induced carbon dioxide emissions. He also notes that natural or intact forests store more carbon than secondary or plantation forests. This is confirmed by the German Advisory Council on Global Change, which states about one quarter contribution of deforestation to human-induced climate change⁹⁴.

The depletion of forests also seems to be closely related to subsidies, but compared to fisheries the problem of protecting forest resources seems to be even more complex. Many subsidies in this sector are not only directed at exploiting the economically viable resources of forests, such as timber and non-timber products. Forests are also affected by subsidies for agricultural conversion or resettlement programmes. Thus, WTO negotiations on the liberalisation of agricultural trade may have negative impacts on forests, when governments create incentives to convert forests for agricultural production in order to stay or become competitive on the world markets for agricultural products.

To determine the exact amount of subsidies running into the forestry sector is exceptionally difficult, not least because of the many indirect or hidden subsidies, like tax exemptions and low user fees for logging companies (see Box 5), that do not even cover the conventional market value of the trees logged. Another example is the provision of infrastructure like road building in remote areas to facilitate logging. This makes it even harder to estimate the range, value and impacts of subsidies targeted at forest resources. The study on non-tariff barriers in the forestry sector in the APEC region can serve as an example of this problem. Although it gives a fairly detailed account of the many forms of subsidies, it can hardly give any indication of the monetary value of these measures since these payments are not reflected in government budgets but are mostly in foregone revenues like tax exemptions and duty waivers⁹⁵.

95 See Forest Research 1999: 21ff

⁸⁸ IIED 2003

⁸⁹ Greenpeace Brazil 2005.

⁹⁰ Greenpeace International 2004d

⁹¹ Greenpeace International 2004b, Greenpeace International 2004c

⁹² Greenpeace UK 2003

⁹³ Sizer 2000: 2

⁹⁴ WBGU 2003

This problem is also reflected in the rather sparse empirical literature on subsidies in the forest sector. According to van Beers and de Moor the total amount of global subsidies comes to USD 35 billion⁹⁶. Myers and Kent suggest that the world wide forest industry subsidies account for around USD 14 billion a year, the associated externality costs are estimated to reach at least USD 78 billion annually, which adds up to USD 92 billion⁹⁷. Both sources qualify all subsidies as perverse. In the following some exemplary figures for three countries are presented to briefly summarise the amount and type of subsidies that play a role in the context of forests.

Indonesia⁹⁸:

The government encouraged the development of a paper pulp and plywood industry, which led to huge over-capacities. The capacity of 600.000 tonnes in 1988 expanded to 4 million tonnes of paper pulp production in 1998. This in turn led to over-logging, especially through illegally logged timber, as the paper mills needed to utilize their capacities.

Because of cheap supplies and subsidised production, Indonesia lost over USD 400 million in potential revenues between 1981 and 1982. This is the equivalent of 27 percent of the entire timber rent. This means for every USD 1 earned in paper or plywood exports the country lost USD 4 in log exports.

In addition, the price for timber concessions was well beyond the market price until the late 1990s, so that government fees and taxes saved only 25-35 percent of the economic revenue of the timber (see Box 3). In the meantime illegal logging and subsequent illegal trade is the biggest threat to sustainable forest management in Indonesia. Since the illegal logging operations are professionally organized by the military and the police it is fair to characterize this development also as a perverse form of subsidisation. Brown concludes that in Indonesia, Sarawak, and Sabah each head of state has multiple ties to timber concessions. He estimates that the three governments failed to collect USD 40 billion dollars in timber revenues over thirty years⁹⁹.

Box 3: Addicted to rent

"'Addicted to Rent' starts from the important but often misunderstood concept of economic rent, or above normal profit. The report argues that in spite of the efforts of many, timber policy reform in Indonesia continues to fail because governments past and present view the timber resources as something from which they can informally capture economic rent, and use it for political and personal objectives, rather than to achieve national development objectives.

The informal capture of timber rent is achieved through a three-step process. (1) Timber concessions and plywood mills are discretionarily licensed to a narrow and politically privileged group of companies. (2) Domestic log prices are kept low through the use of non-tariff barriers. (3) Rents arising from the enormous price spread between low Indonesian forest products prices and high world forest products prices are captured at the export gate exclusively by concession-plywood operations and their political patrons.

⁹⁶ van Beers and de Moor 2001: 32

⁹⁷ Myers and Kent 2001: 188

⁹⁸ See Myers and Kent 2001: 162ff; Brown 1999 and Brown 2001

⁹⁹ Brown 2001

There are two consequences of these policies. First, because rents continue to be siphoned off informally, official government timber revenues are low. Taking the current official log price of USD 80 per square metre for red meant, the industry standard, the government should be capturing USD 58 per square metre in rent. However, timber fees and corporate income tax capture at the most USD 35 per square metre, and probably far less because of transfer pricing. This means that for each cubic metre of red meant harvested, USD 23 in excess profit is being made by timber companies, and lost to the government. All this is happening against a background of Indonesia borrowing tens of billions of dollars to finance government expenditure.

A second consequence of rent addiction is that, because the plywood industry, and to a lesser extent the mouldings industry, are the only gates through which the exports of top value hard-woods may pass, and rents collected, Indonesian businesses scrambled to build plywood mills. As a result, the country now has far more mills than can be supplied by its forests. Assuming they are operating at full licensed capacity, the report proves that export-oriented plywood mills and sawmills can now obtain only 1/3 of the round wood they need from their own timber concessions, with the remaining 2/3 being supplied by unsustainable (but legal) land clearing, and illegal logging^{"100}.

Brazil¹⁰¹:

Apart from expanding its timber and pulp industry Brazil heavily subsidised the deforestation of the Amazon region to provide agricultural lands, mainly for raising cattle. The government provided generous tax grants to attract investors that cleared the forests. Thus, in a period from 1979-1984 a ranch in Amazon accrued average costs of USD 415 per hectarewhile it earned only USD 133 per hectare.

The close link between subsidies and environmental degradation is exemplified by the fact that settlers in the state of Rondonia that received up to USD 3,200 per person by 1990 (in sum USD 163 million) cleared 25 percent more forest land than those who did not receive any government support.

Although the government stopped subsidies for forest clearance and agricultural land conversion it continues to support already established farms that cover around 120,000 square kilometres, this is a third of the size of Germany. Since the 1970s this has cost the Brazilian society already USD 2.5 billions in lost revenues.

The Indonesia case and the additional examples in Box 4 show that illegal logging and subsequent illegal trade is the biggest threat to sustainable forest management in various countries. In countries where illegal logging operations are professionally organized by government institutions or in which a government is not willing or able to stop this ill egal practice illegal logging can be seen as direct or indirect subsidy.

¹⁰¹ See Myers and Kent 2001: 162ff

Box 4 Illegal logging – a hidden subsidy?

What is illegal logging?

In the strictest definition illegal logging takes place when timber is harvested, processed, transported, brought or sold in violation of national laws. Laws can be violated at many different stages of the supply chain and can include:

- Obtaining concessions illegally (e.g. via corruption and bribery)
- · Cutting protected tree species or extracting trees from a protected area
- Taking out more trees, undersized trees, oversized trees than is permitted or trees outside an agreed area
- Illegal processing and export
- Fraudulent declaration to customs of the amount of timber being exported
- Non-payment or underpayment of taxes
- Use of fraudulent documents to smuggle timber internationally.

It should also be noted that much destructive logging is actually legal and that legal and illegal logging are often closely linked. Therefore addressing only illegally sourced timber is not sufficient to protect the world's ancient forests.

Examples of illegal logging rates [17]

Russia: "Today between six and nine out of every 10 logs are exported from Russia illegally".

Indonesia: It is estimated that up to 90 percent of logging is illegal.

Amazon: In the Brazilian Amazon it is estimated that 60-80 percent of logging is illegal.

Cameroon: In Cameroon 50 percent of logging between 1999–2004 is estimated to have been illegal.

Ghana: In Ghana there is no legal timber production because no valid logging permits currently exist¹⁰².

United States of America¹⁰³:

In the United States, for decades public attention has focussed on large subsidies provided for logging on publicly owned forests, especially those administered by the U.S. Forest Service. Although these "national forests" produced only two percent of domestic wood production logging here commonly focusses on high conservation value and pristine old-growth forests. The logging of these forests is widely unpopular with the American people and the high subsidy of this timber program cannot be justified.

¹⁰² Adopted from Greenpeace International 2005d

¹⁰³ See Myers and Kent 2001: 162ff; Anonymous 2004; U.S. Forest Service 2005

The subsidy is made through the sale of timber at less than the cost of operating the federal timber programme. In the case of some specific timber sales, this includes building access roads into pristine wilderness areas at federal expense and not recouping the road building costs from timber purchasers. In other cases the U.S. Forest Service does not receive commercial market value for timber purchases. Consistently for many decades the Forest Service timber program has accrued huge economic losses, every year.

By 2005 in U.S. national forests there were 609,000 kilometres of roads, equal to circling the globe seventeen times. The net increase in forest road mileage during 2004 was 735 kilometres, after accounting for roads that were decommissioned [18]. The U.S. General Accounting Office (GAO) found that the net loss of the Forest Service timber programme between 1992 and 1997 was USD 2.15 billion, on revenue of only USD 268 million. Figures for later years are not available because the GAO has since determined that the Forest Service's accounting system is broken beyond repair.

America's largest national forest, the Tongass in Alaska, is considered the crown jewel of the U.S. forest system [19]. Here the federal timber program's net loss has amounted to nearly USD 1 billion since 1980, and continues unabated. The program's annual loss in recent years has been more than USD 160,000 per timber industry job. One recently completed Tongass logging road that is 6.5 km long and has no long-term utility, was contracted for USD 680,000 but accesses timber that sold for only USD 70,000.

In addition, the U.S. government encourages (as do the governments of Canada, France and Japan) forest depletion in other countries both by supporting overseas activities of its own domestic companies and by funding the creation of forest-depleting industries in developing countries. It has been observed that such development programmes often fail to apply sustainable forest management principles, focussing instead only on fast profit-making¹⁰⁴.

Box 5: The "Softwood Lumber Dispute" between the USA and Canada

This dispute over the potential discrimination of either American or Canadian timber producers has been going on for decades and involves various measures that cannot be described in detail here. It is also played out in different fora like the bilateral agreement on softwood lumber between Canada and the US, the dispute settlement system of the North American Free Trade Association (NAFTA) and the WTO. Basically the dispute addresses the level of government support for the timber industry and recent Canadian fees for logging public lands, the stumpage fees. Stumpage fees are fixed amounts companies are charged for logging public lands, which in this case are considered too low by the US whose timber industry experiences potential competition disadvantages. Subsequently, the US considered the low stumpage fees as a subsidy to Canadian producers. In August 2001 the Bush administration supported a measure by American customs to raise duties on Canadian softwood lumber to 18.8 percent and two months later the administration introduced an additional penalty, a so-called antidumping duty of 8.4 percent. Canada refused to increase stumpage fees and filed a complaint at the WTO against these potentially unjustified countervailing duties. The USA defended the duties as a justifiable measure to counter Canadian subsidies, i.e. the stumpage fees, to create a level playing field between Canadian and American timber producers. In August 2003 the WTO dispute panel ruled that although the stumpage fees subsidise the Canadian producers the countervailing duties imposed by the US were too high. It also has to be noted that stumpage fees qualify as subsidies that are trade-related because the standing timber already does constitute a tradable good. This might be relevant in future disputes over subsidies that involve natural resources. This case implies that it is not just the finished product but also the resource that falls under the scope of the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the WTO¹⁰⁵. In a second case Canada made a complaint about the U.S. International Trade Commission's threat of injury determination of Canadian softwood lumber. This determination of 24 November 2004 is the basis for retaining dumping and countervailing duty deposits and allowing the US to maintain combined duties of around 21 percent on the imported softwood lumber. The WTO panel rejected Canada's complaint and the request to impose up to USD 3.35 billion in sanctions against U.S. imports on 15 November 2005¹⁰⁶. Canada filed an appeal against this panel decision on 13 January 2006¹⁰⁷.

A ruling of the North American Free Trade Agreement Extraordinary Challenge Committee (NAFTA ECC) backed Canada in the dispute in August 2005, upholding a NAFTA panel's previous conclusion that the U.S. International Trade Commission's threat of injury finding could not stand. Without material injury or threat of material injury to the U.S. industry, duties may not be imposed¹⁰⁸. That decision requires the United States to discontinue the current softwood lumber case at the WTO. But the United States ignored the NAFTA decision while reducing the anti-dumping and countervailing duties: On 6 December 2005 the US Department of Commerce issued the second administrative review reducing the countervailing duty rate from 16.39 to 8.7 percent and the antidumping duties from 3.78 to 2.11 percent leading to a new combined rate of 10.81 percent. In January 2006 the Canadian government filed a further challenge and requested another NAFTA panel. In its challenge Canada maintains its position that the countervailing duty should be eliminated¹⁰⁹.

3.3.1 Subsidies related activities of intergovernmental organisations

The "Yokohama Action Plan" of the International Tropical Timber Organization (ITTO) includes a study regarding the amount and effects of subsidies in the tropical timber products sector¹¹⁰ which is not finalized yet [20].

The fourth round of the United Nations Conference for the Negotiation of a Successor Agreement to the International Tropical Timber Agreement (ITTA 1994), convened from 16 - 27 January 2006 in Geneva, managed to reach a consensus for new agreement, called ITTA 2006¹¹¹, which will replace the old ITTA 1994 expiring at the end of 2006. The new ITTA 2006 failed to address the subsidies issue. In the final version of Article 1 regarding the objective of the new agreement the sentence "promote the elimination of subsidies in the forest and timber sectors of member countries" which had been put in brackets in the first draft¹¹² has been deleted.

105 WTO 2003a
106 Lam and Brevetti 2005
107 Pruzin 2006
108 Brevetti 2005
109 Menyasz 2006
110 See ITTO 2004 and ITTO 2005
111 UNCTAD 2006
112 See UNCTAD 2004

4. Effects of subsidies

Ithough it is not always possible to establish direct causal links between subsidies and environmental degradation, some of the examples cited above give a clear indication that subsidies to industrial sectors that exploit the biodiversity of our oceans and forests, contribute to the degradation of the environment. It also questions the reiterated statement, that industrial-scale "sustainable" forest and fishery management is economically viable in the long-term, especially as compared to the small-scale subsistence use of forests and fisheries.

4.1 Effects on fisheries

There is probably no sector where the correlation between increasing subsidies and the depletion of resources is as obvious and direct as in fisheries. Some stocks have been so severely depleted that it is assumed that they will never recover to the levels they had reached forty years ago¹¹³. To these belong North Atlantic cod and Southern Atlantic hake - which have been rendered commercially extinct off the coast of Argentina by subsidised fishing fleets from Europe and North America¹¹⁴.

In addition, the modernisation and vessel buy-back schemes that were intended to make rationalise fishing fleets, had the opposite effect. In the EU it has been observed that these grants were used to build ships with greater fishing capacity and more engine power that enabled fishers to stay out longer or fish further out at sea, thus catching more fish than ever before¹¹⁵. Moreover, vessel buy-back and capacity reducing schemes led to the export of retired vessels to other countries. Reflagged and renamed, this export of overcapacity has led to an expansion, in absolute terms, of the global fishing fleet¹¹⁶. These subsidies have thus effectively protected fishermen from the need to adjust to the changing economic realities of the global fisheries crisis. Rather than abandoning expectations of permanent economic support, this support is now assumed and has effectively impeded the crucial reforms required for the effective conservation of fish stocks.

4.2 Effects on forests

The poor current state of the world's tropical as well as boreal forests, which is mainly due to unsustainable or illegal logging and their conversion to agricultural lands, is well-known and does not have to be repeated here in much detail. However, as Indonesia has been picked as an example for subsidies in the timber sector, it has to be mentioned that the large Indonesian islands of Kalimantan, Sulawesi and Sumatra lost more then 170,000 square kilometres between 1986 and 1997. On Sulawesi the remaining

¹¹³ See Greenpeace 2005a

¹¹⁴ WWF 2002: 2

¹¹⁵ Porter 2002b

¹¹⁶ Cox and Schmidt 2002: 16

forestland is no longer considered to be a viable forest resource and it is assumed that the forests in Sumatra will reach this stage by 2005 and those on Kalimantan by 2010. Forest loss in Indonesia has doubled during the 1990's to 38,000 square kilometres lost in 2000¹¹⁷.

In addition, Indonesia is also an example for how forests that are opened by logging activities become accessible for unsustainable farming practices, which further deplete forests due to unsustainable agricultural practices. The problem of plantations such as palm oil has already been mentioned. Rice et al.¹¹⁸ point out that the expansion of palm oil plantations, which also quite often benefit from subsidies as they are considered an important export cash crop is a major cause for forest depletion. Yet, so far there is not enough information on the volume of subsidies and their impact on forests, thus one has to be cautious about the causal relationship between subsidies and forest depletion. Generally, the relationship between subsidies dogging activities as a factor of "opening" forests to other uses and how the use of forest areas or former forest areas contributes to forest depletion is not clear.

As far as the forests in the US are concerned it is obvious that logging activities such as clear cutting have enormous negative impacts on the environment as it leads to soil erosion, changing water levels in water catchment areas and disturbs salmon breeding, because the fish can no longer reach their breeding grounds, not to mention the loss of biodiversity¹¹⁹. The monetary value of these impacts can only be estimated. Myers and Kent hold that the American society benefits from intact forest "through supply of clean water worth more than USD 3 billion a year, while pollution filters are worth nearly USD 3.4 billion. As principal habitat for thousands of insect pollinators, the forests contribute USD 4-7 billion to US agriculture: Total: USD 11-14 billion"¹²⁰.

4.3 Assessment of relationship between subsidies and the environment

This brief introduction into the web of links between the use of subsidies in the fisheries and forestry sectors and increased environmental degradation shows the complexity of this issue, especially in assessing the impacts of these subsidies on these sectors.

Pearce¹²¹ summarises the current state of the analysis as follows:

- there is a prima facie case for supposing that subsidies, which encourage more production, will be environmentally harmful. Subsidies that try to decouple payment from output levels are less environmentally harmful, but still have the effect of keeping production in existence when the optimal solution may be for it to cease altogether;

- subsidies that seek to insulate domestic production from international competition are likely to have further environmentally harmful effects in other countries as they have to intensify production [21];

- payments for environmental services can be seen as subsidies or as justified internalisation of external benefits, the view taken depending on the assumed allocation of property rights between producers and environmental beneficiaries.

¹¹⁷ Greenpeace International 2004b: 2

¹¹⁸ Rice et al. 2000: 22

¹¹⁹ Menotti 1999

¹²⁰ Myers and Kent 2001: 173

¹²¹ Pearce 2003: 12

From a policy point of view two other points that will play a major role in the context of the WTO negotiations, are important to mention here.

First, a consensus is needed regarding the role and impact of subsidies on the environment. The questions that have to be clarified are whether subsidies are the main cause of fishing-fleet over-capacity and unsustainable logging, whether and how subsidies can contribute to the reduction of capacity, and whether well-managed fisheries and forests can reduce the problem of overuse, even when fishing fleets or logging companies are subsidised¹²².

Second, when discussing the impact and the reduction of environmentally harmful subsidies, the distributional aspects and impact of subsidies on poverty alleviation have to be addressed. Ironically, many subsidies harm the poor and vulnerable groups. One example is the subsidisation of water in developing countries, where water supply is often subsidised, yet the very poor are usually not connected to the water system and have to rely on the more expensive resource of bottled water or cover long distances to collect water at public sources. In 1997, the price of privately sold water on which poor people rely, was on average 12 times (between USD 2-3 per cubic metre) more expensive than piped water¹²³. Similar effects can be observed in the timber sector, where logging companies or plantation owners receive the bulk of government support, while local forest dwellers lose their basic source of income and are being displaced and indigenous community forests rights are threatened [22].

4.4 Proposals for tools and policy options as discussed in the literature

The literature clearly reflects the trend to further analyse the forms and the impacts of subsidies rather than their quantity since the information gathering on the actual financial amounts granted is difficult and time consuming. It can also be said, that there is more information available in areas like agriculture and fisheries than in the timber sector. In the latter the majority of subsidies seem to fall into the category of foregone government revenues and a lack of proper resource management schemes. These subsidies are difficult to quantify.

One crucial aspect in the tackling of perverse subsidies and approaches to reduce them will therefore be the design, implementation and enforcement of resource management schemes¹²⁴. In fisheries where the unintended consequences of vessel buy-back schemes, fleet reduction and modernisation grants actually led to a fleet expansion, the effects of such schemes need to be analysed in an ex ante manner in order to anticipate such unintended negative consequences. The actual management of fleet reduction seems to be crucial¹²⁵. Similarly, support for infrastructure development or expansion of plantations in forestry needs to be analysed more systematically.

In the context of a UNEP Workshop on fisheries subsidies it has been pointed out that there are a number of existing instruments that could be enhanced to get a better idea on the scope and type of existing fisheries subsidies, e.g. increasing transparency through inter-institutional co-operation with organisations like the FAO, WTO, the International Code of Conduct for Responsible Fishing¹²⁶ and regional trading agreements [23]. In addition, governments should be urged to report on all the subsidies they grant. As next steps UNEP advised to first launch a study process on subsidies especially on open access fisheries and unregulated and/or over-exploited fish stocks that could be negatively affected by subsidies. Second, a list of defining sustainability criteria for a "red list" of subsidies that ought to be prohibited¹²⁷. This work produced a matrix of subsidies that indicates under which circumstances subsidies are harmful to the sustainable development of fisheries.

¹²² Porter 2002a: 10

¹²³ de Moor and Calamai 1997: 16

¹²⁴ See also UNEP 2004: 3

¹²⁵ See Porter 2002a: 17

¹²⁶ UNEP 2004

¹²⁷ UNEP 2001

Table 0: Impacts of eight categories of fisheries subsidies of fish stocks											
	Effective Management			Catch Control			Open Access				
	00	FC	LTF	00	FC	LTF	0C	FC	LTF		
Fisheries Infrastructure	NH	NH	NH	Н	Н	NH	Н	Н	NH		
Management Services	NH	NH	NH	NH	NH	NH	NH	NH	NH		
Access to Foreign Waters	NH	NH	NH	Н	Н	NH	Н	Н	NH		
Decommissioning	NH	NH	n.a.	PH	PH	n.a.	Н	PH	n.a.		
Capital Costs	NH	NH	NH	Н	Н	Н	Н	Н	Н		
Variable Costs	NH	NH	NH	Н	PH	PH	Н	Н	PH		
Subsidies to Income	NH	NH	NH	PH	PH	PH	Н	Н	PH		
Price Supports Subsidies	NH	NH	NH	Н	Н	PH	Н	Н	Н		

Table 6: Impacts of eight categories of fisheries subsidies on fish stocks

OC = Over-capacity FC = Full capacity

NH = Not Harmful

PH = Possibly or Probably Harmful

LTF = less than full

H = Harmful

n.a. = Not Applicable

Source: Porter 2004a: 48

In the context of the OECD discussions on impacts of fisheries subsidies and policy options to reduce them or their negative effects, a system of transferable quotas and transferable boat licences has been suggested¹²⁸. Transferring quotas into the hands of fishers, while a policy option that is raised by others, is not one that is supported by Greenpeace. It may be viewed as a way to reduce the impact of subsidies, but it has other impacts, such as the concentration of a public good in the hands of a few large corporations, which goes against the need to ensure that marine biodiversity is managed according to the ecosystem approach and precautionary principle, and is sustainably and equitably managed with benefits for society as a whole. Such a system could help regulate the size of the fleet and the catch and enable fishing communities to slowly adapt to the reduction of fishing activities. Another form of more effective regulation could be the introduction of user fees for using fishing grounds. With regard to resource conservation the transition to less wasteful gear that reduces by-catch should also be supported¹²⁹.

In the context of the transition to smaller fleets it will also be important not to simply reduce the overall level of subsidisation, but also to provide support for retraining and alternative employment. As far as the EU is concerned some of these options are being implemented now. For example, the fleet has been further reduced and subsidies are no longer paid for fleet renewal, only for modernization¹³⁰. At the same time, measures must be adopted to prevent the export of overcapacity to the South.

With regard to forest protection in the context of subsidisation it is obvious, that subsidies for logging and forest conversion activities have to be eliminated and that governments need to focus on sustainable forest management practices as well as conservation measures. So far, data limitations on the volume of subsidies as well as their environmental impacts, severely limit the effort to formulate concrete political recommendations on how to reduce or shift subsidies in the forestry sector. However, at this stage it has to be pointed out that the study on non-tariff measures in the APEC region found only negligible economic effects in terms of increasing costs due to eco-labeling schemes on trade in timber products¹³¹. Thus labeling schemes seem to be a viable instrument for the introduction of comprehensive sustainable

¹²⁸ Cox and Schmidt 2002

¹²⁹ Downes and van Dyke 1999

¹³⁰ See OECD 2003b: 32

¹³¹ Forest Research 1999: 120

forest management schemes. At the same time, it has to be stressed that labeling-schemes and approaches to subsidy reduction can only be permanently effective if governments and companies generally switch to sustainable forest management schemes.

Although it is unclear how much a transition to sustainable forest management schemes would cost, some of the costs would be offset by potential economic benefits from species conservation and general environmental services ranging from climate and erosion protection or the cleansing of water and air resources, not to mention the production of non-timber products. Unfortunately, there are no international agreements dealing with the protection of forests.

Sizer also reminds the G8 group of countries to reinvigorate its forest protection programme initiated in 1998 that aims at the sustainable management of the world's forest resources and an increase in the level of protection of forests¹³². This initiative entails a number of very practical recommendations from improving monitoring of forest depletion and co-operation in information sharing to the implementation of their obligations under international agreements aiming at combating bribery and corruption. However, beside the insufficient "Action Plan on Forest Law Enforcement, Governance and Trade" of the European Union (see Box 6), this initiative did not lead to any real improvements nor did it deal directly with the problem of forest depletion through subsidies.

Box 6: Europe's Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT)

EU action on illegal logging – why it is not enough

To address the problem of illegal logging, the European Commission adopted an Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT) in May 2003¹³³. Amongst other things, the Action Plan recommends the development of Voluntary Partnership Agreements (VPAs) with timber producing countries which are aimed firstly at helping these signatory countries improve their governance and forest management and secondly, implementing a licensing system to ensure that they only export legal timber to Europe.

Loopholes in the voluntary approach

While the FLEGT Action Plan also recommends the development of further legislative options that could include legislation to prohibit the import of illegally logged timber products into Europe, the European Commission is promoting VPAs as the best solution to tackle the problem of illegal logging. Unfortunately, the voluntary approach alone is insufficient and without proper environmental and social safeguards may actually backfire and contribute to the laundering of illegal timber and undermine the drive towards sustainable forest management.

The need for legislation in the EU

Greenpeace believes that to fill the gaps in the voluntary approach set out above, the European Commission must introduce comprehensive legislation to stop the import of illegal timber products into Europe and promote sustainable forest management worldwide.

To outline how legislation to stop the import of illegal timber and promote environmentally and socially responsible forest management could work, Greenpeace, FERN and the WWF drafted model legislation and circulated it to governments of the EU Member States at the end of November 2004.

In July 2005 the European Parliament also called on the Commission to go beyond the proposed voluntary regime by adopting a resolution calling on the Commission to put forward legislation to prohibit the import of illegal timber products¹³⁴.

¹³² Sizer 2000: 1

¹³³ See CEC 2003

¹³⁴ Adopted from Greenpeace International 2005d



5. Can the WTO play a role in reducing or abolishing environmentally harmful subsidies?

he fact that the WTO is the only institution delivering an enforceable regulatory framework how to deal with subsidies leads to the question if this organisation is the right institution to eliminate or reduce perverse subsidies.

5.1 Subsidies in the WTO

Since subsidies are economically inefficient and with regard to trade, discriminate against those that receive no government funding, they are potentially trade distortive and thus potentially violate WTO-rules. Therefore, it is all the more surprising that the political discussion on how to reduce subsidies hardly focussed on the WTO as an instrument for subsidy reduction until the Doha Development Round. The WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement) defines subsidies and differentiates between subsidies that are prohibited and such that are actionable, i.e. that allow trading partners to take countervailing measures to level the playing field between the trading partners. Countervailing measures are normally duties that cover the difference in market prices between goods that are subsidised and those that are not. The SCM Agreement also contained in Article 8 a provisional rule on "non-actionable" subsidies that allowed governments under certain conditions to support research conducted by firms, assist disadvantaged regions, or assist firms to adapt to environmental requirements imposed by law¹³⁵. Such a subsidy could be provided only once per recipient and cover up to 20 percent of the costs. This rule expired on 31 December 1999 because the WTO members failed to agree on an extension of this provision¹³⁴.

As will be shown below the SCM definition of the various categories of subsidies entails a whole range of uncertainties and terms that are open to interpretation. These make the SCM Agreement a rather difficult instrument to use. Basically, the burden of proof lies on the party that claims that a subsidy negatively affects its rights under WTO rules. The difficulty of demonstrating harm or environmental degradation caused by specific subsidies is likely to impede the efforts of WTO members to use the SCM as an instrument against environmentally harmful subsidies.

5.1.1 Subsidy definition from WTO SCM Agreement

Unlike the Tokyo Round Subsidies Code of the WTO predecessor GATT, the WTO SCM Agreement contains a definition of the term "subsidy". Furthermore the SCM differentiates between prohibited subsidies, actionable and non-actionable subsidies: any actionable subsidy can be challenged by a WTO member if it causes adverse effects to the interests of this member (see Box 7 and for details see Annex II).

¹³⁵ See WTO 1994b, Article 8.2(c)

¹³⁶ See WTO 1994b, Article 31

A "subsidy" is a "financial contribution" by a government, or by an agency designated by government, that confers a "benefit" to somebody.

"Financial contribution" is defined broadly and includes direct or potential direct transfers of funds or liabilities (i.e., loan guarantees); provision of goods or services, other than general infrastructure; purchase of goods; foregone government revenue (i.e., tax credits); payments to a funding mechanism that carries out any of these functions; and any form of income or price support.

"Benefit" refers to an advantage resulting from the "financial contribution".

For example, government purchase of goods or services at a commercial rate is a "financial contribution" but does not represent a "benefit" because the purchase is made at a commercial rate – this case is not a subsidy. However, government purchases of goods or services at higher than market rates is a "financial contribution" that is understood as a "benefit", because the recipient receives more than he or she would have received in a commercial transaction. Thus, this is a subsidy.

The definition's three basic elements:

- a financial contribution or in kind contribution
- by a government or any public body within the territory of a Member

• which confers a benefit must be satisfied in order for a subsidy to exist. In addition, the criteria of specificity must be also met. Assuming that a measure is a subsidy within the meaning of the SCM Agreement, it nevertheless is not subject to the SCM Agreement unless it has been specifically provided to an enterprise or industry or group of enterprises or industries. The basic principle is that a subsidy that distorts the allocation of resources within an economy should be subject to regulation. Where a subsidy is widely available within an economy, such a distortion in the allocation of resources is presumed not to occur. Thus, only "specific" subsidies are subject to the SCM Agreement disciplines (see Annex II).

Box 7: Prohibited and actionable subsidies

Prohibited subsidies are defined in the following way: contingent, in law or in fact, on export performance; or contingent on the use of domestic over imported goods.

Actionable subsidies: Except for prohibited subsidies any subsidy can be challenged as an actionable subsidy if it causes adverse effects to the interests of other WTO members, i.e. if it affects the trade between parties¹³⁷.

With regard to the current negotiation it is also important to note that Article 27 of the SCM Agreement contains the special and differential treatment provisions for developing and least developed countries. The WTO provides preferential treatment to these countries by allowing them to use export subsidies up to certain levels.

Developing countries could apply export subsidies for eight years after the WTO entered into force, subject to the requirement that they do not increase the level of export subsidy provided and that they be phased out over the period. This option is generally closed now, but developing countries may seek an extension beyond the eight-year period through consultations with the WTO Subsidies Committee. Least developed countries are not subject to the prohibition on export subsidies. Least developed countries may also apply import replacement subsidies for a period of eight years from the date that the WTO entered into effect.

¹³⁷ WTO: Subsidies and Countervailing Measures: Overview, Agreement on Subsidies and Countervailing Measures ("SCM Agreement"), at www.wto.org

	Table 7: Schematic procedures for subsidy examination
1. Prohi	ibited subsidies
• Grant	depends on export performance
• Grant	aims at preference of domestic over imported products
2. Actio	nable subsidies
 Effect 	s on trading partners
• Highe	r prices for non-subsidised products
• Difficu	ult: Need to proof harm by those who do not benefit from subsidy
3. Non-	actionable subsidies (prohibited since 1 January 2000)

• Specifically addressed at one sector or company but not trade related (e.g. research, infrastructure)

Finally, it has to be mentioned that Article 25 of the SCM Agreement contains the requirement to notify subsidies to WTO members. However, one has to assume that this list is not complete, because governments tend to underreport the subsidies they grant (see Table 8). In addition, the list does not contain any information on the monetary volume of these subsidies and therefore their trade effects are not always obvious¹³⁸. As such, the information and monitoring requirements of the SCM Agreements are weak and cannot even be used to gain a comprehensive overview of the trade-relevant subsidies.

Table 8: Num	Table 8: Number of WTO subsidy notifications regarding fisheries (1995-2001)								
Country	Harvesting Sector	Shipbuilding	Processing Sector	Other	Total by country				
Canada	4				4				
Japan	6			1	7				
Korea	6	2	2	1	11				
Norway	16	1	1	4	22				
Philippines	1				1				
Poland	3				3				
Senegal	1				1				
Slovakia	1				1				
United States	5				5				
EU	75	9	9	34	127				
Iceland	1		1	3	5				
Tunisia				1	1				
Singapore	1				1				
Turkey	1				1				
Thailand				1	1				
Total	121	12	13	45	191				

Source: Cox and Schmidt 2002

5.2 Challenges for subsidy reduction under the SCM Agreement

One study on fisheries subsidies in APEC countries rates subsidies according to the potential risk of challenge they face under WTO SCM rules¹³⁹.

• Very low risk of challenge - programs not likely to be considered subsidies to fishers or the fishing industry. These include programs to support enforcement, R&D, infrastructure development, stock enhancement, participation reduction (i.e., vessel or license buy-backs and fisher retirement), unemployment insurance, some income assistance and assistance to purely subsistence fishing.

• Low risk of challenge - programs which provide a tangential benefit direct to fishers or the fishing industry that could result in adverse trade effects or small scale programs which are not likely to result in a level of adverse trade effects likely to lead to a WTO challenge.

• Medium risk of challenge - programs that provide direct benefits to fishers or to the fishing industry that could result in adverse trade effects.

• High risks of challenge – all prohibited subsidies are considered to have a high risk of challenge because there is no need to demonstrate adverse trade effects resulting from the subsidy.

Yet, "risk" or rather the potential for challenging economically perverse and environmentally harmful subsidies with the help of the SCM Agreement seems to be limited. The reason for the limitation: The SCM agreement does not consider indirect subsidies as soon as they no longer directly relate to trade in spite of their direct impact on the use of a natural resource. The WTO rules consider subsidies as harmful only when exporters lose market shares to subsidised fish. There is no intervention when other effects occur like when subsidies prevent fishermen from fishing¹⁴⁰, or if governments simply shift subsidies to direct income support and detach producers totally from the real costs of resources and market demands.

In the context of a new fisheries subsidies scheme it also has to be pointed out that the SCM definition of subsidies needs to be amended and clarified. The current definition is unclear regarding whether it covers specific measures that are relevant to both trade and resource sustainability. That relates to both, fisheries and forestry subsidies. For example, compensating fishermen for reduced catches due to prolonged recovery times would be a subsidy for conservation measures that has an impact on trade. In addition, the SCM Agreement does not foresee a plan or a schedule to phase out specific categories of subsidies. The entire system only relies on the possibility of judicial challenges of single measures by members. As shown above, this judicial solution can be quite challenging by itself when it comes to demonstrate that subsidies fall within any of the categories of the SCM Agreement. In addition, it is highly unlikely that a member will challenge an economically stronger member, if its economic development or export markets depend on access to the market of the member whose subsidised exports takes over their domestic markets.

Moreover, the SCM definition has to be clarified to establish whether it covers cost-reducing interventions to compensate for the cost of access, e.g. to foreign fishing zones or remote forest areas. Another problem is the definition of "specific" industry or groups and whether, for example, fuel subsidies for the entire fishing sector would qualify as a specific subsidy to an industry. Finally, it is unclear to what extent the SCM subsidy definition comprises indirect or hidden subsidies like the provision of infrastructure in ports free of charge for the users. The definition exempts general infrastructure projects that do not only serve one industry or firm, but the question arises as to whether a fishing port qualifies as such a general infrastructure programme as the group of users is actually limited to fishers¹⁴¹.

Thus, it is fair to say that the SCM Agreement omits subsidies "whose elimination promises the greatest and most direct benefits"¹⁴².

¹³⁹ PWC 2002: 30

¹⁴⁰ WWF International 2002: 5

¹⁴¹ See Porter 2002b: 26ff

¹⁴² von Moltke 2003:9

5.3 Is it possible to integrate environmental aspects into the WTO SCM Agreement?

For the first time ever, the Doha Ministerial Declaration (DMD) of 2001 explicitly included a mandate to negotiate the integration of environmental aspects into international trade policy. It explicitly contains the mandate for the clarification of the relationship between multilateral environmental agreements and the WTO [24]. It also examines possibilities for enhancing international trade of environmental goods and services. And last, but not least, the WTO members also agreed on clarifying the WTO provisions regarding fisheries subsidies, examining in particular those that are trade distorting. The relevant sections of the Doha Declaration¹⁴³ read as follows (see Box 8).

Box 8: The issue of subsidies in the Doha Ministerial Declaration (2001)

Services

(15) The negotiations on trade in services shall be conducted with a view to promoting the economic growth of all trading partners and the development of developing and least-developed countries. We recognise the work already undertaken in the negotiations, initiated in January 2000 under Article XIX of the General Agreement on Trade in Services, and ...

Market Access for Non-Agricultural Products

(16) We agree to negotiations, which shall aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without a priori exclusions. The negotiations shall take fully into account the special needs and interests of developing and least-developed country participants, including through less than full reciprocity in reduction commitments, in accordance with the relevant provisions of Article XXVIII bis of GATT 1994 and the provisions cited in paragraph 50 below. To this end, the modalities to be agreed will include appropriate studies and capacity-building measures to assist least-developed countries to participate effectively in the negotiations.

WTO Rules

(28) 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. We note that fisheries subsidies are also referred to in paragraph 31.

Trade and Environment

(31) With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:

(i) the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question;

(ii) procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for the granting of observer status;

(iii) the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

We note that fisheries subsidies form part of the negotiations provided for in paragraph 28¹⁴⁴.

In the negotiations on rules as well as in the discussions in the WTO Committee on Trade and Environment (CTE) it has generally been recognised that it is important to achieve sustainable development in the fisheries sector. The very fact that there are negotiations on fisheries subsidies, underlines the link between fisheries subsidies and the unsustainability of current fishing practices. At first glance, this negotiating mandate might appear rather important. However, the ability of WTO member countries to find a solution to reduce or eliminate environmentally harmful subsidies in this area remains highly questionable. This assessment provokes the question as to whether the WTO is the appropriate place to negotiate binding rules on subsidy elimination [25].

5.3.1 Forests and the WTO subsidies negotiations

The issue of forest protection and sustainable forest management has been discussed in the CTE and it has been mentioned that forests provide multiple benefits. For those members engaged in this discussion the issue needs to be dealt with in a cross-sectoral manner, which includes a discussion of trade-relevant elements. While members agreed on the importance of achieving the objective of sustainable development, some stressed that there were different ways of achieving sustainable forest management. Accordingly they suggested looking at measures, which ensured conservation without reducing countries' ability to benefit economically from their forestry resources. However, the need to reduce subsidies was not explicitly taken up in this context, but this approach would certainly provide some room to discuss the impacts of subsidies in forest exploitation, especially the trade distortive effects of subsidies¹⁴⁵.

Instead of focussing on trade distortive subsidies several WTO members said that international trade of illegally harvested forest products could undermine conservation efforts in source countries, as well as other environmental, economic, and social goals. The importance of appropriate domestic regulation, and the capacity to implement and monitor such regulation, was emphazised. Although the WTO members did not address it directly, illegally harvested forest products might be understood as trade distortive subsidies - especially if governments know about it but do not take measures against illegal logging - if these products influence the price and the supply on international markets. In addition, it was pointed out that more attention needed to be given to the fact that poverty and high indebtedness fuelled the illegal exploitation of forestry resources and were at the root of the problem.

As in the fisheries context, Japan pointed out that while domestic measures taken to combat illegal logging were needed, it was also important to examine possible international approaches from a trade perspective, taking into account discussions in other international fora. In this regard, a positive contribution to the forestry issue presented a key challenge for the WTO. A number of other WTO members, how-

¹⁴⁴ WTO 2001, emphasis afterwards 145 WTO 2003e

ever, took the view that the issue was being appropriately dealt with in other fora and questioned the usefulness of debating it in the WTO.

Japan also argued that there was a relationship between tariff levels and over-exploitation and stressed that each Member needed to retain flexibility among products when determining the appropriate level of tariffs. A number of other members like the US and Switzerland, argued that tariffs and non-tariff measures were no substitute for efficient resource management and that tariff elimination would not inevitably lead to an exhaustion of natural resources. On the contrary, it was argued that tariff escalation on processed goods impeded developing countries' efforts to achieve sustainable forest management. Moreover, the focus on tariff levels would open up the possibility of discrimination on the basis of non-product related process and production methods (PPMs), which remained unacceptable to several delegations. They fear the introduction of standards that relate to production processes and methods because these would entail further requirements that potentially require considerable technical investments in capital goods and human resources.

These last two points relate to subsidies, because empirical studies outline how illegal logging and the expansion of specific production capacities can be triggered by subsidies for example for pulp and paper producing industries. This brief summary not only describes the main points of the discussion but also the elusiveness that characterises the approach of most WTO members to the subject. Frankly, they don't have any interest to move the issue forward not least to avoid a discussion on labelling of timber products or an assessment of production techniques. Such an assessment would be necessary for example, if a subsidy has to be judged according to its potential to harm the environment. On the basis of the current rules, the narrow negotiation mandate and the obvious reluctance of WTO members to discuss the issues of environmentally harmful subsidies in a comprehensive manner, the WTO subsidies negotiations do not offer an appropriate solution or strategy for the elimination of these subsidies.

5.3.2 Fisheries and the WTO subsidies negotiations

Since 2002 more than 30 proposals have been submitted in the negotiations on the reduction of fisheries subsidies until December 2005. The so-called "Friends of Fish" [26] point out that the main environmental damage attributable to fishery subsidies from increased overcapacity and overfishing is contributing to the depletion of world fish stocks. The demandeurs [27] cite estimates of subsidisation at 20-25 percent of total sectoral revenues (respectively USD 14 to 20 billion)¹⁴⁶, and argue that these subsidies not only directly finance overcapacity (e.g., through shipbuilding subsidies) but also by reducing the costs and risks of investing in this sector (e.g., through income and price supports, insurance subsidies, etc.)¹⁴⁷. This group argues for a general ban on all subsidies in the fisheries sector and the negotiation of specific exceptions¹⁴⁸.

However, there are some members, notably Japan and Korea, who maintain the view that insufficient fisheries management – taking place under open-access fisheries – coupled with increasing world demand for fishery products is the root cause of declining world fisheries resources and over-exploitation and illegal, unreported and unregulated fishing. Japan in particular, argues that subsidies could be an effective instrument to reduce capacity, for example through vessel buy-back programmes. In one intervention it stressed that the possible effects of subsidies on resources change depending on resource status and fishery management regimes. Japan cited the case of skipjack tuna, and the purse seine fishery in the Eastern Pacific Ocean where adequate management prevented stock decline.¹⁴⁹ It has argued that there is a need for flexibility among products when determining tariff levels, taking into account the level of fishery resources and the state of fishery management.

149 WTO 2003f

¹⁴⁶ See WTO 2005c

¹⁴⁷ WTO 2002b

¹⁴⁸ See e.g. WTO 2004a

In addition, Japan has emphasized that the SCM Agreement "should be reviewed, if necessary, from the viewpoint of trade distortion", pointing out that "international bodies report that many fisheries subsidies are spent on resource management and do not distort trade." Japan continues that, "in order for the WTO to appropriately deal with the complex nature of the fisheries subsidies issue, it should fully consider the results of studies conducted by international bodies with fisheries expertise such as the FAO and OECD, taking into account sustainable use of fisheries resources"¹⁵⁰.

WTO members on all sides of the debate recognized the potentially positive environmental effects of some kinds of fishery subsidies, such as subsidies for retiring obsolete fishing vessels, research subsidies for sustainable use and renewal of fish stocks, and subsidies for fisheries management enforcement. In this regard, the demandeurs have put forth information and proposals on various possible categories of certain fishery subsidies according to their trade- and environment-distorting effects. This constitutes a first step towards elaborating possible disciplines on such subsidies. Under these proposals, the strongest disciplines would apply to the fishery subsidies would be exempt from such disciplines. Chile submitted one such proposal and categorizes subsidies according to "red" and "amber boxes" referring to subsidies that should either be prohibited or actionable (see Box 9) [28].

Box 9: Chile's proposal regarding prohibited or actionable fisheries subsidies

"(i) Red light:

All fisheries subsidies of a commercial nature, directly geared towards lowering costs, increasing revenues, raising production (by enhancing capacity), or directly promoting overcapacity and overfishing, shall be expressly prohibited. The following, inter alia, are prohibited subsidies:

1. Subsidies designed to transfer a country's ships for operation on the high seas or in the local waters of a third country.

2. Subsidies that contribute to the purchase of ships, whether new or used.

3. Subsidies to help modernize an existing fleet.

4. Subsidies that contribute to reducing the costs of production factors.

5. Subsidies that generate positive discrimination in the tax treatment of the economic activity of operators involved in the capture, processing and/or marketing of fisheries resources.

6. Subsidies that result in positive discrimination in access to credit.

(ii) Amber category:

The remaining subsidies, which have not been incorporated into the red light box shall not be prohibited, to the extent that they are sufficiently accredited and notified in the WTO. Since subsidies always affect trade, however, no Member shall cause, through use of these subsidies, the trade interests of other members to be adversely affected. Hence, any Member affected by such a subsidy shall present arguments in support of its claim only and strictly where the subsidizing Member has fully complied with the notification procedures established for the purpose in the context of the SCM Agreement. Where the subsidizing Member has not fully met its notification obligations or has failed to notify the programme, it shall be determined that that Member has the responsibility of demonstrating that the subsidy at issue does not cause trade injury to the complaining Member."¹⁵¹ This was one of the most concrete suggestions towards categorization of subsidies in the context of the negotiations. However, it still leaves some grey areas because it does not exempt specific subsidies, such as resource conservation subsidies, from action. However, this proposal triggered a discussion among WTO members regarding which kind of subsidies should actually be considered WTO-inconsistent. Other members like New Zealand, Brazil and a number of Caribbean countries took up the issue and refined the approach by discussing conservation goals as well as exemptions for developing countries and small scale coastal fishing.

The suggestion tabled by China needs to be mentioned in this context. It asked for the inclusion of "non-actionable" subsidies in the negotiations. Although this is short of the suggestion of a reinstatement of Article 8.2(c) promoting environmentally sustainable subsidies, it is nevertheless important, since it can be used to include environmentally benign subsidies. China has suggested that subsidies granted for infrastructure construction, prevention and control of disease, scientific research and training, and support for fishermen leaving the sector should be defined as 'non-actionable'. Such subsidies, China argues, do not distort trade and "contribute to the protection of environment and sustainable development of fishery resources." In addition, China has highlighted the need for special and differential treatment for developing countries¹⁵².

The EU subsequently presented a proposal advocating the prohibition of 'capacity-enhancing' subsidies like payments for marine fishing fleet renewal and for the permanent transfer of fishing vessels to third countries. The EU has considered the latter as 'red box' subsidies. The EU also suggested the creation of a separate 'green box' for subsidies that aim at reducing fishing capacity and the mitigation of any negative social and economic effects of the restructuring of the fishing sector. Accordingly, this box could comprise subsidies for scrapping vessels, economic diversification, temporary breaks in fishing activities, modernization of vessels to improve safety, product quality or working conditions, and for promoting environmentally friendly fishing methods, as long as the output was not increased. Both boxes would be up for revision as necessary. The EU also noted that 'green box' subsidies would have to be notified to the SCM Committee on a regular basis, and this information made available to the public¹⁵³.

Since the failure of the Cancun Ministerial Conference, two basic positions have emerged. The first is: a "bottom-up" approach presented by Japan and Korea. They argue for a very broad category of WTO-compatible subsidies that fall into the general service category, and the negotiation of prohibited forms of subsidization that promote overfishing and overcapacity. This strategy requires the examination of all forms of subsidies and their contributions to the depletion of fish stocks. As has been pointed out earlier, in many cases it is indeed difficult to establish a clear causal relationship between subsidies and the depletion of fish stocks. In addition, most of Japan's subsidies fall into the general services category where this causal link is even more indirect and therefore it can be assumed that on the practical level the rate of subsidization of the fishing sector in Japan would hardly change.

The second approach can be described as "top-down", prohibiting all forms of subsidization in the fisheries sector with the negotiation of WTO-compatible exceptions that are environmentally benign and actually help fish stocks to recover. These might include:

• government expenditures for management frameworks, including those relating to surveillance, monitoring, enforcement and associated research;

• government expenditures for general infrastructure;

• certain fisheries-related social insurance programmes (e.g. job training to assist the transition out of the industry);

• government expenditures for access;

• appropriately structured decommissioning subsidies.

¹⁵² WTO 2002d 153 WTO 2003c

These suggestions are contained in a submission by Argentina, Chile, Ecuador, New Zealand, Philippines, and Peru¹⁵⁴. Between 2004 up until the 6th Ministerial Conference in Hong Kong in December 2006 WTO members focussed on detailed proposals examining parameters that need to be considered for management services, vessel decommissioning and licence retirement, and fisheries infrastructure. Apart from these technical questions other substantive contributions have focussed on special and differential treatment, including from Brazil¹⁵⁵ and a group of small economies for the Caribbean and the Pacific¹⁵⁶, which included discussion of key issues such as the treatment of artisanal and small scale fishing, and the question of subsidised access fees. Moreover Japan, Korea and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu¹⁵⁷ addressed the framework for disciplines on fisheries subsidies, and illegal and unreported fishing. The EU submitted a proposal regarding enforcement and transparency¹⁵⁸. Just before the Hong Kong Ministerial Conference Brazil tabled another paper that provides a detailed approach to the classification of actionable and non-actionable subsidies that also takes account of subsidies aiming at the promotion of resource conservation on November 2005¹⁵⁹. "Of late Brazil has been one of the most active participants"¹⁶⁰ and tabled a detailed list of special and differential treatment (SDT) provisions for developing countries¹⁶¹.

During Hong Kong Ministerial the negotiations regarding agriculture, industrial goods (NAMAs) and services have been in the foreground of discussions; and the WTO members managed to just avoid another failure of a WTO ministerial conference [29]. The agreement in Hong Kong "to ensure the parallel elimination of all forms of [agricultural] export subsidies and disciplines on all export measures with equivalent effect to be completed by the end of 2013"¹⁶² was born out of the necessity to avoid another Seattle or Cancun type fiasco (where WTO members are unable to agree to a Ministerial declaration). And even after Hong Kong the Commisison of the European Communities emphasizes that this agreement was given on condition that "there is comparable effort elsewhere"¹⁶³. This "elsewhere" stays for the two areas where the European Union has a strong interest in market liberalization namely industrial goods (NAMAs) and services. Given this negotiation background it came as a surprise that members could agree on a relatively strong language noting "that there is broad agreement that the Group should strengthen disciplines on subsidies in the fisheries sector proposing" and calling "promptly to undertake further detailed work to, inter alia, establish the nature and extent of those disciplines, including transparency and enforceability" ¹⁶⁴(see Box 10).

154 See WTO 2004b
155 See WTO 2005d
156 See WTO 2005e
157 See WTO 2005a
158 See WTO 2005b
159 See WTO 2005f
160 Wall and Vis-Dunbar 2005: 11
161 WTO 2005d
162 See WTO 2005i
163 Agence Europe 2006
164 See WTO 2005i

Box 10: The issue of Fisheries Subsidies in the Hong Kong Ministerial Declaration

Excerpts from Annex D [Rules. I. Anti-Dumping and Subsidies and Countervailing Measures including Fisheries Subsidies] of the Ministerial Declaration, adopted at the 6th WTO Ministerial Conference, Hong Kong on 18 December 2005: "[We] (9) recall our commitment at Doha to enhancing the mutual supportiveness of trade and environment, note that there is broad agreement that the Group should strengthen disciplines on subsidies in the fisheries sector, including through the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and over-fishing, and call on Participants promptly to undertake further detailed work to, inter alia, establish the nature and extent of those disciplines, including transparency and enforceability. Appropriate and effective special and differential treatment for developing and least-developed Members should be an integral part of the fisheries subsidies negotiations, taking into account the importance of this sector to development priorities, poverty reduction, and livelihood and food security concerns"¹⁶⁵.

5.4 WTO and subsidies - the broader picture

The Hong Kong decisions on agriculture export subsidies and fisheries subsidies might give some reason to answer positively to the question raised a the beginning of this chapter: Is the WTO the right institution to eliminate or reduce perverse subsidies? But a look on the broader picture leads to a different view. The relative progress in fisheries should not hide the overall impression that up to now the Doha Round must be considered [as] "a disappointment for those seeking ambitious, cross-sectoral subsidy reform "¹⁶⁶. And there is no reason for more optimism in the future: "In services and rules, subsidies have not been a priority for most members and, as a result, the discussions have not progressed far. At this point, members and Secretariat officials concur that an agreement on subsidy reform in these sectors is extremely unlikely by December 2005, and perhaps even unlikely within the life of this Round. The issues are sensitive, priorities are elsewhere (for most) and technical difficulties are far from being resolved "¹⁶⁷. This means the WTO is far away of being an institution in which subsidies for various sectors could be discussed and the negative effects of subsidies could be stopped.

And even regarding fisheries subsidies the progress achieved in 2005 in Hong Kong is relative: While the depletion of the oceans is going on, WTO members need four years for a decision stating that members "should strengthen disciplines on subsidies in the fisheries sector" and "undertake further detailed work to, inter alia, establish the nature and extent of those disciplines, including transparency and enforceability"¹⁶⁸.

¹⁶⁵ WTO 2005i

¹⁶⁶ Wall and Vis-Dunbar 2005: 1

¹⁶⁷ Wall and Vis-Dunbar 2005: 1

¹⁶⁸ WTO 2005i



6. Conclusions and policy options

espite incomplete information it is undeniable that subsidies to support industrial development in the fisheries and forestry sectors have reached an enormous scale and that their overall impact is environmentally and economically negative. In both sectors, the annual amount of perverse subsidies – i.e. those that are economically and environmentally unsustainable – amount to around USD 19 to 25 billion (for fisheries subsidies) and USD 35 to 92 billion (for forestry subsidies) respectively. Clearly, an international effort has to be initiated – either by NGOs, governments or intergovernmental bodies – to collect more empirical information on the scope and nature of these subsidies with a view to find solutions towards their phase-out. This is indispensable for the design of appropriate policy alternatives. Ideally, an independent, internationally co-ordinated process of permanent data collection and monitoring of subsidy schemes and their environmental impacts should be set up on the international level. Such an approach would not only improve transparency between governments but also the accountability of governments to their citizens, the majority of which are likely to pay for but hardly benefit from these subsidy schemes.

However, since the beginning of WTO negotiations the analytical efforts focussed more on the identification of the forms and impacts of subsidies rather than their quantity. With regard to the WTO negotiations, the good news is that all WTO members recognize the need to move towards a more sustainable path in fishing – not least because the economic costs of unsustainable fishing are a great burden on government budgets. In fact, only two members, Japan and Korea, are currently actively impeding the discussion by arguing that the management of fisheries and resource conservation efforts need to be enhanced in order to halt the depletion of stocks. Japan also points out, that the causal link between subsidies and stock depletion is not given and notes that some stocks are depleted even without subsidies. For the proponents this means that they must establish a link between specific subsidies and their negative impacts on fish stocks.

The current state of negotiation with two very divergent approaches to the reduction of subsidies in the fishing sector – a general ban with exceptions versus a large category of WTO-compatible subsidies and specific prohibitions – raises concerns that the WTO is not the appropriate forum to achieve a notable reduction or the elimination of environmentally harmful subsidies. The scope of the relevant SCM Agreement and the mandate regarding subsidy reduction of the current trade negotiation round is too narrow.

Independent experts suggest that WTO members need to explore new institutional mechanisms that accompany WTO disciplines and ensure that sustainability aspects are considered beyond their trade effects. This refers to the necessary shift in judging the WTO-compatibility of subsidies regarding their impacts rather than their design. In addition, exceptions for developing countries based on the principle of special and differentiated treatment must be clearly defined¹⁶⁹.

Schorr formulated clear expectations regarding the necessary outcomes of the WTO negotiations. The new rules must include the following characteristics¹⁷⁰:

¹⁶⁹ See Porter 2004b

¹⁷⁰ See Schorr 2004

- Covering all significant fishing subsidy programmes.
- Forbidding harmful fishing subsidies while accommodating beneficial ones.
- Taking account of the special needs of developing countries.
- Promoting the administration of fishing subsidies on a fisheries-specific basis.
- Including mechanisms to improve transparency and accountability.
- Being administered in effective coordination with international fisheries bodies.

In fact, the WTO rules do not even cover those categories of subsidies, which are environmentally most harmful and/or economically perverse. The lack of real progress in four years of negotiations (fisheries subsidies) and more than a decade of discussion of forest-related environmental protection measures and their trade impacts in the CTE, also provoke the question, why everything that is somehow trade-related has to be dealt with in the WTO and according to WTO principles. In the age of economic globalization almost every political measure that affects economic actors or markets will also affect trade. Is it thus automatically trade and WTO-related and does the WTO have the legitimacy to judge the appropriateness of specific measures on the basis of its narrow, trade-oriented approach? The result of this approach is an over-burdened and systematically expanded WTO-agenda, that overwhelms the institutional capacities of the organization and most of its members in terms of volume (too many issues are negotiated at the same time) and scope (issues such as investment and competition, that can not be regulated on the basis of traditional trade policy instruments such as Most Favoured Nation Treatment and National Treatment).

So, where do we go from here? Where could a political process towards a true reduction of environmentally harmful and economically perverse subsidies be hosted? Based on the assessment of the current ability of the WTO to effectively regulate environmentally harmful and economically perverse subsidies, there seems to be a window of opportunity for initiating a more effective international process for subsidy regulation outside the WTO, if key actors work together. For example, in the context of energy subsidies the German Advisory Council on Global Change recommends the negotiation of a multilateral agreement on energy subsidies that aim at the phase-out of perverse and environmentally energy subsidies¹⁷¹. Such a strategy could also be followed in other policy areas or maybe under the heading of a general approach to the reduction of perverse and environmentally harmful subsidies.

The crucial question that would have to be answered is, whether one organization or institution could cover the entire subject or if it is more appropriate to deal with the subsidies in different arenas according to their issue area.

For fisheries a number of specialized international agencies are working on this subject like FAO, UNC-LOS, OECD and regional fisheries commissions. They analyze or work in the fisheries sectors, species protection and develop policies for more sustainable resource management. And institutions like the FAO and OECD have already undertaken considerable efforts to shed light on the sustainability impacts of fisheries subsidies.

With regard to the protection of forests the issue is more complicated, because existing international institutions have not yet built up such a knowledge base as international institutions in the fisheries sector. The UN Forum on Forests is rather new and as a policy forum is only just starting to examine the subsidy issue on a more general level. But up to now the UNFF fails to prove to be relevant institutions being capable to take decisions. On top of it the UNFF has "failed to have a significant mitigation effect on deforestation. It has not respected the rights of indigenous peoples and local communities in an adequate manner... Following the UNFF6 meeting in February 2006 it would be more effective if the UNFF process concluded, and any results be merged and transferred to the processes of the Convention on Biological Diversity. This would also support the overarching goal of reforming/streamlining the UN system and its conventions"¹⁷². In addition, the efforts of the FAO, ITTO respectively ITTA and OECD to analyse the effects of subsidies in the forestry sector do not seem to reach the same level of detail and comprehensiveness as in the fisheries sector.

¹⁷¹ WBGU 2003: 155

¹⁷² Greenpeace 2006

Since the knowledge on the environmental and economic impacts of subsidies in the forestry sectors is spread across a larger number of international governmental and non-governmental institutions, a first step ought to be the establishment of an information sharing process and the co-ordination of activities. Such an approach could be established through the Programme of Work on Forest Biological Diversity (Goal 2 Objective 1) under the CBD or in a broader cross-cutting approach under the CBD. The harm of subsidies is covered in several thematic programmes of work, recently in the one about Protected areas with a clear timeline for elimination by 2008 (Goal 3.1. and Goal 3.4). This programme follows a holistic eco-systems approach that integrates the conservation and sustainable use of biological diversity and takes account of social, cultural and economic considerations. This includes the analysis of how human activities like forest management practices impact on biological diversity. In addition, the issue of perverse incentives to destroy forests is included in this work programme [30].

For the two areas reviewed in this paper, the CBD should be the leading institution dealing with subsidies for the following reasons. The CBD has the right objectives¹⁷³, with 188 parties a broad and nearly universal membership [31], and the right and a comprehensive work programme. Furthermore the CBD is well-structured and scientific based through SBSTTA and respects the rights of indigenous peoples and local communities (see Table 9).

Table 9: Ten reasons to shift the debate on subsidies for fisheries and forests from the WTO to the CBD

a) Five reasons why the WTO is the wrong institution

The WTO has

(1) in focussing on economic issues and demands the wrong objectives for sustainable development [32]

(2) compared with UN institutions a limited membership of 149 members (146 countries and three custom territories)

(3) failed to really integrate environmental and social concerns in WTO decisions and to respect multilateral environmental agreements, core labour standards and human rights

(4) failed to be an institution in which subsidies for various sectors could be discussed and the negative effects of subsidies could be stopped

(5) a "single undertaking" approach requiring WTO members to accept [or reject] the whole package resulting from the negotiations, including decisions which are not environmentally sound.

b) Five reasons why the CBD is the better institution

The CBD

(1) has the right objectives (the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits)

(2) is in possession of a broad and nearly universal membership of 188 parties

(3) has the right and comprehensive work programme

(4) is equipped with a Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)

(5) respects the rights of indigenous peoples and local communities.

173 See CBD 1992: Article 1 Objectives

Other organisations such as ITTO, OECD and FAO represent a specific remit and group of dominant countries. Therefore they are inappropriate fora for playing the leading role and taking the issue of subsidies forward. Nevertheless their knowledge should be used under the leadership of the CBD.

Hence, from an environmental perspective, there are at least three challenges for the reduction and elimination of environmentally harmful subsidies and incentives:

• While all this talking and forum shopping is going on, the subsidies and the harm they cause continue. The most egregious perverse subsidies or incentives should be stopped immediately while the rest should be reviewed.

 \bullet Removing the subsidies issue from the WTO agenda and moving it to the more effective forum – the CBD.

• Agreement on stepwise approach of the phasing out of damage causing subsidies.

The SBSTTA recommendation X/8 offers proposals for the application of ways and means to remove or mitigate perverse incentives like (a) the identification of policies or practices that generate perverse incentives; (b) the design and implementation of appropriate reforms and (c) the monitoring, enforcement and evaluation of reforms.

A further problem is that all three goals ought to be followed at the same time. Since such an effort implies considerable political will as well as huge financial and human resources, this process can only be successful, if in the medium- and long-term a critical mass of supporters or an international alliance of supporters (individuals and institutions) can be created.

But in the short-term it is necessary to examine in more detail the institutional alternatives for the reduction and elimination of environmentally harmful subsidies and strengthen the efforts to take the subject off the WTO agenda. The generation of more detailed, more up-to-date data on scope and impacts of subsidies in the fisheries and forestry sector must be an integral part of this approach. Better data can not only serve as the analytical underpinning of the economic and environmental need to reduce subsidies and alternative policy measures, it can also serve to mobilise the general public and create a political counter-balance to the interest groups of the subsidised industries.

A global network of protected areas (Marine Reserves or Marine Protected Areas) meeting the target of conserving 20 – 30 percent of the world's seas might cost between USD 5 to 19 billion annually to run and would probably create around one million jobs¹⁷⁴. To save our ancient forests through a global system of protected areas might create additional costs of around USD 15 billion a year¹⁷⁵. If we are looking back on figures of the amount of perverse subsidies we can imagine that the necessary public money exists, even if a mere shift from money for subsidies to money for protected areas might not be realistic.

174 Balmford et al. 2004175 Greenpeace International 2002

Summary

The issue of subsidies for agriculture, coal, energy, fisheries, forestry, manufacturing industry and transport is heavily discussed by intergovernmental organisations, on international conferences, in the context of regional economic integration and governments. In spite of the fact that many organisations are dealing with various aspects of subsidies the World Trade Organization (WTO) is the only international body generally regulating subsidies on a multilateral level and the Subsidies and Countervailing Measures (SCM) Agreement of the WTO currently serves as the only internationally agreed definition of a subsidy.

However, the study shows that the issue of subsidies is very complex. First of all, there are many forms of subsidisation of which the direct transfer of money from governments to a specific group of beneficiaries covers only a fraction of what constitute a subsidy. Due to the variety in forms and often indirect nature of financial support, for instance as in the case of free infrastructure provision by governmental agencies to logging or fishing companies, it is also very difficult to establish reliable estimates of the overall volume of subsidies. The WTO SCM Agreement covers only a part of the subsidies currently being provided by governments, namely those that distort trade by altering the international competitiveness of a specific product or industry.

Within this generally complex framework the study examines in particular the linkage between subsidies and environmental degradation and makes the argument that many subsidies generally hurt a society as a whole as they support the increasing use of natural resources. This is very often the case if subsidies reduce the price of a resource or prevent resource users from paying an adequate price for a resource. Thus, it is economically not interesting to manage the resource sustainably, like for example in the case of cheap logging licences or payments for "modernizing" fishing fleets that support the construction of larger ships that can take more fish on board. Such subsidies can even be "perverse" once they cost society or a government more in social, environmental and economic costs than the economic benefit that amounts to the specific interest groups or industries. Again, fisheries or forests that are depleted beyond regeneration are a case in point.

The current WTO negotiations on the reduction of environmentally harmful fisheries subsidies are useful for addressing these issues on the international level, because they urge countries to assess not just the amount of subsidies paid as well as the forms of subsidisation but most importantly their impacts on the environment. However, these negotiations only address a fraction of environmentally harmful or perverse fisheries subsidies and for various reasons the WTO fails to discuss subsidies in a comprehensive way and to deliver solutions to eliminate the negative impacts of subsidies. Therefore, Greenpeace calls for removing the subsidies issue from the WTO agenda and moving it to the more effective forum – the Convention on Biological Diversity (CBD) - and a stepwise approach of the phasing out of damage causing subsidies. While doing this, the most egregious perverse subsidies or incentives should be stopped immediately.



Annex I

Examples of different categories of financial transfer to the marine capture fisheries sector in OECD countries

Direct payments: Price support payments to fishers, grants for new vessels, grants for modernisation, vessel decommissioning payments, buyouts of licences and permits, buyouts of quota and catch history, income support, unemployment insurance, retirement grants for fisheries, compensation for closed or reduced seasons, compensation for damage from predators on fish stocks, disaster relief payments, grants to purchase second hand vessels, grants for temporary withdrawal of fishing vessels, grants to small fisheries, direct aid to participants in particular fisheries, income guarantee compensation, vacation support payments, grants to set up temporary joint ventures in other countries, payments to set up permanent joint ventures in other countries, temporary grants to fishers and vessel owners, price support payments direct to fishers.

Cost-reducing transfers: Fuel tax exemptions, subsidised loans for vessel construction, subsidised loans for vessel modernisation, payments to reduce accounting costs, provision of bait services, loan guarantees, underwriting of insurance costs, contributions to match private sector investments, low cost loans to young fishers, interest rebates, transport subsidies, low cost insurance, government payment of access to other countries' waters, low cost loans to specific fisheries, income tax deduction for fishers, government funded training of fish processing workers, government funding of the introduction of new gear and technology, support for crew insurance, tax exemptions for deep-sea vessels, support for development of deep-sea fisheries, interest subsidies for the purchase of machines and equipment for fishing vessels, interest subsidy for the purchase of second-hand vessels, support to improve economic efficiency, reduced charges by government agencies, support to build facilities for commercial fishers at ports.

General services: Research expenditure, management expenditure, enforcement expenditure, market intervention schemes, regional development grants, support to build port facilities for commercial fishers, protection of marine areas, grants to local authorities for retraining of fishers into other activities, payments to producer organisations, expenditure on the protection of marine areas, payments to support community based management, fisheries enhancement expenditure, support to enhance the fisheries community environment, expenditure on research and development, expenditure on research of deep-sea fisheries, expenditure to promote international fisheries co-operation, support to improve the management of co-operatives, support to improve fishing villages, expenditure on fisheries policy advice, expenditure on prosecution of fisheries offences, support for artificial reefs, expenditure on exploratory fishing, support to establish producers' organisations, aid for restocking of fish resources, funding of information dissemination, funding for the promotion and development of fisheries, expenditure for information collection and analysis, expenditure on conservation and management.

Remark: The examples of transfers provided in this Annex are not intended to be a complete inventory of the transfer programs that are or have been used in OECD countries¹⁷⁶.

176 Reproduced from OECD 2000



Annex II

Definitions in the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the World Trade Organization (WTO)

PROHIBITED SUBSIDIES

Prohibited subsidies are defined in the following way:

- contingent, in law or in fact, on export performance; or
- contingent on the use of domestic over imported goods.

Prohibited subsidies contingent on export performance, or 'export subsidies', are subsidies whose grant is tied to actual or anticipated export performance (the subsidy is granted on the expectation that the subsidised product will be exported).

Export subsidies can either be de jure subsidies (as set out in legislation) or de facto subsidies (are established based on the facts surrounding the grant of the subsidy). The latter are more difficult to establish because they are dependent on the practice of the granting authority.

In addition, prohibited subsidies, can be contingent on the explicit preference of the use of domestic over imported goods, or constituted by yet another subsidy that aims at replacing imported goods in the production of domestic goods.

ACTIONABLE SUBSIDIES

Except for prohibited subsidies any subsidy can be challenged as an actionable subsidy if it causes adverse effects to the interests of other WTO members, i.e. if it affects the trade between parties.

An actionable subsidy can be challenged if the subsidy is specific to an enterprise or group of enterprises or industries (generally available subsidies are permitted).

'Adverse effects' exist when the subsidy causes:

- Injury to the domestic industry of another Member;
- Nullification or impairment; or
- serious prejudice to the interests of another Member.

Nullification or impairment occurs when the subsidy affects the benefits that a party can reasonably expect as a member of the WTO.

'Injury' to the domestic industry can be demonstrated by an analysis of how the volume of subsidised imports affects the price in the domestic market for like products and the impact of those subsidised imports on domestic producers of such products.

'Serious prejudice' may exist where the effect of the subsidy is to:

- displace or impede the import of like products of another Member into the market of the subsidising Member;
- cause significant price undercutting by the subsidised products, significant price suppression, price depression or lost sales; or
- increase the world market share of the subsidised product.
- Moreover, 'serious prejudice' usually exists where:
- total ad valorem subsidisation of the product exceeded 5 percent,

- the subsidies covered operating losses sustained by an industry,
- the subsidies covered operating losses sustained by an enterprise on an ongoing basis, or
- there is a direct write off of company debts by government¹⁷⁷.

However, the provision on 'serious prejudice' was also phased out on 31 December 1999.

NON-ACTIONABLE SUBSIDIES

「日本」というない

Non-actionable subsidies are those that are specific to an enterprise or a group of enterprises or industries but which:

- provide pre-competitive assistance for research activities (i.e., support provided prior to development of products for market use);
- provide assistance to disadvantaged regions as part of a regional development assistance program; or
- provide assistance to promote adaptation of existing facilities (facilities in operation for at east two years) to new environmental requirements.

Remark: Non-actionable subsidies are prohibited since 1 January 2000, the WTO members failed to extend the application of Article 8 of the WTO SCM agreement dealing with the provisional application of so-called green exceptions.

THE SCM CRITERIA OF SPECIFICITY

Assuming that a measure is a subsidy within the meaning of the SCM Agreement, it nevertheless is not subject to the SCM Agreement unless it has been specifically provided to an enterprise or industry or group of enterprises or industries. The basic principle is that a subsidy that distorts the allocation of resources within an economy should be subject to regulation. Where a subsidy is widely available within an economy, such a distortion in the allocation of resources is presumed not to occur. Thus, only "specific" subsidies are subject to the SCM Agreement disciplines. There are four types of "specificity" within the meaning of the SCM Agreement:

- Enterprise-specificity: A government targets a particular company or companies for subsidisation;
- Industry-specificity: A government targets a particular sector or sectors for subsidisation.
- Regional specificity: A government targets producers in specified parts of its territory for subsidisation.
- Prohibited subsidies: A government targets export goods or goods using domestic inputs for subsidisation¹⁷⁸.

¹⁷⁷ See SCM Agreement Article 6.1

¹⁷⁸ WTO: SUBSIDIES AND COUNTERVAILING MEASURES: OVERVIEW, Agreement on Subsidies and Countervailing Measures ("SCM Agreement"), at www.wto.org.

Annex III

WTO, OECD and APEC members

149 WTO members (146 countries and 3 customs territories having full autonomy in the conduct of its trade policies) on 11 December 2005, with dates of membership¹⁷⁹

Albania 8 September 2000 Angola 23 November 1996 Antigua and Barbuda 1 January 1995 Argentina 1 January 1995 Armenia 5 February 2003 Australia 1 January 1995 Austria 1 January 1995 Bahrain, Kingdom of 1 January 1995 Bangladesh 1 January 1995 Barbados 1 January 1995 Belgium 1 January 1995 Belize 1 January 1995 Benin 22 February 1996 Bolivia 12 September 1995 Botswana 31 May 1995 Brazil 1 January 1995 Brunei Darussalam 1 January 1995 Bulgaria 1 December 1996 Burkina Faso 3 June 1995 Burundi 23 July 1995 Cambodia 13 October 2004 Cameroon 13 December 1995 Canada 1 January 1995 Central African Republic 31 May 1995 Chad 19 October 1996 Chile 1 January 1995 China 11 December 2001

¹⁷⁹ WTO: Members and observers, at: http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm

Colombia 30 April 1995 Congo 27 March 1997 Costa Rica 1 January 1995 Côte d'Ivoire 1 January 1995 Croatia 30 November 2000 Cuba 20 April 1995 Cyprus 30 July 1995 Czech Republic 1 January 1995 Democratic Republic of the Congo 1 January 1997 Denmark 1 January 1995 Djibouti 31 May 1995 Dominica 1 January 1995 Dominican Republic 9 March 1995 Ecuador 21 January 1996 Egypt 30 June 1995 El Salvador 7 May 1995 Estonia 13 November 1999 European Communities 1 January 1995 Fiji 14 January 1996 Finland 1 January 1995 Former Yugoslav Republic of Macedonia (FYROM) 4 April 2003 France 1 January 1995 Gabon 1 January 1995 The Gambia 23 October 1996 Georgia 14 June 2000 Germany 1 January 1995 Ghana 1 January 1995 Greece 1 January 1995 Grenada 22 February 1996 Guatemala 21 July 1995 Guinea 25 October 1995 Guinea Bissau 31 May 1995 Guyana 1 January 1995 Haiti 30 January 1996 Honduras 1 January 1995 Hong Kong, China 1 January 1995 Hungary 1 January 1995 Iceland 1 January 1995 India 1 January 1995

the a lot

Indonesia 1 January 1995 Ireland 1 January 1995 Israel 21 April 1995 Italy 1 January 1995 Jamaica 9 March 1995 Japan 1 January 1995 Jordan 11 April 2000 Kenya 1 January 1995 Korea, Republic of 1 January 1995 Kuwait 1 January 1995 Kyrgyz Republic 20 December 1998 Latvia 10 February 1999 Lesotho 31 May 1995 Liechtenstein 1 September 1995 Lithuania 31 May 2001 Luxembourg 1 January 1995 Macao, China 1 January 1995 Madagascar 17 November 1995 Malawi 31 May 1995 Malaysia 1 January 1995 Maldives 31 May 1995 Mali 31 May 1995 Malta 1 January 1995 Mauritania 31 May 1995 Mauritius 1 January 1995 Mexico 1 January 1995 Moldova 26 July 2001 Mongolia 29 January 1997 Morocco 1 January 1995 Mozambique 26 August 1995 Myanmar 1 January 1995 Namibia 1 January 1995 Nepal 23 April 2004 Netherlands¹⁸⁰ 1 January 1995 New Zealand 1 January 1995 Nicaragua 3 September 1995 Niger 13 December 1996 Nigeria 1 January 1995 Norway 1 January 1995

¹⁸⁰ For the Kingdom in Europe and for the Netherlands Antilles

Oman 9 November 2000 Pakistan 1 January 1995 Panama 6 September 1997 Papua New Guinea 9 June 1996 Paraguay 1 January 1995 Peru 1 January 1995 Philippines 1 January 1995 Poland 1 July 1995 Portugal 1 January 1995 Qatar 13 January 1996 Romania 1 January 1995 Rwanda 22 May 1996 Saint Kitts and Nevis 21 February 1996 Saint Lucia 1 January 1995 Saint Vincent & the Grenadines 1 January 1995 Saudi Arabia 11 December 2005 Senegal 1 January 1995 Sierra Leone 23 July 1995 Singapore 1 January 1995 Slovak Republic 1 January 1995 Slovenia 30 July 1995 Solomon Islands 26 July 1996 South Africa 1 January 1995 Spain 1 January 1995 Sri Lanka 1 January 1995 Suriname 1 January 1995 Swaziland 1 January 1995 Sweden 1 January 1995 Switzerland 1 July 1995 Chinese Taipei 1 January 2002 Tanzania 1 January 1995 Thailand 1 January 1995 Togo 31 May 1995 Trinidad and Tobago 1 March 1995 Tunisia 29 March 1995 Turkey 26 March 1995 Uganda 1 January 1995 United Arab Emirates 10 April 1996 United Kingdom 1 January 1995

United States of America 1 January 1995 Uruguay 1 January 1995 Venezuela (Bolivarian Republic of) 1 January 1995 Zambia 1 January 1995 Zimbabwe 5 March 1995

30 OECD members (countries) with dates of membership¹⁸¹

Australia 7 June 1971 Austria 29 September 1961 Belgium 13 September 1961 Canada 10 April 1961 Czech Republic 21 December 1995 Denmark 30 May 1961 Finland 28 January 1969 France 7 August 1961 Germany 27 September 1961 Greece 27 September 1961 Hungary 7 May 1996 Iceland 5 June 1961 Ireland 17 August 1961 Italy 29 March 1962 Japan 28 April 1964 Korea 12 December 1996 Luxembourg 7 December 1961 Mexico 18 May 1994 Netherlands 13 November 1961 New Zealand 29 May 1973 Norway 4 July 1961 Poland 22 November 1996 Portugal 4 August 1961 Slovak Republic 14 December 2000 Spain 3 August 1961 Sweden 28 September 1961 Switzerland 28 September 1961 Turkey 2 August 1961 United Kingdom 2 May 1961 United States 12 April 1961

¹⁸¹ OECD: OECD members countries, at: http://www.oecd.org/document/58/0,2340,en_2649_201185_1889402_1_1_1_1,00.html

21 APEC members (countries)¹⁸²

ないの

Australia Brunei Darussalam Canada Chile People's Republic of China Hong Kong China Indonesia Japan Republic of Korea Malaysia Mexico New Zealand Papua New Guinea Peru The Republic of the Philippines The Russian Federation Singapore Chinese Taipei Thailand United States of America Viet Nam

182 APEC: About APEC , at: http://www.apecsec.org.sg/content/apec/about_apec.html

Notes

[1] The Agreement on Agriculture (AoA) is currently under re-negotiation to strengthen the rules, and specific commitments on government support and protection for agriculture. "The purpose is to correct and prevent restrictions and distortions in world agricultural markets. Without prejudging the outcome, member governments commit themselves to comprehensive negotiations aimed at: market access: substantial reductions exports subsidies: reductions of, with a view to phasing out, all forms of these domestic support: substantial reductions for supports that distort trade". Source: WTO: The Doha Declaration explained [at http://www.wto.org].

[2] "The ministers agreed to negotiations on the Anti-Dumping (GATT Article VI) and Subsidies agreements. The aim is to clarify and improve disciplines while preserving the basic, concepts, principles of these agreements, and taking into account the needs of developing and least-developed participants. In the initial negotiating phase, participants will indicate which provisions of these two agreements they think should be the subject of clarification and improvement in the second phase of negotiations. The ministers mention specifically fisheries subsidies as one sector important to developing countries and where participants should aim to clarify and improve WTO disciplines". Source: WTO: The Doha Declaration explained [at http://www.wto.org].

[3] For an actual overview of all WTO negotiations on subsidies see Wall & Vis-Dunbar 2005.

[4] "A single undertaking requires Members to accept or reject the whole package resulting from the negotiations, instead of being able to selectively accept parts of the negotiations." See 3-D 2004 and Glossary.

[5] For the effects of sectoral liberalisation of the forest product sector see Greenpeace 2005e and Katila & Simula 2005.

[6] Subsidies for fleet modernization are a typical example that is associated with over-fishing because there is evidence that modernized fishing boats can either stay at sea for longer periods or go further into the open ocean to exploit new areas, and thereby increase pressure on fisheries.

[7] Article 11 (Incentive Measures): "Each Contracting Party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity". Source: Convention on Biological Diversity (CBD), 5 June 1992, the text is available at http://www.biodiv.org.

[8] Article 1 (Definition of a Subsidy) of the Agreement on Subsidies and Countervailing Measures starts as follows: "For the purpose of this Agreement a subsidy...".

[9] The original text of the definition includes the following footnote: "In accordance with the provisions of Article XVI of GATT 1994 (Note to Article XVI) and the provisions of Annexes I through III of this Agreement, the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy". [10] Although of course earlier rounds accomplished a set of rules on how to deal with trade distortive subsidies leading to the 1995 WTO Agreement on Subsidies and Countervailing Measures.

[11] In a new Report on Economic Development in Africa, released on 13 September 2005, UNCTAD cautions that African policy makers should pay much greater attention to the costs and benefits of FDI rather than being singularly preoccupied with its attraction. See UNCTAD 2005b.

[12] See different definition of the Danish Environmental Assessment Institute "Subsidies that are both harmful to the environment and the economy are here referred to as perverse subsidies". See IMV 2005: 9.

[13] But the ever repeated critique of EU agricultural subsidies has some misunderstandings underlying the subsidy or national support measures debate, that guide the whole debate in the wrong direction. See Wiggerthale 2005.

[14] Myers and Kent give no indications as to the size of the vessels. See Myers and Kent 2001.

[15] The financial resources are attributed for the entire 6-year period of the programme.

[16] "This is an important step, but not the end of the race," commented Paulo Adario, Greenpeace Amazon Campaign coordinator the decline. "Despite the decrease in Amazon deforestation, there is nothing to celebrate - it's more than five football fields destroyed every minute. We are losing the world's largest rainforest, its biodiversity and a key opportunity to reconciliate human activity with environmental protection". See Greenpeace Brazil 2005.

[17] The sources for illegal logging rates are:

and the second

A STATE

Russia: Speech at the international conference, Responsible use of Nature – 2005, ORGANISATION DATE at http://www.rosbalt.ru/2005/9/7/224795.html

Indonesia: Partners in Crime: A Greenpeace Investigation of the links between the UK and Indonesia's timber barons, Greenpeace, June 2003, at http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/5733.pdf

Brazilian Amazon: In 2004, 58.8% of logs were produced without any authorization from IBAMA. However, the total level of illegality will be higher since most companies with Forest Management Plans do not respect forest laws and regulations. Companies also misuse official paperwork to launder illegal wood from non-authorized areas. The 80% figure comes from IBAMA's own estimate published in SAE (1997) Forest policy – lumbering exploitation in Amazonia. Brazilian Secretariat of Strategic Issues, April 1997.

Cameroon: Evolution de l'exploitation des forêts du Cameroun: production nationale, exploitation illégale, perspectives, Philippe Auzel, Timothée Fomete, ODI Joseph & Jean-Cyril Owada and World Bank/WWF Alliance, Forest Law Assessment in Selected African Countries, Final Draft, October 2002.

Ghana: Forest Ghana Watch, interview with Kyeretwie Opoku, Yaounde, Cameroon, October 2005. All timber concessions are required to be reviewed by the Ghanaian Government. Most companies failed to apply for a review and those that did have yet to have a response from the Government.

[18] A breakdown of the reported net increase is not readily available, except that the agency had planned to decommission 1,500 kilometres of roads in 2004.

[19] "The Tongass National Forest is among the world's largest tracts of remaining old-growth temperate rainforest and is under threat from logging. The Tongass is located in the southeast of Alaska's coastal archipelago and is the largest national forest in the United States". See Greenpeace International 2004a.

[20] Up to now a consultant is being engaged to undertake the first part of the study. See ITTO 2005.

[21] This point is mainly related to agricultural subsidies which have not been described in any detail in this paper.

[22] A Greenpeace evaluation of the social impacts of Congolaise Industrielle des Bois (CIB) concessions in Congo Brazzaville shows that beside the fact that CIB has been supporting indigenous communities to some extent their forest rights are threatened: "a proper balance between the exercise of CIB's right to develop the forestry concessions and the exercise of indigenous communities' rights to maintain their forest-based livelihood is not being achieved in CIB concessions" visited by a Greenpeace team in December 2004. CIB is a privately owned company and has received direct and indirect subsidies as well as funding from various governments, intergovernmental institutions and NGOs. For details see Greenpeace International 2005c.

[23] A recent Greenpeace report on the Northwest Atlantic Fisheries Organisation (NAFO), one of the most well established and developed Regional Fisheries Management Organisations (RFMOs) in the world, shows that also regional agreements must be improved: "With its origins in a regional commission that was established in 1949, [NAFO] has been in existence since 1979 with the mandate 'to contribute through consultation and co-operation to the optimum utilization, rational management and conservation of the fishery resources' of the Convention area. Yet despite this, its adoption of a wide range of conservation and management measures, and a well developed institutional structure, NAFO has been unable to achieve its mandate and as of 2005, 10 stocks under NAFO's competence are currently under moratoria. NAFO is plaqued by overfishing and misreporting by members because of a disregard for guotas and other regulations and the existence and subsequent frequent use of its objection procedure. It has a decisionmaking structure that often results in the adoption of lowest common denominator resolutions; no dispute settlement procedure; it is lacking in effective measures to eliminate IUU fishing; an ongoing disregard for and lack of inclusion of scientific advice; catch allocations based more on politics and history than conservation; a lack of transparency in its workings; and, the on-going lack of political will by Contracting Parties to enforce any significant penalties for management and conservation infringements". See Greenpeace International 2005b.

[24] To show the need to safeguarde Multilateral Environmental Agreements from international trade rules and to settle trade and environment disputes outside the WTO was the aim of the recently published briefing paper "Is the WTO the only way?". The paper states "that the current state of affairs of the DDA negotiations is not simply unsatisfactory but likely to threaten the future development and effective implementation of MEA provisions". Therefore the paper recommends "alternative fora for clarifying the relationship between WTO and MEA rules, and alternative dispute settlement systems". The paper makes it clear that "these alternatives provide real options for trade and environment negotiations outside of the WTO and that Governments have no need to resort to the WTO for solving disputes over WTO and environmental rules". Furthermore the paper calls "on governments to consider these alternatives and move forward to establish new processes that will safeguard global environmental rules". See Adelphi Consult et al. 2005.

[25] Apart from the WBGU (2003) the literature or commentators so far have not yet taken up the question whether the reduction of subsidies ought to be discussed and negotiated outside the WTO. However, as the Doha round does not seem to bring any progress in those areas that are not just relevant in terms of reducing trade barriers and opening markets but also to address the issue of balance between the economically stronger and economically weaker members, it might be possible that suggestions to deal with certain trade-related-issues outside of the WTO are more reasonable and realistic.

[26] The "Friends of Fish" are in this case Australia, Chile, Ecuador, Iceland, New Zealand, Peru, the Philippines and the US. See Glossary for details.

[27] In the WTO context a demandeur is the party that submits specific proposals to other WTO members and formulates a specific request.

[28] The reference to various boxes of measures originates from the WTO Agreement on Agriculture. Although the term "box" is not used in the agreement, the various measures have been categorized

according to the trade restrictiveness and associated with different colours. Domestic support policies that have a direct effect on production and thus on trade are termed as "amber box" measures which have to be reduced. Then there are "blue box" measures which are direct payments for example to farmers in order to reduce production. And finally, "green box" measures are those that have no or only minimal impact on trade such as general government services such as infrastructure, research or disease control. See also Glossary.

[29] Greenpeace termed the Hong Kong Ministerial Conference a failure for environment and development. While the Hong Kong Ministerial Declaration allows participating governments to claim that the WTO trade system is intact, it completely fails to address the environmental and social consequences of free trade. "The declaration is a contemptible face-saving exercise by the WTO," said Daniel Mittler, Trade Policy Advisor at Greenpeace International, "Although it is full of development rhetoric, the final compromise is highly imbalanced in favour of rich countries. True, an agreement has been reached, but governments have agreed on little more than how to continue talking in 2006. Many of the most difficult issues have been conveniently shifted to future negotiations." See Greenpeace 2005g.

[30] A preliminary assessment is included in the document UNEP/COP/6/12/Add.3, p. 6-12. In addition see CBD 2002.

[31] In addition to the United States of America which signed (on 4 June 1993) but never ratified the CBD there are only three states missing: the Holy See, Iraq and the relatively new state of Timor Leste. An overview on parties and signatures is given at the CBD homepage [at http://www.biodiv.org/world/parties.asp].

[32] Even if the Agreement establishing the World Trade Organization (see WTO 1994a)includes a reference to sustainable development ("Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development") the last ten years of WTO presence have shown that the WTO trade rules failed to raise the standards of living for the poor of the world, to ensure full employment worldwide and to use the world resources in a sustainable way.

Glossary

- Actionable subsidy: According to the Agreement on Subsidies and Countervailing Measures (SCM), this is any subsidy that is not prohibited but is countervailable. To impose a countervailing measure, a country must first demonstrate adverse effects, i.e., a loss of market share caused by another WTO member's subsidies. Otherwise the subsidy is permitted. The agreement defines three types of damage they can cause. One country's subsidies can hurt a domestic industry in an importing country. They can hurt rival exporters from another country when the two compete in third markets. And domestic subsidies in one country can hurt exporters trying to compete in the subsidizing country's domestic market. If the Dispute Settlement Body rules that the subsidy does have an adverse effect, the subsidy must be withdrawn or its adverse effect must be removed. Again, if domestic producers are hurt by imports of subsidized products, countervailing duty can be imposed. [VI, XIII]
- ADVERSE EFFECTS: "According to Agreement on Subsidies and Countervailing Measures (SCM), 'adverse effects' can be caused by: (i) injury to the domestic industry of another Member; (ii) nullification or impairment of benefits accruing directly or indirectly to other members under GATT 1994 in particular the benefits of concessions bound under Article II of the GATT 1994; and (iii) serious prejudice to the interests of another Member." [VI, changed]
- AGREEMENT ON AGRICULTURE (AOA): One of the Uruguay Round agreements signed by governments in 1994 in Marrakech. The AoA established rules for agricultural trade for all WTO members. The AoA's core objective "is to establish a fair and market-oriented agricultural trading system." Its implementation period was six years for developed countries and nine for developing countries, starting with the date the agreement came into effect: 1 January 1995. The AoA built in a provision for its own review and renewal. That renegotiation is now underway, under the terms set at the fourth WTO ministerial conference in Doha and the Framework Decision agreed at the WTO General Council on 1 August 2004. [V]
- AGREEMENT ON SUBSIDIES AND COUNTERVAILING MEASURES (SCM AGREEMENT): This is the Uruguay Round agreement that sets out the rules under which WTO members may provide and apply subsidies for domestic products or impose countervailing measures on subsidised imported products. The agreement contains a definition of subsidy. It also introduces the concept of a "specific" subsidy i.e. a subsidy available only to an enterprise, industry, group of enterprises, or group of industries in the country (or state, etc) that gives the subsidy. The disciplines set out in the agreement only apply to specific subsidies. They can be domestic or export subsidies. The agreement defines two categories of subsidies: prohibited and actionable. It originally contained a third category: nonactionable subsidies. This category existed for five years, ending on 31 December 1999, and was not extended. The agreement applies to agricultural goods as well as industrial products, except when the subsidies are exempt under the Agriculture Agreement's "peace clause", due to expire at the end of 2003. [IV, XIII]

AMBER Box: Supports considered to distort trade and therefore subject to reduction commitments. [VI]

- APEC: The Asian Pacific Economic Cooperation forum (APEC) is a loose economic affiliation of Pacific Rim economies. This regional forum, composed of 21 members [see Annex III], is aimed at promoting liberal trade and economic co-operation. [III]
- **BENEFIT:** A legal term in the Agreement on Subsidies and Countervailing Measures (SCM) that most members agree lacks precision. It is not explicitly defined in the SCM and needs clarification; in the WTO trade dispute Canada-Measures Affecting the Export of Civilian aircraft, the WTO Appellate Body "decided that in order to assess the existence of a 'benefit,' the financial contribution provided to a recipient by a government has to be compared with what the recipient in question would have received under normal market conditions." [VI]
- **BLUE Box:** Permitted supports linked to production, but subject to production limits, and therefore minimally trade-distorting. [VI]
- **BOTTOM-UP APPROACH:** A subsidy regime for fisheries based on a "traffic-light" system: a red prohibited box, a yellow actionable box and a green non-actionable box. Red subsidies would be those that contributed to overfishing and overcapacity. Yellow subsidies are those that Japan has yet to describe but would be actionable, though likely uncapped. Green subsidies would be those that reduce overfishing and overcapacity, provide assistance for socio-economic development to fishing villages and fund research for sustainable fishing. Members would have to make an illustrative list of "green" exceptions. Proposed by Japan, supported by South Korea and Chinese Taipei. See top-down approach. [VI]
- **BRUNDTLAND COMMISSION:** The World Commission on Environment and Development, chaired by Gro Harlem Brundtland, former prime minister of Norway and later, between 1998 and 2003, Director-General of the World Health Organization. The commission's 1987 report, "Our Common Future", called for a global transition to more sustainable forms of development and proposed the Earth Summit. [I, changed]
- "CHICKEN AND EGG" PROBLEM: In services, WTO members have neither a definition of a subsidy nor the information to make a definition. Without a definition, some say, they can't provide information on the subsidies they provide to service sectors. Without information, others say, they can't make a definition. [VI]
- **COMMITTEE ON TRADE AND ENVIRONMENT (CTE):** This is the WTO committee that was created under the 1994 Uruguay Round Ministerial Decision on Trade and Environment. It is intended to be the WTO body tasked to identify the relationship between trade measures and environmental measures in order to promote sustainable development, and to make recommendations to the WTO on whether changes in the provisions of the various Uruguay Round agreements are needed in light of such relationship. It originally did not have any negotiating mandate but, as a result of the Doha Ministerial Declaration (DMD), it was mandated to conduct negotiations, through special sessions, on some trade and environment-related issues under Paragraph 31(i) and (ii) of the DMD. The negotiations regarding "environmental goods and environmental services" as mandated in Paragraph 31(iii) and "fisheries subsidies" are taking place in different negotiations bodies. Membership in the committee is open to representatives of all WTO Members. [IV, changed]
- **COUNTERVAILING MEASURE (CVM):** Action taken by the importing country, usually in the form of increased duties to offset subsidies given to producers or exporters in the exporting country. Also known as "countervailing duty", this refers to a special duty or tax imposed by an importing country on an imported product for the purpose of offsetting any subsidies provided in the exporting country, directly or indirectly, for the making, production, or export of the product. [VII and IV]
- DAC LIST OF ODA RECIPIENTS: The DAC list (last version: 1 January 2005) is reviewed every three years by the Development Assistance Committee. The list includes all low and middle income countries, except

those that are members of the G8 or the European Union (including countries with a firm date for EU admission; i.e. Bulgaria and Romania). [IX]

- **DEVELOPMENT ASSISTANCE COMMITTEE (DAC):** The committee of the OECD which deals with development cooperation matters. [IX]
- **DISPUTE SETTLEMENT:** This refers to the process by which any trade disputes among WTO Members can be settled in the WTO following a specific set of rules and procedures, ranging from bilateral consultations, to mediation and arbitration, to the actual initiation and continuation of a trial-like proceeding in which the disputing parties get to present their evidence and argue their case before a panel of trade law experts acting as judges. The objective of dispute settlement is to make WTO members correct any actions that they may have taken in violation of their WTO obligations. Dispute settlement proceedings can be brought under the Dispute Settlement Understanding for violations of any WTO obligation provided for under the Uruguay Round agreements. [IV]
- **DISPUTE SETTLEMENT BODY (DSB):** Body of the WTO made up of all member governments, usually represented by ambassadors or equivalent. The Dispute Settlement Body has the task to administer the rules and procedures set in the Dispute Settlement Understanding. Accordingly, the DSB shall have the authority to establish panels and a standing Appellate Body, adopt panel and Appellate Body reports, maintain surveillance of implementation of rulings and recommendations, and authorize suspension of concessions and other obligations under the covered WTO agreements. Panels and the Appellate Body are the two instances examining a dispute settlement case.
- **DISPUTE SETTLEMENT UNDERSTANDING (DSU):** The DSU is the WTO agreement on settling disputes. Like the bulk of the WTO agreements, this was one of the outcomes of the Uruguay Round negotiations.
- **DOHA DEVELOPMENT AGENDA:** This is the name given by the WTO Secretariat to the trade negotiations that WTO members agreed to embark on when they met in Doha for the WTO's Fourth Ministerial Conference, in November 2001. It used the term "development agenda" as opposed to "round" to make the negotiations seem less threatening to those (particularly developing countries) who had opposed the launch of a new round of trade talks. However, the term "Doha development agenda" is not defined or even mentioned in the text of the Doha Declaration, so many members prefer the use of the term Doha Work Programme, which is technically correct. In addition, critics point out that, whatever it is called, the work programme or agenda does not reflect the development priorities of developing countries. [VIII]
- **DOHA MINISTERIAL DECLARATION (DMD):** The final document of the WTO's Fourth Ministerial Conference in November 2001 launching a new round of trade negotiations.
- **Doнa Round:** see Doha Development Agenda and Doha Work Programme
- **Doha Work Programme:** The technically correct term for the WTO negotiations agreed to at the WTO Doha Ministerial in 2001. [VIII]
- EARTH SUMMIT: The United Nations Conference on Environment and Development (UNCED), known as the Earth Summit, was held in Rio de Janeiro in June 1992. [I, modified]
- **EXPORT SUBSIDIES:** Export subsidies are government payments that cover some of the cost of doing business for export firms. Typically, an export subsidy programme will pay the difference between a more expensive domestic product and a cheaper alternative, so that firms are encouraged to buy from domestic producers... [V]
- EU (15) EUROPEAN UNION (15 MEMBER STATES): Phase in the enlargement process of the European Union lasting from 1995 to 30 April 2004: The original Europe of Six (Belgium, France, Germany, Italy, Luxembourg and the Netherlands) expanded in the following order into a Europe of 15 till 1995: Denmark, Ireland and the United Kingdom (1973), Greece (1981); Spain and Portugal (1986), Austria,

Finland and Sweden (1995). Since 1 May 2004 the European Union, now known as EU (25), has ten additional members: Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

- "FRIENDS OF FISH (FOF)": Originally, Friends of Fish (FOF) comprised Australia, Chile, Iceland, New Zealand, Peru, and the United States. The existence of the group has not stopped its members from submitting its own proposals, and the group's composition has changed depending upon the proposal. In [the WTO Document] TN/RL/W/166, for instance, Australia, Iceland and the U.S. were not part of the group, but Argentina and Ecuador were. Using the moniker Friends of Fish can therefore be misleading; it is done here for simplicity's sake. [VI]
- GENERAL AGREEMENT ON TARIFFS AND TRADE (GATT): The General Agreement on Tariffs and Trade (GATT, 1947) is an economic treaty - now superseded by the WTO -, which organised the negotiations to liberalise world trade and oversaw the multilateral trading system. GATT 1947 refers to the old version of the GATT; whereas GATT 1994 the new version of the General Agreement, incorporated into the WTO, which governs trade in goods. [III]
- GENERAL AGREEMENT ON TRADE IN SERVICES (GATS): Since January 1995, world trade in services has come under a basic framework of WTO rules, the General Agreement on Trade in Services (GATS). A framework of rules for trade in services, similar to the GATT for trade in goods, was negotiated during the Uruguay Round. It includes the same basic principles of the GATT, i.e. transparency (advance publication of trade-related legislation, judicial review) and non-discrimination (MFN, and national treatment once a commitment has been accepted) for service trade. On the rules side three main issues are being pursued, namely negotiations on safeguards, subsidies, and government procurement. World Trade Organisation members are committed to negotiations to bring about further market opening to foreign providers. [The EU states that] negotiations are not about deregulation of services [a statement which is questioned by NGOs]. The GATS is a flexible agreement and it does not cover services, which are not supplied on a commercial basis or in competition with other providers. Only when a WTO member decides to subject a public service to the laws of the market is this service open to competition. Moreover, GATS does not require reciprocity in the engagement from other WTO members: opening of a sector by a member does not need to be reciprocated with the opening of the same sector by the other party. [III]

GREEN Box: Supports considered not to distort trade and therefore permitted with no limits. [VI]

- **GROSS DOMESTIC PRODUCT [GDP]:** The GDP is gross value added, at purchasers' prices, by all resident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. It is calculated without deducting for depreciation of fabricated assets or for depletion or degradation of natural resources. Value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC) revision 3. The World Bank conventionally uses the U.S. dollar and applies the average official exchange rate reported by the International Monetary Fund for the year shown. An alternative conversion factor is applied if the official exchange rate is judged to diverge by an exceptionally large margin from the rate effectively applied to transactions in foreign currencies and traded products. [I]
- **GROSS NATIONAL INCOME (GNI):** Formerly gross national product or GNP, the GNI is the broadest measure of national income, measures total value added from domestic and foreign sources claimed by residents. GNI comprises gross domestic product (GDP) plus net receipts of primary income from foreign sources. Data are converted from national currency to current U.S. dollars using the World Bank Atlas method. This involves using a three-year average of exchange rates to smooth the effects of transitory exchange rate fluctuations. [I]

GROSS NATIONAL PRODUCT (GNP): See gross national income (GNI).

- GROUP OF EIGHT (G8): The G8 consists of the United States, France, the United Kingdom, Japan, Italy, Canada, Russia, Germany and the European Commission. Since 1975, the heads of state or government of the major industrial democracies have been meeting annually to deal with the major economic and political issues facing their domestic societies and the international community as a whole. The six countries at the first summit, held at Rambouillet, France, in November 1975, were France, the United States, Britain, Germany, Japan and Italy (sometimes referred to as the G6). They were joined by Canada at the San Juan Summit of 1976 in Puerto Rico, and by the European Community at the London Summit of 1977. From then on, membership in the Group of Seven, or G7, was fixed, although 15 developing countries' leaders met with the G7 leaders on the eve of the 1989 Paris Summit, and the USSR and then Russia participated in a post-summit dialogue with the G7 since 1991. Starting with the 1994 Naples Summit, the G7 met with Russia at each summit (referred to as the P8 or Political Eight). The Denver Summit of the Eight was a milestone, marking full Russian participation in all but financial and certain economic discussions; and the 1998 Birmingham Summit saw full Russian participation, giving birth to the Group of Eight, or G8 (although the G7 continued to function along side the formal summits). At the Kananaskis Summit in Canada in 2002, it was announced that Russia would host the G8 Summit in 2006, thus completing its process of becoming a full member. The responsibility of host rotates throughout the summit cycle at the end of the calendar year, as follows: France, United States, United Kingdom, Russia (as of 2006), Germany (as of 2007), Japan, Italy and Canada. Throughout the year, the leaders' personal representatives - known as sherpas - meet regularly to discuss the agenda and monitor progress. [XI, complemented]
- **ILLEGAL LOGGING:** In the strictest definition illegal logging takes place when timber is harvested, processed, transported, brought or sold in violation of national laws. Laws can be violated at many different stages of the supply chain.
- **INFORMATION EXCHANGE:** Article 15.1 of the Agreement on Subsidies and Countervailing Measures requires members to "exchange information concerning all subsidies related to trade in services that they provide to their domestic service suppliers." The scope of the information exchange is under debate in the negotiations. Hong Kong argues that Article 15 calls for information on "all subsidies"; the EU and the U.S. argue that an information exchange is not equivalent to a subsidy notification, and the information is only required "for the purpose of the negotiations," and is not in its own right. [VI]
- **INJURY:** The material harm to a domestic industry caused by subsidised imports in the territory of the complaining member. (WTO) The legal interpretation is one issue of the negotiations for both the Anti-Dumping Agreement (ADA) and the Agreement on Subsidies and Countervailing Measures (SCM). [VI]
- JOHANNESBURG SUMMIT: The successor of the Earth Summit, the World Summit on Sustainable Development (WSSD, Johannesburg, South Africa, 26 August-4 September 2002) called for the phasing out of harmful subsidies for energy, reductions of - with a view to phasing out - all forms of export subsidies in agriculture and the elimination of subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity. Furthermore the WSSD encouraged a reform of subsidies that have considerable negative effects on the environment and are incompatible with sustainable development.
- JULY FRAMEWORK AGREEMENT: Technically called the "July Package", the July Framework Agreement is the text adopted by General Council on August 1, 2004. It provides a framework for members to work towards modalities on the topics under negotiation. [VI]
- MARINE PROTECTED AREAS (MPAs): The term "marine protected area" has been in use for over two decades. The concept of marine protected areas has been around for centuries. A marine protected area has

come to mean different things to different people, based primarily on the level of protection provided by the MPA. Some see MPAs as sheltered or reserved areas where little, if any, use or human disturbance should be permitted. Others see them as specially managed areas designed to enhance ocean use. Many accept the definition developed by the World Conservation Union: "any area of the intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment". [XII] Greenpeace favours the concept of marine reserves.

- MARINE RESERVES: Large-scale marine reserves are areas that are closed to all extractive uses, such as fishing and mining, as well as disposal activities. Within these areas core zones exist where no human activities are allowed. They act as scientific reference areas or areas where there are particularly sensitive habitats or species. Some areas within the coastal zone may be opened to small-sclae, non-destructive fisheries, provided that these are sustainable, within ecological limits, and have been decided upon with the full participation of affected local communities.
- MILLENNIUM DEVELOPMENT GOALS (MDGs): The eight MDGs adpted with the UN Millennium Declaration by the UN General Assembly on 18 September 2000 form a blueprint agreed to by all the world's countries and all the world's leading development institutions. They have galvanized unprecedented efforts to meet the needs of the world's poorest. The MDGs range from halving extreme poverty to halting the spread of HIV/AIDS and ensure environmental sustainability, all by the target date of 2015.
- MOST FAVOURED NATION TREATMENT (MFN): A commitment by a state to extend the same treatment it accords to its most-favoured trading partner, to all its trading partners. For instance, if Canada imposes a 1% tariff on imports of kiwi fruit from New Zealand, MFN treatment would demand that Canada extend the same treatment to the imports of kiwi fruit from other WTO members. Together with national treatment, MFN is at the core of the non-discrimination principle that lies at the heart of trade law. [VIII]
- MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEA): Term used to describe international intergovernmental treaties or agreements among countries that pursue or promote environmental protection or conservation objectives and provide for variouss degrees of binding obligations. There are over 200 of these kinds of agreements currently in existence. Of these, around 20 have trade-related provisions i.e. provisions that expressly or implicitly allow or require countries to undertake specific trade measures as part of their treaty obligations. In the WTO, MEA usually refers to those treaties that contain trade-related measures, including the Basel Convention (on hazardous wastes); the Convention on Biological Diversity; the Convention on International Trade in Endangered Species (CITES); the International Tropical Timber Agreement (ITTA); the Montreal Protocol on the ozone layer; and the United Nations Convention on Climate Change (UNFCCC). [IV, VIII]

- **NATIONAL TREATMENT (NT):** A commitment by a state to treat foreign products in the same manner as they would treat domestic products (provided that the foreign products are "like" their domestic counterparts). [VIII]
- **NON-ACTIONABLE SUBSIDY:** A subsidy that is allowed and therefore cannot be countervailed. The equivalent to agriculture's Green Box. The three allowable categories are: research and development; aid to disadvantaged regions; and assistance for environmental upgrades. This category see Article 8 of the Agreement on Subsidies and Countervailing Measures (SCM Agreement) applied provisionally for five years ending 31 December 1999, and pursuant to Article 31 of the Agreement, could be extended by consensus of the SCM Committee. As of 31 December 1999, no such consensus had been reached. Therefore this category lapsed in 1999, and hence these subsidies are prohibited. [VI, VII]
- Non-AGRICULTURAL MARKET ACCESS (NAMA): Term used to describe negotiations on new market access for non-agricultural goods industrial products and manufactures. Due to the WTO classification of

goods and differentiation between agricultural and non-agricultural goods used in the WTO fishery and forests products are covered under the NAMA negotiations. The mandate for the negotiations includes both, to reduce or as appropriate eliminate tariffs as well as non-tariff barriers (including subsidies). The Product coverage of the NAMA negotiations shall be comprehensive and without a priori exclusions. Countries with special interests in specific products groups have started sectorial initiatives to speed up the liberalization process. Examples of sectorial initiatives are Canada, Iceland, New Zealand, Norway, Singapore and Thailand for fish and fish products and Canada, Hong Kong China, Iceland, Thailand and the United States for the forest product sector.

- Non-TARIFF BARRIERS (NTBs) / Non-TARIFF MEASURES (NTMs): Non-tariff barriers (NTBs), such as quotas, import licensing systems, sanitary regulations, prohibitions, etc. Same as "non-tariff measures". Non-tariff measures (NTMs), such as quotas, import licensing systems, sanitary regulations, prohibitions, etc. Same as "non-tariff barriers". These are measures that have trade-restrictive effects on trade in goods or services, but do not involve tariffs. These include technical barriers to trade and quantitative restrictions. They can include standards intended to promote health and protect the environment. As part of the Doha NAMA negotiations, all WTO members have pledged to reduce non-tariff barriers. Up to now there is no accepted definition for NTBs or no overview which measures are qualified as NTBs [VII, IV, II]
- **OFFICIAL DEVELOPMENT ASSISTANCE (ODA):** Grants or Loans to countries and territories on Part I of the DAC List of Aid Recipients (developing countries) which are: (a) undertaken by the official sector; (b) with promotion of economic development and welfare as the main objective; (c) at concessional financial terms [if a loan, having a Grant Element (q.v.) of at least 25 per cent]. In addition to financial flows, Technical Co-operation (q.v.) is included in aid. Grants, Loans and credits for military purposes are excluded. Transfer payments to private individuals (e.g. pensions, reparations or insurance payouts) are in general not counted. [IX]
- **ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD):** The OECD groups 30 states that share a commitment to democratic government and the market economy. The core of original European and North American members has expanded to include Japan, Australia, New Zealand, Finland, Mexico, Korea and four former communist states in Europe: the Czech Republic, Hungary, Poland and the Slovak Republic [see annex III]. Non-members are invited to subscribe to OECD agreements and treaties, and the organisation now involves in its work some 70 non-member countries from Brazil, China and Russia to least developed countries in Africa and elsewhere. [III]
- "PROPERLY MANAGED" FISHERY: A concept used by Japan in its bottom-up approach. Japan defines a "properly managed" fishery one that is managed in accordance with UNCLOS (United Nations Convention on the Law of the Sea) guidelines, national policies and regional fishing agreements. This is not a WTO concept and some members in the fishing subsidies negotiations have warned introducing it may cross the Thin Green Line. [VI]
- **PROHIBITED SUBSIDIES:** Prohibited subsidies are subsidies that require recipients to meet certain export targets, or to use domestic goods instead of imported goods. They are prohibited because they are specifically designed to distort international trade, and are therefore likely to hurt other countries' trade. They can be challenged in the WTO dispute settlement procedure where they are handled under an accelerated timetable. If the dispute settlement procedure confirms that the subsidy is prohibited, it must be withdrawn immediately. Otherwise, the complaining country can take counter measures. If domestic producers are hurt by imports of subsidized products, countervailing duty can be imposed. [XIII]
- **SCM COMMITTEE:** The SCM Committee is the WTO body dealing with the Agreement on Subsidies and Countervailing Measures (SCM Agreement).

- SERIOUS PREJUDICE: "Serious prejudice usually arises as a result of adverse effects (e.g., export displacement) in the market of the subsidizing Member or in a third country market. Thus, unlike injury, it can serve as the basis for a complaint related to harm to a Member's export interests." [VI]
- SINGLE UNDERTAKING: In the WTO context, this term refers to the manner in which Members accept the results of trade negotiations. A single undertaking requires Members to accept or reject the whole package resulting from the negotiations, instead of being able to selectively accept parts of the negotiations." [VIII]
- **SPECIAL AND DIFFERENTIAL TREATMENT (SDT):** As the GATT evolved from its inception in 1947, and as a growing number of developing countries became signatories to the agreement, member states established the principle in the 1960s that developing countries ought to be granted greater flexibility than developed countries in implementing GATT disciplines because of the economic difficulties they faced. Special and Differential Treatment (SDT or sometimes just S&D) provides formal recognition of the disadvantages developing countries face in the world trading system. The cuts, disciplines and new rules agreed by the Doha round will all include an element of flexibility that reflects the special needs of developing countries. Although the WTO is based on the principle of non-discrimination, developing countries and additional use of sensitive product categories. Least Developed Countries will not be required to make any cuts. [V and II]
- **SUBSIDIES:** A subsidy is support in money or in kind by governments to producers or exporters conferring a benefit for them. There are two general types of subsidies: export and domestic. An export subsidy is a benefit conferred on a firm by the government that is contingent on exports. A domestic subsidy is a benefit not directly linked to exports. The first sentence should not suggest that there is universal accepted definition of a subsidy. The WTO Agreement on Subsidies and Countervailing Measures (SCM) provides certainly such a definition, but as the "Chicken and Egg' problem" shows the SCM definition is not applicable to all WTO agreements. In services, WTO members have neither a definition of a subsidy nor the information to make a definition. Also regarding the Agreement on Agriculture there is intensive debate how to define and deal with domestic and export support measures and all forms of exports subsidies.

"In the SCM, a measure is defined to be a subsidy if (i) it is a financial contribution, (ii) the contribution is made by a government or any public body within the territory of a Member, and (iii) the contribution confers a benefit to the receiving party." Furthermore the SCM differentiates between an actionable subsidy, a non-actionable subsidy and a prohibited subsidy. In addition the WTO uses a box system to classify subsidies according to the extent to which they distort trade. In general terms Green box subsidies are permitted, amber box subsidies are to be targeted for reduction and red box subsidies are forbidden. In agriculture – as set out in the Uruguay Agriculture Agreement - there is no red box, and an additional Blue Box. [based on II, VI and VII, amended]

- **THIN GREEN LINE:** The undefined boundary separating the WTO's sphere of authority from environmental issues. Requiring the WTO to judge whether a subsidy is environmentally harmful is one instance that may be a crossing of the Thin Green Line. [VI]
- Токуо Round: The Tokyo Round negotiations (1973-1979) developed agreements on anti-dumping measures, government procurement, technical barriers to trade and other non-tariff measures which were known as "codes". [X]
- **TOP-DOWN APPROACH:** A subsidy regime for fishing subsidies that has a general prohibition on all fishing subsidies with a Yellow Box (or perhaps green, still undecided) for subsidies that would qualify as exceptions. Proposed categories for a yellow category are subsidies for resource management (including research), access fees, general infrastructure and commissioning vessels. This is advo-

cated by the Friends of Fish, and partly supported by the U.S. In the opinion of the Friends of Fish, a top-down approach would ensure greater transparency, since it would require countries who want their subsidies to qualify for the yellow to notify other members and request their permission to use it. Japan, South Korea and Chinese Taipei have criticized it for placing too much of a burden on the notifying countries. [VI]

URUGUAY ROUND:The Uruguay Round of multilateral world trade negotiations (1986-1993: launched at Punta del Este, Uruguay in September 1986, concluded in Geneva in December 1993, signed by Ministers in Marrakesh, Morocco in April 1994) established the World Trade Organisation as the successor to the GATT in 1995 and greatly increased the scope and depth of world trade rules. New features of the trading system include coverage of the services sector and rules to protect intellectual property rights, as well as the establishment of a binding dispute settlement system. [III, ammended]

Sources for the glossary:

[I] World Bank 2004: World Development Report 2005: A Better Investment Climate for Everyone. WashingtonThe International Bank for Reconstruction and Development / The World Bank

[II] EU Commission, DG Trade 2005: Key technical terms – Doha Round negotiations. DG Trade. DG Trade, Brussels, 28 October 2005.
 [III] EU Commission, DG Trade: Glossary [at: http://europa.eu.int/comm/trade/index_en.htm].

[IV] FoEI / Friends of the Earth International 2004: Cracking the WTO Code. Understanding Trade Terms. FoE International, London.

[V] IATP / Institute for Agriculture and Trade Policy 2004: Glossary for the WTO Agreement on Agriculture. IATP, Minnanapolis.

[VI] Wall, Matthew and Damon Vis-Dunbar 2005: The Standstill in Subsidies [Update]. International Institute for Sustainable Development, Winnipeg. [Update November 2005], pages 19-23.

[VII] WTO GLOSSARY: A guide to "WTO speak". [at http://www.wto.org/english/thewto_e/glossary_e/glossary_e.htm] and other WTO online sources [at http://www.wto.org].

[VIII] 3-D 2004: Jargon Explained. Glossary of Terms Commonly Used in the WTO. 3-D, Geneva [at: http://www.3dthree.org].

[IX] OECD Development Co-operation Directorate (DAC), DAC's Glossary [at http://www.oecd.org].

[X] WTO: Pre-WTO legal texts [at http://www.wto.org/english/docs_e/legal_e/prewto_legal_e.htm].

 $\label{eq:star} \ensuremath{\left[XI \right]}\ensuremath{ University of Toronto / G8 Information Centre: What is the G8? [at http://www.g7.utoronto.ca].$

[XII] US MPA Center: Varying Definitions of MPAs [at http://mpa.gov/information_tools/archives/what_is_mpa.html].

[XIII] WTO: Subsidies and countervailing measures [at http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm8_e.htm#subsidies].

References

- Adelphi Consult, Friends of the Earth Europe and Greenpeace 2005: Is the WTO the only way? Safeguarding Multilateral Environmental Agreements from international trade rules and settling trade and environment disputes outside the WTO. A briefing paper. Berlin, Brussels and Amsterdam, Adelphi Consult, Friends of the Earth Europe and Greenpeace International.
- Agence Europe 2006: Peter Mandelson says Doha trade round blockage 'is not in Brussels' and accuses net farm exporters of taking negotiations hostage. Agence Europe, Brussels, 23 January 2006.
- Anonymous 2004: "Forest activists arrested". In: Anchorage Daily News, 6 August 2004.
- APEC 2000: The Nature and Extent of Subsidies in the Fisheries Sector of APEC Member Economies. APEC Secretariat, Singapore.
- Balmford, Andrew et al. 2002: Economic Reasons for Conserving Wild Nature. In: Science, Vol. 297, 9 August 2002, pp 950-953.
- Balmford, Andrew et al. 2004: The worldwide costs of marine protected areas: In: Proceedings of the National Academy of Sciences of the United States of America (PNAS), Volume 101, 29 June 2004, No 26, pp 9694-9697.
- Brevetti, Rossella 2005: Martin says U.S. failure to respect lumber ruling is 'breach of faith'. In: WTO Reporter, 11 October 2005.
- Brown, David 1999: Addicted to Rent: Corporate and Spatial Distribution of Forest Resources in Indonesia; Implications for Forest Sustainability and Government Policy. [Study, dated 7 September 1999, at: http://www.geocities.com/davidbrown_id/Atr_main.html].
- Brown, David 2001: Why Governments Fail to Capture Economic Rent: The Unofficial Appropriation of Rain Forest Rent by Rulers in Insular Southeast Asia Between 1970 and 1999. Dissertation, June 2001 [available at http://www.geocities.com/davidbrown_id/TOC.htm
- CBD (1992) Convention on Biological Diversity. Rio de Janeiro, Brazil, 5 June 1992.
- CBD (2002): Decisions adopted by the Conference of the Parties to the Convention on Biological Diversity at its sixth meeting The Hague, 7-19 April 2002. Document UNEP/CBD/COP/6/20.
- CBD (2003): Incentive Measures (Article 11): Synthesis report on information on incentive measures received from Parties and organizations. Conference of the Parties to the Convention on Biological Diversity, Seventh meeting, Kuala Lumpur, 9-20 and 27 February 2004. Document UNEP/CBD/C0P/7/INF/13, 17 December 2003.
- CBD (2005): Provisonal Agenda. Conference of the Parties to the Convention on Biological Diversity. Eighth meeting Curitiba, 20-31 March 2006. Document UNEP/CBD/COP/8/1, 20 September 2005.
- CBD (2006): Incentive Measures. Compilation of suggesstions on the development of definitions on incentives measures. Conference of the Parties to the Convention on Biological Diversity. Eighth meeting Curitiba, 20-31 March 2006. Document UNEP/CBD/COP/27/Add.1, 17 January 2006.

- CBD/SBSTTA [Subsidiary Body on Scientific, Technical and Technological Advice] 2003: Ninth meeting Montreal, 10-14 November 2003, item 5.2 of the provisional agenda: Incentive Measures: proposals for the application of ways and means to remove or mitigate perverse incentives. Perverse incentives in biodiversity loss: submission by the Organization for Economic Co-operation and Development (OECD).UNEP/CBD/SBSTTA/9/INF/34, 31 October 2003.
- CBD/SBSTTA [Subsidiary Body on Scientific, Technical and Technological Advice] 2004: Synthesis report on information received from parties, other governments and organizations on the removal or mitigation of perverse incentives. Subsidiary Body on Scientific, Technical and Technological Advice. Tenth meeting, Bangkok, 14-18 February 2005. Document UNEP/CBD/SBSTTA/10/INF/8, 17 December 2004.
- CBD/SBSTTA [Subsidiary Body on Scientific, Technical and Technological Advice] 2005: SBSTTA 10 recommendation. SBSTTA 10 - Tenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice - Bangkok, Thailand (7 - 11 February 2005): Recommendation X/8. Document UNEP/CBD/SBSTTA 9/INF/34.
- CBD/SCBD [Secretary of the Convention on Biological Diversity] 2000: "Incentive Measures: Further Analysis of the Design and Implementation of Incentive Measures", paper prepared for the Fifth Meeting of the Conference of the Parties to the Convention on Biological Diversity, document UNEP/CBD/COP/5/15, 15-26 May, Nairobi.
- CEC [Commission of the European Communities] 2003: Communication from the Commission to the Council and the European Parliament: Forest Law Enforcement, Governance and Trade (FLEGT). Proposal for an EU action plan. Brussels, 21 May 2003 [Document COM (2003) 251 final].
- Constanza. Robert et al, (1997): The value of the world's ecosystem services and natural capital. In: Nature, 5 May 1997, Vol 387, No 6630, pp 253-260.
- Cox, Anthony 2002: OECD Work on Defining and Measuring Subsidies in Fisheries. OECD Workshop on Harmful Subsidies, 7-8 November 2002 Paris. OECD, Paris.
- Cox, Anthony and Carl-Christian Schmidt 2002: Subsidies in the OECD Fisheries Sector: A Review of Recent Analysis and fFuture Directions. OECD Workshop on Harmful Subsidies, 7-8 November 2002 Paris. OECD, Paris.
- de Moor, André and Peter Calamai 1997: Subsidizing Unsustainable Development. Undermining the Earth with Public Funds. Earth Council, San José (Costa Rica).

- Downes, David R. and Brennan Van Dyke 1999: Fisheries Conservation and Trade Rules. Ensuring that Trade Law Promotes Sustainable Fisheries. Greenpeace and CIEL. Washington and Hamburg.
- FAO [Food and Agriculture Organization of the United Nations] 1993: Marine Fisheries and the Law of the Sea. FAO, Rome [FAO Fisheries Circular No. 853].
- FAO [Food and Agriculture Organization of the United Nations] 2003: Subsidies, food imports and tariffs key issues for developing countries. Rome, FAO [at http://www.fao.org/english/newsroom/focus/2003/wto2.htm].
- FAO [Food and Agriculture Organization of the United Nations] 2005: The State of World Fisheries and

Aquaculture 2004. FAO, Rome 2005.

- Forest Research 1999: Study on Non-Tariff Measures in the Forest Products Sector. APEC Committee on Trade and Investment. Rotorura, New Zealand.
- Greenpeace Brazil 2005: Amazon deforestation rates down, but it is too early to celebrate Press Release on 5 December 2005, Manaus, Amazon, Brazil.
- Greenpeace International 2002: M for Money. At least USD 15 billion annually to implement the Convention on Biological Diversity for Ancient Forests. Greenpeace International, Amsterdam.

- Greenpeace International 2004a: U.S. Government paves way for logging in Pristine Tongass Forest. Greenpeace International, Amsterdam.
- Greenpeace International 2004b: Rampant Illegal And Destructive Logging Threatens The World's Third Largest Rainforest. Greenpeace International, Amsterdam.

Greenpeace International 2004c: Indonesia's Forests in Crisis, Greenpeace International, Amsterdam.

ないである

- Greenpeace International 2004d: Amazon Under Threat. Greenpeace International, Amsterdam [Greenpeace Briefing].
- Greenpeace International 2005a: Freedom for the Seas, for Now & for the Future. Greenpeace Prosposals to Revolutionise High Seas Oceans Governance. Greenpeace International, Amsterdam.
- Greenpeace International 2005b: NAFO Case Study. The Northwest Atlantic Fisheries Organisation: A case study in how RFMOs regularly fail to manage our Oceans. By Bunny McDiarmid, Martini Gotje, and Karen Sack. Greenpeace International, Amsterdam.
- Greenpeace International 2005c: Greenpeace report on the CIB site visit in Congo-Brazzaville, December 2004. Greenpeace International, Amsterdam.
- Greenpeace International 2005d: Lawless: How Europe's borders remain open to trade in illegal timber. Greenpeace International, Amsterdam [Ancient forest destruction fact file].
- Greenpeace International 2005e: Trading away our last ancient forests. The threats to forests from trade liberalization under the WTO. Greenpeace International, Amsterdam.
- Greenpeace International 2005f: An Amazon Tree Saga: From the forest to the market. Greenpeace International, Amsterdam.
- Greenpeace International 2005g: Face-saving declaration by the WTO fails to address the real impacts of free trade. Press Release on 18 December 2005, Hong Kong.
- Greenpeace International 2006: Position Paper on the UN Forum on Forest Legally-Binding Instrument on Forests: Why bother? Greenpeace International, Amsterdam.
- Greenpeace UK 2003: Partners in Crime: A Greenpeace Investigation of the links between the UK and Indonesia's timber barons. Greenpeace UK, London.
- IEEP [Institute for European Environmental Policy] 2002: Subsidies to the European Union Fisheries Sector. Paper commissioned by WWF European Fisheries Campaign. Institute for European Environmental Policy, London.
- IIED [International Institute for Environment and Development] 2003: Trade and Forests: Why forests issues require attention in trade negotiations. Policy Views on Trade and Natural Resource Management. IIED, London.
- IMV [Institute for Miljøvurdering/Environmental Assessment Institute] 2005: Environmentally Harmful Subsidies. IMV, Copenhagen [edited by Peter Marcus Kjellingbro and Maria Skotte].
- ITTO [International Tropical Timber Organization] 2004: ITTO Draft Biennial Work Programme for 2004-2005.
- ITTO [International Tropical Timber Organization] 2005: Progress report on the implementation of the ITTO biennial work programme [decision 4(xxxv)] [item 14 of the provisional agenda]. Thirty-ninth session, 7-12 November 2005, Yokohama, Japan Document [ITTC(xxxix)/6, 15 september 2005].
- Katila, Marko and Markku Simula 2005: Sustainability Impact Assessment of proposed WTO negotiations.
 Final report for the forest sector study. Savcor Indufor, Impactment Assessment Research Centre
 & Institute for Development Policy and Management, Manchester, UK [report prepared for The European Commission].

- Kurien, John 2005: Sustainable Development and Fisheries Subsidies: Some Preliminary Thoughts. Paper presented at "Untangling Fisheries and Trade: Towards Priorities for Action", 9-10 May 2005, Geneva, Switzerland Organised by the International Centre for Trade and Sustainable Development.
- Lam, Esther and Rossella Brevetti 2005: Panel Ruling in Favour of ITC Determination on Canadian Lumber AD/CVDs. In: WTO Reporter, 16 November 2005.
- Menotti, Victor 1999: Free trade, free logging. How the World Trade Organization Undermines Global Forest Conservation. International Forum on Globalization, San Francisco.
- Menyasz, Peter 2006: Canada Seeks Further NAFTA Action in Ongoing Softwood Lumber Dispute. In: WTO Reporter, 13 January 2006.
- Myers, Norman and Jennifer Kent 2001: Perverse Subsidies. How Tax Dollars Can Undercut the Environment and the Economy. Island Press, Washington, Boulder.
- Millennium Ecosystem Assessment 2005: Millennium Ecosystem Assessment Report Ecosystems and Human Well-being: Synthesis. Island Press, Washington D.C.
- OECD 2000: Transition to Responsible Fisheries. Economic and Policy implications. OECD, Paris.
- OECD 2003a: The Cost of Managing Fisheries. OECD, Paris.
- OECD 2003b: Review of Fisheries in OECD Countries. OECD, Paris.
- OECD 2003c: Working Party on Global and Structural Policies. Working Group on Economic Aspects of Biodiversity: Perverse Incentives in Biodiversity Loss. Paris 2003 [Document: Unclassified ENV/EPOC/GSP/BI0(2003)2/FINAL].
- OECD 2005a: Environmentally Harmful Subsidies. Challenges for reform. OECD, Paris.
- OECD 2005b: Subsidies: A Way Toward Sustainable Fisheries? OECD, Paris [OECD Policy Brief].
- OECD 2006: Development Co-operation Report 2005. OECD, Paris.
- Oxfam 2002: Milking the CAP. How Europe's dairy system is devastating livelihoods in the developing world. Oxfam International [Oxfam Briefing Paper 34].
- Pearce, David 2003: Environmentally Harmful Subsidies: Barriers to Sustainable Development. In: Environmentally Harmful Subsidies: Policy Issues and Challenges. OECD, Paris, pp 9-32.
- Porter, Gareth 2002a: Fisheries Subsidies and Overfishing: Towards a structured discussion. Fisheries and the environment. UNEP, Geneva.
- Porter, Gareth 2002b: Subsidies and the Environment: An Overview of the State of Knowledge. Draft paper prepared for the OECD Workshop on Environmentally Harmful Subsidies, 7-8 November 2002 Paris. OECD, Paris.
- Porter, Gareth 2004a: A Matrix Approach to Analyzing the Resource Impacts of Fisheries Subsidies. Draft Paper March 2004 UNEP Workshop on Fisheries Subsidies, Geneva April 2004. UNEP, Geneva.
- Porter, Gareth 2004b: Incorporating Impacts on Resources into Disciplines on Fisheries Subsidies: Issues and Options. A discussion paper. March 2004 UNEP Workshop on Fisheries Subsidies, Geneva April 2004. UNEP, Geneva.
- PWC [PriceWaterhouseCoopers] 2000: Study Into the Nature and Extent of Subsidies in the Fisheries Sector of APEC Members Economies. APEC Secretariat, Singapore.
- Pruzin, Daniel 2005: WTO Announces Further Delay in Ruling On U.S. Use of Zeroing in Lumber Duties. In: WTO Reporter, 22 September 2005.
- Pruzin, Daniel 2006: Canada Appeals WTO Ruling Upholding ITC Determination on Canadian Lumber. In: WTO Reporter, 17 January 2006.

- Sachs, Jeffrey D. (ed.) 2005: Investing in Development: A Practical Plan to Achieve the Millennium Development Goals. UN Millennium Project, New York.
- Schorr, David 2004: Healthy Fisheries, Sustainable Trade. Crafting New Rules on Fishing Subsidies in the World Trade Organization. WWF International, Gland.

Schrank, William 2003: Introducing Fisheries Subsidies. FAO, Rome [Fisheries Technical Paper No. 437].

and the second second

- Sizer, Nigel 2000: Perverse Habits: The G8 and Subsidies that Harm Forests and Economies. World Resources Institute, Washington [Forest Notes June 2000].
- Steenblik, Ronald 2003: Subsidy Measurement and Classification: Developing a Common Framework. In: Environmentally Harmful Subsidies: Policy Issues and Challenges. OECD, Paris, pp 101-142.
- Rice, Tim et al. 2000: Trade Liberalisation and its Impacts on Forests an overview of the most relevant issues. FERN, Brussels.
- RIIA [Royal Institute of International Affairs] / FERN 2002: Controlling Imports of Illegal Timber. Options for Europe. Royal Institute of International Affairs and FERN, London, Brussels.
- 3-D 2004 [Trade Human Rights Equitable Economy]: Jargon Explained. Glossary of Terms Commonly Used in the WTO. 3-D, Geneva [at: http://www.3dthree.org].
- Templet, Paul H. 1995: Grazing the Commons: An empirical analysis of externalities, subsidies, and sustainability. In: Ecological Economics 12, pp 141 – 159.
- Toepfer, Klaus 2000: Presentation to the WTO Committee on Trade and Environment, Geneva, 24 October 2000.

Trebilcock, Michael J. and Robert Howse 1999: The Regulation of International Trade. Routledge, London. UNCTAD 2000: UNCTAD Handbook of Statistics 2000. United Nations, New York and Geneva.

- UNCTAD 2004: Preparation of a Successor Agreement to the International Tropical Timber Agreement, 1994. Working document resulting from the first session (26 30 July 2004) of the Conference for the Negotiation of a Successor Agreement to the International Tropical Timber Agreement, 1994. UNCTAD, Geneva [Document TD/TIMBER.3/L.3, 22 October 2004].
- UNCTAD 2005a [Trade and Development Board, Commission on Trade in Goods and Services, and Commodities. Expert Meeting on Dynamic and New Sectors of World Trade Geneva, 24-26 October 2005, Item 3 of the provisional agenda]: Promoting Participation of Developing Countries in Dynamic and New Sectors of World Trade: Fishery Products. Background note by the UNCTAD secretariat, Geneva [Document GENERAL TD/B/COM.1/EM.28/3, 1 September 2005].
- UNCTAD 2005b: Economic Development in Africa. Rethinking the Role of Foreign Direct Investment. United Nations, New York and Geneva.
- UNCTAD 2006: International Tropical Timber Agreement, 2006. UNCTAD, Geneva [United Nations Conference for the Negotiation of a Successor Agreement to the International Tropical Timber Agreement, 1994, Fourth part, Geneva, 16-27 January 2006. Document TD/Timber.3/12, 1 February 2006].
- UNEP 2001: Chairman's Summary: UNEP Fisheries Subsidies Workshop Geneva, 12 February 2001. UNEP, Geneva.
- UNEP 2004: Fisheries Subsidies and Sustainable Fisheries Management. A UNEP Update, June 2004. UNEP, Geneva.
- UNEP 2005: Press Statement by Monique Barbut, Director, Division of Technology, Industry and Economics, United Nations Environment Programme (UNEP) at the UNEP-WWF High-Level Press Event at Sixth WTO Ministerial Conference on 14 December 2005.

- USDA [United States Department of Agriculture] Forest Service 2005: Forest Service Performance and Accountability Report – Fiscal Year-2004. USDA Forest Service, Washington [at http://www.fs.fed.us/plan/par/2004/].
- van Beers, Cees and Jeroen van den Bergh 2001: Perseverance of Perverse Subsidies and their Impact on Trade and Environment. In: Ecological Economics 36, pp 475-486.
- van Beers, Cees and André de Moor 2001: Public Subsidies and Policy Failures: How Subsidies Distort the Natural Environment, Equity and Trade and how to Reform them. Edward Elgar, Cheltenham.
- Vannuccini, Stefania 2004: "Overview of Fish Production, Utilization, Consumption and Trade". FAO, Rome.
- Verweij, Pita A. and Michiel de Man 2005: We cannot afford more biodiversity loss: the urgency of protected area financing. Copernicus Institute for Sustainable Development and Innovation, Utrecht University, December 2005 [Report commissioned by Greenpeace International].
- von Moltke, Konrad 2003: Negotiating Subsidy Reduction in the World Trade Organization. International Institute for Sustainable Development, Winnipeg.
- Wall, Matthew and Damon Vis-Dunbar 2005: The Standstill in Subsidies [Update]. International Institute for Sustainable Development, Winnipeg. [Update November 2005].
- Ward, Barbara and René Dubois 1972: Only One Earth: The Care and Maintenance of a Small Planet. Numerous publishers.
- WBGU [German Advisory Council on Global Change] 2003: World in Transition. Towards Sustainable Energy Systems. WBGU, Berlin.
- WBGU [German Advisory Council on Global Change] 2004: World in Transition. Fighting Poverty through Environmental Policy. WBGU, Berlin.
- Wiggerthale, Marita 2005: What's wrong with EU agricultural subsidies? Position Paper July 2005 [http://www.fairer-agrarhandel.de].
- WRI [World Resources Institute] in collaboration with United Nations Development Programme, United Nations Environment Programme, and World Bank 2005: World Resources 2005: The Wealth of the Poor - Managing Ecosystems to Fight Poverty. WRI, Washington, DC.
- WTO 1994a: Agreement establishing the World Trade Organization. GATT, Geneva.
- WTO 1994b: Agreement on Subsidies and Countervailing Measures. GATT, Geneva.
- WTO 2000: Environmental Benefits of Removing Trade Restrictions and Distortions: The Fisheries Sector. Note by the Secretariat. WT/CTE/W/167, 16 October 2000. WTO, Geneva.
- WTO 2001: Ministerial Declaration. Adopted on 14 November 2001. WT/MIN(01)/DEC/W/1. WTO, Geneva.
- WTO 2002a: Environmental Data Base for 2001. WT/CTE/EDB/1, 31 May 2002. WTO, Geneva.
- WTO 2002b: Adverse Trade and Conservation Effects of Fisheries Subsidies. Communication from the United States US TN/RL/W/21, 15 October 2002. WTO, Geneva.
- WTO 2002c: Japan's Basic Position on the Fisheries Subsidies Issue. TN/RL/W/11, 2 July 2002. WTO, Geneva.
- WTO 2002d: Proposal from the People's Republic of China on Fisheries Subsidies. TN/RL/W/9, 20 June 2002. WTO, Geneva.
- WTO 2003a: United States Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada. Report by the Panel. WT/DS257/R, 29 August 2003. WTO, Geneva.
- WTO 2003b: Possible Approaches to Improved Disciplines on Fisheries Subsidies. Communication from Chile. TN/RL/W/115, 10 June 2003. WTO, Geneva.

- WTO 2003c: Submission of the European Communities to the Negotiation Group on Rules Fisheries Subsidies. TN/RL/W/82, 23 April 2003. WTO, Geneva.
- WTO 2003d: Preparation for the Fifth Session of the Ministerial Conference. Draft Cancun Ministerial Text. Second Revision. JOB(03)/150/Rev.2., 13 September 2003. WTO, Geneva.

- WTO 2003e: Environment-related Issues in the Negotiations on WTO Rules. Statement by Mr. Jan Woznowski at the regular session of the Committee on Trade and Environment of 29-30 April. WT/CTE/GEN/10, 11 April 2003. WTO, Geneva.
- WTO 2003f: Analysis on the Relationship Between Fisheries Subsidies and Over-exploitation of Fisheries Resources. Submisssion by Japan. WT/CTE/W/226, 24 April 2003. WTO, Geneva.
- WTO 2004a: Fisheries Subsidies. Communication from New Zealand. TN/RL/W/154, 26 April 2004. WTO, Geneva.
- WTO 2004b: Fisheries Subsidies. Communication from Argentina, Chile, Ecuador, New Zealand, Philippines, Peru. TN/RL/W/166, 2 November 2004. WTO, Geneva.
- WTO 2005a: Contribution to the Discussion on the Framework for the Disciplines on the Fisheries Subsidies. Communication from Japan; the Republic of Korea; and the separate customs territory of Taiwan, Penghu, Kinmen and Matsu. TN/RL/W/172, 22 February 2005. WTO, Geneva.
- WTO 2005b: Paper on Fisheries. Paper from the European Communities. TN/RL/GEN/39, 12 May 2005. WTO, Geneva.
- WTO 2005c: Contribution to the Discussion on the Framework for Disciplines on Fisheries Subsidies -Aquaculture. Submission from Australia, Ecuador and New Zealand. TN/RL/GEN/54, 1 July 2005. WTO, Geneva.
- WTO 2005d: Contribution to the discussion on the framework for disciplines on fisheries subsidies. Paper from Brazil. TN/RL/GEN/56. 4 July 2005. WTO Geneva.
- WTO 2005e: WTO fisheries subsidies disciplines. Architecture on fisheries subsidies disciplines. Paper (Revision) from Antigua and Barbuda; Barbados; Dominican Republic; Fiji; Grenada; Guyana; Jamaica; Papua New Guinea; St. Kitts and Nevis; St. Lucia; Solomon Islands; and Trinidad and Tobago. TN/RL/GEN/57/Rev.2, 13 September 2005. WTO, Geneva.
- WTO 2005f: Fisheries subsidies. Paper from Brazil; Chile; Colombia; Ecuador; Iceland; New Zealand; Pakistan; Peru and the United States. TN/RL/W/196, 22 November 2005. WTO, Geneva.
- WTO 2005g: Market Access for Non-Agricultural Products. Liberalisation of Trade in Fish and Fish Products. Communication from Canada, Iceland, New Zealand, Norway, Singapore and Thailand. TN/MA/W/63, 18 October 2005. WTO, Geneva.
- WTO 2005h: Market Access for Non-Agricultural Products. Tariff Liberalization in the Forest Products Sector. Communication from Canada, Hong Kong China, Iceland, Thailand and the United States. TN/MA/W/64, 18 October 2005. WTO, Geneva.
- WTO 2005i: Ministerial Conference. Sixth Session, Hong Kong, 13 18 December 2005, Doha Work Programme Ministerial Declaration, Adopted on 18 December 2005. WT/MIN(05)/DEC, 22 December 2005, WTO, Geneva.
- WWF 2001: Hard facts, Hidden Problems. A Review of Current Data on Fishing Subsidies. A WWF Technical Paper. October 2001. WWF, Washington, Gland.
- WWF 2002: Turning the Tide on Fishing Subsidies. Can the World Trade Organization Play a Positive Role? WWF International, Gland.





GREENPEACE INTERNATIONAL

Ottho Heldringstraat 5 1066 AZ Amsterdam The Netherlands Tel: +31 20 7182000 Fax: +31 20 5148151 Email: daniel.mittler@int.greenpeace.org

