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Published in:
Handbook Of Globalization and The Environment

2006

Document Version:
Early version, also known as pre-print

The World Trade Organization: Free Trade and Its Environmental Impacts

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"I see no conflict between trade and the environment.

Countries and international institutions must simply ensure that they pursue their various policies coherently."

(Pascal Lamy, WTO-Director General, 28 March 2006)[1]

At first glance, Pascal Lamy's statement is an utmost optimistic expression of the classical win-win hypothesis, propagating co-existence, mutual support and synergism between trade liberalization and environmental protection. However, the second phrase introduces an important qualification: obviously, Lamy concedes that the untouched state of nature between both fields is not *that* free of conflicts.[2] Taken at face value, the quote insinuates that there is no inherent harmony among free trade and the environment; rather, such harmony needs to be constructed, i.e. brought about by active policy coordination. As a major source of this coordination Lamy names "international institutions" such as the WTO. This view of a constructed coherence also implies an important distinction which is often ignored: the WTO's impact on the environment and free trade's impact on the environment are not necessarily the same. In fact, through its

[1] Lamy 2006.
[2] Indeed, in the very same speech, Lamy concedes that it is "undoubted that completely unregulated trade can be harmful for biodiversity" (Lamy 2006).

regulatory efforts, the WTO might significantly alter the consequences of free trade for the global ecology and other domains.

Thus, in three aspects, the above quote by the WTO Director-General has marked out the course of this chapter. I will start out with an overview of common assumptions on the impact of free trade on the environment – assumptions which, very much like the first part of Lamy's statement, are all-encompassing and deterministic. From there, I will narrow down the scope of examination to specific and immediate hardware-to-hardware impacts: akin to the second part of the above statement, the emphasis shall be put on the WTO's efforts to actively ensure coherence between international trade law and environment regulations. By the same token, I will also take into account the role of countries in these coordinative efforts, which is a third factor named by Lamy. As will be shown, the ongoing deadlock among WTO members on ecological questions has so far prevented a more comprehensive approach, thereby leaving the momentum to the organization's dispute settlement system.

1. INTRODUCTION: WHAT IMPACT AND HOW TO ASSESS IT?

1.1. CLASSICAL ASSUMPTIONS ABOUT THE IMPACT OF TRADE LIBERALIZATION

Major controversies about the (in-)coherence between trade liberalization on the one hand and environmental protection on the other date back to the early 1970ies, particularly instigated by the 1972 United Nations Conference on the Human Environment (UNCHE) in Stockholm. In the pre-negotiations for this conference, both representatives of developed and developing countries for the first time discussed the trade-environment nexus in a larger setting. Another forum for such early debates was the OECD which adopted "guiding principles concerning the international

economic aspects of environmental policies" in May 1972. Also the GATT tried to join the party and established the 1971 Group on Environmental Measures and International Trade (EMIT). In these various settings, the compatibility question was raised out of the emerging awareness that new transboundary environmental challenges had to be tackled within an international setting.

Parallel to this debate among practitioners, academics from different disciplines such as international economics, international law or political science sparked off similar discussions, most noteworthy in the aftermath of the 1972 "Limits to Growth" Report of the Club of Rome (Meadows et al. 1972). Political theorists came up with a multitude of mostly normative models about how the objectives of sustainability and growth could be, if at all, reconciled. Even when ignoring the more utopian blueprints of these earlier debates, and instead concentrating on more realistic models, it is still possible to paradigmatically distinguish the protagonists of a win-win hypothesis from an eco-fundamentalist position.[3]

At the occasion of the WTO's establishment, these two groups voiced major assumptions and predictions about the environmental impact of the new organization. The only expectation which both sides, skeptics and optimists, had in common was that the WTO would bring about a further intensification and liberalization of global trade. Bernauer (1999: 44ff.) summarizes the perspective of the trade-skeptical group (e.g. Eckersley 1992; Hardin 1993; Ophuls 1992, 1997) along the following well-known lines of arguments:

1. Intensified international trade will promote economic growth across the globe, thus accelerating the current rate of environmental exploitation.
2. Further trade liberalization will exploit and freeze the low environmental standards of certain countries, in particular least developed countries (LDCs). With re-imports of end-

[3] This is not to disregard positions who occupy middle ground between both extremes, e.g. the proponents of green trade such as Daly 1996, Gray 1993 or Norton 1991. Clearly the below lists of arguments shall provide a paradigmatic introduction to the issue and are far from being exhaustive.

products facilitated, developed countries will be given further incentive to outsource ecologically detrimental industries into LDCs, along with the relocation of hazardous goods, e.g. wastes or pollutants. In short, the WTO will promote the transfer of risks to the global South, leading to a faster depletion of its rich environmental assets.

3. Correspondingly, stronger trade liberalization will threaten previously high environmental standards in other countries, in particular industrialized countries. Through the adjustment and abolition of commercial barriers, it will spark off a race to the bottom, severely obstructing domestic environmental policies and safety standards as well as local, environmentally sound ways of life.

Right on the other side of the spectrum of opinions, proponents of a harmony hypothesis (e.g. Bhagwati and Srinivasan 1996; Cairncross 1991) and advocates of "Free Market Environmentalism" (Anderson and Leal 1991, 2001) stress the considerable synergy between environmental and commercial objectives. Naturally, major representatives of the world trade regime adopted their position and repeatedly stressed the win-win situation, e.g. Pascal Lamy, as quoted above, or former GATT Director-General Arthur Dunkel.[4]

Their key tenets include (cf. Kulessa and Schwaab 2000):

1. Intensified international trade will promote economic growth and welfare across the globe, thus raising the international awareness of post-material, long-term goals such as environmental protection.
2. Further trade liberalization will enhance the dissemination of environmentally sound products and technologies. By the same token, it will challenge protectionist policies which favour environmentally harmful production methods.

[4] Arthur Dunkel: "International trade and the protection of the environment are at heart natural allies" (quoted from Eglin 1998: 253).

3. International trade appears un-ecological because it has so far not been applied appropriately and thoroughly. The WTO bears the potential to set things right on a global scale: potential conflicts between environmental protection and economic globalization can now be solved in a comprehensive manner, e.g. by integrated accounting which internalizes ecological costs (cf. Barry 1999: 143f.; Bartelmus 1994: 31ff.; Rivera-Batiz and Oliva 2003: 614).

1.2. LOOKING FOR A SIGNPOST: THE WTO'S EFFECT ON DOMESTIC AND INTERNATIONAL ENVIRONMENTAL POLICIES AND STANDARDS

The deterministic nature of these and other classical assumptions strongly insinuates the need for profound empirical evidence. *But how to provide this evidence, i.e. how to reliably assess the WTO's impact on the environment?* A closer look at the aforementioned hypotheses might at least help to distinguish possible research endeavours from impossible ones. In fact, any clear-cut corroboration of the respective first item on both lists – each one focusing on economic growth, though under reversed premises – seems unfeasible. The causal chain from free trade to ecological degradation (or improvement) is simply too complex and too long for unfailingly sorting out the influence of the numerous third factors on the environment, let alone side-effects and unintended consequences.[5] These difficulties notwithstanding, several efforts have been made in order to develop and apply tools for a comprehensive environmental impact assessment of the international trade regime. Alas, "empirical studies of the social and ecological effects of

[5] Moreover, since economic growth assumes the status of an intervening variable in such a research design, one would additionally have to substantiate the causality between free trade on the one side and economic growth on the other.

free trade are still in their early days" and first need further methodological development (Santarius et al. 2004: 49; cf. Sampson 2002: 19).[6]

Regarding the second win-win assumption (i.e. trade liberalization curbs ecologically harmful subsidies), the avenue of causation from the WTO to a potentially positive environmental impact appears significantly shorter. And indeed, in the fisheries sector, the link between depleted fish stocks and trade-distorting subsidies is well accepted. Likewise, subsidies in the agrarian sector may encourage intensive farming, and, subsequently, overgrazing, land conversion and the loss of forests (Sampson 2002: 21). Moreover, subsidies on carbon-intensive polluting sources, as they currently exist in a number of OECD member states, hamper the expansion of renewable energies in these countries. However, as plausible as these arguments might sound, it is too early to praise the WTO's role as a global subsidies remover. As is well known, controversies about agricultural subsidies are still at the core of WTO-internal disputes, and they are far from being solved. Similarly, lengthy discussions in different WTO forums on the removal of fisheries subsidies have not yet produced significant results.[7] The same goes for the debate on the export of domestically prohibited goods (DPGs) which present a danger to the environment or the health of humans, plants or animals.[8] As will be shown in section 2.2, this stagnation or idleness goes back to the fact that the relevant organs have no authority to develop a proper WTO

[6] Since 1999, a very promising instrument for Sustainability Impact Assessment (SIA) has been designed and partially tested on behalf of the European Commission (e.g. for the forest sector, cf. Katila and Simula 2005). However, critics complain about a pro-liberalization bias of the original SIA design, since the conceptions do not include scenarios of less or no trade liberalization (Santarius et al. 2003: 41). Further studies of environmental impact assessment were announced by Canada and the United States (see also section 5.3).

[7] Discussion on fisheries subsidies are taking place in the context of the Agreement on Subsidies and Countervailing Measures (SCM) in the Negotiating Group on Rules. Furthermore, such subsidies have been discussed at length in the CTE under item 6 of its work program (http://www.wto.org/English/tratop_e/envir_e/envir_backgrnd_e/c4s1_e.htm [23 April 2006]).

[8] The GATT had taken up this subject as early as 1982 and established a notification system which however proved unsuccessful and was abolished after eight years. Though the DPG issue was included into the Marrakesh Agreement, further attempts to revive the notification system have failed; apparently, the WTO has left the matter to multilateral agreements which were originally designed for the issue, e.g. the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (http://www.wto.org/English/tratop_e/envir_e/envir_backgrnd_e/c4s3_e.htm [23 April 2006]).

environmental policy. All in all, these current observations about dull efforts of subsidies removal indicate that the above assumption keeps standing on thin ice.[9]

Finally, the third win-win assumption about the need for adequate ecological accounting is even less helpful for the WTO outlook of this chapter. Such ideas – in their most modest forms like environmental taxing which rather runs counter to WTO principles – have at best been realized in a handful of national economies of highly industrialized countries. And they certainly play no role whatsoever in current WTO negotiations.

When bearing in mind these methodological or empirical obstacles for an investigation on most of the above assumptions, what is left for a more reliable examination are but two of the listed predictions voiced by trade-skeptics (items 2 and 3). Both hypotheses – risk transfer and race to the bottom – share a focus on environmental standards and rules. But it is particularly the race-to-the-bottom assumption whose causal inference stops at these standards, treating them as dependent variables. In other words: this third assumption does not focus on end-of-the-pipe impacts on the environment, but rather on the WTO's more immediate effects on given environmental policies and norms both multilateral and domestic. This immediacy should allow for more dependable – though far from exhaustive – findings about the international trade regime's environmental role. In the terminology of international regime theory, such an approach corresponds with an *output* level perspective (cf. Miles et al. 2002: 10ff.; Oberthür and Gehring 2006; Underdal 2004). This perspective implies that the ensuing sections will focus on the institutional hardware (*output*), i.e. the bodies and norms produced by an international regime (in case of the trade regime: the WTO and the agreements under its auspices) (section 2) and their

[9] Moreover, the WTO Secretariat anyway voiced concerns about the extent to which the positive ecological impact of the removal of subsidies could be correctly assessed. In a 1997 background note on "Environmental Benefits of Removing Trade Restrictions and Distortions", the secretariat pointed out that these benefits are likely to be indirect and not readily identifiable in general terms (Doc. WT/CTE/W/67, http://docsonline.wto.org/imrd/directdoc.asp?DDFDocuments/t/wt/cte/w67.wpf [23 April 2006]).

respective influence on the output of other institutions – for our purpose: domestic environmental policies and standards (section 3) as well as multilateral environmental agreements (section 4).[10]

2. THE WTO'S ENVIRONMENTALLY RELEVANT INSTITUTIONS

Right from the start in 1995, the WTO has addressed the compatibility of international trade and environmental protection – both through the establishment of specific bodies (see section 2.2) and via particular rules in some its agreements, most prominently by recognizing the objective of sustainable development in the preamble of the WTO Agreement (see section 2.3). However, one should not misinterpret this initial inclusion of environmental as either brand-new or issue-specific: on the one hand, during the Uruguay Round (1986-1993), negotiators took efforts to integrate a variety of issue-areas such as international finance, development assistance, health or civil aviation;[11] on the other hand, the old, pre-WTO GATT had not completely ignored the trade implications of environmental policies.

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[10] Besides the *output*-level, two further levels of effectiveness grasp the less immediate consequences of a regime (which in turn are harder to be assessed in a clear-cut manner). These levels are: the *outcome*-level where a regime exerts behavioral effects on relevant actors, e.g. states parties, and the *impact*-level of the ultimate consequences of a regime on a given subject matter, e.g. biological diversity (cf. Underdal 2004).
NB: Given that the remainder of this chapter will focus on one level, namely the *output* effectiveness of the WTO, the term "impact" will not be used in the narrow sense of this typology, but in a general sense, i.e. interchangeably with terms like "effect" or "consequence".
Moreover, regime theorists have come up with other well-cited typologies of regime effectiveness. For instance, Young and Levy (1999: 4ff.) distinguish between five possible approaches to the concept of regime effectiveness:

1. *Problem-Solving Approach* (= degree to which the problem that prompts regime creation is eliminated)
2. *Legal Approach* (= degree to which contractual obligations are met)
3. *Economic Approach* (= compliance [i.e. legal approach] + degree of economic efficiency)
4. *Normative Approach* (= degree of achievement of normative principles, e.g. fairness, participation, etc.)
5. *Political Approach* (= degree of causing changes in the behavior/interests of actors and in the policies/performances of institutions)

Whereas the *output*-level as such is not covered by any of these categories, types 2 and 5 correspond with a regime's *outcome* effectiveness, and type 1 clearly equals the *impact* effectiveness of the above typology.

[11] Among the WTO bodies dealing with these issues are the Trade and Finance and Trade Facilitation Division, the Training and Technical Cooperation Institute, the Committee on Trade-Related Investment Measures, the Committee on Trade and Development, the Sub-Committee on Least-Developed Countries, the Committee on Trade in Civil Aircraft, etc.

2.1. THE OLD GATT AND THE ENVIRONMENT

It took the GATT no less than 24 years to explicitly address the connection between international trade and the environment. In November 1971, on the verge of the 1972 Stockholm Conference on the Human Environment, the GATT Council of Representatives established the Group on Environmental Measures and International Trade (EMIT). Nonetheless, it would be quite an overstatement to speak of a continuous environmental agenda from the early 1970s onwards: in fact, the EMIT never convened in the first twenty years after its establishment. And it took up to 1989, until another "organ" with an environmental subject – a working group on trade in hazardous substances – was set up.[12] It was thus only the late 1980s and early 1990s when a second environmental debate took place within the architecture of the GATT, clearly instigated by key events such as the publication of the Brundtland Commission's report on "Our Common Future" (WCED 1987) or the 1992 UN Conference on Environment and Development in Rio. This second debate "came at an awkward time for GATT signatories, since the Uruguay Round entered a deep crisis in the early 1990s and the agricultural dispute between the USA and the EU threatened to scupper the talks" (Santarius et al. 2004: 10). Though advocated by major industrialized countries, any comprehensive approach to ecological standards was blocked by developing countries who interpreted them as a disguise for protectionist measures (Eglin 1998: 252) (see Section 2.2).

[12] cf. http://www.wto.org/English/tratop_e/envir_e/envir_backgrnd_e/c1s1_e.htm (14 April 2006). The EMIT should convene at the request of Contracting Parties, with participation being open to all. However, this only happened in 1991; again, an upcoming global conference, the 1992 UN Conference on Trade and Environment (UNCED), helped put the environment on the WTO's agenda. Several member states of the European Free Trade Area (EFTA) requested EMIT's activation in order to debate the trade-related impacts of environmental measures.

Given the rather sporadic and mostly consultative nature of these initiatives (due to the controversies among member states), the baseline for the old GATT's environmental agenda is not to be found in the activities of its political bodies. Instead, this agenda has mostly been externally imposed by some of the states parties, namely when invoking the GATT Panel in order to solve disputes about national environmental policies: it is thus the dispute settlement system, where the old GATT repeatedly shaped and broadened its environmental role – a tradition which was well picked up by the WTO, though as will be shown, with more favorable implications for environmental concerns. The importance of these judicial decisions not withstanding, the next section will focus on a more obvious novelty of the WTO, namely bodies particularly designed for the trade-environment nexus.

2.2. WTO BODIES OF ENVIRONMENTAL RELEVANCE

The major institutional manifestation of the WTO's environmental agenda is the Committee on Trade and Environment (CTE). Following the 1994 Ministerial Decision on Trade and Environment, the committee was established in January 1995, i.e. at the very onset of the organization itself. The CTE has a standing agenda and includes all WTO members as well as several observers from intergovernmental organizations (but not from NGOs) which come together at least two times a year for formal meetings plus further informal ones if necessary. Its chief mandate is to ensure a positive interaction between trade and environment measures inside and outside WTO law – and to recommend appropriate modifications to the latter where necessary. Subsequently, a major portion of its work addresses the relationship between WTO law and the trade-related rules and measures of multilateral environmental agreements (MEAs) (cf. Sampson 2002: 17). Further items on the committee's agenda include concrete issues such as

taxes, technical regulations, labeling, transparency and market access as well as arrangements with NGOs.

The CTE is supported by one of the WTO Secretariat's divisions, the Trade and Environment Division. The division provides technical assistance to WTO members, reports to them about discussions in other intergovernmental organizations – including negotiations about trade-related measures in MEAs – and maintains contacts with non-governmental actors.[13]

Given these new bodies and their mandates, is it appropriate to speak of a proper WTO environmental *policy*? The answer to this question is clearly no. The Trade and Environment Division is merely performing a service function while the WTO Secretariat has not been endowed with any competency to set and exert its own environmental agenda. Likewise, the CTE is anything but pro-active on ecological matters: first of all, the committee's mandate is *not* to tackle free trade's impact on the environment; instead, it is supposed to act under exactly reversed premises: to keep to the effects of environmental measures on trade policy (Santarius et al. 2004: 48). And second, least common denominator outcomes will rather be the rule than the exception, since the CTE does not consist of independent agents, but of governmental representatives, its reports resting upon consensual decisions. As a result, though a good deal of promising modifications to WTO law has been discussed in the committee, the actual final reports on the matter frequently turned out rather vague. To set things right: this lack of environmental momentum from within the WTO was well intended by its creators, bearing justice to concerns voiced mostly by developing countries who feared a green conditionality for market access. During the Uruguay Round, members therefore agreed that "the WTO is not an environmental protection agency and that it does not aspire to become one. Its competence in the

[13] Moreover, the division provides service to the Working Group on Technical Barriers to trade (WGTBT), if the TBT Committee so decides (http://www.wto.org/english/thewto_e/secre_e/div_e.htm [14 April 2006]).

field of trade and environment is limited to trade policies and to the trade-related aspects of environmental policies which have a significant effect on trade."[14]

2.3. WTO RULES OF ENVIRONMENTAL RELEVANCE

Before depicting some of the important WTO regulations of potential environmental impact, it is vital for the assessment of this impact to anticipate a key observation: the environmental agenda of the WTO is mostly set by its rules and their interpretation in the course of dispute settlement. Two peculiar aspects endorse this assessment. In the first place, as mentioned above, the WTO secretariat has no competency for its own environmental policy, hence rendering fairly impossible any *ex ante* coordination of regulatory activities in the fields of trade and environment (Bernauer 1999a: 132f.). Second, though WTO law presents no closed legal circuit, it implies an essential particularity as compared to other bodies of public international law: WTO obligations are *reciprocal* rules, i.e. unlike MEA regulations (which are *integral* rules), they are not "immutable obligations to be respected at all times and as between all WTO members", but instead "can, at times, be supplemented or deviated from as between some or all WTO members, by other rules of international law" (Pauwelyn 2003: 52ff.). As a result, WTO rules, as the ones presented in the remainder of this section, are not carved in stone or universally applicable; instead, their impact is comparably flexible, such that *ad hoc*-decisions in the course of WTO dispute settlement present the *ultima ratio* of the WTO's legal stance on ecological issues. One

[14] http://www.wto.org/English/tratop_e/envir_e/envir_backgrnd_e/c1s3_e.htm (14 April 2006). Nonetheless and especially in the new millennium, several efforts have been made to provide the CTE with a more active role and to extend its mandate. Some of these attempts will be considered in section 5.

should therefore not mistake the following principles for an indisputable corroboration of arguments brought up by trade skeptics about the watering down of environmental standards.

Two of the most noteworthy WTO principles which overlap with the trade provisions of some MEAs are included in the GATT and in the General Agreement on Trade in Services (GATS). According to the *most-favored-nation clause* (MFN) in Article I GATT (Article II GATS), parties have to grant any trade advantage (with regard to custom duties and charges of any kind) which they concede to any one country (no matter if or not this country is a party to the WTO) to all members. In the so called *national treatment principle* (NT), Article III GATT (Article XVII GATS) prohibits the discrimination of foreign goods (services) as compared to like domestic goods (services). The chief environmental implication of this principle stands and falls with the understanding of the term "like products". Taken at face value, GATT and GATS do generally not allow for the discrimination of goods and services on the basis of their origin, regardless of environmental or labor standards in the respective countries. However, as will be shown in the upcoming section, this understanding has been subject to changes across various reports of the GATT's and WTO's Dispute Settlement Body (DSB).[15]

Moreover, GATT and GATS include provisions which qualify the applicability of the MFN and NT principles. For instance, waivers can be granted to non-WTO environmental rules, on a case-by-case basis under Article 25(5) GATT. However, in order to take effect, this procedure would require the consent of a three-quarters majority of WTO members, which is a quite unlikely scenario. A more promising approach for suspend the non-discrimination principles is based on Article XX GATT (and Article XIV GATS respectively) which grants "general exceptions" to the agreement's regulations. Eligible for such exceptions are measures "necessary to protect

[15] In addition to the MFN and NT clauses, another prominent anti-discrimination principle in WTO law is the prohibition of quantitative restrictions on imports and exports under Art XI GATT and Articles XVI + VI GATS respectively.

human, animal or plant life or health" (XX[b]) and measures "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption" (XX[g]).

The abstract phrasing of both formulas open up considerable room for speculations – and hence leave more concrete interpretations to the Dispute Settlement Body. Regarding clause XX(b), *inter alia*, controversies have arisen about the inclusion of measures to save not only domestic, but also extraterritorial human, animal or plant life, i.e. in the countries of origin. Likewise, debates addressed the scope of allowable measures under clause XX(g): does it only apply to restrictions of the trade in endangered natural resources, or also to import bans on goods whose process and production methods (PPMs) have endangered these very resources (Neumann 2002: 139)? Furthermore, the term "exhaustible natural resources" itself needed clarification; in the decision on the so called Shrimp Turtle Case, "endangered species" were finally subsumed under the term (1998) (cf. Chambers 2001: 96ff.).

The most remarkable difference in the conditionality of both clauses is the introduction of a so called necessity test: the GATT only demands measures under clause XX(b) to be "necessary"; clause XX(g) contains no similar wording. This implies that the latter does not require eligible measures to be as little trade-restricting as possible; measures under clause XX(b) however, have to undergo a test which has to reveal that no measure less inconsistent with the GATT would have an equally positive effect for the protection of human, plant or animal life.[16]

[16] On the other hand, Art. XX(g) measures have to stand a so called "chapeau test" or "cap test" which according to Chambers (ibid.) is perhaps the most difficult to apply: In this test, certain general provisions must be met such as non-discrimination or non-arbitrariness in order to strike a balance "between the right to invoke the exception and the rights of Members to the main provisions contained in the WTO". Such main provisions with an ecological bias can be found in the preamble of the Agreement Establishing the World Trade Organization (WTO Agreement) which thus presents another major source of environmentally relevant WTO law. The preamble's first paragraph explicitly names sustainable development as well as the protection and preservation of the environment as objectives of equal importance as economic growth. Regarding the efforts to be taken by WTO members in order to pursue these

Another WTO treaty with far-reaching environmental implications is the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) – not only because it includes the non-discrimination principles such as MFN and NT. In fact, with its predominant goal to protect certain rights (instead of facilitating international trade which is the core goal of the bulk of WTO treaties), TRIPS takes a rather exceptional approach. The agreement's Part II on "Standards concerning the availability, scope and use of Intellectual Property Rights" touches upon the issues of biological diversity and genetic engineering. Article 27(3), states that "[m]embers shall provide for the protection of plant varieties either by patents or by an effective *sui generis* subsystem or by any combination thereof".[17] This promotion of individual patents can have ambiguous ecological consequences while the protection of intellectual property rights of environmentally sound procedures and products might promote the dissemination of such technologies and goods, the privatization of hitherto openly accessible knowledge and publicly protected species can equally threaten biological diversity (cf. Neumann 2002: 155ff.).

Finally, the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Technical Barriers to Trade (TBT) are WTO treaties with a potential environmental impact – especially, due to their treatment of PPMs: both agreements product labeling, if the production method has an effect on the final characteristics. In addition, the SPS permits safety measures up to import bans, however depending on scientific proof (to be provided by the importing party) of any health risks. This conditionality contradicts the genuine precautionary principle which puts the burden of proof on the exporting party. The SPS

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objectives, the preamble refers to the principle of common but differentiated responsibility, which has been established by Principle 7 of the 1992 Rio Declaration on Environment and Development.

[17] Originally, deadlines for the introduction of such systems were 2000 and 2005 respectively, but at the Doha ministerial meeting, the deadline for least developed countries was extended until 2016.

perspective might thus bear peculiar consequences for the trade in goods whose health implications can hardly be predicted, e.g. living modified organisms (LMOs).

The above compilation of environmentally significant WTO law is far from being exhaustive both with regard to the number of treaties and in terms of their various environmental implications.[18] Nonetheless, this synopsis of the most important regulations should serve as useful background information for the following sections: it is now time to consider these regulations in action, i.e. when applied or referred to in the course of actual conflicts with environmental law.

3. CONFLICTS BETWEEN WTO LAW AND DOMESTIC ENVIRONMENTAL LAW

Given the numerous domestic laws which rely on trade measures in order to enforce environmental protection, there is an abundant amount of dormant collisions between national environmental regulations and the free trade principles embedded in WTO law. Since the early 1990s, a couple of these latent legal frictions became manifested in the form of legal disputes brought before GATT / WTO institutions. The following will be a synopsis of some of the most influential rulings.[19]

3.1. CASES ON ISSUES OF SPECIES PROTECTION AND BIOLOGICAL DIVERSITY: DIRECT IMPORT RESTRICTIONS

[18] The WTO itself names the Agreement on Agriculture and the Agreement on Subsidies and Countervailing Measures (SCM) as further treaties with potential environmental impact (cf. http://www.wto.org/English/tratop_e/envir_e/envir_backgrnd_e/contents_e.htm [22 April 2006]).

[19] The WTO Website lists nine environment-related disputes under GATT and the WTO Dispute Settlement Understanding. (cf. http://www.wto.org/english/tratop_e/envir_e/envir_backgrnd_e/c8s1_e.htm [17 April 2006]). In the following, four of these cases will be given particular attention, plus one case (*EC – Hormones*) which is not listed on the website.

The first noteworthy judicially manifest conflict between domestic environmental law and international trade law was the Tuna Dolphin case, or *US – Tuna I*. It was brought before the GATT Panel in 1991, i.e. more than three years before the establishment of the WTO. Mexico had complained against US import bans on yellowfin tuna harvested with purse seine driftnets by Mexican ships in the Eastern Pacific. The justification for these import bans was rooted in the 1972 US Marine Mammal Protection Act which ordered such restrictions towards countries which did not prescribe measures similar to US standards for dolphin protection. The GATT Panel – whose report was never adopted due to an amicable settlement among the conflict parties – interpreted the import bans as a violation of Article XI GATT (prohibiting quantitative import or export restrictions), as well as of the national treatment principle under Article III GATT. As for the latter, the panel's decision was based on a very narrow understanding of the term "like products" with mere regard to their physical features. Only the end-uses, but not the process and production methods (PPMs) in the product's life cycle were taken into account. "Whether the production process of a final product entails a GHG [greenhouse gas]-emitting fossil-fuel-intensive method such as the burning of coal, or something as clean as wind or solar energy, is irrelevant to a WTO decision" (Chambers 2001: 91). Furthermore, the GATT Panel decided that parties could not refer to Article XX(g) to protect the global commons, but only to protect resources under their national jurisdiction (cf. Housman and Zaelke 1992; Zaelke, Housman, and Gary 1993).[20]

[20] This very restrictive and classically trade-promoting ruling against national environmental standards seems to bolster the arguments of green GATT and WTO critics. This assessment not withstanding, the panel's decision featured two more characteristics with slightly opposite implications for environmental concerns. First, the panel did not forbid the voluntary labeling of tuna as dolphin proof; and second, the Panel remarked that the USA had not "exhausted all options reasonably available (…) in particular through the negotiation of international cooperative agreements." This ruling implies an aspect which was further elaborated in the Shrimp Turtle case, namely "that

Three years later, in 1994, the European Community (EC) brought the issue back before another GATT Panel, *US – Tuna II*, by complaining that the very same US import bans kept it from exporting yellowfin tuna – caught by Mexican vessels, but processed in EC countries. Though the Panel followed its predecessor in rejecting the import restrictions as violations of Article IX GATT, there was a slight, but essential difference to the first decision: this time, the justification of import bans because of extraterritorial PPMs was not considered to be fundamentally at odds with WTO law, due to Article XX(g) GATT. In other words: the stretching of environmental standards towards the country of origin was no longer ruled out.[21]

Such minor concessions notwithstanding, a profound re-definition of the dispute settlement system's stance on environmental protection matters kept taking its time. In fact, it only took place on the occasion of the 1998 Shrimp Turtle decision, i.e. well after the WTO Dispute Settlement Understanding (DSU) had entered into force.[22] Again, the US environmental law was the object of contention – this time challenged by India, Malaysia, Pakistan and Thailand. Washington had justified import bans on shrimp from these countries, since their fishing fleets did not use turtle excluder devices – as demanded by Section 609 of US Public Law. At first glimpse, both Panel and Appellate Body (AB) appeared to continue the tradition of the

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internationally adopted standards such as those pursuant to MEAs could be grounds for justifying an exception" (Chambers 2001: 94).

[21] However, the Panel's further interpretation of Article XX(g) turned out far more restrictive than in future cases of WTO dispute settlement, especially when denying the significance of MEAs as acceptable points of references for the conflict parties. More precisely, the Panel concluded that MEAs could not be accepted as a specification of WTO law (*lex specialis*) in the sense of Article 31(3) of the Vienna Convention on the Law of Treaties. This article states that "[t]here shall be taken into account, together with the context: (a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions; (b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation." A more integrative decision by the GATT Panel was nevertheless possible at the time(and would not have needed to take until the Shrimp Turtle decision): the GATT could have embraced the potential meaning of MEAs as "any relevant rules of international law applicable in the relations between the parties" under Article 31(3c) (Neumann 2002: 168).

[22] Nonetheless, the Shrimp Turtle decision was not the first environment-related report of the WTO Appellate Body: in *US – Reformulated Gasoline* (US vs. Venezuela and Brazil) of 1996, both the Panel and the AB had interpreted the diversity of verification methods for the composition of imported gasoline (under the US Clean Air Act) as discriminatory, hence violating Article III GATT.

aforementioned Tuna Dolphin rulings: they considered the import restrictions as a breach of WTO law. Yet, when taking a closer look at the AB report, it significantly upgraded the legal status of both domestic and multilateral environmental standards. For the first time, it comprehensively acknowledged the legitimacy of specific PPM demands voiced by an importing country in order to protect animal species outside its own territory (Jackson 2000). Precisely, the AB ruled that such extraterritorial PPM requirements must not be decided unilaterally, but should be rooted in specific agreements adopted by the corresponding countries. Such an agreement could, *inter alia*, be an existing MEA if applicable. As a reference for the *US – Shrimp* case, the AB explicitly mentioned the Convention on Biological Diversity (CBD) and the Interamerican Convention for the Protection and Conservation of Sea Turtles. Alternatively to such MEAs, the report conceded that import criteria be developed on an *ad hoc*-basis in the course of negotiations with the potentially affected exporting countries – possibly flanked by financial support for the changeover of production methods in developing countries.[23] Unilateral action is hence only permitted, if the potentially affected countries refuse to negotiate any such conditions at all.

To sum up the meaning of *US – Shrimp* for the future practice of environmentally relevant WTO dispute settlement: it could be the starting point for a more extensive inclusion and consideration of non-WTO law. Apart from the enhanced relevance of MEA rules, this observation also concerns the general principle of common, but different responsibility under Principle 7 of the Rio Declaration. This principle had already found its way into the preamble of the WTO Agreement; now, in its report, the AB picked it up as a point of reference, when requesting financial support for the adaptation of PPMs in exporting developing countries. When taking this request at face value, future tests of import restrictions by an industrialized country could involve

[23] The AB deducted this principle of financial equity and support from the preambular clause of Article XX GATT which states that exceptional measures shall not be "applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail".

examinations of financial fairness among the conflict parties – which again raises the question of the WTO's competency to fulfill such a task (Neumann 2002: 179ff.).

3.2. CASES ON HUMAN HEALTH ISSUES: RISK ASSESSMENT, PRIOR INFORMED CONSENT AND LABELING REQUIREMENTS

The *EC – Asbestos* report of April 2001 is a good example for the Appellate Body's slowly emerging openness toward environmental law. In this report, the AB overruled the previous Panel decision about the genuine alikeness of asbestos products, regardless of their health effects. Canada, one of the world's biggest exporters of asbestos, had appealed to the WTO due to French import bans, induced by national working and consumption law, on asbestos fibers and asbestos-containing products. While examining the necessity of the French measure under Article XX(b) GATT, the AB renounced a strict testing and instead stressed the appropriateness of the import restriction in order to exclude any potential health risks (ibid.: 185ff.). Still, by referring to the SPS, the AB demanded a previous scientific assessment of these risks. However, it sufficed with that a qualitative assessment (i.e. an assessment about the mere existences of health risks, not about the dimensions of these risks), based on a scholarly minority opinion. In short: the eminent social importance of the import ban's objective considerably softened of the necessity test requirements. This ruling raises hopes for the prevalence of environmental law in similar cases, at least as long as the corresponding trade-restricting measures aim at objectives which touch upon human health issues (cf. Howse and Tuerk 2001).[24]

[24] These hopes were particularly nourished by two further cases of similar concern in the late 1990s, namely *Australia – Salmon* and *Japan – Varietals*. In the former case, the AB confirmed the legitimacy of Australian import bans on Pacific salmon and confirmed the sufficiency of qualitative assessments and scientific minority opinions about a potential animal epidemic. In the latter case, the AB decided on Japanese import restrictions serving as plant

Such a case, which stretches from the 1980s until present, is the European Economic Community (EEC)'s ban on the import of beef from animals treated with hormone growth promoters. Pointing at the potential risks of cancer, the EEC had reduced allowable quantities of such hormones in 1981 and finally abolished them altogether in 1986, leading to a first – though unsuccessful –GATT Panel appeal by Canada and the US in 1987. After imposing trade sanctions against the EEC over the following years, both countries solicited the establishment of a WTO Panel in 1996. In its 1998 *EC – Hormones* report, the Appellate Body (who partially corrected some of the Panel's observations) ruled that national measures supposedly are not at odds with SPS regulations when relying on international health agreements. Only when exceeding the standards of such agreements, the importing country has to provide a timely assessment (again only a qualitative one) of the risk and the appropriateness of the measures taken. Hence, as in *US – Shrimp* and *EC – Asbestos*, the WTO dispute settlement again bolstered the referential status of external law in order to define the leeway for environmental standards.

However, having so far read quite optimistic implications out of the judicial reports on health issues, it is time to qualify this view. Indeed, this is far from stating that these three reports mark the beginning of a green era in health-related AB rulings. First of all, clear limits have been set to the consultation of external agreements. This goes especially for the precautionary principle which, according to the *EC – Hormones* report, only prevails in its narrow SPS understanding. The burden of proof is thus left with the importing countries, i.e. with the consumers instead of the producers of a potentially harmful good. Second, the difficulties of sticking to deadlines for the qualitative proof of risk should not be underestimated (Neumann 2002: 217ff.). In the

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protection measures, again sufficing with qualitative tests. However, by strictly following the SPS, the AB set particular deadlines for the proof of health risks and formulated very precise conditions for such temporary measures (Neumann 2002: 217ff.).

aftermath of the AB's original ruling, this very problem of sufficient proof has been keeping the case from being closed, resulting in the establishment of two further WTO panels in early 2005.[25]

3.3. CONCLUSION: THE WTO IS TAKING OVER

Summarizing the major implications of the abovementioned and some further cases, three major sets of observations can be made. First, with regard to extent and quantity, the WTO has definitely been assuming considerable competency and power about numerous non-trade issues (cf. Sampson 2005). Through decisions on various environmental topics, from species protection via air pollution (namely in the *US-Reformulated Gasoline* report) to consumer and health standards, the WTO Dispute Settlement Body has constantly broadened its ecological agenda. If this development is keeping its pace, the WTO will also "colonize" other environmental domains, thereby ultimately deciding to what extent countries can unilaterally set trade restrictive standards in these issue areas. What is more, since the Panel or the Appellate Body cannot issue reports on their own initiatives, it is not the WTO as such which exerts this extensive influence across policy fields; after all, it is the member states who can invoke the DSB in order to block the implementation of other countries' ecological policies (Pfahl 2005: 8). Hence, paradoxically, by using the instrument of WTO law, these parties do the very thing they are complaining about:

[25] These panels were requested by the EU who was convinced to have complied with the requirements of the 1998 decision, by basing its 2003 Hormones Directive on a full scientific risk assessment conducted over the years 1999-2002. On the other hand, Canada and the US continued their sanctions against EU exports, complaining about the lack of any multilateral confirmation of the EU's risk evaluation. While continuously imposing their trade sanctions, both countries refused to challenge the new EU Hormones Directive before the WTO. As a matter of fact, they even blocked the EU's first request to establish respective panels in January 2005 (http://www.wto.org/english/news_e/news05_e/dsb_17feb05_e.htm [2 April 2006]). The final reports of these panels which are expected in the first half of 2006 will elucidate to which extent previous rulings on risk assessment can be interpreted in a flexible and thus environmentally sound and health-oriented manner.

they have a severe impact on extraterritorial standards. This observation appears to be a strong corroboration of the race-to-the-bottom argument brought up against the WTO.

Nonetheless, a second major trend – which goes hand in hand with the aforementioned formal extension of the WTO's agenda – qualifies this finding. In terms of substance and quality, there has been a tendency towards more flexible and integrative decisions by the WTO dispute settlement mechanism. This concerns both key types of contested environmental standards, namely the precautionary principle, as addressed in the asbestos and hormone cases, and the PPM-related provisions, as addressed in the tuna and shrimp cases. Whereas in the first Tuna Dolphin case, the GATT Panel had clearly refused to take into account the environmental or social relevance of the production cycle of a good, later reports by the WTO Appellate Body (who sometimes overruled a previous panel decision) stressed the strong interdependence between international trade and other policy issues. These non-trade preoccupations have eventually become positively integrated into the decisions – either through demands for multilateral negotiations and agreements in order to specify WTO law (as in the *US – Shrimp* report) or through the intensified recognition of the actual objectives of the contested trade-restrictive measures (especially health issues as in the *EC – Asbestos* decision). However, given increasing protests by WTO members about the Appellate Body's flexible interpretation of the agreement (cf. Sampson 2002: 23), the future has to show to which extent this tendency towards more environmentally friendly rulings will prevail.

Third and most generally, the key object of contention in all cases was the WTO consistency of trade-related measures in national environmental law with WTO law. In this regard, three kinds of jurisdictional scope should be distinguished (cf. Neumann 2002: 227ff.): 1. Measures to protect the domestic environment are rather at ease with WTO law as long as they affect like goods of all exporting countries in the same way. 2. Measures aimed at safeguarding

transboundary resources however need to stand tests of appropriateness and necessity; furthermore, they have to be backed up by previous negotiations or agreements, and they need to be applied equitably across all exporting countries. 3. Measures to protect the global commons, as they are promoted by MEAs, have so far been beyond concern: no Panel or AB report has dealt with the relationship between the WTO and such agreements in the first place. This notwithstanding, one should not conclude that overlaps or conflicts of WTO law and international environmental treaties do not exist or have no impact on the effectiveness of these treaties. The next section will therefore outline some of the most notable of these overlaps.

4. CONFLICTS BETWEEN WTO LAW AND MULTILATERAL ENVIRONMENTAL AGREEMENTS

4.1. INCREASING INSTITUTIONAL OVERLAP AND CONFLICT AMONG INTERNATIONAL INSTITUTIONS

At first glance, one might wonder about the widespread existence of legal conflicts between international trade and environmental agreements, especially among those which have been negotiated and adopted by nearly identical parties. At second glance however, the counterintuitive observation of international regime overlap or even regime conflict should not come as a total surprise – for particularly two reasons. First of all, since the end of World War II, international relations have been marked by a growing interdependence in the most different policy areas, entailing a corresponding increase in the number of international organizations and regimes. Further impetus has been given by the ending of the Cold War, principally for institutions with subject matters beyond the “classical” issues of international security and

economic integration. As a result, observers are counting between 200 and over 700 MEAs at the time of writing – depending on the criteria applied for their definition (e.g. issues to be considered as environmental, minimum number of states parties, consideration of soft law, etc.).[26] Most of these rule systems have been developed independently of each other, do cover different geographic and substantial scopes, and are partly marked by very different patterns of codification, institutionalization and cohesion including different compliance mechanisms and sanctioning capacities.

Second, this fragmentation of international law is considerably advanced in the fields of trade and environment due to the cross-cutting nature of both issues.[27] On the one hand, whatever can be traded can fall under WTO jurisdiction, a fact which is well exemplified by the agenda of the international trade regime which has been steadily expanding (cf. Sampson 2005: 128ff.). Today, no less than 60 legal instruments under the auspices of the WTO cover a multitude of different policy fields, from agriculture to labor rights or from international finance to telecommunications. On the other hand, many issues regulated by MEAs such as biological diversity, climate change or ozone layer depletion touch upon such different fields as technology, lifestyle – and trade.

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[26] The lower number represents the concise WTO understanding of the term (cf. http://www.wto.org/english/tratop_e/envir_e/cte01_e.htm [25 April 2006]). The higher number is derived from the *International Environmental Agreements Website*, by R.B. Mitchell, available at http://www.uoregon.edu/~iea/ (25 April 2006) (cf. Mitchell 2003).

[27] Roughly over the last ten years, the fragmentation of international environmental law has been attracting the attention of scholars from various disciplines, with many of them focusing on the overlaps with trade agreements (e.g. Bernauer and Ruloff 1999; Moltke 1996; Neumann 2002; Pauwelyn 2003; Stokke 2001; Young 1996). Two encompassing and comparative research projects about the interplay of international trade and environment institutions are: first, the Institutional Interaction Project (Oberthür and Gehring 2006a); and second, the ongoing Institutional Dimensions of Global Environmental Change (IDGEC) project (cf. King 1997; Young 2002, 2002a).
Moreover, it is not only scientists which grow aware of the increasing overlap between trade and environmental agreements, but also the negotiators of these very agreements. Chambers (2001:85ff.) observes a tendency towards implicit or explicit recognition of such overlaps in the text of respective treaties, e.g. in MEAs such as the Convention on Biological Diversity (CBD, Article 22) and the United Nations Framework Convention on Climate Change (FCCC, Articles 3[5] and 4[2e]), but also in trade law, e.g. in NAFTA Article 104 (granting three MEAs prevalence in case of conflict), the preamble of the WTO Agreement or GATT Article XX on general exemptions.

Already in 1996, the WTO Committee on Trade and Environment identified "about 20" multilateral environmental agreements containing trade provisions.[28] Clearly, overlap does not equal collision: not all of these provisions are incompatible with WTO law. But wherever MEA regulations get into conflict with international trade rules, they basically do so on the same grounds as domestic environmental regulations. They either collide over import restrictions due to particular PPMs and product qualities; or they clash because of flanking conditions such as precautionary risk assessment, prior informed consent procedures or product labeling.

4.2. THE BASEL CONVENTION, CITES AND THE MONTREAL PROTOCOL: DIRECT IMPORT RESTRICTIONS

All three regimes include TREMS (trade-related environmental measures) which collide with the MFN principle "by banning the import of various substances on the basis of the status of the country of origin (e.g. countries that are not Parties to the MEA, Parties to the MEA that fall into particular categories, and Parties not in compliance with the MEA)." (Werksman 2001: 183).

In its Articles III, IV and V, the Convention on International Trade in Endangered Species (CITES) requires the "prior grant and presentation of an export permit" for the export of any specimen of a species included in the appendices of the convention, no matter whether the importing country is party or non-party.[29] Likewise, in its Article 7, the 1989 Basel Convention

[28] In two more recent documents, the CTE has narrowed its focus down to 14 agreements, namely: International Plant Protection Convention, ICCAT, CITES, CCAMLR, Montreal Protocol, Basel Convention, CBD, Cartagena Protocol on Biosafety, UNFCCC, Kyoto Protocol, International Tropical Timber Agreement, UN Fish Stocks Agreement, Rotterdam Convention, and Stockholm Convention on Persistent Organic Pollutants (Docs. WT/CTE/W/160/Rev.1, 14 June 2001, and WT/CTE/W/160/Rev.2, 25 April 2003).

[29] More precisely, the three appendices differentiate between different levels of protection and subsequent measures, namely: permits for both import and export (Appendix I), only export permits (Appendix II), and permits by countries which have previously acknowledged the need to protect the corresponding species (Appendix III). CITES, which entered into force in July 1975, has been strongly supported by the USA which advocated the

on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal demands notification of importing countries, no matter if such wastes are traded from a party to a non-party or *vice versa*.[30] In addition, the 1995 Ban Amendment to the Basel Convention, which is one single ratification short of entering into force, prohibits exports from OECD to non-OECD countries for final deposit.[31]

Of the three mentioned regimes, the Montreal Protocol to the 1985 Vienna Convention for the Protection of the Ozone Layer presents the most interesting case, since its negotiators explicitly anticipated a potential conflict with the GATT. Article 4 of the protocol deals wit the "Control of trade with non-parties"; it obliges each party to ban the import and export of the controlled substances in the different annexes of the Protocol from or to "any State not party to this Protocol". These substances include ozone-depleting substances (ODS) and products containing ODS.[32] However, import bans were not extended to goods produced with the use of ODS into the Protocol, because such a rule seemed hardly applicable and might have deterred potential signatories. According to statements by some of the protocol's negotiators, this decision was not primarily motivated by the desire to avoid a legal collision with the GATT (Benedick 1991; Bernauer 1999a: 133f.). Nevertheless, compatibility with international trade law was a carefully regarded issue when drafting the protocol: parties agreed on the establishment of an *Ad Hoc* Working Group of Legal and Technical Experts which should detect and prevent potential

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cooperation with the initiator, the World Conservation Union (then: International Union for Conservation of Nature [IUCN]). Despite its regulations, each year between $20 billion and $50 billion specimen are traded, about a quarter of them illegally.

[30] Originally, some African countries were against the convention, asking for more intensive restrictions, similar to those adopted two years later in the 1991 Bamako Convention which nearly banned exports of hazardous wastes to Africa altogether. On the other hand, the US (no member until present) had reservations concerning the ratio of municipal waste to hazardous waste. This criticism notwithstanding, the Basel Convention entered into force on 5 May 1992 (http://www.basel.int/ratif/frsetmain.php [8 May 2006]).

[31] By May 2006, the Ban Amendment had been ratified by 61 countries. The 1999 Liability Protocol to the Convention has been facing more lack of support (only 7 parties as of May 2006; ratification by 20 parties needed).

[32] Furthermore, it grants developing countries a special status (Article 5: "Special situation of developing countries"), entitling them "to delay for ten years" the compliance with the control measures, i.e. standards and phase-out dates under Article 2.

collisions with GATT rules. Surprisingly though, the working group did not see any need for immediate action such as modifications of the draft text (Brack 1996: 67).[33] Chambers (2001: 103) explains this finding with the fact that, at the time, the issue of compatibility in international environmental politics "was not the focus of as much concern as it is today". Indeed, the same question was interpreted quite differently a couple of years later, i.e. after the establishment of the WTO: the WTO Secretariat voiced clear opposition to the Montreal Protocol's trade restrictions, fearing they could serve as a role model for future MEAs. In this spirit, the CTE "opted not to welcome their replication in an emissions-trading scheme" (Zhang 2001).

A common property of the three named MEAs is the range of their jurisdiction, since they are all operating on a global level and display a nearly universal membership. This feature might well prevent these MEAs from being challenged before the WTO dispute settlement system, since party vs. non-party constellations should be rather exceptional. Comparably, regional environmental regimes with similar trade restrictions might turn out more prone to such a challenge. Such regional MEAs which collide with WTO law are the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR). Both include import bans (based on PPMs) which – just like in the cases of CITES, the Basel Convention, and the Montreal Protocol – contradict the GATT's MFN principle (cf. Palmer, Chaytor, and Werksman 2006).

4.3. THE CLIMATE CHANGE REGIME: MIX OF DIRECT AND INDIRECT TRADE RESTRICTIONS

[33] The Working Group considered the exceptions under Article XX GATT and the corresponding rules of the 1969 Vienna Convention on the Law of Treaties (VCLT) as sufficient in order to avoid conflicts.

The climate change regime, i.e. the 1992 Framework Convention on Climate Change and its 1997 Kyoto Protocol, can collide with WTO law in a number of aspects. First of all and similar to the aforementioned agreements, the Kyoto Protocol confines the trade in particular products; but unlike other MEAs which affect *existing* goods, the Kyoto Protocol, in its Article 17, *introduces* the very products it regulates. These emissions or "Parts of Assigned Amounts" (PAAs) shall only be traded within certain limits ("caps") and between designated industrialized countries listed in Annex B of the protocol.

However, what can be traded, is subject to WTO agreements, regardless of the difficult characterization of PAAs as either goods or services, hence either falling under the GATT or the GATS.[34] A legal challenge of the global climate regime might only be a question of time: "In the absence of express rules limiting PAA-related issues to the UNFCCC, difficulties may arise because there is no legal barrier preventing a country from bringing the case before the WTO dispute settlement" (Chambers 2001: 103; cf. Brack, Grubb and Windram 2000).

With the Kyoto Protocol's entering into force in February 2005, the compatibility issue of PAA-trading has not only become more virulent, but will also turn out more complex, since the parties have to decide on concrete procedures under Article 18 which asks "to approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance". As a matter of fact, the first Meeting of Parties in December 2005 has already taken a major step in

[34] Werksman (2001: 155f.) denies this interpretation of emissions allowances as either goods or services. This notwithstanding, he agrees that Kyoto Protocol regulations can promote behavior which is at odds with GATT or GATS rules: "design choices regarding the *incidence of regulation* and *allocation of allowances* will probably affect the competitive relationship between products and services that are governed by WTO disciplines." In particular, Werksman predicts legal conflicts not so much for the primary market, i.e. trade in allowances by end-users, but rather for the secondary market, i.e. trade in derivative financial instruments based upon allowances: "If the ETS [Emissions Trading Scheme] rules allow financial-service providers to buy, own, and hold allowances, the EC and its Member States may be under a GATS obligation to extend MFN and national treatment to foreign services and service suppliers" (ibid.: 171). Depending on the design of the ETS, especially on the point of a carbon-based fuel cycle, at which allowances are required, the trading scheme could run counter to WTO provisions. This holds especially true for upstream allocations requested from energy producers, since, whenever exporting their energy to another ETS country, such allocations would be equal to import licenses to be held by these producers.

this direction, by adopting the Marrakesh Accords, including "the most elaborate compliance regime of any existing multilateral environmental agreement" (IISD 2005: 19). If upcoming meetings decide to include trade-related sanctions into this compliance regime, the Kyoto Protocol might yet in another way collide with GATT or GATS.

Another type of provisions, which could at least indirectly lead to a conflict with WTO law, are so-called PAMs under Article 2 of the Kyoto Protocol. Parties ought to apply these "policies and measures" in order to meet their quantified emission limitation and reduction commitments. Among these PAMs are "fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors" (Article 2[v]) – in other words: steps "which are likely to affect the competitiveness of national industries" (Chambers 2001: 100; cf. Charnovitz 2003). In particular, border cost adjustments have recently entered debates about appropriate measures. (Biermann and Brohm 2005). These tools aim at balancing competitive disadvantages of domestic goods which face higher licensing costs under the Kyoto Protocol. However, in light of more trade-consistent alternatives, cost adjustments might not stand tests of necessity and appropriateness under Article XX GATT, once being challenged and brought before the DSB.[35]

4.4. THE CONVENTION ON BIOLOGICAL DIVERSITY: BENEFIT-SHARING, PRIOR INFORMED CONSENT AND LABELING REQUIREMENTS

[35] In light of the abovementioned *US – Shrimp* report, one might argue that the negotiations on the global climate regime fulfill the WTO's demand for consultations among the affected parties prior to trade-restricting measures. Nevertheless, border cost adjustments are just one among several measures which were taken into consideration by the negotiators. In fact, during Conferences of the Parties to the UNFCCC, member states could not agree about whether trade restrictions were an appropriate tool at all (Werksman 2001:178ff.).
In addition to the scenarios mentioned in the text, there are further possible collisions between the climate change regime and international trade law. Some observers argue that the climate regime, particular the Clean Development Mechanism which aims at stimulating investment flows, can also be considered as an investment regime. Since it conditions such investments, the CDM potentially gets into conflict with international investment rules, e.g. the OECD's Multilateral Agreement on Investment (cf. Werksman and Santoro 2001; Werksman, Baumert, and Dubash. 2003).

The importance of the above examples notwithstanding, it is another potential incompatibility between an MEA and WTO law which has been attracting the bulk of scholarly attention, namely the overlap among the Convention on Biological Diversity and the TRIPS Agreement. Unlike the aforementioned cases, the CBD-TRIPS conflict is less of an incompatibility of particular rules, but rather a general programmatic conflict. The CBD reaffirms "that states have sovereign rights over their own biological resources" (4th preambular) and advocates the equitable sharing of benefits from utilization of genetic resources (Article 1). On the other hand, Article 27 TRIPS seeks to strengthen and harmonize intellectual property rights systems and calls for patent legalization in all technical fields including biotechnology.[36]

Hence, not through some of its concrete rules, but with its general approach to intellectual property rights, TRIPS contradicts the CBD objective of an equitable distribution of benefits. Bound to this objective, the CBD has established a different type of property rights regime "where national sovereignty is introduced to counterbalance intellectual property rights" (Rosendal 2001: 107).[37] Since patenting is a costly business, multinational corporations can take advantage of the TRIPS approach by securing monopolies over numerous varieties of genetic material, including those which have been developed over generations by indigenous and local communities. In fact, such behavior termed as *biopiracy* or *bioprospecting* has already taken place to a considerable extent: today, developing countries do not hold more than three per cent of all patents worldwide (Rosendal 2003: 9).

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[36] Article 27(1) states that "patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application".

[37] More precisely, the CBD advocates the transfer of environmentally safe technology, including biotechnology and technologies covered by intellectual property rights on "fair and most favorable terms" (Article 16[2]). It also calls for the fair and equitable sharing of benefits arising from the utilization of knowledge (Article 8 and 12th preambular) from research and development (Article 15) and from biotechnologies (Article 19). Most remarkably, the CBD even explicitly refers to a potential regime conflict in its Article 16(5), stating that intellectual property rights systems should "not run counter to its [the convention's] objectives".

Apart from the issue of access and benefit sharing, there is a second potential conflict between CBD and TRIPS which takes place on the level of treaty implementation, namely with regard to the sustainable use of the plant varieties in question. In the long run, the TRIPS-induced property structure might threaten the chief objective of biological diversity itself: patent owners, i.e. mostly multinational corporations of industrialized countries will promote the cultivation of "their" varieties; subsequently, incentives for farmers in developing countries to conserve other species clearly decrease (Rosendal 2003: 10f.).

As is the case with other MEA-WTO incompatibilities, the incoherence of CBD and TRIPS has so far not led to any legal disputes. Nonetheless, the overlap of both treaties and their subject matters became the subject of several controversies on the level of bureaucracies and negotiating parties. These controversies date back to the founding phases of both regimes which partially, in the early 1990s, took place at parallel timelines. Clearly, both processes of regime genesis exerted mutual impacts on each other, while developing and industrialized countries could score quite differently in the two arenas. Though the CBD had originally been advocated by several OECD countries (including the United States!), eventually, its content became strongly influenced by developing countries. On the other hand, the genesis of the TRIPS Agreement in the course of the Uruguay Round was clearly dominated by Western European countries and the United States – with the latter explicitly complaining about the strategy of some developing countries to undermine TRIPS via the biodiversity convention (ibid.: 11f., Raustiala 1997: 47).

Even after the original negotiations had ended and both documents had entered into force, these disputes have continued until this day within different settings and arenas, generally evolving around the question whether further institutional steps are desirable – either to enhance the robustness of one treaty or to instigate the mutual harmonization of both agreements. Roughly, four theatres of this ongoing conflict can be distinguished: First of all, controversies have taken

place on a regime-internal level, i.e. within the institutional architecture of both regimes, e.g. in the CBD's Ad Hoc Open-ended Working Group on Access and Benefit-sharing. On the WTO level, the United States – not being a party to the CBD – repeatedly voted against the CBD secretariat's request for observer status during TRIPS conventions (Rosendal 2003: 13ff.). Moreover, parties keep on debating a treaty change in order to include into the TRIPS Agreement a requirement for disclosure of the source of patent-relevant biological resources.[38] Second, disputes have taken the form of an "arms race" (Rosendal 2003: 18; cf. Rosendal 2006) of follow-up or side agreements. On the one hand, regional agreements on intellectual property rights (which partially run counter to TRIPS rules) have been adopted by the Andean Community (CAN) and by the Organization of African Unity (OAU) (Raghavan 2000).[39] On the other hand, bilateral 'TRIPS plus' agreements between the US or EU and a developing country even exceed TRIPS demands on patent standards.

Third, and apart from such disputes within the extended architecture of both regimes, further negotiating forums have been established – e.g. within the UN's Food and Agriculture Organization (FAO) and within the World Intellectual Property Organization (WIPO) – in order to deal with the issues of access to genetic resources, of prior informed consent and of benefit

[38] For instance, Brazil, India and further countries with highly diverse biological resources keep pushing for an amendment of the TRIPS Agreement which would clearly safeguard key CBD objectives. Accordingly the amendment shall allow members to ask patent applicants for disclosure of a. the country of origin of biological resources or traditional knowledge used in inventions, b. evidence of prior informed consent by the country of origin, and c. evidence of fair and equitable appropriate benefit-sharing agreements with the country of origin (cf. Meier-Ewert 2005).

[39] The CAN IPR-regime was established in the name of TRIPS, however it asks for an amendment of the Agreement's Article 27(3b) in order to account for potential conditions of patentability such as prior informed consent. The OAU Model Law is even more straightforward in its opposition to TRIPS provisions and explicitly requires the permit and the prior informed consent of importing communities. Another type of CBD-endorsing follow-up treaties are bilateral agreements on bioprospecting; the CBD's Ad Hoc Working Group on Access and Benefit Sharing prepared the 'Bonn Guidelines" in 2002 in order to include prior informed consent and other principles into such agreements (Rosendal 2003: 13ff.).

sharing.[40] Fourth and finally, the CBD's Cartagena Protocol on Biosafety (BSP) contains rules which collide with several WTO treaties – though in a rather indirect manner.[41] For instance, the BSP protects the rights of importing states to be informed about the pending introduction of living modified organisms. On the other side, the GATT, SPS and TBT safeguard the interests of exporters through non-discriminatory regulations, e.g. with regard to labeling obligations (Palmer, Chaytor, and Werksman 2006; Santarius et al. 2004: 25ff.).[42]

4.5. CONCLUSION: NO DISPUTE, NO PROBLEM?

All in all, what can be said about the impact of inter-regime conflicts? At first glance, there is good news for the involved MEAs: Unlike the cases of incoherence among domestic environmental law and WTO law (presented in section 3), none of these legal conflicts has so far become manifest in a legal controversy among (non-)member states of the respective treaties.[43]

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[40] These new forums and treaties include FAO's International Treaty on Plant Genetic Resources for Food and Agriculture and WIPO'S Intergovernmental Committee on Intellectual Property Rights and Genetic Resources, Traditional Knowledge and Folklore. This is not to state that FAO has only recently played a role in these issues. Quite on the contrary, had it not been for the pharmaceutical sector and its concern about emerging biotechnologies, the 'gene wars' might have been left to the non-legally binding FAO documents (Rosendal 2003: 7). As early as 1983, the FAO International Undertaking on Plant Genetic Resources had declared all categories of such resources a common heritage of mankind. Moreover, the 2001 International Treaty on Plant Genetic Resources for food and agriculture explicitly prohibits patenting of material from genebanks in the public domain. However, this recent FAO agreement "will hardly block patenting altogether. Even slight modifications of the germplasm may qualify for patent protection and the isolation and description of any particular gene may still count as an invention" (ibid.:13),

[41] "Indirect" refers to the fact that there is no immediate contradiction between rules; instead, a regulation might be relatively vague about concrete measures to be taken, hence possibly inducing a behavior which could run counter o the provisions of other rules of international law. Whereas, for example, the Basel Convention (in the treaty text) or the ICCAT (in a follow-up resolution) explicitly name trade restrictions as sanctions for non-compliers (colliding with the GATT's MFN or NT principles), the BSP does not explicitly permit such measures. In fact, import bans could only be deducted from the protocol's rather indistinct policy recommendations.

[42] A similar kind of incompatibility exists between the GATT and the Rotterdam Convention. The latter demands prior informed consent by the importing state as well as labeling by the exporting state for the introduction of certain hazardous chemicals and pesticides of the marine environment of the North-East Atlantic. But like the BSP, the Rotterdam Convention does not contain any obligatory trade bans, but instead leaves concrete measures to the states parties. Furthermore, the convention's preamble tackles this indirect incompatibility, by explicitly requesting mutual support between the convention and WTO agreements (Neumann 2002: 262).

[43] This observation might not meet general consent, depending on the definition of the terms "inter-regime" and "dispute" (i.e. based on the question to which extent the regimes need to be involved in the dispute). In fact, the

As possible explanations for this absence of WTO disputes, Werksman (2001: 183) names a. the "self-restraint" of parties to settle any differences within the context of the respective MEA, b. the nearly universal membership of most of these MEAs (which rules out the problem of disputes of parties vs. non-parties), and c. the potentially "narrow economic impacts" of most of the environmental agreements in question.

This is not the place to prove or rebut any of these reasons; nonetheless, in light of these observations, it is even more crucial to deny the merely theoretical character of such inter-regime conflicts on two grounds. First, the lack of legal disputes simply is no indicator for the future absence of them; the majority of the respective MEAs have only been adopted within the last 15 years, and some of them (including agreements with considerable economic implications) have either not yet or only recently entered in force. For instance, the implementation of the Kyoto Protocol might well instigate cases for the WTO dispute settlement mechanism.[44] And if one day such a legal dispute about an MEA takes place, the consequences would be way more comprehensive than any of the challenges hitherto brought up against domestic environmental regulations: taken at face value, a decision against the MEA could lead to a domino effect which

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2000/01 *Chile – Swordfish* case between Chile and the European Community could be interpreted as a conflict between the GATT and the UN Convention on the Law of the Sea (UNCLOS). Chile had prohibited foreign and domestic vessels to unload swordfish harvested in the High Seas, referring to UNCLOS Articles 64, 118 and 119 which demand the cooperation of countries in order to guarantee the optimal use of fishery resources. Whereas Chile interpreted these UNCLOS rules as *lex specialis*, i.e. law specifying GATT provisions, the EC clearly objected any UNCLOS jurisdiction for the case and instead opted for WTO dispute settlement. These different interpretations notwithstanding, the controversy ended before any Panel report was filed, since both parties agreed on negotiating a particular multilateral agreement on swordfish (Neumann 2002: 198ff.). Even when – in the absence of an actual Panel or AB report – interpreting this dispute as a manifest inter-regime conflict, the question remains whether UNCLOS should be considered an *environmental* agreement, since it is rather a multi-issue agreement.

This notwithstanding, the *Chile – Swordfish* case points at another – so far only theoretical – nonetheless type of conflicts between MEAs and WTO law which might become highly relevant in the future, namely *jurisdictional conflicts*. These are meta-conflicts among regimes, not rooted in direct collisions of their rules, but instead circling around the question which regime should be entrusted with the settlement of conflicts between domestic environmental law and international trade law. As Neumann (ibid.: 513ff.) rightfully observes, the *US – Shrimp* case, if taking place today, could as well fall under the jurisdiction of the International Tribunal on the Law of the Sea.

[44] As Werksman (2001: 156f.) himself observes, "no MEA has the potential to affect so many sectors of the economy, so many economic interests, and such high volumes of trade in products and services, as does the climate change regime."

would extend well beyond the jurisdiction of the dispute parties. In the long run, such a decision could also undermine environmental standards in countries which were not involved in the actual legal dispute, supposing these standards have resulted from the implementation of the contested MEA rules.

Second, and even more importantly, the absence of WTO disputes should not at all be mistaken for an absence of impact of international trade law on the shape or effectiveness of these MEAs. In fact, the collisions of rules might provoke severe compliance problems for some environmental agreements in the long run. True, it is more than difficult (and a definite research lacuna) to roughly determine the extent by which the legal backup provided by WTO law has triggered non-compliance with MEA regulations.[45] One might wonder, for example, about the TRIPS Agreement's approximate share in the lack of motivation of the vast majority of CBD parties when it comes to enforcing prior informed consent procedures upon users of genetic resources (cf. Rosendal 2006). But as speculative as such assumptions might sound at present, no convincing justification exists for the opposite claim, i.e. that there is no mutual influence at all on agreements' compliance rates.

Moreover, though there are no judicial controversies, there definitely are debates taking place within the architecture of the respective regimes, as was shown for the CBD-TRIPS case: thus, the shadow of WTO law and its strong dispute settlement system might provoke *anticipative conflicts*, e.g. when negotiators of an MEA refrain from building in more ambitious trade-relevant measures, or when countries refuse to ratify an agreement or one of its protocols

[45] Currently, counter-factual studies – as developed by Mitchell (2004) or in the "Oslo-Potsdam solution" Hovi, Sprinz, and Underdal 2003, 2003a) present a promising approach to this research question. Sprinz (2003) suggests the application of such an extended counter-factual approach in order to determine the fictitious effectiveness of a regime in the absence of the regime(s) it collides with.

(Pauwelyn 2003: 237ff.).[46] In short, unlike in the case of collisions of domestic environmental law and WTO law, inter-regime conflicts often take place in the corridors of international negotiations. This renders the environmental impacts of such conflicts rather subtle, but certainly anything but marginal. Hopefully, further research by scholars of international relations, economics and law can open this peculiar black box of environmental impacts of world trade law. Regardless of such analyses and their prospective results, both policy-makers and academics have meanwhile come up with suggestions and concrete strategies to address the incoherence of WTO provisions and both domestic and multilateral environmental law. The next section will outline some of the most pivotal of these proposals.

5. STRATEGIES AND PROPOSALS TO IMPROVE WTO COMPATIBILITY WITH ENVIRONMENTAL LAW

5.1. A SOLUTION UNDER THE LEGAL *STATUS QUO*?

The creators of the WTO did not build any comprehensive and sustainable clause into the agreements in order to address specific multilateral or domestic environmental standards. Instead of such an *ex ante* approach, they relied on a strategy of case-by-case interpretation. With regard to potential collisions with domestic environmental law, such an interpretation should concretize generally phrased exceptions under Article XX GATT. And as for potential collisions with MEAs, negotiators hoped for sufficient backup by existing superordinate international law – in

[46] Naturally, such anticipative conflicts can also take place with regard to domestic law. For instance, Austria took back its 1992 import restrictions on tropical timber after timber exporting countries such as Brazil, Malaysia and Singapore had threatened to apply their own import restrictions to Austrian goods (Bernauer 1999a: 132f.).

particular by the 1969 Vienna Convention on the Law of Treaties (VCLT). Strikingly, it is this very reliance upon the VCLT which can also be held responsible for the inclusion of trade-related measures into MEAs such as CITES or the Montreal Protocol.

Indeed, at first glance, the Vienna Convention hosts satisfying principles to determine the hierarchy among agreements in a given legal dispute. For instance, as laid out in Articles 30-32 VCLT, agreements prevail when containing more specific rules (*lex specialis*) or when being adopted later (*lex posterior*) than a rival treaty. However, in order for these principles to apply, the colliding treaties should feature identical parties, which is a rather hypothetical and obsolete request given today's fragmentation of international law.[47]

In sum, sole confidence in the VCLT's applicability is at best outdated and at worst, it could be backfiring at MEA objectives –in particular when leaving treaty coordination between MEA parties and non-parties to WTO dispute settlement organs. Hence, in order to reduce the potentially disruptive impact of the world trade regime on both domestic and multilateral environmental regulations, jurisdictional clarity via an explicit *ex ante* approach is desirable – for at least two obvious reasons: first, as long as no legal disputes take place, such clarity can help diminish the anticipative effect of the WTO "shadow" on environmental legislation both national and international, as outlined in the preceding section (4.5); and second, if it comes to actual disputes, a respective approach could set limits to the current process of a self-expanding mandate of the WTO Dispute Settlement Body.

5.2. INITIATIVES FROM THE INSIDE

[47] This notwithstanding, some AB reports have referred to MEA rules, arguing that it is sufficient that the dispute parties are members of the respective MEA. Thus, in the *US – Shrimp* case, the AB referred to the CBD and to the Convention on Migratory Species. This can be justified by the fact that WTO agreements, unlike MEAs, are bipolar contracts, implying that *inter se* modifications are possible, i.e. *ad hoc* modifications of WTO law which only apply to the conflict parties in a particular dispute (see section 2.3; cf. Neumann 2002: 368ff.; Pauwelyn 2003: 52ff.).

With the ubiquitous applicability of the VCLT cast in doubt, the WTO started several initiatives in order to ensure a stronger coherence among international trade rules and environmental law. In accordance with its chief mandate, the CTE took on this matter from the very start: in its 1996 Report to the Singapore Ministerial Meeting, the committee recommended that disputing parties which are members in both the WTO and an MEA should first try to resolve their dispute through the MEA's mechanisms. As much as this appears a major concession to MEAs, the report remains "decidedly vague on disputes pursuant to an MEA arising between Parties and non-Parties" (Chambers 2001: 102f.).

This indistinctness is the result of a second-rate compromise between strongly diverging proposals which some parties had brought up in the preparatory process of the Singapore meeting. The more daring of these proposals, voiced by the European Community and Switzerland, suggested the inclusion of provisions for a so called "environmental window" into WTO agreements, or even the adoption of a whole new 'MEA agreement'. Both of these tools intended to enduringly classify selected MEA rules as necessary measures, thus granting them a permanent waiver with regard to non-discriminatory WTO principles (Sampson 2001: 74).[48] However, such proposals met considerable resistance by other parties, in particular by ASEAN countries and India who renounced any sort of treaty amendment and refused to grant any further environmental indulgence (Neumann 2002: 330). The poor outcome of this early intra-WTO debate exhibits the abovementioned key weakness of the CTE: resting upon the consensual decisions of governmental representatives, the committee cannot act as source of a self-contained

[48] In June 2000, Switzerland made another proposal for a solution of the matter. This time, the Swiss representative suggested an authoritative interpretation of the WTO Agreement by the General Council about the relevance of MEAs for WTO law. The proposal was endorsed by the EC, Japan, Canada and members of the WTO Secretariat, however it was turned down by the US, Australia, India and Brazil (Neumann 2002: 341).

WTO environmental policy. Subsequently and – as shall be shown – well until the time of writing, the structure and mandate of the committee have been perpetuating the failure of WTO parties during the Uruguay Round to come up with an appropriate *ex ante* treatment of environmental law.

A second initiative on the matter was sparked off in 1999, when then WTO Director-General Renato Ruggiero called for a regular framework in order to deal with MEAs in a coherent and effective manner (Sampson 2002: 7). That same year, the secretariats of the WTO and the UN Environment Programme (UNEP) signed a cooperation agreement which launched their regular exchange of information on legal issues. Such exchange should *inter alia* take place at the occasion of staff meetings which, where feasible, ought to include representatives from MEA secretariats.[49] Finally, this initiative resulted in an extensive consideration of environmental matters during the Qatar Ministerial Meeting in November 2001 and the subsequent inclusion of a "trade and environment" section into the Doha Declaration. Article 31 of the declaration sets the goal of "enhancing the mutual supportiveness" of both policy fields. To this end, it requests further negotiations on "the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs)" as well as "procedures for regular information exchange between MEA Secretariats and the relevant WTO committees".[50]

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[49] UNEP hosted the first of these joint meetings of WTO and MEA secretariats in June 1999. Since then, the UNEP has been organizing further meetings, e.g. two key events in 2000: a high level panel discussion on WTO-MEA relations in New York and a Geneva meeting on Enhancing Synergies and Mutual Supportiveness, featuring both UNEP's Executive Director and the WTO Director General (cf. UNEP Report to the 45th Meeting of the CITES Standing Committee SC 45 Doc. 7.3, http://www.cites.org/eng/com/SC/45/E45-07-3.pdf [22 April 2006]).

[50] Besides, in Article 6, the declaration welcomes "the WTO´s continued cooperation with UNEP and other inter-governmental environmental organizations". It also encouraged "efforts to promote cooperation between the WTO and relevant international environmental and developmental organizations, especially in the lead-up to the World Summit on Sustainable Development to be held in Johannesburg, South Africa, in September 2002." Interestingly though, a couple of months later, heavy debates evolved about the actual inclusion of a similar request for coherence into the final document of the World Summit. The Draft Plan of Implementation, which had been issued at the fourth PrepCom in Bali on 12 June 2002, still contained the heavily bracketed Paragraph 122c. This paragraph stated that the international community should "promote initiatives to ensure the coherence and mutual supportiveness between the rules of the multilateral trading systems and the rules of multilateral environmental agreements." It called for

Moreover, Article 32 extended the CTE's mandate towards "the effect of environmental measures on market access", the environmentally relevant provisions of the TRIPS Agreement and "labeling requirements for environmental purposes".

Pursuant to this explicit request for compatibility, a CTE Special Session (CTESS) was to discuss a number of models for harmonizing WTO law and the trade-related measures of MEAs. The number of formal proposals from all sides was considerable. MEAs willingly joined the process, last not least out of concern about the growing number of WTO disputes on domestic environmental law: "the lack of clarity between WTO and MEA rules has lead to confusion in the negotiation of the MEA" (Sampson 2002: 18).[51] Another reason for the MEAs' increasing interest in an *ex ante* approach might have been the emerging influence of NGOs and academics who had briefed the secretariats on the potential implications of the current legal constellation (ibid.; Moltke 2003). Thus, in May 2003, secretariats from UNEP and six trade-related MEAs participated in the CTESS.[52] However, the secretariats were not allowed to make interventions and had to leave the session before issues under Article 32 of the Doha Declaration were discussed. In the end, this meeting as well as the follow-up meetings to this date share one specific result – no matter if taking the form of further CTE sessions or of bilateral meetings among bureaucrats from the WTO and a particular MEA (e.g. CITES):[53] they have stimulated but little agreement among WTO members on the further coordinative process (Thomas 2004).

"further collaboration between on the one hand the WTO and on the other ILO, UNCTAD, UNDP, UNEP and other relevant agencies". This harmonization should be "consistent with the goals of sustainable development". However, none of these several formulas ever was included into the final plan.

[51] For instance, Switzerland argued that negotiations surrounding the Biosafety Protocol had turned out difficult because of the protocol's relationship to the WTO (ibid.).

[52] These MEAs included the Basel Convention, the CBD, CITES, the International Tropical Timber Organization (ITTO), the Montreal Protocol and the UNFCCC.

[53] Besides these inter-regime meetings, the WTO has been organizing internal consultations on the trade-environment nexus among experts of its various divisions, e.g. at the occasion of the WTO Symposium on Trade and Sustainable Development in Geneva in October 2005.

If there is a success at all, it is an informal one: "These sessions have clearly facilitated a mutual understanding of the linkages between the multilateral environment and trade agendas, and built awareness of the use of trade-related measures in MEAs" (Sampson 2002: 18). Alas, even this assessment only holds true for those MEAs which so far have been granted observer status in the CTE such as the CBD, CITES and the UNFCCC, whereas requests by the Ozone Secretariat or the International Tropical Timber Organization (ITTO) are still pending.

On the other hand, the lack of substantive results of these meetings reveals a dangerous pitfall: besides its stagnation, the Doha-induced process might turn out as a one-way street on which MEAs eventually leave the initiative for harmonization to the WTO, but have little to gain, most definitely no comprehensive "safety net" (Pfahl 2005: 8). From the side of the CTE, the predominant objective of the process is to diminish the negative impact of environmental measures on WTO law, not *vice versa* – an intention which should hardly surprise given the CTE's clear-cut mandate.[54]

5.3. SUGGESTIONS FROM THE OUTSIDE

In the absence of an accord within the CTE, "the question of whether and how environmental aspects should be integrated into the world trade regime has mainly been taken up outside the context of the world trade regime – above all, in academic and environmental institutes" (Santarius et al. 2004: 11). Generally, three groups of proposals can be distinguished: a first one focusing on a reform of WTO law, a second one suggesting changes in the organizational

[54] "Members at this stage are still attempting to define what constitutes an STO [specific trade obligation], which MEAs should be considered, and ultimately how to go about clarifying the WTO-MEA relationship. […] [I]t was not clear that MEAs had anything to gain from devoting resources to the WTO-MEA endeavour" (ICSTD 2003). At the meeting, special emphasis was put on decisions taken at MEA Conferences of the Parties (COPs) which might bear trade-related implications, e.g. the Marrakesh Accords, resulting from UNFCCC COP7 in November 2001.

structure, and a third one which, instead of "greening" the WTO, shifts the focus on the strengthening of MEAs.

As for the proponents of the first group, some of their suggestions follow those voiced by reform-oriented parties in the CTE who promote an "environmental window" or a "savings clause" for certain MEAs. More precisely, some observers call for an expansion of Article XX GATT, either by amending clauses XX(b) or XX(g) or by entering a new clause XX(k) (Biermann 1999; Helm 1995). Such proposals are not as unrealistic as they might sound at first glance; in fact they can point at a prominent role model: Article 104 NAFTA contains a priority clause which confirms that in cases of inconsistency between NAFTA on the one hand, and CITES, the Montreal Protocol and the Basel Convention on the other hand, the obligations of the latter shall prevail.[55]

Hence, akin to the initiatives taken up within the WTO, a great deal of scholarly suggestions also concentrates on legal exceptions to the benefit of multilateral environmental treaties. This might be the time to ask why certain principles inherent to *domestic* environmental rules are not considered in these proposals. The answer is that in fact these principles are not at all excluded from the debate. Quite on the contrary: what has been said in section 4.5 about a potentially negative domino effect of legal challenges against MEA rules, in turn implies positive effects for domestic standards under reversed premises. An environmental window for MEAs would also open up for related national regulations, enhancing the robustness of the latter against legal challenges before the WTO. For instance, a savings clause for trade-related measures under the Montreal Protocol should equally provide a backup for national import bans on ODS from certain countries.

[55] NAFTA is also more progressive than WTO law when it comes to general exceptions under Articles 904, 907 and 915 which expressively take into account factors like climate impact and scientific risk assessment. Apart from such explicit treaty modifications, treaty *changes* can also be made implicitly, e.g. through shifts in customary law (Neumann 2002: 343ff.).

This interconnectedness among multilateral and national environmental law notwithstanding, there are also alternative reform proposals which propagate safeguards for specific green principles and standards. In particular, suggestions are dedicated to the precautionary principle. Environmental NGOs as well as the European Union advocated a change of the corresponding provisions in the SPS agreement, thereby reverting the burden of proof for health risks from importers to exporters (cf. Santarius et al. 2004: 12). Drawing lessons from the Tuna Dolphin cases, other observers demand stronger consideration of processing and production methods (PPMs) when determining the alikeness of products. To this end, Helm (1995: 131) suggests the inclusion of PPMs into Article III GATT on national treatment.

No matter how adequate some of these ideas might appear, they will remain fruitless academic exercises as long as they only focus on the legal side of the problem. Clearly, in order to bear practical relevance, suggestions have to equally address the political or institutional reasons for the WTO's inflexibility, namely the weak agenda-setting position of the CTE and the ongoing stalemate among its members. Therefore, a second group of proposals advises structural changes within the WTO. Environmental groups opt for the dissolution of the CTE and, instead prefer a mainstreaming of environmental issues across the other WTO committees and sub-committees. Gary Sampson (2002: 17), former director of the organization's Trade and Environment Division, strongly disagrees with this idea, warning that this move would even further dilute ecological interests: "resources by governments to questions relating to the environment are already spread thinly in WTO meetings."

Still, instead of abolishing the CTE altogether, it might make sense to occasionally circumvent the impasse of its meetings via complementary activities by other WTO organs. Besides further intensifying its ties with UNEP, the WTO secretariat could initiate bilateral agreements with specific MEAs, similar to those it already negotiated with WIPO or the IMF. For instance, Asselt,

Gupta and Biermann (2005: 261f.) recommend a Memorandum of Understanding between the WTO and the UNFCCC in order to allow for package deals on contentious issues.

Another approach to tackle the CTE's stalemate might be to enhance the influx of ecological data into the WTO's policy-making processes, and, by the same token, to alter the positions of some of the hitherto eco-skeptical developing countries. With the help of improved impact assessment methods, science could provide for more robust and more comprehensive evidence about the world trade regime's effects on the environment (WWF 2001). Depending on the outcome of such impact assessments, developing countries might be persuaded to deviate from a one-sided perception of green standards as merely protectionist measures. Santarius et al. (2004: 44ff.) name two ways to integrate environmental impact assessment into the WTO's institutional structures: either by incorporating them into the WTO's Trade Policy Review Mechanism (*ex post* assessments) or by creating a new Strategic Impact Assessment Body within the organization (*ex ante* assessments). However, if not carried out by independent institutions, the initiatives for such assessments might be an easy prey for the very deadlock they want to overcome, since developing countries might resist the inclusion of environmental aspects into current evaluations from the beginning.[56]

Unlike the aforementioned ideas, a further group of proposals does neither call for a legal reform of the WTO nor for a change in the organization's institutional structure. In fact, they do not conceive of the WTO as the adequate arena at all for the strengthening of environmental interests. Rather, they argue that any further consideration or even inclusion of green rules and standards might prove counterproductive, since, this way, the WTO would keep expanding its jurisdiction

[56] In fact, developing countries have already done so in a similar discussion, namely when debating the integration of labor standards into the annual Trade Policy Reviews (Santarius et al. 2004: 45). Moreover, there has already been a first WTO-internal debate about environmental impact assessment studies. Following an earlier proposal by the Commission on Sustainable Development (CSD), the EU, Canada and the United States announced in 1999 to perform environmental impact assessments. However, they could not convince further WTO parties to join in (ibid.: 36ff.).

and mandate at the expense of environmental regimes. For instance, via savings clauses for specific standards, the organization would assume the right to determine which regulations are trade restricting in the first place (only explicitly or also potentially trade-related measures); what is more, the WTO would also have the privilege to define which of these regulations are legitimate, and which ones aren't (ibid.: 29).

As a counterweight to this 'big brother' mentality, some observers suggest to boost the effectiveness of MEAs from within, i.e. independent from the mercy of the WTO and its parties. In this regard, it deems quintessential to strengthen the judicial side of MEAs, i.e. to come up with proper agencies for case-by-case decisions, thereby hampering further takeovers by the DSB. For instance, in light of prospective clashes with international trade regulations, Chambers (2001: 114f.) proposes the establishment of a strong dispute settlement system for the global climate regime. Likewise, Pfahl (2005: 17ff.) makes a case for the International Court of Justice and the UN's International Law Commission as the most suitable institutions to decide upon disputes between WTO and MEAs.

Meanwhile, UNEP "should strengthen its technical role in order to influence the policy debate", e.g. through a clearinghouse "for identifying successful examples of MEA trade-measure implementation" (ibid.: 4). Or, why not a little more? As a matter of fact, a plethora of more audacious proposals propagates the establishment of a World Environment Organization or an even more ambitious World Environment and Development Organization (Biermann and Simonis 2000). The potential functions of the new organization might range from a UN specialized agency which harmonizes existing MEAs (Biermann 2005) to a direct competitor of other global institutions including the WTO (Charnovitz 2005).[57] Finally, some proposals focus

[57] For a comprehensive discussion of different proposals in favor or against a World Environment Organization, see Biermann and Bauer 2005.

less on the institutional design and more on the membership of MEAs, suggesting stronger efforts to integrate the global South. In this regard, regional environmental agreements could provide an effective stepping stone; by dealing with ecological issues particularly relevant for countries in a certain area of the world, these agreements could help raise the environmental awareness in those nations (Kulessa and Schwaab 2000).

6. SUMMARY AND CONCLUDING REMARKS

At the onset of this chapter, by listing six quite diverse hypotheses about the WTO's impact on the environment, I tried to sketch how broad the assumed scope of this impact can possibly be: it ranged from optimistic expectations of a raise in environmental awareness to deeply pessimistic predictions of an accelerated depletion of worldwide ecological assets. The variety of these predictions mirrors the diversity of ecological matters which are in one way or the other affected by the international trade regime, from biological diversity to ozone layer depletion, from global climate change to hazardous wastes. On the other hand, it is this complexity of overlaps of trade and several environmental issues which also renders unfeasible any waterproof examination of the assumptions it has inspired.

Apart from these methodological obstacles, it was also the apparent lack of evidence for some suppositions (e.g. the rather sluggish removal of un-ecological subsidies) which insinuated to single out one particular hypothesis for further examination. The choice was made for the prediction that the WTO will provoke a race to the bottom between domestic and multilateral environmental standards and policies. Still, this concentration on one particular type of environmental impact was far from an over-simplification: given the plethora of intersecting and

partially conflicting agreements and rules, the focus on the WTO's role in this institutional mosaic should produce anything but one-dimensional results.

And indeed, when finally asking whether the assumption of a WTO-induced race to the bottom has stood the test, the answer is far from a simple yes or no. In fact, at the time of writing, this question seems more undecided than ever before. Things were different around the time of the WTO's establishment, when two observations clearly seemed to corroborate the watering-down assumption. First, from its very beginning, the environmental policy-making of the organization had been structurally doomed not to exceed the least common denominator of its member states. Neither the secretariat nor the CTE had been endowed with the competency to exert a proper WTO environmental policy (cf. Senti 1999: 110ff.). Instead, the deadlock between industrialized and developing countries on ecological matters had been perpetuated from the Uruguay Round into the CTE whose decisions tend to be taken consensually among governmental representatives. Second, the organ which was to fill up this environmental policy vacuum, namely the Dispute Settlement Body, inherited anything but a green legacy from the old GATT Panel which had issued reports clearly unfavourable to domestic environmental standards. Moreover, the DSB cannot set its agenda on its own behalf, but is dependent from WTO parties who have to appeal to it.

Paradoxically, the DSB – while not entitled to set the agenda – has well managed to constantly expand it via groundbreaking decisions; and by the same token, it has expanded its mandate on diverse ecological issues. Yet at the same time, it has also developed greater flexibility in its reports, e.g. when taking into account the life cycle of products, or when recognizing, in certain limits, the backup of national policies by previously agreed MEAs. In this spirit, both the CTE and the DSB acknowledged that conflicts about trade-related rules of an MEA should first be handled by the environmental agreement, supposed that both dispute parties are belong to its

members. In fact, so far no MEA has ever been challenged before the WTO. And finally, the ongoing debate about the inclusion of an environmental window into WTO law nurtures further hopes for an undisturbed co-existence of key green standards and the international trade regime.

So given these pale green spots which have recently been covering the WTO's surface, can we call off the race to the bottom been altogether? Well, not quite that either! At best, it might have slowed down in light of these concessions. But it could well regain pace, depending on some upcoming decisions which may serve as signposts for the further environmental course of the WTO. First of all, member states have increasingly questioned the legitimacy of the Appellate Body's recent flexibility towards domestic environmental regulations. Such, the body's next reports on such provisions will show whether this criticism has made it review its practice. And second, the impasse of the debate about the WTO-MEA relationship needs to be broken – the sooner the better. The uncertainty of the *status quo* is definitely not in the interest of environmental conventions, no matter if or not a 'hot' legal dispute about an MEA will take place soon. In the absence of clear priority rules for one regime or the other, the shadow of the WTO's stronger enforcement mechanism makes its members think twice before complying with trade-related measures of an MEA.

Suggestions to solve this dilemma either have focused on legal or institutional reform of the WTO or instead have concentrated on strengthening the judicial status of MEAs. All in all and little surprising, the best approach might well be a reasonable mix of some of these measures, taking the shape of a multi-forum-approach. No doubt, MEAs are the better advocates of environmental concerns. It is hence imperative to make the best out of the current stagnation of the WTO's MEA-related initiatives. This means: using the time at hand and the undecidedness of the matter in order to piece by piece strengthen the position of MEAs vis-à-vis a double expansionism: first, in order to counterbalance the self-inflating jurisdiction and mandate of the

Dispute Settlement Body, and most of all to do so *before* the first MEA party vs. non-party dispute will have taken place; and second, in order to keep the CTE from having the final word about which environmental regulations are housebroken and which ones aren't.

On the other hand, it is equally important neither to exclude the WTO from the environmental debate in general nor to give up on the CTE in particular. The anti-WTO attitude, as exposed by many protesters from Seattle to Cancún, keeps overlooking the very simple fact that the organization is the only forum which is to some extent capable of controlling trade on a global scale. In other words: no WTO would not mean no free trade, but instead more unregulated free trade – with potentially worse implications for the environment. Therefore, a two-track strategy inside and outside the WTO shows the best potential, i.e. enhancing the institutional design of MEAs, while at the same time promoting further WTO-MEA cooperation and attuning WTO law towards the creation of an environmental window. Such efforts across various forums should also be best suited for breaking the ongoing impasse among states parties, by allowing for issue-linkages and hence for a broad acceptance of negotiation results (Raustiala and Victor 2004; Young 1999: 69).[58] After all, there is enough substance for package deals: across the WTO and a number of MEAs, similar groups of countries are facing each other, but sometimes with reversed roles regarding ecological matters.[59] Moreover, the overlap of WTO law with international

[58] The notion that issue-linkages and multiple forums alter the interests of member states and enhance cooperation is deeply rooted in the neo-institutionalist school of international relations theory. Unlike their neo-realist counterparts (who understand international institutions as the short-lived epiphenomena of power constellations among members [Mearsheimer 1994]), neo-institutionalists like Keohane (1984, 1989) believe that organizations and regimes can make a difference by connecting issues and by enhancing the continuity of political relationships over time (cf. Hasenclever, Mayer, and Rittberger 1997).
However, as Raustiala and Victor (2004) further observe, multi-arena constellations can also be abused by member states through a practice of "forum shopping", i.e. actors seek out the forum most favorable to their interests. Thus, in order to create win-win effects for both objectives, issue-linkages always need to be flanked by a further strengthening of the involved institutions.

[59] For instance, in the WTO, the global climate regime or the ozone regime, the bulk of developing countries have been acting as environmental laggards; but when it comes to the issues of biological diversity and intellectual property rights, they have been playing an almost reversed role (cf. Biermann 2005a).

treaties of other issue areas such as labor rights, human rights or international finance (cf. Neumann 2002: 280ff.), should open up further chances for more complex issue-linkages.

To sum up, there are currently several ambiguous tendencies in the relationship between WTO law and both domestic and international environmental regulations. With the outcome of these developments still uncertain and a considerable number of proposals at hand, we're well kept in suspense about the direction which the presumed race to the bottom might finally take. Having affirmed this enduring uncertainty, it is time to bring back to mind that this chapter's focus on legal overlaps presents but one portion of the highly complex mutual impact between free trade and the global environment. With the future findings of new comprehensive research approaches, especially environmental impact assessments, some of this uncertainty should be transformed into a deeper understanding of the trade-environment nexus. However, it remains to be seen if this increasing insight will ever be sufficient to justify statements as plain and as optimistic as the one by Pascal Lamy cited at the beginning of this chapter.

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