

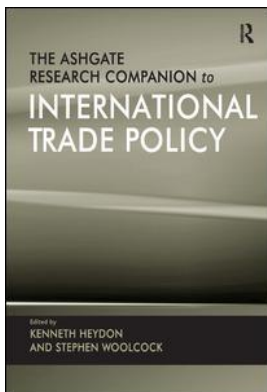
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Environmental Protection, International Trade and the WTO

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Environmental Protection, International Trade and the WTO

Robert Falkner and Nico Jaspers

Introduction

The expansion of international trade since the Second World War has gone hand-in-hand with global economic growth on an unprecedented scale. It has also coincided with a dramatic rise in global environmental degradation, in the form of increased air and marine pollution, desertification and deforestation, loss of biological diversity and climate change.

Two sets of questions arise from this. The first concerns the general link between trade and environment: is the liberalization and expansion of international trade in some way responsible for what many now refer to as the global ecological crisis? Or do freer trade, increased global competition and greater wealth help to promote environmental protection and a more efficient use of scarce resources? The second is about the specific institutional context of international trade and environmental policy: do the rules of the international trading system, primarily those of the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) system but also bilateral and regional trade agreements, help or hinder efforts to protect the environment? Furthermore, are international environmental agreements consistent with the rules and obligations of the WTO order?

These and other questions about the trade–environment nexus have been intensely debated for decades, and especially since the 1990s (for a general overview, see Sampson 2005). They remain critical to the future of the trading system. This chapter reviews the debate and recent scholarship on this topic. It begins with a brief discussion of the general relationship between trade and environment and then focuses more closely on the institutional context for trade and environmental policymaking: the rules of the WTO and how they relate to environmental matters; the relationship between the WTO and multilateral environmental agreements; recent WTO jurisdiction on trade–environment conflicts; and political efforts to resolve such conflicts within the WTO’s Committee on Trade and Environment (CTE) and the Doha Round.

Links Between Trade and the Environment

Are international trade and environmental protection compatible or in conflict? This question has provoked a lively debate between academics, environmental campaigners and free trade advocates. It has focused on two types of causal links between trade and environment: the first concerns the effect that trade liberalization has on environmental quality in a given country or worldwide; the second reverses the perspective and addresses the impact that environmental protection policies have on international trade. At the risk of oversimplifying a complex debate, free trade supporters generally argue that liberalizing trade has a mostly positive effect on the environment, but some environmental measures pose a protectionist threat to the free trade order (Bhagwati 2004; Bhagwati and Srinivasan 1996; Hettige et al. 1998). In contrast, environmentalists assert that free trade is one of the main causes of the global environmental crisis, and that environmental policy should rightly limit free trade where it harms environmental quality (Daly 1993; Goldsmith and Mander 2001).

Closer examination of the empirical evidence behind these claims reveals a more nuanced picture (for an overview, see Neumayer 2001). Under certain circumstances, free trade can lead to more polluting production and greater consumption of natural resources. This is the case in countries that specialize in the production of pollution-intensive goods in response to trade liberalization, such as China which has seen a dramatic rise in air and water pollution caused by the expansion of export-oriented manufacturing (Economy 2004). In other contexts, free trade can promote greater efficiency in production and the diffusion of environmental technologies and standards throughout the world. For example, more globally oriented companies in the chemical and steel industries tend to adopt and promote higher environmental standards than national companies (Garcia-Johnson 2000; Reppel-Hill 1999).

The empirical record is also mixed when it comes to the impact of environmental policies on trade. Environmental protection efforts can disrupt international trade and often give rise to accusations of disguised protectionism. Many developing countries, in particular, have accused advanced economies of using environmental standards to protect their domestic markets against foreign competition (OECD 2005). Other measures, however, can be compatible with the international trading system. Abolishing subsidies for fossil fuel use, for example, would not only help in the fight against global warming; it would also promote a level playing field in international energy markets (Anderson and McKibbin 2000).

Overall, therefore, generalizations about the trade–environment nexus are problematic. Trade liberalization and environmental protection can, but need not, be in conflict. Much depends on the specific circumstances of the industrial sectors and national economies concerned, and the specific environmental policies pursued by governments.

A more useful way to think about these connections is, therefore, to consider context-specific causalities and to identify particular mechanisms by which trade impacts on the environment. Grossman and Krueger (1993) propose three such

mechanisms: scale, composition and technique. The *scale* effect occurs when liberalized trade stimulates economic growth, which in turn leads to an increase in environmentally harmful activities including increased resource consumption. The *composition* effect leads to greater specialization between countries and, as a consequence of the shift in economic activity, differential rates of environmental degradation. Countries with lower environmental standards will see an expansion of environmentally harmful activity in response to this trade-induced specialization effect. The *technique* effect involves changes in the technologies for production and resource extraction. Where increased trade and competition leads to improvements in the efficiency of production or the transfer of advanced technologies to less developed economies, trade can raise the level of environmental protection worldwide.

Environmentalists add to this two further mechanisms, which are generally not well captured by economic models. One such mechanism can be found in the *cultural change* in society which is caused by an opening up to international trade. In this view, trade liberalization creates shifts not only in production technologies but also in consumption patterns, due to a spread of consumerist values and the greater availability of goods, leading to an ever-rising spiral of consumer needs. Rising consumption may even outstrip any efficiency gains from more trade (Princen et al. 2002). Another mechanism is the so-called *distancing* effect. International trade creates longer and more complex chains between geographically dispersed economic actors, from resource extraction and manufacturing to international trade and retailing. As a consequence, consumers are less able to identify and accept the responsibility for the consequences that their decisions have on the environment in evermore distant locations (Princen 1997).

While free trade advocates and environmentalists continue to argue over the right way to conceptualize the linkages between trade and the environment, international policymakers are keen to stress the mutual supportiveness of trade and environmental policies, as was the case at the 2002 World Summit on Sustainable Development. But whether trade and environmental policymaking support each other or clash depends on how existing international norms and rules are to be interpreted. We need to consider in particular how the rules of the GATT/WTO trade system affect environmental policy and vice versa. Other bilateral and regional trade agreements (such as NAFTA) also affect the trade–environment relationship (Gallagher 2004; Heydon and Woolcock 2009), but the subsequent analysis focuses on the relationship between multilateral trade rules and environmental policies and regimes.

International Trade Rules and Environmental Protection

At the time of the creation of the GATT in the late 1940s, there was no international environmental agenda to speak of. Apart from a small number of treaties and institutions dealing with transboundary environmental concerns, environmental

protection was predominantly seen as a domestic policy issue. Understandably, therefore, the creators of the GATT did not include in the agreement any special provisions on the relationship between trade and environmental policy. Still, they recognized that governments might occasionally need to restrict trade in the interest of public health or nature conservation.¹

The GATT's main objective has been to reduce the overall level of tariffs and other trade barriers through a series of multilateral negotiations. Its legal structure is based on a number of fundamental norms, of which reciprocity and non-discrimination are the most important. Reciprocity in the GATT system is evident from the way in which negotiations on tariff reductions have been conducted. Rather than lower trade barriers unilaterally, GATT members, in multilateral negotiations, have only agreed to reduce their levels of protection in return for reciprocal concessions from other trading partners. Non-discrimination is expressed in two principles in the GATT agreement: the most-favoured-nation (MFN) principle (Article I), which requires each GATT member to accord to all other members the same privileges it has granted to its 'most-favoured-nation'; and the national treatment principle (Article III), which demands that GATT members treat 'like products' imported from foreign producers in the same way as those of domestic producers. The concept of like products is an important one in the context of trade–environment debates, even though no definite interpretation of it exists in GATT/WTO law and jurisdiction (Sampson 2005). Internationally traded goods may be different in some respects, for instance reflecting different designs or production techniques; but they are to be considered as like products if they share important physical characteristics or are functionally equivalent (such as cars by different manufacturers).

Article XX is the only provision in the GATT that specifically mentions environmental concerns. It sets out the conditions for restricting international trade in the interest of human, animal or plant life or health (Article XX(b)) and the conservation of natural resources (Article XX(g)). Such measures are allowed if they do not arbitrarily and unjustifiably discriminate between countries with similar conditions or constitute a disguised protectionist measure; if (in the case of subclause b) they can be considered necessary, that is no other, less trade-intrusive, measures are available; and if (in the case of subclause g) equivalent domestic restrictions are imposed as well. The GATT thus allows exceptions from its trade disciplines where environmental objectives are concerned, but seeks to ensure that these measures do not give rise to discrimination or protectionism (Neumayer 2001: 24–25).

Like many other elements of the GATT, the conditions set out in Article XX are ambiguous and have given rise to conflicting interpretations. A number of disputes have arisen that centre on the use of Article XX as a rationale for imposing trade restrictions. We review some of these cases and the evolution of GATT/WTO jurisdiction below. It is worth noting in this context, however, that Article XX contains provisions that are bound to come into conflict with a wide range of

¹ A comprehensive guide to WTO law and jurisdiction in relation to environmental matters can be found in Bernasconi-Osterwalder et al. (2006).

environmental policies. This is most clearly the case with the non-discrimination rule for like products. As a general rule, GATT provisions prohibit member states from restricting trade based on the way in which goods have been produced, so-called process and production methods (PPMs). From an environmental perspective, however, it is often the production process that gives rise to concern and that is targeted by environmental measures (for example greenhouse gas emissions of manufacturing processes). Indeed, many international environmental agreements are about restricting the environmentally damaging side-effects of global economic activities, and environmentalists have long complained about the GATT's 'chilling' effect on taking out trade measures focused on polluting production methods (Eckersley 2004).

More recently, the creation of the WTO at the end of the Uruguay Round has signalled a greater willingness in the trading system to recognize the legitimacy of environmental policies (Charnovitz 2007). This is most clearly evident in the preamble of the Marrakesh Agreement Establishing the WTO, which lists sustainable development and environmental protection as explicit objectives for the trading system. Although not legally binding, the preamble represents an important departure from the GATT's previous philosophy of a strict separation of trade and environmental policy. Furthermore, because the WTO also strengthened the GATT's dispute settlement mechanism and made its rulings legally binding, the evolving WTO jurisdiction on cases involving environmental trade measures has assumed greater importance in balancing the competing perspectives of trade and environmental protection.

Other notable achievements of the Uruguay Round that are of relevance to the trade–environment link include the Agreements on Technical Barriers to Trade (TBT) and on the Application of Sanitary and Phytosanitary Measures (SPS). The TBT agreement sets rules for the use of technical regulations and standards with a view to minimizing their trade-distorting effect (Stein 2009). It recognizes the right of countries to impose such measures to protect human health and the environment, but stipulates that these should not be more trade-restrictive than necessary. For example, an environmental label that informs consumers about the potential health risks associated with a particular product could be considered acceptable under WTO rules if it is applied in a non-discriminatory manner. However, a label that aims solely at PPM characteristics of a product (such as carbon-intensity of car manufacturing) might fall foul of the TBT agreement. This applies particularly to mandatory standards and regulations imposed by governments, whereas measures such as voluntary eco-labels, which are created by private actors, do not fall under WTO jurisdiction.

The SPS agreement, which deals with measures to protect human, animal or plant life or health, similarly allows states to take such measures where they don't lead to discrimination or disguised restrictions on international trade (Charnovitz 1999). Both the TBT and SPS agreements encourage the harmonization of standards or the creation of international standards, such as through multilateral environmental agreements. Article 2.2 of the Agreement further specifies that SPS measures are to be based on scientific principles of risk assessment and sufficient

scientific evidence. This requirement can be temporarily suspended where 'relevant scientific evidence is insufficient', but additional scientific information is to be obtained to carry out a full risk assessment 'within a reasonable period of time' (Article 5.7). The SPS Agreement is the only trade agreement that formally recognizes precaution as a justification for taking trade measures where there is scientific uncertainty but some evidence of potential harm. The question that has repeatedly pitted the WTO against environmentalists is whether such uncertainty is only a temporary phenomenon or a more persistent and thus long-term problem that pervades many areas of environmental policymaking, such as food safety and genetically modified organisms (Isaac and Kerr 2007; Post 2006).

Multilateral Environmental Agreements, Trade Measures and the WTO

Well over 200 multilateral environmental agreements (MEAs) have come into existence since the first United Nations (UN) environment conference in 1972. Some treaties, such as the UN Framework Convention on Climate Change (UNFCCC), have achieved near-universal membership, while others are of a more regional nature or represent small clubs of countries. A small but growing proportion of these MEAs include trade measures among their regulatory instruments. As trade restrictions become more popular in global environmental policymaking, concern is rising that these measures will increasingly come into conflict with WTO rules.

The definition of trade measures in MEAs is fairly wide and often imprecise. It most commonly refers to various forms of restrictions on trade for environmental purposes, such as bans on the trade of certain polluting substances or embargoes on specific countries that are in breach of environmental obligations. It may also include other measures that have an indirect trade impact, such as reporting requirements, labelling systems, prior consent requirements, or fiscal instruments (such as taxes, subsidies) (Brack and Gray 2003: 5–6). Some MEAs are designed to regulate trade. The Convention on Trade in Endangered Species (CITES), for example, uses trade restrictions to control and, where necessary, ban the transboundary movement of animal and plant species that are close to extinction. It also uses trade restrictions as a form of punishment for those parties that do not comply with its provisions. Other treaties use trade restrictions as one of many instruments to support their main environmental goal. One such example is the Montreal Protocol on ozone layer depletion, which imposes a phase-out schedule for certain chemical substances that harm the stratospheric ozone layer. The treaty also includes a ban on trade in these substances with countries that have not ratified the Protocol, the so-called non-parties (Brack 1996).

Trade measures have become popular instruments in MEAs for a number of reasons. They broadly serve three purposes (see Brack and Gray 2003: 13–15):

- Target environmental harm: Most trade measures in MEAs seek to tackle environmental problems by restricting the international movement of products or species that are potentially harmful or endangered (such as CITES, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Cartagena Protocol on Biosafety).
- Promote compliance and regime effectiveness: some MEAs use trade measures to ensure the effective operation of an environmental regime. For example, restrictions may be imposed to punish countries that do not fully comply with a regime's provisions, or to prevent industrial flight to non-parties, so-called 'leakage'.
- Encourage participation in environmental regimes: trade restrictions are also seen as a form of pressure on countries that are reluctant to join an environmental regime. For example, the Montreal Protocol's prohibition of trade with non-parties encouraged some countries to join the Agreement to prevent being excluded from the international trade in regulated substances and products containing them.

While trade measures have become a central element of international environmental treaties, they pose certain problems from a trade perspective. As discussed above, WTO rules require environmental trade measures to be non-discriminatory, that is they should not discriminate between like products from different WTO members or between domestic and international production. Where environmental treaties target products because of the underlying process and production methods rather than environmental quality of the product itself, any resulting trade interference could be seen to be in breach of WTO obligations. A further area where MEAs and the WTO rules could clash is where one party to an MEA uses trade sanctions against a non-party, but both parties are members of the WTO. In such cases, the party that suffers a trade sanction could take action under the WTO alleging breach of trade rules. As yet, no WTO member has challenged an MEA in the WTO's dispute settlement mechanism. However, as the number of environmental treaties with trade restrictions grows and the value of the affected trade increases, a future conflict over the application of MEA-based trade restrictions cannot be ruled out.

One area where WTO–MEA tensions may surface in the not too distant future is climate change. Indeed, the potential use of climate regulation to justify restrictions on trade in carbon-intensive goods has raised considerable interest and concern in the academic and policy community (for an overview, see UNEP 2009). Overlaps between trade and international policies aimed at reducing carbon emissions are inevitable, given the centrality of fossil fuel-based energy to international shipping and manufacturing. As yet, the international climate regime does not include explicit trade measures. But a successor agreement to the Kyoto Protocol, which expires in 2012, may include such measures, and if no comprehensive climate regime is agreed for the post-2012 era, then national or regional climate policies may include some form of border tax adjustment to deal with the competitiveness effects of an uneven regulatory environment (Houser et al. 2008). One way or the

other, climate policy is bound to come into contact, and potentially conflict, with WTO rules.

What do recent WTO dispute settlement cases tell us about the evolution of WTO jurisdiction on trade–environment conflicts? The next section reviews the most high-profile environment-related trade disputes of the last 20 years, before considering the current state of play in multilateral negotiations.

Trends in WTO Jurisprudence

So far, only a very small fraction of the over 500 disputes that have been considered under the GATT/WTO dispute settlement mechanism relate to environmental issues, and virtually all of them occurred over the past two decades. Despite their small number, environment-related trade disputes have attracted a great deal of public attention. A closer examination of the most important cases reveals important developments in international trade jurisdiction.²

The Tuna–Dolphin Case

One of the earliest and most controversial trade–environment disputes concerned a US ban on certain tuna imports as part of a wider effort to protect dolphins. The 1972 Marine Mammal Protection Act (MMPA) required US fishermen to use dolphin-safe fishing methods to prevent the unwanted trapping of dolphins in purse seine nets used by tuna fishing fleets. In 1984, the US Congress added a Direct Embargo Provision to the MMPA that allowed the US to impose import bans on tuna from countries that did not employ dolphin-safe fishing methods. This trade measure was designed to prevent foreign competition from circumventing the MMPA's provisions and gaining an unjustified competitive advantage over US fishermen. When the United States implemented an embargo on tuna imports from Mexico and a few other countries in 1990, Mexico filed a complaint with the GATT arguing, among others, that the US ban was illegal as it was focused on process and production methods (type of nets that trap dolphins), rather than the product itself (tuna). Mexico further argued that the United States was not allowed to use GATT Article XX to force other countries to abide by its domestic environmental laws (extraterritoriality). The GATT panel that heard the case decided in Mexico's favour in 1991, but the ruling never became legally binding. In light of the upcoming negotiations on the North American Free Trade Agreement (NAFTA), Mexico decided not to demand the formal adoption of the decision. In any case, the GATT rules gave any party, such as the United States, the right to veto

² An overview of these and other environment-related cases, as well as panel and appellate body reports, can be found at: www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm.

a panel decision. The decision caused uproar among environmentalists and led to a protracted debate in the 1990s about whether the GATT was fundamentally hostile to environmental concerns (Esty 1994).

The US–Gasoline Case

In 1990, the United States amended the Clean Air Act (CAA) in an effort to improve air quality by reducing adverse emissions from gasoline use. The law mandated the sale of reformulated (that is, cleaner) gasoline in heavily populated urban areas but permitted the continued sale of conventional gasoline in more rural areas. To prevent a shift in inexpensive but highly polluting gasoline ingredients from urban to rural areas, the law also stipulated that conventional gasoline must remain as clean as it was in 1990 (the baseline). By and large, domestic refiners were allowed to use individual baselines that were actually in use in 1990, while foreign producers had to follow an average baseline set by the Environmental Protection Agency. This, Venezuela and Brazil argued, was in conflict with Article III of the GATT as it discriminated against imported products. In 1996, the WTO Appellate Body decided that the baseline establishment methods were indeed inconsistent with Article III and could not be justified by Article XX, as the United States had claimed. However, the Appellate Body found that the US measures were aimed at the conservation of natural resources, and that WTO members were free to set their own environmental objectives, provided they do so in conformity with WTO rules, in particular with regard to the treatment of domestic and foreign products. The dispute settlement body, now operating under the strengthened rules of the WTO agreement, thus took a broader view of the environmental purpose of the trade measure and did not focus solely on the discriminatory nature of the measure (Trebilcock and Howse 2005).

The Shrimp–Turtles Case

A similar case to the *tuna–dolphin* dispute emerged in 1997, when India, Malaysia, Pakistan and Thailand filed complaints at the WTO against a US decision to force foreign shrimp trawlers to use so-called ‘turtle excluder devices’ (TEDs) when fishing in areas where sea turtles are present. The plaintiffs argued that this measure, which was based on the US Endangered Species Act of 1973, was in breach of WTO rules as it threatened foreign producers with a trade ban if they did not comply with US environmental law. Again, the case was decided under the enhanced powers of the WTO agreement and in the context of the WTO’s greater emphasis on balancing free trade with environmental sustainability. In 1998, the dispute settlement body (DSB) ruled that the US import ban was generally a legitimate policy with regard to provisions under Article XX related to ‘exhaustible natural resources’. However, it also found that the way the ban operated and the fact that the United States had previously negotiated treaties on sea turtle protection with some but not all

affected countries, constituted 'arbitrary and unjustifiable discrimination' between WTO members. The United States subsequently changed its rules to be targeted at individual shipments rather than at countries – a practice that the WTO decided was justified under Article XX. While the United States technically lost the initial case, the decision marked an important shift in WTO jurisdiction as it essentially acknowledged that in certain circumstances, countries can use trade measures with the aim of protecting natural resources. The United States lost the case not because it aimed to protect the environment but because it had designed the measure in a discriminatory way – similar to the above gasoline case. Critically for the debate on whether the WTO and environmental policies are compatible, the ruling also pointed to the possibility that trade restrictions can be based on process and production methods in another country if these restrictions do not arbitrarily and unjustifiably discriminate between different countries (Howse 2002).

The EC–Biotech Case

A series of food and feed safety scares in Europe in the late 1980s and in the 1990s created considerable public pressure for more stringent food safety measures at the European level. In the second half of the 1990s, NGO campaigns and consumer hostility against genetically modified organisms (GMOs) led the EU to impose a de facto moratorium on GMO approvals and imports. Under pressure from their farming and biotechnology sectors, the United States, Canada and Argentina in 2003 brought a WTO case against the EU's restrictions on the marketing of GMOs. At the heart of the dispute was the question whether the EU was entitled to act in a precautionary manner even though a high degree of scientific uncertainty surrounded the GMO safety debate. The use of the WTO as a forum to settle a dispute over the appropriate use of precaution in environmental risk regulation proved controversial, not least since the Cartagena Protocol on Biosafety had been adopted in 2000 against US resistance (Falkner 2007). In 2006, the WTO ruled against the EU on procedural grounds, finding that the de facto GMO moratorium was in violation of WTO law, but did not pass a substantive judgment on the WTO consistency of the EU's precautionary GMO legislation as such. By the time the ruling was announced, the EU had already revised its regulations on GMOs and lifted its moratorium at least partially, even though its GMO approval process remains complex and prone to substantial delays due to domestic resistance to agricultural biotechnology (Lieberman and Gray 2008).

The Brazil–Retreaded Tyres Case

In late 2004, Brazil decided to strengthen its import restrictions on retreaded tyres (reconditioned old tyres for further use) from non-MERCOSUR countries, arguing that the disposal of such tyres creates environmental and human health

problems. A year after Brazil imposed these restrictions, the EU asked for a WTO panel to consider whether they conformed to WTO rules. Brazil claimed that its import restrictions were justified under Article XX and that it was obliged to exclude MERCOSUR countries from the restrictions according to the rules of the customs union. The EU countered that the exemption of MERCOSUR countries from the import restriction constituted a breach of the WTO's non-discrimination rule, among others. Both the Panel and the Appellate Body ruled in 2007, albeit for different reasons, that Brazil's import restrictions were inconsistent with WTO rules and could not be justified by Article XX. Similar to earlier rulings such as *US-gasoline* or *shrimp-turtles*, the Appellate Body argued that import bans can be justified on environmental grounds, but that the chapeau (introductory provisions) of Article XX stipulates that they must not lead to 'arbitrary and unjustifiable discrimination between countries'. Brazil complied with the DSB's request to revise its laws to make them conform to WTO rules.

Overall Trends in WTO Jurisdiction

Over the past two decades, GATT/WTO jurisdiction on environment-related trade measures has changed considerably. Earlier rulings as in the *tuna-dolphin* case insisted that trade restrictions must not be aimed at process and production methods (PPMs) outside a country's own jurisdiction, a position that threatened to undermine many trade-related environmental policies. Soon after this decision, however, the *US-gasoline* case marked the cautious beginning of a less restrictive interpretation of environmental measures. While the WTO panel stressed that trade measures must not discriminate among countries, it acknowledged that they can be based on grounds of environmental protection. The *shrimp-turtle* case is widely seen as a watershed in the WTO's interpretation of environmental trade measures. The decision almost reversed the earlier *tuna-dolphin* decision by arguing that a trade measure based on PPMs *can* be directed at other countries under Article XX, and that animals can qualify as an 'exhaustible natural resource' that may be protected through trade bans. In the *EC-biotech* case, the WTO Panel reinforced the importance of non-discrimination and the proper application of regulatory procedures, but acknowledged the importance of scientific uncertainty in justifying trade restrictions, arguing that a moratorium amidst scientific uncertainty need not necessarily violate international trade law.

Thus, WTO jurisdiction has gradually come to accept that trade-restricting measures under Article XX can be justified for environmental reasons, but continues to insist that they must not constitute an arbitrary and/or unjustifiable discrimination. Indeed, the primary reason for why environmental measures in *gasoline*, *shrimp-turtle*, and *retreaded tyres* were found to be in breach of WTO rules was not the ultimate objective of these measures but the way in which they had been applied. As DeSombre and Barkin (2002) argue, the WTO ruled against these measures not because they were inherently bad, but because they 'were either

clear attempts at industrial protection dressed up in environmentalist clothes, or they were poorly thought through and inappropriate tools for the environmental management intended.

The Committee on Trade and Environment and the Doha Round

One of the outcomes of the Uruguay Round was the creation of the Committee on Trade and Environment (CTE) in 1995, which was tasked to consider the relationship between environmental and trade measures, and to formulate recommendations on how to modify WTO rules with regard to environmental policy if modifications are required. The CTE's initial work programme covered an extensive policy terrain, ranging from the relationship between MEAs and WTO rules to issues related to transparency, market access, intellectual property rights, and arrangements with NGOs.

To date, the CTE has made only minimal progress in trying to resolve the issues on its agenda. At best, it produced a series of background studies and annual reports on trade–environment matters and provided a forum for different stakeholders from national and international bodies to exchange their views (Charnovitz 2007; Neumayer 2004). At the heart of the CTE's failure to resolve any of the issues on its agenda are deep-seated differences in national interests, particularly between developed and developing countries, but also a more general unwillingness among participants to address the underlying tensions between WTO norms and principles and those of environmental regimes (Gabler 2010).

The role of the CTE in the WTO framework changed with the launch of the Doha Round in 2001, when it was given a negotiating mandate at the WTO Trade Negotiations Committee (TNC). The 2001 WTO Doha Ministerial Declaration recognizes the importance of 'enhancing the mutual supportiveness of trade and environment' (paragraph 31) and calls for 'the reduction or, as appropriate, elimination of tariffs and non-tariff barriers to environmental goods and services' (paragraph 31). Other elements of the negotiation mandate include the relationship between the WTO and MEAs and procedures for information exchange between MEAs and WTO committees. Little progress has been made in any of these areas. Notwithstanding the potentially large gains from the liberalization of environmental goods and services (Steenblik et al. 2005), because 'environmental goods' were not defined in the Doha mandate, much of the focus in negotiations has been on competing attempts to arrive at a workable definition. This task is further complicated by the fact that technological progress makes it difficult to establish definite lists of goods that fall into this category.

Conclusion

The trade–environment nexus remains a controversial and challenging issue on the international trade agenda. Some progress has been made in identifying the circumstances in which international trade and environmental protection can be mutually compatible, but several areas of contention and conflict remain.

The first area relates to the WTO's general approach to environmental policy. Some observers call on the WTO to become more engaged with environmental issues, not least since the WTO already adjudicates cases that involve conflicts between environmental measures and international trade law. Given the WTO's de facto impact on global environmental policy, they argue that the WTO should take on more formal environmental responsibilities, even though details of such a closer engagement with the global environmental agenda remain sketchy. On the other hand, concerns have been raised that environmental protection might actually take a backseat on the international trade agenda due to an increasing use of bilateral agreements instead of multilateral ones and a generally low interest among some countries on issues related to environmental protection (Neumayer 2004). The WTO has so far trod a careful path through this debate, stating repeatedly that, while it aims to contribute to sustainable development, it does not consider itself as an environmental protection agency (WTO 2004).

The second area relates to the interpretation of existing legal provisions. Despite an evolving mandate and institutional framework, the WTO has had significant impact on certain environmental measures, as outlined above. Past decisions have clarified what a 'necessary' environmental measure is; what is meant by 'exhaustible natural resource'; whether measures can extend extraterritorially; and how 'arbitrary' and 'unjustifiable' should be interpreted under the chapeau of Article XX. Disagreement still exists, however, with regard to environmental measures aimed at PPMs, especially when they are 'unincorporated', that is when they cannot be detected in the final product. The definition and use of precaution remains equally contested, as has been illustrated by the *EC–biotech* case and the question of 'sound' science as a criterion for policymaking versus a broader interpretation of the evidence basis for risk assessment.

The third area relates to the question of inclusiveness and transparency of decisionmaking. While the CTE has been tasked with addressing the relationship between MEAs and the WTO, both in institutional and jurisdictional terms, there remains considerable debate on how to integrate the two, especially when the former continue to employ trade-restricting measures that remain vulnerable to challenges under WTO law (Eckersley 2004; Palmer and Tarasofsky 2007). Another contentious point is the access of external stakeholders, especially civil society and NGOs, to WTO decisionmaking processes. While the WTO has promoted dialogue with interested organizations, NGOs continue to raise concerns about the lack of transparency in the WTO's deliberations and negotiations, especially with regard to environmental issues.

The fourth and final area relates to the increasingly important impact of the climate change debate on international trade. As states explore different options

for reducing greenhouse gas emissions, it is becoming increasingly clear that trade measures will be part of the international effort to combat global warming. This could be in the form of border tax adjustment to address international competitiveness issues, preferential treatment of climate-friendly goods and services, renewable energy subsidies and product labels indicating carbon content, among others (Brewer 2010). Efforts to enforce international climate policy through trade measures may severely test the scope of Article XX (Frankel 2009), and a push to target carbon-content in internationally traded goods may test the WTO's willingness to accept trade measures that are based on PPMs (Hufbauer and Kim 2009). The WTO itself recognizes its responsibility in the international community to address climate change as part of its sustainable development agenda, but sees its role primarily as an arbiter of conflicts. The challenge will be to avoid the trap of green protectionism where general trade restrictions are used to seek compliance with quite distinct climate goals. Climate policy may yet prove to be the biggest challenge for the WTO's ability to manage the trade–environment relationship.

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