PART 2

RELEVANCE OF OTHER INTERNATIONAL AGREEMENTS FOR UNILATERAL NPR PPM MEASURES ADDRESSING NON-TRADE CONCERNS

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1 General introduction

Environment, human rights and labour standards are the subject of separate international agreements, as introduced in Part 1 of this report. Occasionally, such agreements contain provisions that have a bearing on international trade. These provisions either directly pose obligations upon parties that affect trade or allow for parties to install trade measures addressing environmental or social concerns. Examples include the regime of import and export restrictions under the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) – which is in part obligatory and in part voluntary – and the protection of labour rights under the International Labour Organization (ILO) conventions. Also, the production standards developed by private or non-governmental organizations, such as those of the Euro Retailer Working Group (EurepGAP) and the Forest Stewardship Council, have a direct bearing on international trade.

The first part of this chapter will address the WTO compatibility of these specific international agreements and measures, while the second part will assess the place and role of other norms of international law – such as those emanating from human rights and environmental agreements – in the WTO system. It must be noted that, so far, a dispute over conflicting obligations under environmental or human rights agreements on the one hand, and WTO law on the other, has not yet been put forward to the WTO dispute settlement system. However, there is an apparent need for answers in order to avoid or to address such disputes in future.

2 Obligations stemming from other international agreements and measures

This section describes the pertinent features of the international environmental and social agreements and measures introduced in section 1 above. It will address the obligations stemming from these agreements and measures and briefly explain how these relate to WTO obligations. It will also assess some possibilities for installing unilateral measures based on these agreements and measures.

2.1 International agreements on environmental protection

International environmental agreements occasionally resort to trade-related measures to further their objectives. Out of the 200 multilateral environmental agreements (MEAs) currently in force, the WTO has identified 14 agreements containing trade-related provisions.[477]

477 See the Matrix on Trade Measures pursuant to Selected Multilateral Environmental Agreements, prepared by the WTO Secretariat, WT/CTE/W/160/Rev.3, 16 February 2005, available at www.wto.org.

It should be noted that in most cases these trade provisions relate to product-related processes and production methods (PR PPMs). Nonetheless, their relevance for the current discussion is twofold. First, the discussion on the relation of MEAs to WTO law is still not resolved, while the need for answers is of high relevance, notably in the context of unilateral measures adopted pursuant to these agreements. Second, these unilateral measures may relate to non-product related PPMs introduced in furtherance of the objectives of environmental agreements. Examples include a prohibition on harvesting techniques detrimental to biological diversity (protected under the *Convention on Biological Diversity*) or to endangered species (protected under CITES), and the levy of a carbon tax on products produced in an unsustainable way by States not party to the *Kyoto Protocol*.

This subsection will review the major environmental agreements and their trade-related provisions. Particular conflicts with WTO law will be assessed within the context of these treaties. Some common features of the environmental agreements – i.e. provisions on the transfer of technology to developing countries and provisions affecting non-Parties – and their relation to WTO law will be dealt with separately at the end of this subsection.

2.1.1 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

CITES is among the earliest multilateral environmental conventions and regulates the trade in endangered species of wild fauna and flora.[478] Its main purpose is to prevent overexploitation of wild animals and plants leading to their extinction. Article 2 of the Convention distinguishes three categories:

- 'species threatened with extinction which are or may be affected by trade', listed in Appendix I to the Convention;
- 'species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival', listed in Appendix II to the Convention; and
- 'species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the cooperation of other Parties in the control of trade', listed in Appendix III to the Convention.[479]

478 *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES), concluded in Washington, DC, on 3 March 1973 (entry into force 1 July 1975), 993 *UNTS* 243. As of early 2007, 169 states had ratified CITES. On international wildlife law, see P. van Heijnsbergen, *International Legal Protection of Wild Fauna and Flora* (Amsterdam: IOS Press, 1997); and S. Lyster, *International Wildlife Law: An Analysis of International Treaties Concerned with the Conservation of Wildlife* (Cambridge: Grotius Publications, 1985).

Requirements for trade in these species differ according to the appendix they are listed in, the Appendix I regime being the most severe. Trade in species listed in Appendix I requires both an export and an import permit, granted after approval of both a Scientific and Management Authority (Article III). The Scientific Authority must determine that trade in the species involved will not be detrimental to its survival. This is the so-called 'no detriment' requirement. For species listed in Appendix II the same requirements apply, except for the obligation to present an import permit (Article IV). Finally, a species listed in Appendix III only require an export permit for States that have included that species in Appendix III and do not need the approval of a Scientific Authority (Article V). Although the Convention does not specifically provide for it, export quotas for specific species can be installed by the Conference of the Parties or – on a voluntary basis – by Parties themselves. Furthermore, in order to enforce the provisions of the Convention, Parties are required to take domestic measures. According to Article VIII of the Convention, these shall include measures 'to penalize trade in, or possession of […] specimens' and 'to provide for the confiscation or return to the State of export of such specimens'.

CITES is the only MEA that exclusively resorts to trade measures to protect the environment.[480] These measures, which consist of import and export licences and (voluntary) quotas, are *prima facie* incompatible with Article XI of the GATT. However, these may be justified under the general exception clauses of Article XX of the GATT.[481] First, the measures may be considered necessary for the protection of animal and plant life and health (Article XX(b) of the GATT) since they intend to protect species threatened with extinction.[482] It is difficult to think of another less

479 Parties to the convention may propose amendments to Appendices I and II to be adopted by the Conference of the Parties (Article XV). Since inclusion of a species in Appendix III is voluntary and only relates to trade in species from the Party that has included them, amendments to Appendix III may be made by any Party at any time (Article XVI).

480 See G. van Calster, *International and EU Trade Law: The Environmental Challenge* (London: Cameron May, 2000), p. 83.

481 For an in-depth analysis of Articles XI and XX GATT, see Part I of this study.

482 Van Calster points out that the 'no detriment requirement' of CITES for trade in species listed in Appendices I and II might make it difficult for a country to justify the import restrictions under Article XX of the GATT, since this might result in a situation in which different trade restrictions apply for the same species depending on whether it is threatened or not in the region from which it originates. However, it could also be argued that in these circumstances 'the same conditions', as stipulated by Article XX of the GATT, do not apply. See G. van Calster, *International and EU Trade Law,* pp.110-121.

trade-restrictive way to attain this objective. Second, the measures relate to the conservation of exhaustible natural resources and are made effective in conjunction with domestic restrictions (Article XX(g) of the GATT). In the *US – Shrimp* case, the Appellate Body made it clear to be a proponent of international cooperation for the protection of the environment. Therefore, it is likely that the measures prescribed by a multilateral convention like CITES, that creates the same obligations for all Parties and serves a legitimate objective (i.e. the protection of species threatened with extinction), will be found compatible with WTO law. This leaves open the question of how to deal with the obligations the Convention creates for non-parties. Article X of the Convention states that

> *where export or re-export is to, or import is from, a State not a Party to the present Convention, comparable documentation issued by the competent authorities in that State which substantially conforms with the requirements of the present Convention for permits and certificates may be accepted in lieu thereof by any Party.*

This provision essentially requires non-signatories to abide by the Convention in their trade relations with Parties to CITES. In its Resolution 9.5, the Conference of the Parties established strict criteria for documentation issued by non-parties.[483] That is not to say that these automatically amount to – in the words of Article XX of the GATT – 'arbitrary or unjustifiable discrimination'. Much will depend on the interpretation of the CITES requirements in the context of WTO law. In the *US – Shrimp* case, the Appellate Body determined that requiring other countries to adopt 'essentially the same' regulatory programme amounts to arbitrary discrimination.[484] However, in the follow-up to this case, the Appellate Body ruled

483 Resolution 9.5, adopted at the ninth meeting of the Conference of the Parties in Fort Lauderdale, 7-18 November 1994; amended at the thirteenth meeting in Bangkok, 2-14 October 2004. The Conference of the Parties recommends that Parties only accept permits and certificates issues by non-signatories if they contain 'i) the name, stamp and signature of a competent issuing authority; ii) sufficient identification of the species concerned for the purposes of the Convention; iii) certification of the origin of the specimen concerned including the export permit number from the country of origin, or justification for omitting such certification; iv) in the case of export of specimens of a species included in Appendix I or II, certification to the effect that the competent scientific institution has advised that the export will not be detrimental to the survival of the species (in case of doubt a copy of such advice should be required) and that the specimens were not obtained in contravention of the laws of the State of export; v) in the case of re-export, certification to the effect that the competent authority of the country of origin has issued an export document that substantially meets the requirements of Article VI of the Convention; and vi) in the case of export or re-export of live specimens, certification to the effect that they will be transported in a manner that will minimize the risk of injury, damage to health or cruel treatment.'

484 For a discussion of the requirements of the chapeau of Article XX of the GATT, see Part I of this study. See also section 3.3 below.

that requiring other countries to adopt a programme which is 'comparable in effectiveness' is allowed. In this regard, the Appellate Body stated that

> *…there is an important difference between conditioning market access on the adoption of essentially the same programme, and conditioning market access on the adoption of a programme* ***comparable in effectiveness****. Authorizing an importing Member to condition market access on exporting Members putting in place regulatory programmes* ***comparable in effectiveness*** *to that of the importing Member gives sufficient latitude to the exporting Member with respect to the programme it may adopt to achieve the level of effectiveness required. It allows the exporting Member to adopt a regulatory programme that is suitable to the specific conditions prevailing in its territory.*[485]

2.1.2 Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer

The *Vienna Convention for the Protection of the Ozone Layer* is a multilateral framework convention, negotiated in the early 1980s in response to concerns regarding acid rain and the depletion of the ozone layer by substances such as chlorofluorocarbons (CFCs).[486] The Convention aims 'to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer'. The Convention sets out general policy guidelines relating to research and systematic observations (Article 3) and to international cooperation in the legal, scientific and technical fields (Article 4). Amongst these guidelines is the obligation for Parties to 'cooperate in the formulation of agreed measures, procedures and standards for the implementation of this Convention, with a view to the adoption of protocols and annexes'. Thus, the Convention provides for a framework for Parties to take further action through the adoption of protocols and annexes.

So far, the Conference of the Parties has only adopted one – but highly successful – protocol to the *Vienna Convention*. The *Montreal Protocol on Substances that Deplete the Ozone Layer* aims

485 See Appellate Body Report, *US – Shrimp (Article 21.5 – Malaysia)*, para. 144.

486 *Convention for the Protection of the Ozone Layer*, concluded in Vienna on 22 March 1985 (entry into force 22 September 1988), 26 *ILM* 1529 (1987). As of early 2007, 191 states had ratified the *Vienna Convention*. On this subject, see O. Yoshida, *The International Legal Regime for the Protection of the Stratospheric Ozone Layer* (The Hague: Kluwer Law International, 2001).

to protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it, with the ultimate objective of their elimination on the basis of developments in scientific knowledge.[487]

These precautionary measures consist of the phasing out of the consumption of certain controlled substances as specified in the Annexes to the Protocol. Parties to the Protocol undertake to reduce their levels of consumption of ozone-depleting substances to an established base level. Article 2 of the Protocol allows for Parties to transfer portions of their calculated level of production of a number of the controlled substances to other Parties, 'provided that the total combined calculated levels of production of the Parties concerned for any group of controlled substances do not exceed the production limits set out in those Articles for that group'. The Protocol also allows for limited transfer of portions of the consumption level of substances known as hydrochlorofluorocarbons, which are considered less damaging to the ozone layer than CFCs. On the basis of Article 2(8), members of a regional economic integration organization such as the European Union may form a 'bubble', that is they may choose to jointly fulfil their obligations in order to reduce their consumption levels.

Furthermore, Article 5 of the Protocol provides for preferential treatment for developing countries. It also makes the implementation of the Protocol by those Parties dependent upon the effective implementation of the provisions for financial assistance and the transfer of technology by industrialized countries. While WTO law provides for special and preferential treatment for developing countries Members, the provision on the transfer of technology may conflict with WTO law. This issue will be discussed below.

Finally, Article 4 of the Protocol contains provisions for trade with non-parties to the Protocol. In theory, these provisions are the most problematic in relation to WTO law, because they provide for a complete ban on trade through a phasing-out method.[488] This ban even applies to the export of technology for the production and utilization of substances that deplete the ozone layer and to the granting of subsidies, aid, credits, guarantees or insurance programmes for the export of products, equipment, plant or technology that facilitate the production of such

487 *Montreal Protocol on Substances that Deplete the Ozone Layer*, concluded in Montreal on 16 September 1987 (entry into force 1 January 1989), 26 *ILM* 1550 (1987). As of early 2007, all Parties to the *Vienna Convention* had also ratified the *Montreal Protocol*. For an explanation of the precautionary principle/approach, see section 2.1.4 on the *Cartagena Protocol* below.

488 In practice, almost the entire international community – 191 out of 192 States – have ratified the *Vienna Convention* and its *Montreal Protocol*.

substances.[489] Furthermore, Article 4(4) relates to non-product-related production methods. It prohibits the import from non-parties of products 'produced with, but not containing' certain controlled substances. Finally, Article 4(8) determines that non-parties who *de facto* abide by the Protocol – as determined by the Parties – are exempted from the ban. These provisions clearly violate Article XI of the GATT. However, as pointed out by Yoshida, the measures in Article 4 of the *Montreal Protocol* are to be considered necessary to ensure the effectiveness of the protocol and to overcome the free-rider problem, i.e. the problem that non-parties benefit from the measures taken under the protocol without taking their share in the measures to preserve the ozone layer.[490] Furthermore, although in a strict sense CFCs or other ozone-depleting substances (ODSs) are not directly harmful to human, animal or plant life or health, it could be argued that their phasing-out is necessary to protect human, animal and plant life and health against the negative effects due to the depletion of the ozone layer.

2.1.3 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

The *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* was drawn up in response to incidents in the 1980s involving the dumping of hazardous wastes by industrialized countries in developing states.[491] This multilateral convention aims to regulate the trade in hazardous and other wastes with the objective of protecting human health and the environment from the dangers posed by such wastes. The Convention excludes radioactive wastes from its scope.

Article 2 of the Convention defines wastes as 'substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law'. Article 4 of the Convention obliges Parties to reduce

489 See Part I of this study for a discussion of the scope of measures falling within the scope of Article XI of the GATT.

490 O. Yoshida, *The International Legal Regime for the Protection of the Stratospheric Ozone Layer* (The Hague: Kluwer Law International, 2001). Yoshida argues that 'without such trade restrictions, non-parties would simply increase their production as Parties gradually phase out their ozone-depleting substances (ODS) production, and it is possible that unrestricted imports from non-parties would impair the further development of CFC/ODS substitutes. Furthermore, if industries using ODSs simply moved to non-parties and then manufacture such products for export to the parties, this would eventually nullify the environmental benefits of the Montreal Protocol regime' (p.139).

491 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, concluded in Basel on 22 March 1989 (entry into force 5 May 1992), 28 *ILM* 657 (1989). As of April 2007, 170 States had ratified the *Basel Convention*.

to a minimum the generation and transboundary movements of hazardous wastes, and to ensure their environmentally sound management. Parties are not allowed to export wastes to countries that have prohibited the import of such wastes, or that have not consented in writing to the specific import, or when there is reason to believe that the wastes in question will not be managed in an environmentally sound manner.[492] Trade with non-parties to the Convention is prohibited altogether, except through the conclusion of an agreement.[493] Furthermore, the Convention adopts the 'proximity principle'. The transboundary movement of wastes is only allowed if the exporting State does not have the capacity or facilities to dispose of the wastes in an environmentally sound manner, or when the wastes are required as a raw material for recycling or recovery industries in the importing State, or if it is in accordance with other criteria decided by the Parties. In addition, Article 4 requires wastes to be packaged, labelled and transported in conformity with generally accepted international rules and standards.[494] Article 6 provides for an extensive procedure for the transboundary movement of hazardous wastes, based upon notification by the exporting Party and prior informed consent by the importing State.

Finally, Article 11 allows Parties to 'enter into bilateral, or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention'.

Furthermore, the provisions in these agreements or arrangements are not to be less environmentally sound. Examples of such regional agreements are the *1991 Bamako Convention* between the members of the former Organization of African Unity – which even provides for a complete import ban of hazardous wastes from non-Parties into Africa – and the *1995 Waigani Convention* between the Pacific

492 The second Conference of the Parties approved a ban for all export by OECD countries to non-OECD countries, known as the 'Basel ban'. Failing to receive the required number of ratifications, the ban has not yet entered into force. See P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press, 2003), pp.694-695.

493 See Article 11 further below.

494 This requirement is in conformity with and even exceeds the requirements of the *TBT* and *SPS Agreements*. Article 2.4 of the *TBT Agreement* requires national measures to be based on relevant international standards, if available. Article 3.1 of the *SPS Agreement* requires Members to base their national measures on international standards, guidelines or recommendations, where they exist.

Island developing countries.[495] Also, reference can be made to Article 32 of the 2000 *Cotonou Agreement*, a mixed partnership agreement between the European Communities and the Member States of the EU on the one hand, and the African, Caribbean and Pacific (ACP) countries on the other, and to the EC Waste Shipment Regulation 259/93. Unlike its predecessor, the *Lomé IV Convention*, which contained a detailed provision on waste management, the *Cotonou Agreement* confines itself in Article 32 to mentioning that 'cooperation on environmental protection and sustainable utilisation and management of natural resources shall [take] into account issues relating to the transport and disposal of hazardous waste'.[496] The EC Waste Shipment Regulation contains a regime for members of the European Community concerning the shipment of hazardous wastes within, into and out of the European Community.[497]

At least two features of the regime for the transboundary movement of wastes as set out in the *Basel Convention* are problematic in view of the requirements of WTO law.[498] First, Article 4(5) of the *Basel Convention* prohibits Parties to trade with non-parties, which constitutes a violation of Articles I and XI of the GATT. The Convention does not include any exceptions to this rule, except for the possibility for a Party to conclude an agreement with a non-party through Article XI of the Convention. Nonetheless, held against the requirements of Article XX(b) of the GATT, this restriction may pass the test. The possibility offered by the Convention to conclude an agreement with a non-party – supplementary to the option for a non-party to join the Convention – may be deemed compatible with the 'good faith efforts' requirements as set out by the Appellate Body in *US – Shrimp (Article 21.5 – Malaysia).*

The second aspect relates to the decisions by the second and third Conferences of the Parties to install an export ban on hazardous wastes from OECD countries to

495 *Bamako Convention on the ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa*, concluded in Bamako on 30 January 1991 (entry into force 10 March 1999); *Convention to Ban the Importation Into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region*, concluded in Waigani on 16 September 1995 (not yet in force).

496 Article 39 of the *Lomé IV Convention* contained a prohibition on the movement of hazardous and radioactive wastes from EC to ACP states and provided for consultation between Parties in case of difficulties.

497 Council Regulation (EEC) No. 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community. *Official Journal* L 30, 6/2/1993, p.1, as amended.

498 The packaging and labelling requirements of Article 4(7)b could also pose problems. However, the *Basel Convention* requires these measures to be in conformity with 'generally accepted and recognized international rules and standards'. This is compatible with the 'international standards' rule of the *SPS* and *TBT Agreements*.

developing countries, which also includes a ban on the export of hazardous wastes for recycling purposes. Although the Convention applies to both hazardous and other wastes, the 'Basel ban' – not yet applied – only prohibits shipments of hazardous wastes from industrialized to developing countries. Schoenbaum has argued that 'an export ban on hazardous wastes may be justified under GATT Article XX(b) on the same basis as export restrictions on domestically prohibited goods' because they 'have the potential to endanger human health and the environment'. In his opinion,

> *even a discriminatory export ban may be upheld under Article XX(b) if the discrimination is not 'arbitrary or unjustifiable … between countries where the same conditions prevail'. A ban that distinguishes between OECD and developing countries, arguably at least, could pass this test because of the very different conditions in developing countries'.*[499]

Actually, this is far from certain. First, the GATT does not contain an explicit exception for trade in dangerous goods. Second, the 'Basel ban' aims at extraterritorial application. If there is no genuine connection with the interests of the exporting party, i.e. to protect the health of its inhabitants or its domestic environment, it is doubtful whether the ban will be compatible with WTO obligations. The exporting state would have to prove that the environmentally unsound management of wastes in the importing state poses a risk to human health or the environment of the exporting state. This might be the case if the wastes were to pollute the sea.[500]

2.1.4 Convention on Biological Diversity and the Cartagena Protocol on Biosafety

The *Convention on Biological Diversity* is a multilateral convention that aims at

> *the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.*[501]

499 T. Schoenbaum, 'International trade and environmental protection', in P. Birnie and A. Boyle, eds, *International Law and the Environment*, 2nd edition (Oxford: Oxford University Press, 2002), p.727. Also, see M. Matsushita, T.J. Schoenbaum and P.C. Mavroidis, *The World Trade Organization: Law, Policy and Practice*, 2nd edition (Oxford: Oxford University Press, 2006), p.822.

500 See also Part I of this study for a discussion on the scope of Article XX(b) of the GATT.

501 *Convention on Biological Diversity*, concluded in Rio de Janeiro on 5 June 1992 (entry into force 29 December 1993), 31 *ILM* 818 (1992). As of early 2007, 190 states had ratified the *Biodiversity Convention*.

Article 2 of the Convention defines biological diversity as 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.' Although the *Biodiversity Convention* sets only broad policy goals and does not contain specific trade-related measures, it does contain some provisions that have been the subject of considerable debate within the context of the *TRIPS Agreement* on the protection of intellectual property. These provisions relate to the protection of traditional knowledge and folklore (Article 8(j)); the sharing of benefits arising out of the utilization of genetic resources (Article 15); access to and transfer of technology, including biotechnology (Article 16); and the handling of biotechnology and the distribution of its benefits (Article 19). A particular controversial subject is the sharing of benefits arising from traditional knowledge and genetic resources. Indigenous peoples have acquired knowledge of genetic resources over centuries, without being able to identify a specific inventor as required under the *TRIPS Agreement*.[502] Therefore, the pharmaceuticals industry has been able to register patents on plants and herbs for their medicinal effects without seeking the permission of, or having to compensate the original holders of the knowledge. The *Biodiversity Convention* purports to make this practice more difficult in the future.[503]

On 29 January 2000, a Protocol to the *Convention on Biological Diversity* was adopted. The *Cartagena Protocol on Biosafety* addresses the issue of genetic modification through biotechnology. It intends to minimize the potential risks for the environment and human health surrounding the use of living modified organisms, better known as genetically modified organisms (GMOs). It aims to ensure

> *an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health.*[504]

For this purpose, the *Cartagena Protocol* establishes a regulatory framework for the use or transboundary movement of GMOs consisting of different procedures,

502 See C. Dommen, 'Raising human rights concerns in the WTO', in *Human Rights Quarterly*, vol. 24 (2002), pp.38-39.

503 On this subject, see P. Birnie and A. Boyle, *International Law and the Environment*, pp.733-734.

504 *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*, concluded in Montreal on 29 January 2000 (entry into force 11 September 2003), 39 *ILM* 1027 (2000). As of early 2007, 138 states had ratified the *Cartagena Protocol*.

depending on the purpose of the use or the transboundary movement (e.g. the advanced informed agreement procedure of Articles 8–10 and 12 for the intentional introduction of GMOs into the environment of the importing Party, or the simplified procedure of Article 11 for the direct use of GMOs as food or feed or for processing). A Party is free to decide, on the basis of a risk assessment, whether it will allow a certain GMO on its territory or not.

The Protocol further stipulates, in Articles 10.6 and 11.8, that

> *lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision […] in order to avoid or minimize such potential adverse effects.*

These provisions incorporate the precautionary principle, sometimes referred to as the precautionary approach. In a somewhat other – more restricted – form, this principle is also incorporated into Article 5.7 of the *SPS Agreement*, which allows WTO Members to provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, in cases where relevant scientific evidence is insufficient.[505] This right is coupled with the obligation for Members to 'seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time'. What constitutes 'a reasonable period of time' depends on the specific circumstances of the case and must therefore be determined on a case-by-case basis. Yet, Members have to make a real effort to seek to obtain additional information necessary to conduct a risk assessment.[506] In other words, as long as measures taken under the *Cartagena Protocol* are based on available pertinent information, and Parties make a genuine effort to seek additional information to conduct a risk assessment, these measures are compatible with WTO law.

505 In *EC – Hormones*, the Panel considered that the precautionary principle would not override the explicit wording of Articles 5.1 and 5.2 of the *SPS Agreement*, 'in particular since the precautionary principle has been incorporated and given a specific meaning in Article 5.7 of the *SPS Agreement*'. The Appellate Body determined that Article 5.7 of the *SPS Agreement* does not exhaust the relevance of a precautionary principle. However, in the view of the Appellate Body, the principle 'at least outside the field of international environmental law, still awaits authoritative formulation'. Therefore, the Appellate Body upheld the finding of the Panel that the precautionary principle does not override the provisions of Articles 5.1 and 5.2 of the *SPS Agreement*. See on this subject also S. Safrin, 'Treaties in collision? The Biosafety Protocol and the World Trade Organization Agreements', in *American Journal of International Law*, vol. 96, no. 3 (2002), p.610; and S.D. Murphy, 'Biotechnology and international law', in *Harvard International Law Journal*, vol. 42, no. 1 (2001), pp.47-139.

506 See Appellate Body Report, *Japan – Agricultural Products II*.

2.1.5 United Nations Framework Convention on Climate Change and the Kyoto Protocol

The *United Nations Framework Convention on Climate Change* is a multilateral convention that aims to achieve 'the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' and applies to all greenhouse gases not controlled by the *Montreal Protocol*.[507]

Just like the *Montreal Protocol* and the *Cartagena Protocol*, the *Convention on Climate Change* adopts a precautionary approach. Article 3(3) states that 'where there are threats of serious and irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures'. Furthermore, the preamble to the Convention pronounces climate change to be a 'common concern of humankind', which calls for the 'widest possible cooperation by all countries'. However, since 'the largest share of historical and current global emissions has originated in developed countries' and since they have the financial and technological capabilities, the Convention proclaims that these countries should take the lead in combating the adverse effects of climate change. Therefore, the Convention adopts the principle of 'common but differentiated responsibilities' as one of the cornerstones of the climate change regime, together with the principle of equity. This is made explicit in the commitments of Parties, as formulated in Article 4 of the Convention. Article 4(1) contains a number of general policy guidelines and reporting requirements that apply to all Parties.[508] In this respect, Article 4(2) formulates stricter requirements for the industrialized countries and for those with economies in transition. For the latter category, some flexibility is allowed. Furthermore, industrialized countries must provide financial resources and transfer technology to developing-country Parties.[509] The extent to which developing countries are required to implement the Convention is made

507 *United Nations Framework Convention on Climate Change*, concluded in New York on 9 May 1992 (entry into force 21 March 1994) 31 *ILM* 849 (1992). As of early 2007, 190 States had ratified the *Climate Change Convention*.

508 The *Climate Change Convention* differentiates between three groups of countries, listed in the appendices to the Convention. The first group consists of industrialized Parties (listed in Appendix II). The second group consists of the industrialized countries and of countries undergoing the process of transformation from a planned to a market economy (Appendix I). The third group consists of developing countries (non-Annex I countries).

509 See Article 4(3) to (5) of the Convention.

dependent on the effective implementation by industrialized countries of their commitments relating to financial resources and transfer of technology.[510]

The *Convention on Climate Change* does not contain specific obligations concerning the reduction of greenhouse gases. These must be regulated through protocols. The *Kyoto Protocol*, containing a framework of measures for the reduction of greenhouse gas emissions until the year 2012, was adopted in 1997[511] and entered into force in 2005. The *Kyoto Protocol* is guided by the same principles as the *Convention on Climate Change*. These take shape in the Protocol's regime, which only imposes targets for the limitation and reduction of greenhouse gases on industrialized countries and on countries with economies in transition (the Annex I countries, listed in Annex B to the Protocol). Furthermore, Article 11(2) of the Protocol reiterates the obligations for industrialized countries under the Convention, i.e. to provide additional financial resources to assist developing countries with the implementation of the Convention. In order to achieve the emissions reduction targets, Parties are to implement measures into their domestic policies. To this effect, Article 2 of the Protocol contains a list of potential policy instruments. Complementary to domestic measures, Parties are allowed to fulfil their commitments by reducing emissions abroad if this is more cost-effective than in their own countries. For this purpose, the Protocol contains three flexible mechanisms:

- the Joint Implementation mechanism, which allows Annex I Parties to transfer to or acquire from other Annex I Parties emission reduction units resulting from projects aimed at reducing emissions by sources or enhancing removals by sinks (Article 6);
- the Clean Development Mechanism, which makes it possible for Annex I countries to gain emission credits from projects in non-Annex I countries aimed at achieving sustainable development (Article 12); and
- Emissions Trading, which allows the countries listed in Annex B (the Annex I countries) to trade emission credits amongst each other (Article 17).[512]

510 See Article 4(7) of the Convention.

511 *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, concluded in Kyoto on 11 December 1997 (entry into force 16 February 2005) 37 *ILM* 22 (1998). As of early 2007, 169 Parties to the *Climate Change Convention* had joined the Protocol.

512 On the joint implementation mechanism, see O. Kuik, P. Peters and N.J. Schrijver (eds.), *Joint Implementation to Curb Climate Change* (Dordrecht: Kluwer Academic Publishers, 1994). On the subject of climate change, see also J. Gupta, *The Climate Change Convention and Developing Countries: From Conflict to Consensus?* Environment and Policy Series (Dordrecht: Kluwer Academic Publishers, 1997).

Although the principles of both the Convention and the Protocol appear to be compatible with WTO law, certain measures taken pursuant to the *Kyoto Protocol* could resort to discrimination or be trade restrictive. The *Kyoto Protocol* leaves it open to Parties to decide on the domestic measures they will take to reach their emissions reduction targets. A number of countries have adopted measures – such as energy labelling, subsidies to promote the development and consumption of green energy, carbon and energy taxes, and border adjustment measures – that might conflict with WTO rules.[513] As far as the flexible mechanisms of the Protocol are concerned, it is not certain yet whether they are compatible with the WTO agreements.[514] Furthermore, it is not yet clear whether the WTO Agreement applies to emissions trading, since it is uncertain whether 'emission credits' can be defined as either goods or services.[515]

2.1.6 UN Fish Stocks Agreement

The *UN Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, commonly known as the Straddling Stocks Agreement, is a multilateral agreement that aims 'to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks' (Article 2).[516] As the full title suggests, this Agreement is supplementary to the *UN Convention on the Law of the Sea* and must be 'interpreted and applied in the context of and in a manner

513 These types of unilateral measures are considered more generally in Part I of this study on the compatibility of unilateral measures to protect environmental and social concerns with WTO law. For a more specific analysis of the compatibility of measures taken pursuant to the Kyoto Protocol with WTO law, see also *Climate and Trade Rules: Harmony or Conflict?*, Report by the Swedish National Board of Trade, September 2004. Available at www.kommers.se.

514 In their report, the Swedish National Board of Trade raises the question of whether the free allocation of emission credits within the European Union under the Joint Implementation Mechanism might constitute a subsidy in the sense of the *SCM Agreement*. However, as long as the system of allocation is designed and applied in a non-discriminatory way, it should be in conformity with WTO law. Also, with respect to the Clean Development Mechanism, problems could arise with regard to the transfer of technology in relation to the *TRIPS Agreement*. This problem, which is common to all environmental agreements providing for the transfer of technology to developing countries, will be discussed below.

515 Swedish National Board of Trade, *Climate and Trade Rules*. See also T. Brewer, 'The WTO and the Kyoto Protocol: Interaction issues', in *Climate Policy*, vol. 4 (2004), pp.3-12.

516 *UN Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, concluded in New York on 3 August 1995 (entry into force 11 December 2001) *34 ILM 1542 (1995)*. As of early 2007, 65 states had ratified the *Straddling Stocks Agreement*.

consistent with the Convention' (Article 4).
The *Straddling Stocks Agreement* adopts a precautionary approach to the conservation, management and exploitation of straddling and highly migratory fish stocks, and applies principally to fish stocks beyond areas under national jurisdiction.[517] Parties are to set precautionary reference points to guarantee the conservation and sound management of a stock, which may not be exceeded. Furthermore, under the Agreement Parties have a duty to cooperate in the conservation and management of fish stocks. In order to make this cooperation effective, Article 8 of the Agreement provides for Parties to give effect to their duty to cooperate by becoming a member of a sub-regional or regional fisheries management organization or a participant in a fisheries management arrangement which has the competence to establish conservation and management measures for particular straddling or highly migratory fish stocks. Parties can also agree 'to apply the conservation and management measures established by such an organization or arrangement' or, where such an organization or arrangement does not exist, establish a new organization.

The Agreement does not use trade-restrictive measures to further its objectives. Nonetheless, some of its provisions may have a bearing on trade. These provisions relate to Parties that are not members of a (sub)regional organization or participants in an arrangement (Article 17.4) on the one hand, and to non-parties to the Agreement (Article 33.2) on the other. The relevant provisions determine that members of a (sub)regional organization or participants in an arrangement shall take measures consistent with this Agreement and international law to deter activities of vessels which undermine the effectiveness of sub-regional or regional conservation and management objectives (Article 17.4), or which undermine the effective implementation of the Agreement (Article 33.2). Although these provisions do not restrict trade in a strict sense, a consistent application of the Agreement will result in a *de facto* import ban by the members of such organizations or participants in such arrangements on fish caught by these States. After all, if members of such organizations or participants in such arrangements are held to deter the fishing activities of other States, they will certainly not buy the fish. Although these provisions are not themselves incompatible with WTO law, the unilateral measures adopted to give effect to these provisions will be incompatible with Article XI of the GATT. It remains to be seen whether these may be justified under Article XX(b) or (g), since the provisions apply primarily to activities outside the limits of national economic jurisdiction. On the other hand, since the object of the treaty concerned constitutes 'migratory' fish, it could be argued on the basis of the Appellate Body Report in *US – Shrimp* that a sufficient nexus exists between

517 The *Straddling Stocks Agreement* also contains some provisions that apply within the jurisdiction of the Party. See Articles 6 and 7 of the Agreement.

unilateral measures adopted pursuant to the Agreement and the interests of the States concerned in protecting these fish.[518]

2.1.7 Some common features of environmental agreements

The majority of the environmental treaties discussed in this section contain provisions restricting or prohibiting trade with non-Parties to the agreements and/or promoting the transfer of technology to developing countries. Both types of measures potentially conflict with relevant WTO rules.

The restriction or prohibition of trade with non-Parties is a common feature of several environmental agreements. Under CITES, trade with non-Parties is only allowed if these States provide comparable documentation. The *Montreal Protocol* prohibits trade with non-Parties altogether, except for trade with non-Parties who *de facto* abide by the Protocol. Finally, the *Basel Convention* only allows trade with non-Parties through the conclusion of bilateral agreements. The compatibility of this type of trade restriction depends largely on whether they pass the two-tier test of Article XX of the GATT. For the *Basel Convention* and the *Montreal Protocol*, this means that the restrictions must be deemed 'necessary' to attain their objective, while for CITES it must be established that they 'relate to' their objective.[519]

As far as *import* prohibitions under the *Montreal Protocol* and the *Basel Convention* are concerned, these could probably be justified under the general exception clauses of Article XX(b) of the GATT, because of the (potentially) harmful effects of the substances covered under these agreements to the human, animal or plant life or health in the importing State. Of course, the contention that these substances are harmful will have to be supported by (some) scientific evidence. A prohibition on the *export* of such substances, on the other hand, will be more difficult to justify under the relevant WTO provisions because of its extraterritorial application. Also, an *export* prohibition under CITES could be justified by reference to Article XX(g) of the GATT relating to the conservation of exhaustible natural resources, but it is uncertain whether this exception could be invoked for an *import* prohibition. Furthermore, it must be determined that the measures do not generally constitute 'arbitrary or unjustifiable discrimination'. Of course, the

518 See Appellate Body Report, *US – Shrimp*. In para. 133, the Appellate Body stated that 'sea turtles are highly migratory animals, passing in and out of waters subject to the rights of jurisdiction of various coastal states and the high seas. […] The sea turtle species here at stake, i.e., covered by Section 609, are all known to occur in waters over which the United States exercises jurisdiction. […] in the specific circumstances of the case before us, there is a sufficient nexus between the migratory and endangered marine populations involved and the United States for purposes of Article XX(g)'.

519 See Part I of this study for the different criteria of these tests.

measures discriminate between Parties and non-Parties to the agreements. That is not to say that the discrimination is 'arbitrary or unjustifiable'. However, this has to be determined on a case-by-case basis.[520]

The provisions on the transfer of technology to developing countries in the *Montreal Protocol* and the *Biodiversity* and *Climate Change Conventions* and their Protocols may conflict with intellectual property rights protection under the *TRIPS Agreement*. These provisions require the States Parties to transfer technology to developing countries on preferential terms, while the rights on the technologies involved belong to (private) patent holders. Schoenbaum proposes to resolve these problems through the financial mechanisms of the Conventions. The transfer of technology to developing countries on preferential terms could then be resolved by the provision of financial resources to these countries to be used for the acquisition of technology. With regard to the *Biodiversity Convention*, Schoenbaum argues that

> *nothing in the* ***TRIPS Agreement*** *would prohibit the use of an international financial mechanism to assure access and the transfer of technology. Articles 15, 16 and 19 can be interpreted to mean that transfer of technology should be left to negotiations between private parties, but should be supplemented where needed by the financial mechanism established by the Convention's contracting parties under Articles 20 and 21.*[521]

2.2 International agreements on human rights and labour standards

2.2.1 General remarks

Unlike environmental agreements, most human rights treaties do not contain explicit trade-restrictive provisions. Furthermore, it can be observed that whereas Article XX of the GATT contains an explicit environmental exception, a clear social exception is absent. Also, where trade restrictions under environmental treaties in most cases concern product-related process and production methods, the type of human rights trade measures of concern for the current discussion generally relate to labour standards, a typical example of non-product related PPMs. Important human rights treaties in this respect include the *International Covenants on Economic, Social and Cultural Rights* and *on Civil and Political Rights* as well as the *International Convention on the Elimination of All Forms of Racial Discrimination; the Convention on the Elimination of All Forms of Discrimination against Women; the Anti-Torture Convention; and the International Convention on the Rights of the Child*. These have attained broad – sometimes even almost universal – membership.[522] Furthermore, several human rights have achieved the status of customary international law, some even amounting to peremptory norms of international law.[523]

This section will concentrate on core labour rights as an example of the relation between core human rights and WTO law. Furthermore, cultural rights will be discussed within the context of the *UNESCO Convention on Cultural Diversity*.

2.2.2 International agreements on labour rights

The link between trade and labour rights is not a new concern to the WTO. Already under the GATT, the issue of 'social dumping' has been discussed. Moreover, the question of including a social clause in the WTO agreement has been on the agenda of the WTO since its very inception.[524] Nevertheless, a solution reconciling the divergent interests of industrialized and developing countries on this point is still to be found.

520 See Part I of this study for a discussion of what constitutes arbitrary or unjustifiable discrimination. See also paragraphs 2.1.1. above and 3.3. below for an analysis in the context of the *US – Shrimp* case.

521 T. Schoenbaum, 'International trade and environmental protection', as quoted by P. Birnie and A. Boyle, *International Law and the Environment*, p.736.

522 *International Covenant on Economic, Social and Cultural Rights*, adopted in New York on 16 December 1966 (entry into force 3 January 1976; 155 parties as of early 2007), 6 *ILM* 368 (1967); *International Covenant on Civil and Political Rights*, adopted in New York on 16 December 1966 (entry into force 23 March 1976; 160 parties as of early 2007), 6 *ILM* 368 (1967); the *International Convention on the Rights of the Child*, adopted in New York on 20 November 1989 (entry into force 2 September 1990; 193 parties as of early 2007), 28 *ILM* 1456 (1989); *Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*, adopted in New York on 10 December 1984 (entry into force 26 June 1987; 144 parties), 1465 *UNTS* 85; *Convention on the Elimination of All Forms of Discrimination against Women*, adopted in New York on 18 December 1979 (entry into force 3 September 1981; 185 parties as of early 2007), 19 *ILM* 33 (1980); and *International Convention on the Elimination of All Forms of Racial Discrimination*, adopted in New York on 21 December 1965 (entry into force 4 January 1969; 173 parties as of early 2007), 660 *UNTS* 195.

523 The rights formulated in the *Universal Declaration on Human Rights* (General Assembly Resolution 217A(III), 10 December 1948) are part of customary international law. Examples of peremptory norms include the right to life, the right to be free from torture and other inhumane or degrading treatment or punishment and the right to be free from slavery or servitude. Such non-derogatory human rights norms are listed in Article 4 of the *International Covenant on Civil and Political Rights*.

524 See F. Weiss, 'Trade and labor I', in P.F.J. Macrory, A.E. Appleton and M.G. Plummer, *The World Trade Organization: Economic and Political Analysis*, vol. II (New York: Springer, 2005), pp.572-596.

The WTO has turned to the International Labour Organization (ILO) to deal with the question of setting internationally recognized labour standards.[525] In response, the ILO has adopted the *1998 Declaration on Fundamental Principles and Rights at Work* recognizing some of the ILO conventions as containing fundamental rights, which must be respected by all ILO members whether or not they have ratified the relevant conventions.[526] Article 2 of the Declaration mentions four categories of fundamental labour rights. These relate to freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.[527] These rights and prohibitions are also included in the *International Human Rights Covenants* and in the *International Convention on the Rights of the Child*, which is indicative of their paramount importance in the human rights system.[528] However, that is not to say they may be used to adopt trade measures to protect labour rights abroad. In this respect, the concluding Article of the Declaration is revealing: 'nothing in this Declaration and its follow-up shall be invoked or otherwise used for [protectionist trade] purposes' and 'the comparative advantage of any country should in no way be called into question by this Declaration and its follow-up'. How should these provisions be interpreted? How should 'protectionist' be defined in this respect? The academic literature on this subject does not provide a clear answer to these questions.[529] With respect to the use of trade measures to protect core human rights, Cleveland poses that

> *under customary international law, states clearly are authorized to adopt trade sanctions to promote human rights values. On the other hand, neither the human rights treaties nor customary international law clearly establishes a right of states to impose human rights trade measures that cannot be overridden by treaty.*[530]

525 See Article 4 of the *Singapore Ministerial Declaration*, adopted on 13 December 1996, WT/MIN(96)/DEC, 18 December 1996.

526 ILO *Declaration on Fundamental Principles and Rights at Work*, International Labour Conference, 86th session, Geneva, June 1998.

527 The special incentive arrangements for the protection of labour rights under the EU's Generalized System of Preferences are based on these core labour rights. The compatibility of the GSP with WTO law will be discussed in more detail in section 2.4 below on international measures.

528 See Articles 6, 7(a)i, 7(c), 8 and 10(3) of the *International Covenant on Economic, Social and Cultural Rights*; Articles 8, 22 and 26 of the *International Covenant on Civil and Political Rights*; and Articles 19 and 32 of the *International Convention on the Rights of the Child*. With the exception of the prohibition on child labour, these rights are also included in the *Universal Declaration of Human Rights*.

529 See, for example, F. Weiss, 'Trade and labor I', p.573.

530 S. Cleveland, 'Human rights sanctions and the WTO', in F. Francioni (ed.), *Environment, Human Rights and International Trade* (Oxford: Hart Publishing, 2001), p.212

Mutatis mutandis, whether states may impose labour rights trade measures beyond their own jurisdiction depends on the hierarchy of the relevant norms. This matter will be discussed in the following section.

2.3 UNESCO Convention on Cultural Diversity

The *Convention on the Protection and Promotion of the Diversity of Cultural Expressions* is a multilateral convention open to all 'members of the United Nations, or of any of its specialized agencies, that are invited by the General Conference of UNESCO to accede to it'.[531] The Convention aims *inter alia* 'to protect and promote the diversity of cultural expressions' and 'to give recognition to the distinctive nature of cultural activities, goods and services as vehicles of identity, values and meaning'.[532]

For this purpose, Article 2, paragraph 2 of the *Convention on Cultural Diversity* confirms the sovereign right of states 'to adopt measures and policies to protect and promote the diversity of cultural expressions within their territory'. These measures and policies may consist *inter alia* in providing public financial assistance and support to public institutions. Furthermore, Article 8 of the Convention allows Parties to determine 'the existence of special situations where cultural expressions on its territory are at risk of extinction, under serious threat, or otherwise in need of urgent safeguarding'. In these circumstances, 'Parties may take all appropriate measures to protect and preserve cultural expressions […] in a manner consistent with the provisions of this Convention'. These provisions are rather intriguing in light of the WTO *Subsidies and Countervailing Measures (SCM) Agreement* and the principle of non-discrimination in the GATT and the *General Agreement on Trade in Services* (GATS).

First, the Convention explicitly allows for Parties to provide public financial assistance or support to public institutions. Depending on the kind of measures taken, a conflict with the *SCM Agreement* is foreseeable. This is especially the case with subsidies intended to increase the export of a certain cultural good or

531 Article 27 of the *Convention on the Protection and Promotion of the Diversity of Cultural Expressions*, adopted in Paris on 20 October 2005 (entry into force 18 March 2007), available at www.unesco.org. As of early 2007, 45 states had ratified the Convention on Cultural Diversity.

532 Article 4(3) defines cultural expressions as 'those expressions that result from the creativity of individuals, groups and societies, and that have cultural content'. According to Article 4(4), cultural activities, goods and services 'refers to those activities, goods and services, which at the time they are considered as a specific attribute, use or purpose, embody or convey cultural expressions, irrespective of the commercial value they may have. Cultural activities may be an end in themselves, or they may contribute to the production of cultural goods and services'.

service.[533] Second, measures taken by Parties under the Convention to protect and preserve cultural expressions in their territory may include import restrictions or a restriction of market access, which results in a conflict with Article XI of the GATT or Article XVI of the GATS, respectively. Third, a conflict with GATT Article III or GATS Article XVII on national treatment may occur, since the Convention implicitly allows Parties to favour domestic cultural goods and services over foreign goods and services.[534] The potential for conflict also depends on the scope of the Convention. Of course, products like movies, books, magazines or music qualify as cultural goods and services, but one could also imagine that the Convention applies to specific local products like champagne or parmesan cheese,[535] which could be defined as embodying a cultural expression.

Moreover, the potential for conflict is reinforced through the Convention's dispute settlement mechanism, which may be an alternative to WTO dispute settlement.[536] The Convention does not contain a clear-cut conflict rule as to its relationship to other treaties, such as the WTO agreements. Article 20 of the Convention calls on Parties to 'foster mutual supportiveness' between this Convention and other treaties, and to 'take into account the relevant provisions of this Convention' when interpreting or applying other treaties, while at the same time it determines that 'nothing in this Convention shall be interpreted as modifying the rights and obligations of the Parties under any other treaties to which they are parties'. This means that disputes between Parties to the Convention who are also WTO Members can be settled both through the dispute settlement mechanism of the *Convention on Cultural Diversity* and through the WTO dispute settlement mechanism. Depending on the law these dispute settlement bodies will apply, this could lead to inconsistencies in case law between the two systems. This is especially so since it is not clear whether WTO dispute settlement bodies are allowed to consider obligations under non-WTO agreements. An even more difficult problem would arise if a non-Party to this Convention were to bring a complaint before a WTO Panel against a Party to the Convention.

533 The *SCM Agreement* distinguishes 'prohibited subsidies' from 'actionable subsidies'. The example quoted above would fall within the category of prohibited subsidies, since it is designed to disrupt trade. On this subject, see Part I of this study.

534 On this subject, see T. Voon, 'UNESCO and the WTO: A clash of cultures?' in *International and Comparative Law Quarterly*, vol. 55 (2006), pp.635-652; and J. Pauwelyn, 'The UNESCO Convention on Cultural Diversity and the WTO: Diversity in international lawmaking?', in *ASIL Insights*, 15 November 2005, available at www.asil.org/insights/2005/11/insights051115.html.

535 See J. Pauwelyn, *ibid*.

536 The Convention's dispute settlement mechanism provides for conciliation concerning the interpretation or the application of the Convention by a Conciliation Committee. See Article 25 of the Convention and the Annex to the *Convention on Cultural Diversity*.

These issues will be considered more generally in the next section.[537]

2.4 International measures addressing non-trade concerns

2.4.1 General remarks

An increasing number of regulatory programmes addressing socially and environmentally sound production are being developed at the international level. Examples of such programmes include those adopted by intergovernmental organizations such as the EU's Generalized System of Preferences (GSP); by the private sector, such as the Euro Retailer Working Group Good Agricultural Practices (EurepGAP); and by non-governmental organizations (NGOs), such as the Forest Stewardship Council certification programme for timber, and the Sustainable Agriculture Network (SAN) certification programme.[538] An example of an intergovernmental programme providing for special incentive arrangements with regard to environmentally and socially sound production in developing countries is the EU's GSP. These programmes should be distinguished from those exclusively aimed at setting standards in the field of product-related process and production methods, such as the joint FAO/WHO Food Standards Programme under the auspices of the Codex Alimentarius Commission. This programme exclusively develops standards in the field of food and consumer safety. For the purpose of the current discussion, which focuses on non-product related PPMs, the work of the Codex Alimentarius Commission is therefore considered to be outside the scope of this study.

2.4.2 Certification programmes

Certification programmes developed by NGOs and/or the private sector are voluntary in nature and are primarily aimed at enabling consumers to make informed choices concerning the products they buy. Relevant examples of these programmes include the Forest Stewardship Council (FSC) certification programme for sustainable timber, the Sustainable Agriculture Network (SAN) certification programme initiated by the Rainforest Alliance, and the Fair Trade Organizations programme. Whereas the aforementioned certification programmes are aimed at the labelling of products to inform consumers, other programmes, such as EurepGAP, a partnership of agricultural producers and retailers, use certification for the purpose of informing retailers. They also set standards for Good Agricultural Practice (GAP).[539]

537 For a discussion of the relation between the two systems and their dispute settlements mechanisms, see T. Voon, 'UNESCO and the WTO: A clash of cultures?', pp.635-652; and J. Pauwelyn, 'The UNESCO Convention on Cultural Diversity and the WTO'.

538 On the issue of international standards and the requirements of the *TBT Agreement*, see Part I of this study.

539 See EurepGAP: www.eurepgap.org.

All of these programmes address both environmental and social concerns. The criteria for certification under these programmes are largely based on principles from international social and environmental conventions, such as the ILO Conventions and environmental agreements such as CITES and the *Biodiversity Convention*. Since adherence to these programmes is voluntary and does not involve government regulation, they fall outside the scope of the GATT.[540] The *TBT Agreement*, on the other hand, expressly covers voluntary standards set by 'recognized' bodies.[541] Annex 1.2 to the *TBT Agreement* defines standards as documents

> *approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.*

The *TBT Agreement* does not define what should be understood by a 'recognized body'. Also, it is not clear whether the *TBT Agreement* covers non-product related processes and production methods. Whereas the first sentence of the provision expressly refers to 'related' processes and production methods, a specific reference in this regard is missing in the second sentence.[542] The 2001 Doha Ministerial Conference instructed the WTO Committee on Trade and Environment 'to give particular attention to [...] labelling requirements for environmental purposes'.[543] To date, however, the Committee has not made any substantial progress in this field.

540 If a government would were to decide to set voluntary standards (for the purpose of certification), the GATT principles on non-discrimination would apply. It should also be noted that – depending on their requirements – certification programmes can harm the opportunities for market access of producers in developing countries. Whereas the Fair Trade programme provides certification free of charge for small-scale producers in developing countries, the strict tracking-and-tracing requirements and social criteria of the Forest Stewardship Council programme, for example, place a heavy burden on (small-scale) producers in developing countries. Since it is difficult and costly for these producers to meet the requirements of the programme, their access to the market for sustainable timber is thus *de facto* restricted.

541 See also Part I of this study.

542 See C. Dankers, *Environmental and Social Standards, Certification and Labelling* (Rome: UN Food and Agriculture Organization, 2003), p.76, and Part I of this study.

543 See Article 32(iii) of the 2001 Doha Declaration.

2.4.3 Some concluding observations

This section has revealed a number of potential conflicts between international environmental and human rights agreements and measures addressing non-trade concerns on the one hand, and WTO agreements on the other. It has also highlighted the basic differences between the environmental and human rights systems, in the sense that environmental treaties explicitly use trade measures to further their objectives while human rights treaties do not. Also, where trade restrictions under environmental treaties in most cases concern product-related processes and production methods, the type of human rights trade measures of concern for the current discussion generally relate to labour standards, a typical example of non-product related PPMs.

Finally, whereas the GATT contains a clear environmental exception, an explicit social clause is absent. The only option to address non-product related social concerns will be under the public morals exception of Article XX(a) of the GATT. These differences are also of relevance for the determination of the relation between WTO law and other international agreements, discussed in the following section.

3 Relation between WTO law and other international agreements and measures

3.1 General remarks

In this section, the relation between WTO law and other international agreements and measures is considered in more detail. Most authors regard trade law, human rights law and environmental law as three different branches of public international law, without an *a priori* hierarchy between these systems.[544] This means that conflicts between WTO agreements and other agreements must be considered according to the general rules of treaty interpretation and the general rules of international law for resolving conflicts between norms.

In this section, the relation between these different branches of international law will be considered through an evaluation of these rules. Also, the place and role of other agreements and measures in WTO practice will be assessed.

544 See J. Pauwelyn, *Conflict of Norms in Public International Law: How WTO Law Relates to Other Rules of International Law* (Cambridge: Cambridge University Press, 2003); T. Cottier, 'Trade and human rights: A relationship to discover', in *Journal of International Economic Law*, vol.5 (2002), pp.114-115; and E.U. Petersmann, 'Human rights and the law of the World Trade Organization', in *Journal of World Trade,* vol. 37 (2003), pp.241-281.

3.2 Conflict rules

As no *a priori* hierarchy exists between trade law, human rights law and environmental law, a conflict between norms in these fields must in principle be resolved through the rules of treaty interpretation of Article 31 of the *Vienna Convention on the Law of Treaties*, and through the conflict rules of Article 30 of the *Vienna Convention*.[545]

First, Article 31 of the *Vienna Convention on the Law of Treaties* determines that 'a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose'. Article 31(2) specifies what should be understood by the context of a treaty, while Article 31(3) provides, *inter alia*, for 'any applicable rules of international law applicable in the relations between the parties' to be taken into account.[546] In *US – Gasoline*, the Appellate Body concluded that this general rule for interpretation has attained the status of customary international law and thus forms part of the customary rules of interpretation of public international law that WTO dispute settlement bodies must use to clarify the provisions of the WTO agreements, as indicated in Article 3.2 of the WTO *Dispute Settlement Understanding* (DSU).[547] Hence, WTO adjudicating bodies must interpret the WTO agreements 'in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose'. In doing so, they must take into account 'any relevant rules of international law applicable in the relations between the parties'.

In the recent *EC – Biotech Products* case, the Panel qualified the latter rule for interpretation. It acknowledged that Article 31(3)(c) '…should be interpreted to mandate consideration of rules of international law which are applicable between all parties to the treaty which is being interpreted'. This approach seems to imply that WTO adjudicating bodies are only required to consider other rules of international law when interpreting a WTO Agreement if these are applicable between all WTO Members. This limits the scope of Article 31(3)(c) of the *Vienna Convention* to treaties to which all WTO Members are party and to general international law, including customary international law and general principles of law. In all other situations, the Panel found that WTO dispute settlement bodies

545 The focus will be on conflicts in the applicable law. The issue of inherent normative conflict will be left aside. For more on this subject, see J. Pauwelyn, *Conflict of Norms in Public International Law,* pp.275-326.

546 *Ibid.*, pp. 237-274. See also G. Marceau, 'Conflicts of norms and conflicts of jurisdiction', pp.1086-1090. As discussed in more detail below, Marceau considers the principles of *lex specialis* and *lex posterior* to be part of the 'applicable rules of international law'.

547 See Appellate Body Report, *US – Gasoline*, p.17.

'may consider other relevant rules of international law when interpreting the terms of the WTO Agreements if it deems such rules to be informative', i.e. to determine the ordinary meaning of the terms of WTO law under Article 31(1) of the *Vienna Convention*.[548] Yet, this still leaves ample room for dispute settlement bodies to take into account obligations from other international agreements in interpreting WTO law.

As far as interpretation of the terms of WTO law is concerned, the Panels and the Appellate Body have done so on several occasions. In the *EC – Bananas III* case, the Appellate Body, albeit with some reluctance, used the *Lomé Convention* to interpret the GATT/Lomé Waiver adopted by the General Council of the GATT pursuant to Article IX of the *WTO Agreement* at the request of the European Communities and of the 49 out of the 79 ACP States that were also GATT Contracting Parties.[549] Furthermore, in *US – Shrimp* the Appellate Body referred to a number of international agreements, amongst which the *UN Convention on the Law of the Sea*, CITES and the *Biodiversity Convention*, to determine the meaning of the term 'exhaustible natural resources' in the general exception clause (g) of Article XX of the GATT.[550] The Appellate Body also expressly adopted an evolutionary approach to treaty interpretation, when it determined that the term 'exhaustible natural resources' 'must be read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment'.[551]

548 See Panel Report, *EC – Biotech Products*, para 7.49-7.96. For an analysis of the Panel Report, see S. Cho, 'The WTO Panel on the *EC – Biotech* dispute releases its final report', in *ASIL Insights*, vol. 10 (2006). For a discussion on the rules of interpretation in the context of the WTO, see J. Pauwelyn, *Conflict of Norms in Public International Law*,pp.257-263.

549 Appellate Body Report, *EC – Bananas III*. The issue at stake was what was 'required' under the *Lomé Convention* for the purpose of interpreting the scope of the GATT/Lomé waiver. The operative paragraph of the GATT/Lomé Waiver read: 'Subject to the terms and conditions set out hereunder, the provisions of paragraph 1 of Article I of the General Agreement shall be waived, until 29 February 2000, to the extent necessary to permit the European Communities to provide preferential treatment for products originating in ACP States *as required by the relevant provisions of the Fourth Lomé Convention*, without being required to extend the same preferential treatment to like products of any other contracting party' [emphasis added].

550 Appellate Body Report, *US – Shrimp*, para 130.

551 *Ibid.* The Office of the High Commissioner for Human Rights recently issued a report on the use of the WTO general exception clauses to protect human rights, in which it asserts on the basis of WTO jurisprudence that 'international human rights treaties with broad membership would be valid tools to interpret the terms "public morals", "human life or health" and "public order".' See Office of the UN High Commissioner for Human Rights, *Human Rights and World Trade Agreements: Using General Exception Clauses to Protect Human Rights* (2005), available at http://ohchr.org/english/about/publications/docs/WTO.pdf.

If the conflict cannot be resolved through interpretation of the conflicting treaty provisions, recourse should be made to the conflict rules of Article 30 of the *Vienna Convention* with regard to the application of successive treaties relating to the same subject matter. First, Article 30(2) of the *Vienna Convention* states that 'when a treaty specifies that it is not to be considered as incompatible with an earlier or later treaty, the provisions of that other treaty prevail'. As far as the *WTO Agreement* is concerned, no general conflict clause in respect of either pre-existing or future treaties is included. This means that in case of conflict between WTO law and other law, the conflict rules of the other treaty should be examined. If this does not resolve the conflict, recourse should be made to the *lex posterior derogat lex anterior* principle of Article 30(4) of the *Vienna Convention* and to the customary international law principle of *lex specialis derogat lex generali*. The first principle relates to the aspect of temporality (a newer rule prevails over an older rule), while the second determines that a more specific obligation should prevail over a more general obligation.

Article 30(4) of the *Vienna Convention* determines that between States parties to both treaties, 'the earlier treaty applies only to the extent that its provisions are compatible with those of the later treaty', while between States not party to both treaties, 'the treaty to which both States are parties governs their mutual rights and obligations'. Although most human rights and environmental agreements predate the 1994 WTO Agreement, the principle is of high relevance for the current discussion. It is generally accepted that the principle applies not only to treaties, but also to other sources of international law.[552] This means that provisions of human rights or environmental agreements that have crystallized into customary international law since 1994 may be of relevance to determine the obligations of Parties under WTO law. Examples of (emerging) international customary law principles include the precautionary approach, the principle of sustainable use of natural resources, the principle of common but differentiated responsibilities, and the duty to cooperate for sustainable development.

Also, Article 11 of the DSU explicitly allows for WTO dispute settlement bodies – within certain limits - to 'make such other findings as will assist the DSB in making the recommendations or in giving the rulings provided for in the covered

552 The sources of public international law are referred to in Article 38 of the *Statute of the International Court of Justice* and include treaty law out of the 79 customary international law and general principles of international law. There exists no formal hierarchy between these sources.

agreements'.[553] In *Korea – Procurement*, the panel stated – albeit in a footnote – with regard to its terms of reference: '…we do not see any basis for arguing that the terms of reference are meant to *exclude* reference to the broader rules of customary international law in interpreting a claim properly before the Panel'.[554]

Furthermore, Article 30(5) of the *Vienna Convention* determines that paragraph 4 is without prejudice to the possibility to modify multilateral treaties between certain of the Parties only under Article 41 of the *Vienna Convention*. That article provides the possibility for Parties to the WTO Agreement to modify the treaty between themselves alone if 'the possibility of such a modification is provided for by the treaty', or if 'the modification in question is not prohibited by the treaty and does not affect the enjoyment by the other parties of their rights under the treaty or the performance of their obligations'. The WTO Agreement does not provide for modification, but does not prohibit it either. The question then arises as to whether a modification of the WTO Agreement among certain parties would affect the rights and obligations of other WTO Members. The answer to this question depends on how the WTO is viewed as a legal system and will be discussed in more detail in section 3.3 below.

The second conflict rule determines that a more specific obligation prevails over a more general obligation. Although human rights law, environmental law and trade law as such can all be considered *lex specialis* with regard to general international law, this principle is of high relevance to determine the interplay between specific

553 Article 11 reads: 'The function of panels is to assist the DSB in discharging its responsibilities under this Understanding and the covered agreements. Accordingly, a panel should make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements, and make such other findings as will assist the DSB in making the recommendations or in giving the rulings provided for in the covered agreements. Panels should consult regularly with the parties to the dispute and give them adequate opportunity to develop a mutually satisfactory solution'.

554 Panel Report, *Korea – Procurement*, footnote 755. Yet, in paragraph 7.96 of its report, the Panel states with regard to Article 3.2 of the DSU: 'We take note that Article 3.2 of the DSU requires that we seek within the context of a particular dispute to clarify the existing provisions of the WTO agreements in accordance with customary rules of interpretation of public international law. However, the relationship of the WTO agreements to customary international law is broader than this. Customary international law applies generally to the economic relations between the WTO Members. Such international law applies to the extent that the WTO treaty agreements do not 'contract out' from it. To put it another way, to the extent there is no conflict or inconsistency, or an expression in a covered WTO agreement that implies differently, we are of the view that the customary rules of international law apply to the WTO treaties and to the process of treaty formation under the WTO'.

obligations under human rights or environmental treaties on the one hand, and international trade law on the other. Especially in the context of Article XX of the GATT, obligations under environmental or human rights law may be considered to be *lex specialis* for the purpose of determining the meaning of the exceptions.[555]

Finally, the principle of *lex specialis derogat lex generali* does not apply to rules of general international law that are of a peremptory nature, so-called *jus cogens*. Article 53 of the *Vienna Convention* describes these norms as

> *accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character.*

According to Articles 53 and 64 of the *Vienna Convention*, treaties conflicting with peremptory norms of international law are void. Although only a few norms in international law amount to *jus cogens*, they do have some relevance for this discussion. For example, one of the norms recognized as *jus cogens* is the prohibition on slavery.[556] This means that trade in products derived from slave labour – an exception not expressly included in the WTO agreements – is prohibited.[557]

3.3 The WTO as a legal system and the nature of WTO obligations

The question of whether application of relevant environmental or human rights norms that have not become part of general international law between Parties to those agreements in WTO dispute settlement is possible, depends on how the WTO is viewed as a legal system and how to view WTO obligations. In this regard, this section will explore the two diametrically opposed conceptions of Marceau and Pauwelyn.

555 See also G. Marceau, 'Conflicts of norms and conflicts of jurisdiction: The relationship between the WTO Agreement and MEAs and other treaties', in *Journal of World Trade,* vol. 35(6) (2001), pp.1096-1097. Marceau proposes to use the *lex posterior* and *lex specialis* principles as rules of interpretation for determining the 'relevant rules' between WTO Members (Article 31(3)(c) of the *Vienna Convention* on the Law of Treaties).

556 The International Law Commission Special Rapporteur on State Responsibility, James Crawford, mentions the prohibitions against slavery and the slave trade, genocide, aggression, torture, racial discrimination and apartheid, and the obligation to respect the right of self-determination as examples of peremptory norms. See J. Crawford, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (Cambridge University Press, 2002), pp.246-247.

557 It should be noted that slave labour may also be brought under the exception of Article XX(a) of the GATT.

Marceau presents WTO law primarily as a 'specific subsystem of international law with specific rights and obligations, specific claims and causes of action, specific violations, specific enforcement mechanisms and specific remedies in case of their violation'.[558] In her opinion, a conflict between WTO law and other agreements cannot be resolved through the WTO dispute settlement mechanism. The responsibility of States for violations of their environmental or human rights obligations should be made effective in other fora, 'so that the benefits obtained in one forum may be nullified by the consequences of a violation in another forum'.[559] Moreover, she argues that 'WTO law 'cannot be overruled by situations and considerations belonging to another subsystem', even when all parties to a WTO dispute are also Parties to the other relevant agreement.[560] Marceau advocates conflict avoidance through an extensive application of the interpretation rules of Article 31 of the *Vienna Convention*. In her opinion, the principles of *lex posterior* and *lex specialis* may also be considered 'relevant rules of international law' under Article 31(3)(c). This means that as a rule of interpretation, WTO dispute settlement bodies may take into account 'relevant rules' of other treaties, even as a valid legal defence against claims of violation of WTO rules.

In Marceau's opinion, no real conflict exists when a WTO Member invokes a relevant multilateral environmental agreement (MEA) as a defence under Article XX of the GATT against another Member party to that agreement, because Article XX explicitly authorizes trade restrictions for environmental purposes. Also, human rights obligations can be taken into account to interpret the exception of Article XX(a) of the GATT that addresses measures necessary to protect public morals. This can also be the case when the trade measure was not required but permitted, or when the trade measure was taken in pursuance of the objectives of the MEA or human rights treaty.[561] However, when a conflict cannot be avoided through interpretation, Marceau argues that

> *Article 30 of the Vienna Convention (**lex posterior**) and the rule on **lex specialis** may be used to identify which should be the prevailing provision (the 'applicable' provision). Article 30.5 of the Vienna Convention seems to allow two States to modify (distinct from an amendment) their rights and obligations within a multilateral treaty as long as the rights of third States are not affected.*[562]

558 G. Marceau, 'WTO dispute settlement and human rights', in *European Journal of International Law* vol. 13 no. 4 (2002), p.755.

559 *Ibid.*, p.805.

560 *Ibid,* pp.774-775, citing B. Simma, 'Self-contained regimes', *Netherlands Yearbook of International Law*, vol. 16 (1985), p.111.

561 G. Marceau, 'Conflicts of norms and conflicts of jurisdiction', pp.1096-1097.

562 *Ibid.*, p. 1129.

In her opinion, such a situation would not be possible in the context of WTO dispute settlement: allowing a WTO dispute settlement body to give prevalence to a non-WTO norm as between the disputing parties would 'amend' the WTO agreement in question, which would also alter the rights and obligations of other WTO members not party to the non-WTO agreement.[563]

Pauwelyn, on the other hand, makes a clear distinction between the *jurisdiction* of the WTO dispute settlement bodies – which is in his opinion necessarily limited to WTO law – and the *law they may apply* to enforce WTO rules. Pauwelyn argues that although the jurisdiction of the WTO adjudicating bodies is limited to claims under the WTO agreements, this 'does not mean that the applicable law available to a WTO panel is necessarily limited to WTO covered agreements'.[564] In his opinion, the dispute settlement system 'is merely a tool or an instrument to enforce WTO covered agreements as they were created and necessarily continue to exist in the wider corpus of international law'.[565] Since the terms of reference set out in the *Dispute Settlement Understanding* (DSU) do not explicitly exclude the application of other norms of international law by WTO dispute settlement bodies, Pauwelyn argues that WTO adjudicating bodies are automatically authorized to apply non-WTO norms for the purpose of deciding the WTO claims before them. In his opinion, if WTO adjudicating bodies are authorized to apply rules of general or customary international law to decide WTO claims, they should also be authorized to apply human rights or environmental agreements to decide claims brought under the WTO agreements, provided that all Parties to the dispute are also Parties to the non-WTO agreement in question.[566]

In practice, according to Pauwelyn, this means that if a WTO adjudicating body determines that the non-WTO norm prevails, the *WTO rule cannot be applied*.[567] If this would not be possible, the WTO dispute settlement mechanism would make it possible for States to opt out of their obligations under environmental or human

563 Article 3.2 of the DSU prohibits WTO adjudicating bodies to 'add to or diminish the rights and obligations provided in the covered agreements'.

564 J. Pauwelyn, *Conflict of Norms in Public International Law,* p.460.

565 *Ibid*, p.461.

566 It should be noted that WTO dispute settlement bodies can apply other rules when deciding WTO claims, but they cannot judicially enforce these norms. See J. Pauwelyn, *Conflict of Norms in Public International Law,* p.473; G. Marceau, 'Conflicts of norms and conflicts of jurisdiction', p.763; and E.U. Petersmann, 'Human rights and the law of the World Trade Organization', in *Journal of World Trade,* vol. 37 no. 2 (2003), p.248. In practice, according to Pauwelyn, this means that if a WTO adjudicating body determines that the non-WTO norm prevails, the *WTO rule cannot be applied*.

567 It should be noted that the proper decision of the dispute settlement body would rather be a determination that the WTO norm has not been violated.

rights agreements, which would go 'to the heart of the legitimacy and democratic content of international law'.[568] In his opinion, modification of the *WTO Agreement* between Parties to the relevant environmental or human rights agreement is possible since WTO obligations are 'reciprocal', whereas human rights and environmental obligations are of an integral nature. Under a multilateral treaty, reciprocal obligations are to be considered as a 'promise […] made towards each and every state individually' whereas 'integral obligations, in contrast, imply a promise […] towards the collectivity of all state parties taken together'.[569] Therefore, if a WTO dispute settlement body gives prevalence to an integral norm from a relevant human rights or environmental treaty, this does not affect the rights and obligations of other WTO Members. It only modifies the relations between the disputing parties, which are all Parties to the non-WTO agreement.

3.4 Other international agreements: alternative or complementary to WTO law?

The previous section has highlighted the different conceptions in the academic literature on the WTO as a legal system. The answer to this question is of high relevance in view of the key question of whether environmental and human rights agreements should be considered alternative or complementary to WTO law. It is evident that a narrow conception of the WTO as a closed legal system will lead to a different outcome than a more progressive approach, considering WTO law as part of the wider corpus of international law. A balanced approach to the WTO as a legal system will in this way take into account its place within the wider corpus of international law – e.g. as demonstrated by the reference in the preamble of the *WTO Agreement* to sustainable development and to the international law in the field of sustainable development – but will also accept its limitations as a consequence of its speciality. As the Appellate Body determined in *US – Gasoline*, WTO law should 'not to be read in clinical isolation from public international law', but that is not to say that environmental and human rights obligations should automatically be applied as 'legal norms' within the context of the WTO.[570]

In the opinion of the present author, using other agreements as interpretation tools to determine the 'relevant rules of international law applicable between the parties' under Article 31(3)(c) of the *Vienna Convention*, even by means of the principles of *lex specialis* and *lex posterior*, would clarify the rights and obligations in the *WTO*

568 J. Pauwelyn, *Conflict of Norms in Public International Law*, p.476.

569 *Ibid.*, p. 65.

570 Appellate Body Report, *US – Gasoline*.

Agreement in such a way as to bind all WTO Members.[571] It is difficult to imagine an interpretation of the WTO Agreement that would apply to some but not all WTO Members. Also, in the current state of legal doctrine the direct application of non-WTO norms as 'legal norms' would be considered a bridge too far. Nonetheless, this should not preclude WTO dispute settlement bodies from expressly considering and/or applying environmental agreements in their analysis of Article XX(b) or (g) and the chapeau of the GATT, especially where it concerns a dispute between WTO Members that are all parties to a relevant MEA or human rights treaty. When not all the parties to the dispute are also parties to the relevant MEA or human rights treaty, these agreements continue to be highly relevant.

With regard to the analysis of the exceptions, besides using environmental agreements to determine the 'ordinary meaning' of the WTO provisions, their role as factual evidence is of great importance. The observation that a measure was taken pursuant to a widely ratified environmental agreement could be considered relevant factual evidence that the measure taken was 'necessary' for the protection of human, animal or plant life or health, or that it 'related to' the conservation of exhaustible natural resources. The use of environmental agreements as evidence is also of relevance to the analysis of the chapeau. In *US – Shrimp*, the Appellate Body used the *Inter-American Convention for the Protection and Conservation of Sea Turtles* as a factual reference in their analysis of the chapeau.[572] Also, in the context of human and labour rights, agreements in these fields could be used to determine the meaning of the term 'public morals' in Article XX(a) of the GATT and serve as proof of the importance of the rights incorporated therein.

Furthermore, of particular relevance to the discussion on human and labour rights, is the extraterritorial application of measures taken pursuant to a multilateral treaty. In *US – Shrimp*, the Appellate Body expressly sought to establish a territorial link between the measures applied by the United States to protect sea turtles by resorting to the migration patterns of these animals. It concluded that sea turtles traverse the waters of many countries, including those of the United States. Yet, an evolutionary interpretation of the exceptions of Article XX of the GATT should have to take into account modern notions such as a duty to cooperate for environmental conservation and to promote respect for human rights, which

571 See also J. Pauwelyn, *Conflict of Norms in Public International Law,* p.476. In the view of Pauwelyn, interpreting the WTO treaty differently depending on the parties to a particular dispute, 'is not allowed and would definitely threaten the uniformity of WTO law'.

572 The Appellate Body used the *Inter-American Convention* to show the existence of 'unjustifiable discrimination'. In paragraph 172 of its report, the Appellate Body determined 'clearly, the United States negotiated seriously with some, but not with other Members (including the appellees), that export shrimp to the United States. The effect is plainly discriminatory and , in our view, unjustifiable'.

denote a common interest of the international community in environmental and human rights protection. Although these notions are not yet fully incorporated into general international law, it is to be expected that in future they will find application in WTO dispute settlement practice.

Also in the context of human rights, other notions denoting a common interest of States in the protection of human rights worldwide are emerging. Where gross and massive violations of human rights are at stake, recent developments in international law indicate that it might be possible for states to resort to Chapter VII of the *UN Charter* to adopt targeted economic sanctions.[573] In addition, States sometimes apply unilateral sanctions, for example the economic sanctions by the European Union and the United States against Burma. These measures could probably be justified under the exceptions of Article XX(a) of the GATT as 'necessary to protect public morals' or even under Article XX(b) as 'necessary to protect human life and health' because of the *erga omnes* implications of such violations.[574] Apart from such situations of gross and massive violations of human rights, it seems unlikely that WTO dispute settlement bodies will accept a measure to be 'necessary to protect human life and health' under Article XX(b), when it concerns a measure with extraterritorial effect.[575] With regard to the exception of Article XX(a) of the GATT, in *US – Gambling* the Panel defined the concept of public morals in the context of Article XIV(a) of the GATS as 'standards of right and wrong conduct maintained by or on behalf of a community or nation'.[576] Although its scope is far from clear and its precise interpretation depends on the views of the state concerned, it could be contended that an evolutionary interpretation of this provision would include, *inter alia*, some of the core labour standards developed

573 See the report *Strengthening Targeted Sanctions through Fair and Clear Procedures*, UN Doc. A/60/887-S/2006/331, 14 June 2006.

574 Although in principle the exception of Article XX(b) cannot be invoked for the protection of human rights abroad, it could be argued that 'gross and massive violations of human rights' constitute a violation of *erga omnes* obligations, i.e. owed to the entire international community of states, thus giving other States the right to react against these violations. See also G. Marceau, 'WTO Dispute Settlement and Human Rights', in *EJIL* (2002), vol. 13 no. 4, p. 811-812.

575 For trade measures relating to the protection of labour standards for example, it is difficult to imagine the importing state having a legitimate interest in protecting labour rights outside its own jurisdiction. It could only claim a derived interest, in the sense that it indirectly violates its own obligations under human rights and labour conventions by profiting from human rights violations committed in the exporting state.

576 Panel Report, *US – Gambling*.

by the ILO, such as those relating to forced and prison labour and the worst forms of child labour.[577]

Finally, an alternative way to ensure that human rights measures, including those relating to labour standards, are compatible with WTO law is to follow the approach adopted in *US – Shrimp*. One of the main reasons why the Appellate Body in *US – Shrimp* determined that the discrimination was unjustifiable was that the United States had treated WTO Members differently by not attempting to negotiate a multilateral treaty with the affected countries, while it had concluded an agreement with others. In *US – Shrimp (Article 21.5 – Malaysia),* the Appellate Body found that good faith efforts to negotiate a multilateral treaty were sufficient:

> *Requiring that a multilateral agreement be* ***concluded*** *by the United States in order to avoid 'arbitrary or unjustifiable discrimination' in applying its measure would mean that any country party to the negotiations with the United States, whether a WTO Member or not, would have, in effect, a veto over whether the United States could fulfil its WTO obligations. Such a requirement would not be reasonable.*[578]

In the light of this decision, the best way to avoid discrimination is to opt for a multilateral agreement expressly containing trade measures to further its objectives. This agreement should be open to all WTO Members and must impose equal obligations on countries where the same conditions prevail. Furthermore, a multilateral treaty that aims at protecting certain core human and labour rights and that uses trade measures to further its objectives could constitute evidence regarding the legitimacy of the measures adopted. In the context of labour standards, the ILO would be the appropriate forum to negotiate such a treaty. Also, special arrangements for certain developing countries, adopted pursuant to the WTO Enabling Clause, if applied in a non-discriminatory way, are a credible alternative for addressing non-trade concerns.

577 It should be noted that prison labour is already listed among the general exceptions of Article XX of the GATT.

578 Appellate Body Report, *US – Shrimp (Article 21.5 – Malaysia),* para. 123. The Appellate Body also states in paragraph 124 in a more general sense that 'clearly', and 'as far as possible', a multilateral approach is strongly preferred. Yet it is one thing to *prefer* a multilateral approach in the application of a measure that is provisionally justified under one of the subparagraphs of Article XX of the GATT 1994; it is another to require the *conclusion* of a multilateral agreement as a condition of avoiding 'arbitrary or unjustifiable discrimination' under the chapeau of Article XX. We see, in this case, no such requirement'.

PART 3

ECONOMIC EFFECTIVENESS AND EFFICIENCY OF UNILATERAL NPR PPM MEASURES ADDRESSING NON-TRADE CONCERNS AND THEIR IMPACT ON DEVELOPING COUNTRIES

Gerrit Faber

1 Introduction to the economic analysis of policies

This third part of the report presents an economic analysis of measures addressing non-trade concerns (NTCs). In economic terms, these concerns are approached as market failures. The theory of economic policy has developed a useful approach to address market failures that will be reviewed in section 1.1 below. The rest of Part 3 is devoted to specific measures and tools that are used or have been proposed to address these non-trade concerns.

Section 2 will discuss biofuels (and bioethanol in particular) as an instrument to curb climate change, and will analyse the sustainability of bioethanol production, trade and consumption. Bioethanol and biomass production also offer export opportunities for developing countries, but barriers to trade (trade policy measures, regulatory barriers) may restrict the realization of these opportunities.

Animal welfare is the subject of section 3, in which the tool of labelling will be analysed. Important issues are the information asymmetry of consumers of animal products, the effectiveness of labelling in this respect, and the small market shares of products that have been produced in an animal-friendly way. Measures that address non-trade concerns often incur extra costs for producers in both rich and poor countries. These costs may be borne by consumers, by producers and processors or by retailers. Producers in developing countries may be weak links in the supply chain and will shoulder part of the cost burden, although there may be benefits as well. This issue will be discussed for the cases of bioethanol and labelling.

1.1 Economic analysis of policies to address market failures

Non-trade concerns can be regarded as the result of market failures: people are worried because markets do not produce efficient outcomes, or resources are wasted. There are several reasons for such market failures. First, it may be that the social value of products and services is different from their private value. If so, there is an externality, the quantities supplied and consumed are not in line with the social costs and benefits (polluting activities, knowledge creation).[579] Second, there may be an information problem. If market parties are not well informed, supply or demand will be distorted (contaminated food, second-hand cars).[580] A third reason is the public good case: private actors cannot produce and sell the product or service at a profit (law and order). Finally, lack of competition may

579 Damage to the global commons (due to climate change) is an example of a negative external effect.

580 Labelling may be an instrument to redress this market failure in particular situations. The economic aspects of labelling are discussed in section 3.

produce a market failure (monopoly prices). Collective decision making is often needed to establish the existence of market failures,[581] and policies need to be devised and implemented to correct them. As policy-making institutions are not perfect, the corrective policies sometimes give rise to new problems – government failures – such as ineffectiveness (the objective is not realized), and inefficiencies (the objective can be realized at a lower cost and without undesirable side-effects). As this report does not discuss all possible market failures and instruments to redress them, we will limit ourselves to the instruments related to the use of biofuels and to animal welfare.

First, in order to design an effective policy, knowledge is needed about the causes of the market failure and the interrelationships involved in the failure in order to determine which factors should be influenced to produce the desired outcome without undesirable side-effects.

Second, the right instruments should be available to produce the impact on the factors that will lead to the desired outcome. The design of an effective and efficient policy is often complicated by the desire to serve several objectives by using one or a few instruments. Examples include the EU Common Agricultural Policy, which in the early stages used one price instrument to serve five objectives, and the impossibility of using monetary policy to achieve both inflation and employment targets. The Tinbergen rule formulates the solution: the number of independent objectives should be matched by an equal number of independent instruments.[582] Thus, measures to increase the share of bioethanol in fuel consumption will reduce the dependence on mineral fuels and thus contribute to energy security. The production of bioethanol might also offer EU farmers new opportunities in times of falling prices and decreasing farm subsidies. Finally, bioethanol may be used in climate policy. If the first or second objective is chosen, this will not by definition reduce emissions of greenhouse gases (GHGs) in an optimal way, as bioethanol may be produced in a relatively climate unfriendly way. Since only one of these three objectives will have to be chosen, we will argue in section 2 that bioethanol should be used primarily to reduce emissions of greenhouse gases.

581 In some cases, private groups (e.g. producers' associations) undertake this role.

582 J. Tinbergen, *On the Theory of Economic Policy (*Amsterdam: North-Holland, 1952). See also R.A. Mundell, *International Economics* (New York: Macmillan, 1968). The Tinbergen rule is used in the literature on economic policy-making in various policy areas (e.g. Central Bank monetary policies, macro-economic policies, agricultural policies). See also, e.g. T.R. Michl, *Tinbergen Rules the Taylor Rule*, Working Paper No. 444, Levy Economic Institute, 2006; I. Gombi, (2003) 'Multiple market intervention for target zones', in: *The Japanese Economic Review*, vol. 54, no. 1 (2003), pp.75-85; S. Mann, 'Different perspectives on cross-compliance', in: *Environmental Values*, vol. 14, no. 4 (2005), pp.471-482.

A policy is efficient if the objective is realized at the lowest cost in welfare terms. A policy instrument that addresses the cause of a market failure directly, i.e. as close to the root of the problem as possible, is more efficient than one that works in an indirect way. Thus, if a domestic market does not produce a product in sufficient quantity at the going price because the private net profit is lower than the social benefit, then paying a subsidy to domestic producers is more efficient than imposing an import tariff on the product. If production or consumption of a product affects the local environment or the global commons, measures that have a direct impact on the cause of the problem (e.g. setting caps on emissions enforced by tradable permits, emission taxes and licences) will be more efficient than measures aimed at curbing production or consumption.

Efficient measures generally provide incentives to realize the desired effect with minimal negative side-effects. Thus, to reduce GHG emissions, one might curb the production and consumption of GHG-emitting activities.[583] Such 'command and control regulations' come at a high welfare cost, however. For example, *non-tradable licences* do not provide an incentive to lower levels of the damaging effect below the permitted level, and create vested interests in the damaging activity.[584]

Economic measures that encourage private parties to develop and apply new technologies and processes (such as engines that emit less or no GHG in combination with new clean fuels) stimulate static and dynamic efficiencies. *Tradable emission permits* are a case in point, as these provide an incentive to lower the negative effect in order to sell the permit. In equilibrium, the permits end up in the hands of those who produce the highest value with the allowed emissions (static efficiency) and propel innovation (dynamic efficiency). Sometimes the most efficient solutions cannot be applied because the costs of organization and implementation may be too high, but there are many second- and third-best options. A *tax on the damaging effect* (e.g. on CO_2 emissions) might work well in theory, but in practice, a first problem connected to tax measures is to define the level of taxes that will exactly redress the market failure. A second problem is that frequent changes in the tax level might be necessary to account for changes in the pre-tax price. The political cost of variable taxes is very high.[585]

Third, the impact of the taxes on the market failure, which may be costly, will have to be monitored. These remarks also apply to the *differential taxes* that have been

583 Constraining the level of an activity may be required for other reasons, e.g. lowering traffic density to prevent overcrowding of infrastructure.

584 For an extensive analysis of the tax instrument: OECD, *Environmentally Related Taxes in OECD Countries: Issues and Strategies* (Paris: OECD, 2001).

585 Governments will have to increase carbon taxes if fuel prices fall.

proposed to stimulate products or services that have been produced in a less damaging way or produce less damage in consumption (reduced excise duties or rates of VAT on biofuels, organic meat, low-emission cars, etc.).[586] In general, the tax instrument is effective, but insufficient to realize the objective. It is often used to facilitate the transition to a new (improved) product (e.g. unleaded petrol) that will be compulsory.

In general, *trade policy measures* are third-best measures, as these interventions are far away from the cause of the market failure. Trade barriers have an effect on domestic and world market prices if there is import demand. Through price changes, there will be an impact on consumption and production. The relative inefficiency of these interventions stem from the fact that they work in an indirect way. An import tariff will reduce the welfare of all domestic consumers or processors (if the product is used as an input for other industries), it will reduce demand and burden the relationship with trade partners. A direct subsidy to producers to increase production comes at a lower welfare cost than import barriers. If a market failure is caused in consumption, an import barrier does not produce much of an incentive to find alternatives that do not have the same problem.

Labelling is one way to diminish information asymmetries.[587] This is a different objective than *de facto* regulating particular actions by economic agents in the case of externalities. This section mainly addresses one particular type of asymmetric information, namely, the characteristics of the production process that cannot be verified by the consumer. These are the so-called credence attributes of a product.[588] The supplier may label a product at his own initiative ('first-party labelling' or 'self-declaration'). As suppliers are party in the transaction of selling the product concerned, buyers may distrust the information they provide. In these cases, second- or third-party labelling schemes may be used by industry organizations or by independent agents, respectively. Strictly speaking, the effectiveness and efficiency of labelling should be measured against the objective of lowering the information asymmetry. If the effectiveness of labelling is sufficient, the 'credence good' becomes a 'search good': consumers will be able to buy the preferred product by inspecting the products on offer. Whether this will be realized depends on the communication and design of the label (does the consumer know what label to look for, is it recognizable?), on its credibility, and on the amount and quality of information provided on other product varieties (there may be an overload of information). In practice, however, many advocates of the measures addressing the non-trade concerns concerned will gauge the effectiveness of labelling with reference to the observed change in the quantities sold of the preferred product. This change will depend not only on the solving of the information asymmetry – well-informed consumers may decide to stick to the conventional product – but also on the buyer's preference for the attribute that is labelled, whether the label is compulsory, whether there is competition with other labels, and product characteristics such as design, and the relative price of the labelled product.

The efficiency of the labelling instrument is difficult to measure, as one has to take into account the efficiency of the labelling and certification, the adaptation of process of producing the labelled product and the effects on non-labelled products. The net welfare effects will vary for different labelling systems and products.[589] It may be concluded that labelling may be an effective and efficient instrument to solve information asymmetries. If the labelling does not have the effect that campaigners for higher standards hoped for, buyers will continue to choose the 'low standard product' for reasons such as lower prices or other product characteristics. The campaigners will probably try to frame their case as an externality, instead of an information asymmetry. Collective decision making is required to choose between the two alternatives. If an externality is accepted, more interventionist measures will be needed, as discussed above.

In practice, policies do not always stand the tests of effectiveness and efficiency, perhaps due to incomplete information or the absence of 'first-best' policy instruments. In many cases, policy makers design policies in response to the demands of special interest groups. For policy makers it is rational to balance these special interests against the 'general interest'. These special interest groups may form coalitions with groups that campaign for measures to address non-trade concerns, thus producing effective pressure on policy makers.

586 In the early 1990s, most OECD countries levied a lower excise duty on unleaded petrol than on the leaded variety.

587 Other ways to diminish information asymmetries include officially required diplomas for service providers, voluntary associations of service providers that adhere to a code of conduct, etc.

588 J.A. Caswell and E.M. Mojduszka, 'Using informational labelling to influence the market for quality in food products', in: *American Journal of Agricultural Economics*, vol. 78, no. 4 (1996), pp.1248-1253.

589 In a simple model of labelling food products (in the categories 'organic', 'conventional' and 'genetically modified') a high level of separation cost between GM and non-GM products substantially increases the market share of the organic products, while pushing the conventional products out of the market. All this gives rise to a fall in consumer welfare. K. Giannakas and A. Yiannaka, 'Agricultural biotechnology and organic agriculture: National organic standards and labelling of GM products', in: *AgBioForum*, vol. 9 no. 2 (2006), pp.84– 93.

2 Measures relating to sustainable production of biofuels

Biofuels are considered to be an important instrument in various policy areas.[590] First, biofuels can be used to reduce greenhouse gas emissions, thus contributing the goal of curbing climate change. Second, there is the reasoning that biofuels will reduce the dependency on imported fossil fuels, thus increasing energy security. Third, biofuels are seen as a solution for agricultural producers who are faced with falling prices and incomes as a result of reforms of traditional support policies.[591] According to the Tinbergen rule, biofuels should be used as an instrument for one policy objective, since trying to meet two or more objectives will seriously undermine the effectiveness and efficiency of the measures. This section is largely devoted to bioethanol as a substitute for gasoline.[592] It is argued that bioethanol could be a very effective instrument in climate policy for the coming 10–15 years. If policy makers were also to use it for other objectives, the climate effect will be seriously reduced.

2.1 Effectiveness

Ethanol, or alcohol, is produced from petroleum by the petrochemical industry and from various biological feedstocks, including sugar (cane and beet), grain crops, cellulosic crops and waste biomass. The ethanol made from biological feedstocks is called bioethanol. Biological feedstocks are converted to sugars by different technologies. Sugar crops offer the least complicated way to produce ethanol. In tropical countries, sugar cane is mostly used as feedstock. It has the advantage that the production process yields a byproduct, 'bagasse', that is used for the process energy in the manufacture of methanol. If grain crops are used, the starchy part of the plant is used to produce sugars, leaving considerable fibrous residue.

A technology that is still under development uses the cellulose of plants (most parts of plants consist of cellulose), which can be converted into alcohol (via

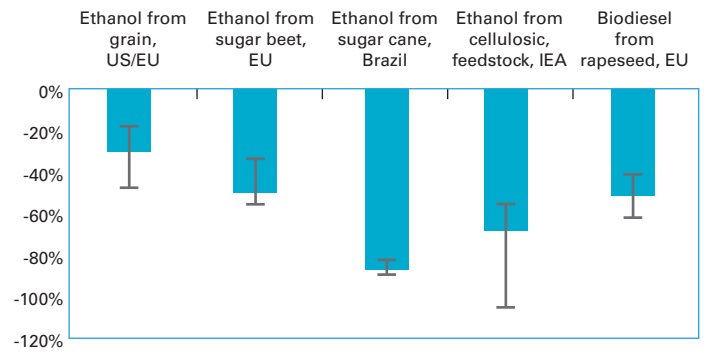
590 M. Stilwell and E. Rose, 'Biofuels and trade: Perils and promises for policy-makers', in: *ICTSD, Linking Trade, Climate Change and Energy* (Geneva: ICTSD, 2006).

591 T. Turner, 'Biofuels, agriculture, and the developing world', in: *ICTSD, Linking Trade, Climate Change and Energy* (Geneva: ICTSD, 2006). Turner maintains that biofuels are the solution to the problems of trade liberalization in agriculture, as 'agriculture is changing from an industry that faces limited demand to an industry that faces *un*limited demand'.

592 Biodiesel is produced in the EU using mainly rapeseed as feedstock. Biodiesel production based on other oils and fats, including palm oil (imported from Malaysia and Indonesia) is also increasing. In 2005, the world production of biodiesel amounted to 3.5 billion litres, of which 2.8 billion litres were produced in the EU using rapeseed as feedstock. The EU's MFN tariffs on biodiesel are 6.5 per cent on an *ad valorem* basis. The EU did not import biodiesel in 2005.

sugar). This process is rather complicated and is not commercially viable. Cellulosic ethanol has important advantages – it can be produced using a wide variety of feedstocks such as grasses and trees, there is less competition in land use; it displaces a greater amount of fossil energy per litre of fuel, and produces much lower net 'well-to-wheels' greenhouse gas emissions than grain-based alcohol. If the production costs can be reduced, cellulosic ethanol offers a promising alternative to fossil fuels, but this may take another 10–15 years.[593]

Figure 1 *Range of estimated greenhouse gas reductions from biofuels*



Note: This figure shows reductions in wells-to-wheels CO_2-equivalent GHG emissions per kilometre from various biofuel/feedstock combinations, compared to conventional-fuelled vehicles. Ethanol is compared to gasoline vehicles and biodiesel to diesel vehicles. Blends provide proportional reductions – e.g. a 10% ethanol blend would provide reductions one-tenth of those shown here. The vertical thick lines indicate the ranges of estimates.
Source: IEA (2004).

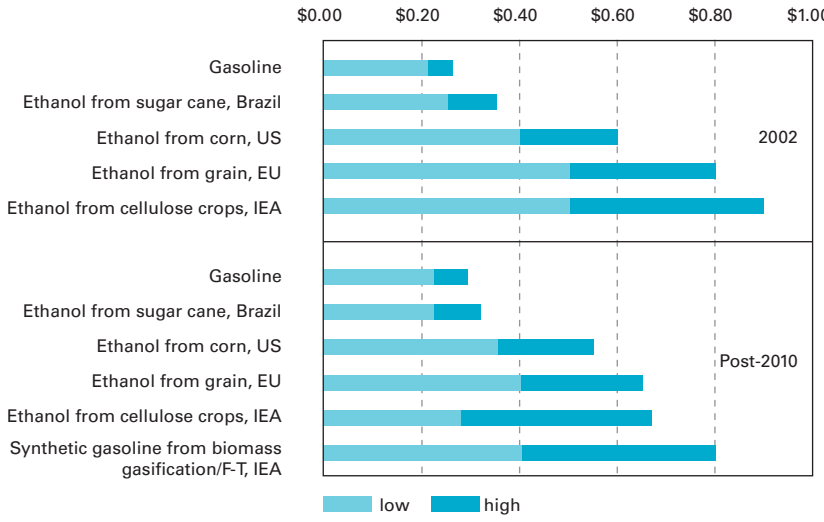
To calculate the reduction in emissions of GHGs as a result of increased biofuel consumption, the whole supply chain has to be taken into account. Various studies have been undertaken to estimate the GHG emissions of various alternatives to petroleum-based fuels. A review by the International Energy Agency (IEA; see *Figure 1*) compared the different biofuels on a 'well-to-wheels' basis and showed that the largest reductions in GHG emissions are made by ethanol from sugar cane produced in Brazil. Ethanol from cellulosic feedstock is the second-best option, but the production process is not yet commercially viable. This is a promising technique in terms of both reducing GHG emissions and in not crowding out other crops.

593 International Energy Agency, *Biofuels for Transport: An International Perspective* (Paris: IEA, 2004), p.42.

2.2 Efficiency

Biomass production in tropical and sub-tropical climates is five times more productive in terms of photosynthetic efficiency than in temperate regions.[594] If such regions also have large areas of suitable cropland, the relative costs of biofuels will be low. The cost of producing ethanol is lowest for the sugarcane-based product. Thus, the cost levels in Brazil, India, Pakistan and other developing countries are less than half of those of the United States, the European Union and other IEA members. This is likely to remain the case until rather far into the future. The IEA estimates (*Figure 2*) indicate that even after 2020, by which time cellulose processing technology will have been developed to a much higher level, the cost of sugarcane-based ethanol will be in the same range as cellulose-based ethanol, and the latter may still be much more costly.[595]

Figure 2 *Cost ranges for current and future ethanol production (US dollars per gasoline-equivalent litre)*



Note: 'F-T' is Fischer-Tropsch type production process.
Source: IEA (2004).

594 V. Johnson, V. Seebaluck, H. Watson and J. Woods, 'Bioethanol from sugarcane and sweet sorghum in Southern Africa: Agro-industrial development, import substitution and export diversification', in: *ICTSD, Linking Trade, Climate Change and Energy* (Geneva: ICTSD, 2006).

595 The price comparisons in this report are not based on organic products. A proper comparison should be based on sustainability criteria for production in all countries.

2.3 Conclusions on the effectiveness and efficiency of bioethanol as an instrument of climate policy

From the studies reviewed by the IEA, ethanol from Brazil – and probably some other developing countries[596] – is the ideal substitute for mineral gasoline: it ranks highest in terms of GHG emission reductions (more than 80 per cent), it is competitive with conventional fuel at current prices, and it is much cheaper than all other alternatives available now and in the foreseeable future. Thus, at present, the cost per tonne of GHG reductions using Brazilian ethanol is a fraction (around 5 per cent) of the cost of using ethanol produced from grain in the EU.[597]

The Copernicus Institute (Utrecht University) and the State University of Campinas (UNICAMP, Brazil) analyzed the sustainability of ethanol production in Brazil. While different types of uncertainties are mentioned, the conclusion for ethanol made from sugarcane, is that 'no prohibitive reasons were identified why ethanol from São Paulo in principle could not meet the Dutch sustainability standards set for 2007'.[598] Whether it makes sense to make the importation of bioethanol conditional on the meeting of sustainability criteria will be discussed in section 2.5.

Imports of bioethanol from competitive producers in tropical regions have an impact on energy security by geographical diversification of sources of energy. Promotion of bioethanol production in the EU on the basis of feedstock grown in the EU contributes to increased energy security by reducing energy imports. Some will consider this a strong form of energy security, but it comes at a very high price, as the cost of bioethanol produced in the EU is up to twice that of imported bioethanol. The contribution of EU-produced bioethanol to GHG emission reductions is almost 50 per cent lower (per kilometre) compared to bioethanol from Brazil, which makes the EU product relatively ineffective for the realization of the Kyoto objectives.

2.4 Bioethanol production, trade flows and trade barriers

The promotion of biofuels to reduce GHG emissions and the introduction of standards for animal welfare will have impacts on developing countries' exports,

596 See section 2.4 below for other potential exporters.

597 Worldwatch Institute, *Biofuels for Transportation. Global Potential and Implications for Sustainable Agriculture and Energy in the 21st Century.* Extended summary (Washington, DC, Worldwatch Institute, 2006).

598 E. Smeets, M. Junginger, A. Faaij, W. Arnaldo and P. Dolzan, *Sustainability of Brazilian Bioethanol* (Utrecht: Copernicus Institute, and Campinas: State University of Campinas, 2006), p.2. Available at www.bioenergytrade.org/downloads/sustainabilityofbrazilianbioethanol.pdf.

production and development through international trade flows and foreign direct investment. This section will assess these impacts. For some of these effects, research data or estimates are available, while for other potential effects no reliable studies have yet been conducted. The section will also discuss trade policy measures that have an impact on the trade flows studied here. As biofuels and animal welfare are rather different policy areas, they are treated separately.

2.4.1 Bioethanol producing countries

Bioethanol is produced and traded in substantial quantities in many regions worldwide. In 2005, global production was more than 35 billion litres. Table 1 presents the top five producers.

Table 1 *Top five bioethanol producers in 2005*

Producing country	Production (million litres)
Brazil	16,500
United States	16,230
China	2,000
European Union	950
India	300

Source: Worldwatch Institute (2006).

In the near future, the production of bioethanol in developing countries will rise considerably, in response to rising domestic demand for ethanol as a fuel, and to rising import demand from temperate countries. Import demand from OECD countries is likely to rise, depending on their policies to protect domestic production. Given that cellulosic ethanol and synthetic biodiesel will not be commercially viable in the coming 10–15 years, the availability of land in the EU and the USA will probably limit the realization of their objectives for consumption of biofuels.[599] In addition, trade liberalization and sound GHG emission reduction policies will make more imports of biofuels probable and attractive, as was argued in section 2.3.

Domestic demand in many developing countries (including Brazil, India and China) is rising as these countries are introducing compulsory blending, thus reducing the quantities available for export. Nevertheless, the potential export capacities in

599 See IEA, *Biofuels for Transport,* chapter 6. The European Environment Agency estimates that the EU can technically produce significant amounts of biomass to realize ambitious targets, 'even if strict environmental constraints are applied'. EEA, *How Much Bioenergy can Europe Produce without Harming the Environment*, EEA Report 7/2006). Available at http://reports.eea.europa.eu/eea_report_2006_7/en/eea_report_7_2006.pdf.

developing countries are promising. Brazil could expand its bioethanol production significantly, by increasing the area under sugarcane cultivation and improving the productivity of land.[600] In India the government is also promoting production by paying sugar mills a premium on each litre of bioethanol they produce.[601]

Many developing countries already produce small quantities of bioethanol and have the potential for larger production. Africa is expected to become one of the largest producers of biomass in the future: its potential is estimated to be equal to that of Latin America.[602] In Africa, where biomass is traditionally used for cooking and heating, South Africa is the lead country in the development of bioenergy production, but is unlikely to be able to export significant quantities of biofuels if the government decides to introduce compulsory blending. Other member countries of the Southern Africa Development Community (SADC) also have considerable export potential, particularly the least-developed countries (LDCs) Malawi, Mozambique and Zambia. Bioethanol production in these countries can use both sugar cane and sweet sorghum[603] as feedstocks. Johnson *et al.* estimate that these countries have the natural resources to supply 6 per cent of EU demand in 2015 and 10 per cent in 2020 (after meeting domestic consumption).[604] These countries are expected to be competitive if oil prices remain in the range of US$45–55 and import tariffs are zero. The bottlenecks to realizing this potential are the large investments required to expand feedstock production, and to upgrade both the processing capacity and transport infrastructure, a large part of which will have to come from foreign direct investment (FDI). South–South FDI and technology transfer will be part of the solution. Illovo Sugar, a South African firm, for example, already controls the sugar production capacity in Zambia and has dominant positions in Malawi, Mozambique, Swaziland and Tanzania. The participation of

600 Smeets *et al., Sustainability of Brazilian Bioethanol*, pp.38–40.

601 In India, the cost price of ethanol is around US$ 0.15 (of the same order as in Pakistan and Brazil), but the premium of US$ 0.18 per litre is encouraging many sugar mills to shift to ethanol production. International Energy Agency, *Biofuels for Transport: An International Perspective* (Paris: IEA, 2004), p.164. Available at www.iea.org/textbase/nppdf/free/2004/biofuels2004.pdf.

602 Consultancy and Research for Environmental Management, *Dutch Import of Biomass: Producing Countries' Points of View on the Sustainability Biomass Exports* (Amsterdam: CREM, 2006). See also B. Batidzirai, A.P.C. Faaij and E. Smeets, 'Biomass and bioenergy supply from Mozambique', in: *Energy for Sustainable Development,* vol. X, no.1 (2006), pp.54–81.

603 Sweet sorghum grows faster than sugarcane, and has much lower water requirements and a better drought resistance. It is also a more flexible crop than sugarcane as it is grown from seed, rather than from plantings. See F. Johnson, V. Seebaluck, H. Watson and J. Woods, 'Bio-ethanol from sugarcane and sweet sorghum in Southern Afica: Agro-industrial development, import substitution and export diversification', in: *ICTSD, Linking Trade, Climate Change and Energy* (Geneva: ICTSD, 2006).

604 *Ibid.*

foreign sugar companies might be expanded and broadened. The market value of the reduction of GHG emissions could be leveraged to finance investments.[605]

The range of problems to be overcome is well illustrated in the case of Zambia. Although at present Zambia is one of the five most efficient sugar producers, its global competitiveness is severely limited by the high costs of transporting sugar overland to a seaport.[606] These costs will have to be diminished by infrastructure development financed by public and/or private investors. As the infrastructure improves, so will the connections between neighbouring countries, leading to regional integration, in which the Common Market of Eastern and Southern Africa (COMESA), the East African Community (EAC) and SADC, supported by donors, are the natural lead organizations. Once these regions and the EU conclude Economic Partnership Agreements, the EU might play an important role in this programme.

2.4.2 Trade flows and trade barriers: MFN, GSP and EBA; regional trade agreements

Imports of ethanol into the EU averaged 150 million litres per year in 1999–2001, more than 250 million litres in 2002–2004, and a record of almost 600 million litres in 2005.[607] These imports are administered under CN code 2207, which has two subcategories, undenatured alcohol (code 2207 10) and denatured alcohol (code 2207 20). Although both types can be used for biofuels, more than 93 per cent of ethanol imports were in the form of undenatured alcohol.[608] Increasing quantities of imported bioethanol are also blended with other fuels such as petrol, under code 3824. These quantities of bioethanol escape statistical observation, reducing the reliability of the figures. To remedy this situation, the European Commission is now considering a proposal to create a separate code for biofuels in the combined nomenclature (CN).

The two categories of ethanol are subject to different import tariffs: € 19.2 per hl[609] for undenatured, and € 10.2 per hl for denatured alcohol. Given that in the most competitive countries (Brazil and Pakistan) production costs are around US$15 per hl, these tariffs are very substantial (more than 100 per cent for the undenatured variety, depending on transport costs). However, a large part of ethanol imports enter the EU on a preferential basis.

605 *Ibid.*

606 J. Pilegaard, 'Symbolic *and* effective? An LDC perspective on duty-free and quota-free market access', in: G. Faber and J. Orbie (eds) *European Union Trade Politics and Developing Countries: Everything but Arms Unravelled* (London: Routledge, 2007), chapter 8.

607 European Commission, *An EU Strategy for Biofuels*. Communication of the Commission SEC(2006)142, 8 February 2006. Available at http://ec.europa.eu/agriculture/biomass/biofuel/com2006_34_en.pdf.

608 *Ibid.*

609 1 hectolitre = 100 litres.

The Generalized System of Preferences (GSP) classifies ethanol as a sensitive product. Under the GSP that applies from 1 January 2006 to 31 December 2008, preferences for alcohol under code 2207 have been completely removed; before 2006 the MFN tariff was reduced to 15 per cent. Under the special drugs regime of the GSP that was applicable before 2006, a number of countries (Bolivia, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Peru, Pakistan, El Salvador and Venezuela) had duty-free access for alcohol.[610] Under the GSP+ incentive scheme for sustainable development and good governance that more or less replaced the drugs regime, these countries now enjoy duty-free and quota-free (DFQF) access. Georgia, Moldova, Mongolia and Sri Lanka were also added to the group, while Pakistan was removed. Thus, imports of ethanol from Pakistan have been subject to the full MFN tariff since 1 January 2006. In the first five months of 2006, EU imports of ethanol from Pakistan were 8.7 million litres, compared with 50.3 million litres in the same period in 2005.[611] These two examples – the exclusion of bioethanol from the GSP and the exclusion of Pakistan from the GSP+ – show that these trade preferences are rather unreliable, and are unlikely to create a favourable climate for investment in bioethanol production in developing countries.

The LDCs also have DFQF access to the EU market, including the three Southern African LDCs with the greatest bioethanol export potential (Malawi, Mozambique and Zambia). This group of LDCs partly overlaps with the ACP countries that enjoy tariff-free access under the Cotonou Agreement until 1 January 2008, when new arrangements – Economic Partnership Agreements – have to be in place. The EU has proposed to expand DFQF access under the Economic Partnership Agreements, which will give all ACP countries access to the EU (with a temporary exception for rice and sugar). South Africa is in an exceptional position as it concluded a separate bilateral Trade, Cooperation and Development Agreement (TCDA) with the EU in 1999 that does not provide for preferential treatment for alcohol; as a result, South African ethanol exports are subject to the full MFN tariff. Imports that pay the MFN tariff originate mainly from Brazil, the USA and – since 1 January 2006 – Pakistan.

610 This special GSP regime was to stimulate the countries concerned to export goods other than drugs. The drugs regime was abandoned in 2006.

611 Data retrieved from the Eurostat Comext database. The European Commission has tried to play down the effect of imposing the MFN tariff on ethanol from Pakistan by saying: 'Pakistan might … be expected to continue to be able to export significant quantities of ethanol to the EU, albeit not at the same pace as before, thus utilizing the increased production capacity built over the last couple of years'. European Commission, *An EU Strategy for Biofuels,* pp.28

Table 2 *Average annual EU imports of ethanol (CN code 2207) under the various preferential trade regimes, 2002–2004*

Import regime	Average annual imports, 2002–2004 (million litres)	Share of total imports, 2002–2004 (%)
GSP normal	23.2	9.0
GSP+	117.8	47.5
ACP/Cotonou Agreement	23.8	9.0
Everything but Arms	4.5	1.5
Others	12.2	4.0
Total preferential	199.8	70.0
Total MFN	112.5	30.0
Grand total	312.2	100.0

Source: European Commission (2006).

Future trade policy developments with respect to biofuels will depend on the outcome of regional and global negotiations. In the framework of the Doha Development Agenda (DDA), negotiations are underway to reduce tariffs and non-tariff barriers in general, and to establish a list of environmental goods and services for which trade barriers will be reduced or eliminated. Biofuels are candidates on the list of 'environmentally preferred goods'.[612] This might lead to a gradual phasing out of tariffs on biofuels, maybe to zero. On a bilateral level, the EU–Mercosur negotiations on a free trade agreement (FTA) have dragged on for many years, mainly as a result of differences of opinion on agricultural trade liberalization. Whether these two negotiating processes will yield results in the near future remains to be seen.

2.5 Conclusions with respect to measures that relate to the provision of the EU with sustainably produced bioethanol

At present the European Union obtains bioethanol from domestic production (950 million litres in 2005) and imports (312 million litres in 2004). Bioethanol from both sources accounts for less than 2 per cent of gasoline consumption (the EU goal for 2005).[613] By 2010 the share of biofuel in transport fuels should rise to 5.75 per cent,

612 This was proposed by Brazil. See R. Howse and P.B. van Bork, *Options for Liberalizing Trade in Environmental Goods in the Doha Round,* Report no. 2, ICTSD Project on Environmental Goods and Services (Geneva: ICTSD, 2006).

613 Consumption of gasoline in the Netherlands amounted to 5466 million litres in 2005. If the EU objective of 2 per cent biofuel had been realized, more than 100 million litres of bioethanol would have been consumed. In 2006 a compulsory blending requirement of 2 per cent entered into force.

according to the EU Biofuels Directive.[614] Thus, the market is growing rapidly. The Commission has indicated that Member States will have to introduce more binding measures, such as compulsory blending and tax measures. On the supply side, the EU market for biofuels is highly distorted by the Common Agricultural Policy,[615] the subsidies for innovative fuels and the EU's common trade policy. As a result, the price of bioethanol in the EU does not reflect its relative scarcity globally. We have shown that bioethanol from tropical countries has a high potential to reduce greenhouse gas emissions in the short run in an effective and efficient way. In order to realize this potential, the EU will have to devise a coherent trade policy with respect to bioethanol. Today this policy is highly segmented.

There is stable free access for ACP and least developed countries, economies that have significant potential but small export capacities at the moment. A group of developing countries have free access on a temporary and unilateral GSP+ basis, as long as they meet specific conditions for sustainable production and good governance. Competitive producers in other countries pay a very high MFN tariff (50 or 100 per cent or more). This patchwork of policy interventions does not constitute a consistent climate policy. In order to make bioethanol a competitive alternative to mineral fuels, the trade barriers for the two should be equalized over a defined time path, which means falling tariffs for bioethanol. A gradual erosion of tariff preferences will occur. If this is implemented according to a plan, the potential of developing countries that are well-endowed with the natural resources for biofuel production could be further developed.

614 EU Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport, 8 May 2003 (*OJ*, L 123, vol. 46, 17.5.2003).

615 Special aid for energy crops (€ 45 per ha) was introduced by the 2003 CAP reform. Sugar beet grown for bioethanol is exempt from quotas. Investments in biomass processing can be supported under the Rural Development Policy. European Commission, *An EU Strategy for Biofuels.* COM(2006)34 final. For the full report, a background memo and press release of 8 February 2006, see http://ec.europa.eu/agriculture/biomass/biofuel/index_en.htm

The European Commission has studied two scenarios for the biofuel supply in the EU, one based on current MFN tariffs and one on zero tariffs. In the latter case, all bioethanol consumed in the EU in 2010 would be imported (although the EU would retain a sizeable biodiesel production capacity). This scenario offers the highest greenhouse gas savings.[616]

This trade policy that is coherent with climate objectives should be complemented with a programme to develop the untapped potential for biomass and biofuel production in Africa. Support will be necessary to improve the physical infrastructure for export, to finance feasibility studies, and to create a favourable climate for private investment in biomass production.

Finally, it has been proposed to make the import of bioethanol conditional upon sustainability criteria. The Dutch government intends to incorporate sustainability criteria in its policy instruments related to biomass production. The project group 'Duurzame productie van biomassa' (the Cramer Commission) has proposed criteria related to the production and processing of biomass for energy, fuels and chemicals, that should be 'measurable and broadly supported'. These Cramer criteria cover the themes of GHG balance, competition with other crops (including food crops), biodiversity, welfare, well-being and the environment.[617] Apart from the question of whether international obligations under EU and WTO law forbid the imposition of such conditions on imports, do these criteria make sense? In this discussion we keep in mind that biofuels are used as a means to reduce GHG emissions. For this objective, bioethanol from developing countries is an effective and efficient instrument, taking into account GHG emissions on a well-to-wheels basis.

We have already shown that allowing bioethanol imports from developing countries (free) entry to the EU would meet the condition of a very high GHG balance. With regard to the other criteria, it is questionable whether it would be wise to impose these conditions. The broad objective to produce in a sustainable way (preserving biodiversity, the environment, benefiting all segments of society, etc.) applies

616 European Commission, *Annex to the Communication from the Commission, An EU Strategy for Biofuels: Impact Assessment,* SEC(2006)142. However, the Commission does not make a clear choice. While on the one hand it proposes to 'develop a coherent Biofuels Assistance Package that can be used in developing countries which have a potential for biofuels', on the other, it wants to pursue a 'balanced approach' in market access that respects 'the interests of both domestic producers and EU trading partners …' (p.38). Available at http://ec.europa.eu/agriculture/biomass/biofuel/sec2006_142_en.pdf.

617 *Toetsingskader voor duurzame biomassa* (Cramer report). Final report of the project group 'Duurzame productie van biomassa', chaired by Professor Jacqueline Cramer, 2007. Available at www.vrom.nl/docs/20070427-toetsingskader-duurzame-biomassa.pdf.

economy-wide. It is related not only to the way of development, but also to the level of development. The idea that making particular imports conditional upon sustainability criteria would contribute to the realization of the stated goals may be misleading, for several reasons.

First, an importing country has a potential impact on part of the production only (the EU imports only 1 per cent or less of all bioethanol produced in Brazil). Even if the exporting country meets the sustainability criteria for that small part of the production, little will change in the sector. The exporting country may also respond by shifting its exports to less demanding markets.[618] Thus, trying to encourage an entire economy to adopt more sustainable methods of production by imposing conditions on a tiny part of its production, would be a case of the tail wagging the dog. Second, even if the exporter were to adapt the production process throughout sector, there would then be one sector where the regulatory situation would differ significantly from the rest of the economy. This will greatly distort relative prices and wages. It cannot be assumed that the sustainability and welfare of the exporting economy as a whole would improve; it might even deteriorate. Research into the issue of child labour has made it clear that import constraints on goods produced using child labour do not necessarily improve the lot of the children in the exporting economy.[619]

Third, the exporting developing countries may perceive these criteria as eco- or labour protectionism. Given the experiences of these countries in the recent past, and the imminent risk that regulatory systems are captured by rent-seeking groups, this perception is not without grounds. The practical effect of the implementation of the criteria will be an increase in the cost of production. Although it is difficult to give the precise cost-increasing effect as a simple percentage, it is clear that it will be substantial. For ethanol produced in the São Paulo region (where 60 per cent of Brazilian sugar and ethanol are produced), for example, it is estimated that total production costs could rise by 24–56 per cent, increasing the cost per litre by € 0.12 (see *Box 1* below). This would come on top of the EU import tariff of € 0.19 per litre. Taken together, the impression of protectionism is difficult to refute, and the opportunity to introduce an effective and efficient climate policy based on ethanol will be lost – given the earlier cited conclusion that 'no prohibitive reasons were identified why ethanol from São Paulo principally could not meet the Dutch sustainability standards set for 2007'.[620]

618 In a seller's market such as the bioethanol market, this is a realistic scenario.

619 For a literature review and the findings of their empirical research, see E. Edmonds and N. Pavcnik, *Does Globalization Increase Child Labor? Evidence from Vietnam*, NBER Working Paper Series, no. 8760 (Cambridge, MA: National Bureau of Economic Research, 2002).

620 Smeets *et al., Sustainability of Brazilian Bioethanol*, p.2.

Box 1 *The costs of sustainability criteria for bioethanol*

The Cramer Commission has proposed that imports of bioethanol should be conditional on a number of sustainability criteria in the exporting country, including biodiversity, social conditions, etc. While there are serious doubts as to whether an importing country should try to have an impact on the regulatory climate of an exporting country by imposing conditions for imports of only one product, here we look only at the impacts of such criteria on production costs, and the costs of monitoring, testing, traceability and certification.

With regard the likely increase in the costs of producing bioethanol as a result of sustainability criteria, the estimates vary widely, depending on a number of factors:

- the precise sustainability conditions applied;
- local physical conditions affecting production (e.g. weather conditions, slope of terrain, geographical situation, etc.); and
- the scale of production, soil fertility, etc.

In a study of the impacts of sustainability criteria on bioethanol production in Brazil and the Ukraine, Smeets *et al.* (2006) estimated that total production costs would increase by between 35 and 88 per cent.[621] Of this, a maximum of 29 percentage points would be due to meeting the environmental criteria. For ethanol produced in the São Paulo region (where 60 per cent of Brazilian sugar and ethanol are produced), they estimated that total production costs would rise by 24–56 per cent, increasing the cost per litre by € 0.12.[622]

The costs of certification will depend on the complexity of the scheme, including the number of benchmarks, the frequency of controls, the nature of the supply chain, and the characteristics of production. The last aspect is important: if production is scattered over large area, or over many small enterprises, inspectors will have to control many units, thus increasing the costs of certification per unit of product. In the case of bioethanol in Brazil, production is concentrated geographically, but a substantial share of the sugarcane is grown by smallholders (30–35 per cent in the São Paulo region). Smeets *et al.* estimate that the costs of certification in relation to the sustainability criteria would be 0.1–1.2 per cent of the cost of production.[623]

621 E. Smeets, A. Faaij and I. Lewandowski, *The Impact of Sustainability Criteria on the Costs and Potentials of Bioenergy Production*. Report no. NWS-E-2005-6 (Utrecht: NOVEM, 2005), p.67. Smeets *et al.* applied socio-economic criteria (related to child labour, wages, employment, health care and education) and environmental criteria (related to soil erosion, fresh water use, pollution stemming from the use of fertilizers and other agricultural chemicals).

622 Smeets *et al.*, *Sustainability of Brazilian Bioethanol*, pp.74 –78. A large part of the increase is due to 'green' manual harvesting. If mechanical harvesting is used, total costs would increase by 'only' 24 per cent (or € 0.05 per litre).

We do not easily dismiss the concerns that gave rise to the proposed Cramer sustainability criteria. Our conclusion is, however, that imposing these criteria on one product, in combination with a very high import tariff, is not a promising way of putting these principles into practice. There are more effective and efficient ways to contribute to achieving these objectives: by concluding international agreements, through international cooperation to support aspects of sustainable production by financial means, and via transfer of technology.

3 Labelling for animal welfare

In this section we define the objective of animal welfare as the desire to guarantee a minimum standard of welfare in the living conditions of animals that are reared for human consumption. If the majority of consumers share this desire, then the problem is asymmetrical information: the standard of animal welfare cannot be determined from the product. Labelling schemes are a means to resolve this problem. There are two forms of labelling: compulsory and voluntary. In the former case, producers are obliged to indicate particular data on their products (such as the ingredients and nutritional content of food products). A voluntary system does not have this obligation. In practice, however, a voluntary system may be compulsory. This is the case if consumers come to regard non-labelled goods or products as inferior,[624] or if producers in a supply chain have no alternative outlets for non-labelled products. Although this section focuses on voluntary labelling, most of the conclusions apply equally to compulsory labelling schemes.

The concern for the welfare of animals in the agro-food industry is a rather recent phenomenon in the EU, yet the EU is a frontrunner in the area compared to other countries. As incomes in OECD countries have risen, the preferences of consumers

623 *Ibid.*, p.88.

624 This argument applies to voluntary and compulsory systems. For example, the National Organic Program (NOP) has introduced a label for organic products. One of the criteria is that the products do not contain GMOs. Thus, the NOP label is also a 'non-GMO label'. K. Giannakas and A. Yiannaka, 'Agricultural biotechnology and organic agriculture: National organic standards and labelling of GM products', in: *AgBioForum*, vol. 9 no. 2 (2006), pp.84–93.

have shifted towards goods produced in accordance with minimum standards of social, environmental and animal welfare. The concern for animal welfare is a global one that does not stop at the borders of the Netherlands or the EU. As a result of trade liberalization, a rising share of consumption stems from imports. The falling costs of transportation and communication have enabled firms to segment geographically the supply chains of many products.

3.1 Effectiveness

Labelling has an impact on domestic and imported goods. The impact of labelling in general may be limited in the sense that firms may turn out much larger quantities of goods that are not produced in accordance with animal welfare standards, and some may not produce goods that require to be labelled at all. Thus, while (voluntary) labelling schemes may guarantee that the labelled product has been produced in an animal-friendly manner, it does not guarantee that domestic and foreign producers have converted their entire production processes to meet the required standard of animal welfare. This depends on a number of factors, including the share of production destined for markets where labelling is necessary, and the possibility to have labelled and non-labelled production lines next to each other (such as the cost of separating the two varieties). One may argue that labelling one variety of a product implicitly also labels the other variety as non-labelled. This may increase the effectiveness of the label, as argued above. The label would be more effective if producers were to adopt the animal welfare standard of the label for their entire production process.

Credibility of labels is essential. Certification is required to build up the reputation of labels. Labels prescribed by public authorities are generally monitored by public or semi-public agencies. In case of voluntary labels, certification is done by specialized agencies, such as NGOs or private certification agencies for the private labels of particular retailers, or for a group of private firms in the same industry.

Private parties (both firms and not-for-profit organizations) that try to communicate particular characteristics of their products or certify these attributes in labels, have to invest substantial funds in building up the reputation of their brand name or label, by adapting the production process of their own plants or the plants of third parties, by setting up a monitoring organization and through marketing campaigns. In large part, these investments can be regarded as sunk costs – the investing organization cannot retrieve the investment without incurring substantial losses. As a result, the investor has an interest in continuing to build his reputation, and will monitor the supply chain to ensure that products meet the criteria, or will keenly guard the quality of its certification. For the same reason, a retailer will only adopt a particular standard, such as for animal welfare, if the marketing benefits clearly outweigh the costs of creating the label. Sufficient consumers should be

willing to pay a premium on the price of the normal product. NGOs play an important role in making consumers aware of the processes involved in the production of many consumer goods, and regularly report on different aspects of these 'non-trade concerns'.[625] Thus voluntary labels, once established, have the advantage that the organization that has adopted a standard has a strong incentive to maintain and improve its credibility.

Do labels effectively diminish the information asymmetry? To find out, the European Commission's Energy, Environment and Sustainable Development programme recently conducted an EU-wide survey of consumers to evaluate the success of environmental product information schemes.[626] The results of the surveys were mixed. Consumer awareness of established national 'eco-labels' was high in Norway (White Swan, 70 per cent) and Germany (Blue Angel, 70 per cent), while in Italy and Spain awareness of eco-labels was very low. The EU Flower eco-label was known by only a few consumers.[627] Recognition of the Fair Trade label also varies widely, from 90 per cent in the Netherlands, to 25 per cent in the UK in 2003. The Energy Star label for electrical appliances, a joint initiative of the US Environmental Protection Agency and the US Department of Energy launched in 1992, is now recognized by 63 per cent of respondents. Information campaigns may increase the level of awareness of such labels, although full awareness is not realistic. A significant proportion of consumers (20–50 per cent in the Netherlands) are not interested in information on the food supply chain, believing that this is a task for the government and producers.[628] Our conclusion is that labels can be very effective *in resolving the information asymmetry*, although they are not always entirely successful. This may be because the labels themselves do not communicate information effectively, or may be due to disinterest on the part of the target group.

625 A recent report by the OECD Trade Committee contains many sector studies. See *Informing Consumers of CSR in International Trade, Part II: Case Studies* (Paris: OECD, 2006). NGOs play an important role in the creation of labels and brands that communicate Corporate Social Responsibility (CSR) in the production processes for cut flowers, clothing and cosmetics. Examples of private labels in animal welfare include those of the Body Shop and other large cosmetics firms. The Coalition for Consumer Information on Cosmetics, established by the largest US animal protection groups, has developed the internationally recognized Corporate Standard for Compassion for Animals and issues a label, the 'leaping bunny'.

626 European Commission, Energy, Environment and Sustainable Development (EESD) programme, available at http://cordis.europa.eu/eesd.

627 European Commission, summary of the EESD research programme: *Developing Effective and Efficient Product Information Schemes,* available at http://cordis.europa.eu/data/PROJ_FP5/ACTIONeqDndSESSIONeq112362005919ndDOCeq485ndTBLeqEN_PROJ.htm.

628 Stichting Natuur en Milieu, *Van grond tot mond. Transparantie van de voedselmarkt* (Utrecht: SNM, 2004).

The effectiveness of (voluntary) labels *in terms of market share* is limited. Products that have been produced in accordance with the standards of corporate social responsibility (CSR), and are labelled as such, have 'relatively modest but usually growing market shares', according to the OECD.[629] A relatively large share of the products consumed does not meet the conditions of CSR. For animal welfare, some voluntary labels have been relatively successful in terms of market share, particularly cosmetics. For meat, they have been less successful, for a number of reasons. First, consumers must be willing to pay a premium for meat products from animals reared according to animal welfare standards. When asked, consumers overwhelmingly say they are willing to pay 'a little extra' for 'ethical alternatives'.[630] In practice, however, consumers take into account many factors when making spending decisions. Although many care for ethically responsible production conditions, only a minority rank them above other factors such as design and taste (5 per cent of the British public did in 2000). If products (plywood articles) are sold in two varieties that are equal in all respects (including price), except that one carries an eco-label and the other does not, the majority will buy the former.[631] For meat, the price difference between labelled and non-labelled products may be substantial.[632]

A second reason why labels on meat have not been successful is that the label may not communicate information effectively. Consumers sometimes distrust the claims of socially responsible production methods as they fear that commercial interests are the main motive. Alternatively, the labels may provide an overload of information, there may be different labelling systems for the same product, or discontinuities in labels. Third, voluntary labels are difficult to implement in particular sectors. The nature of the product (the animal origins of intensively processed products and of non-food products may be difficult to recognize) and the organization of the sector (small-scale production and retailing is costly to certify, and free riding is attractive and easy if the price premium is substantial and if the supply chain is complex) play a role.

629 OECD, *Informing Consumers of CSR in International Trade,* Part I (Paris: OECD, 2006) p.9.

630 A survey by Co-op UK in 2004 indicated that 84 per cent of respondents answer this question in the affirmative in 2004, compared to 62 per cent in 1994. See *Shopping with Attitude* (Manchester: Co-op, 2004), available at www.pdf.co-operative.co.uk/pdfs/shopping_with_attitude.pdf.

631 R.C. Anderson and E.N. Hansen, 'Determining consumer preferences for ecolabeled forest products: An experimental approach', in: *Journal of Forestry*, vol. 12, no.4 (2004), pp.28-32. For a review of research, see OECD, *Informing Consumers of CSR in International Trade,* Part I, pp.14–16.

632 For free-range chicken breast the price premium may be almost 50 per cent above the the price of conventional chicken (as observed by the author in a Dutch butcher's shop in December 2006).

The question is whether other steps should be taken if the market share of the preferred product remains relatively low despite the fact that a voluntary label has solved the problem of information asymmetry. One might say that, apparently, the concern for animal welfare is not generally supported by consumers to the extent necessary to stop production processes that fall short of animal welfare standards. Or, to put it differently, as the willingness to pay for the labelled product is insufficient to make the labelled product the dominant product, there is no externality. This view can be challenged. A voluntary label enables consumers to take away only part of the externality they face. As far as consumer welfare is determined by the living conditions in animal husbandry in general, buying animal welfare labelled products has a small effect if the conventional production process remains dominant.

Animal welfare is said to have the characteristics of a public good: it is non-excludable and non-separable, which makes it impossible to collect payments for the supply of the good.[633] Before governments take measures to produce the public good of animal welfare (by mandatory labelling and/or regulation), the size and valuation of the public good should be clear. This is required to make an informed trade-off between benefits and costs. Much research has been devoted to the question of negative external effects of caged hens. The significantly greater willingness to pay for eggs from free-range hens is interpreted as an indication of a negative external effect. These studies do not distinguish between the individual welfare effect of consuming food that meets high standards of animal welfare and the collective welfare effect of a general application of these standards. In a research setting that made this distinction (for eggs), Carlsson *et al.* found that there is no significantly higher willingness to pay for the regulation solution (the collective welfare improvement).[634] They concluded that '… if a choice is made to impose higher welfare standards in farming, it must be based on criteria other than economics'.[635] However, before a definite conclusion can be drawn more empirical research is required.

As far as mandatory labelling of *negative attributes* is concerned, the following reasoning may be adopted, based on the question of whether a standard is generally accepted as the norm. Swinbank argues that in this case mandatory labelling for animal welfare for negative attributes is acceptable where a country can demonstrate that 'there is a clear expectation that consumers expect to be

633 Farm Foundation, *The Future of Animal Agriculture in North America* (Oak Brook, Ill.: Farm Foundation, 2006) ch. 8, pp.133-151.

634 F. Carlsson, P. Frykblom and C.J. Lagerkvist, *Farm Animal Welfare: Testing Market Failure*. Working Papers in Economics no. 19, Department of Economics, Göteborg University, 2003.

635 Farm Foundation, *The Future of Animal Agriculture in North America,* p.140.

warned when the norms are not respected, and that equivalent or more stringent standards apply to domestic production …'.[636] Thus, the decision on domestic regulation on animal welfare is one of collective decision making on ethical grounds. Once a regulation on animal welfare has been adopted, this might develop into a norm. Swinbank is of the opinion that this proposal should not undermine the concept of 'like' products and that the proposal does not extend to climatic advantage or geographical location. He accedes that the inclusion of labour standards would be highly controversial. One might add that the discussion as to the minimum standards for animal welfare in the EU has been going on for many years already, and is likely to continue. It cannot be concluded that the EU rules for animal welfare have developed into a norm, let alone that consumers expect to be warned if these standards have not been respected.

3.2 Efficiency

Labelling is a way to communicate to the buyer that a product (or service) has a particular attribute that is not visible. As such, labelling diminishes the asymmetry in information between sellers and buyers. This enables buyers to purchase those goods that better match their preferences. This is welfare enhancing. It is a different issue whether voluntary labelling is an efficient system.

As indicated above, voluntary labelling is practised by firms that consider the label to be a device for communicating the special nature of a product. Labels are a way of product differentiation. This gives the seller some influence in the market for his particular variety of product. Depending on the level of competition in the market concerned, firms will minimize the cost of production. The need for cost-effective production applies for the whole supply chain. The firm that is responsible for the label's validity (usually the retailer or owner of the brand name) has to take care that it observes the label's conditions at competitive cost levels. As the consumer markets where animal welfare labels are relevant are rather competitive, particularly in the medium to long run, labels have to be upheld in efficient ways. In addition, improved control systems for labels may lead to reduced product and raw material wastage, improved product-cost accounting and increased efficiency and competitiveness.[637]

636 A. Swinbank, 'Like products, animal welfare and the World Trade Organization', in: *Journal of World Trade*, vol. 40, no.4 (2006), p.707.

637 S. Jaffee and S. Henson, 'Agro-food exports from developing countries: The challenges posed by standards', in: M.A. Aksoy and J.C. Beghin (eds) *Global Agricultural Trade and Developing Countries* (Washington, DC: World Bank, 2004), chapter 6.

Voluntary labelling may give rise to inefficient outcomes, i.e. produce labels at cost levels that are higher than necessary. This may happen in particular circumstances. For example, if the label is a company label and gives the firm a monopoly position, excessive profits will result, at the expense of consumer welfare. Such a situation is rather special and will not hold in the long run. One may think of a sudden illness among livestock in the 'normal' production process that makes the public turn *en masse* to the animal welfare labelled product.

3.3 Conclusions on the effectiveness and efficiency of labelling for animal welfare

Labels as such are extensively used, as consumers in high-income countries want to have a broad choice among different varieties of a product and are increasingly attaching value to products that have been produced in socially responsible ways. Voluntary labelling schemes are increasingly being used and are taking different forms. Labelling is an effective way of reducing information asymmetries. The effectiveness in terms of market shares of existing voluntary labels is considerable in some cases, although for most products market shares remain in the order of 1–5 per cent. Considerable funds have to be invested to create, certify and communicate labels; these investments have the nature of sunk costs. This is an incentive to guarantee the credibility of the label. The effectiveness may be limited by unwillingness to pay for the labelled product quality where many other product qualities are taken into account. An overload of information may make the consumers disinterested in a label. The efficiency of voluntary labels is relatively high, as the private parties that introduced and maintain the label have to compete with non-labelled varieties. Sometimes the chain control mechanism leads to cost reductions that would not have otherwise occurred. Compulsory labelling has some different aspects. Its effectiveness might be somewhat greater as it covers all products sold. On the other hand, compulsory labels often are less flexible, as long bureaucratic procedures are involved in their formulation. This may reduce the efficiency of these systems in the long run.

3.4 Labelling and developing country agro-food exports

3.4.1 General aspects: problems and opportunities

Developing countries have been rather reluctant with respect to labelling initiatives. The suspicion of protectionism and the cultural and economic distance between high- and low-income countries largely explain this attitude. With the ongoing globalization of supply chains, consumers in rich countries are showing increasing concern about the safety and other (hidden and apparent) qualities of products. Both public and private bodies have reacted by introducing technical norms and standards. Labelling and certification are part of this development. For

exporters in developing countries, the required new product qualities may indeed be difficult to realize. This may be due to their complexity, the number of different labels and their certification (lack of harmonization), the lack of administrative, technical and scientific capacities of the exporting countries' firms and public agencies.[638] In a recent paper, Chen *et al.* examined the impact of foreign standards on the export performance of developing country firms, measured by the share of production that is exported and the number of export markets a firm enters.[639] Their empirical results – based on the World Bank Technical Barriers to Trade Survey database – indicate that testing procedures and lengthy inspections reduce exports by 9 per cent and 3 per cent, respectively. In addition, they find that differences in standards cause diseconomies of scale, which reduces the entry into new markets. Although this research covers a broader set of standards and technical regulations than labelling, it is relevant as public and private labelling has the same effect for exporting firms: if they do not meet the labelling requirements, there are markets or segments of markets that they cannot enter. A limitation of their approach is that they assume that compliance with the standards has no effect on demand. Other authors take demand into account. They argue that the emerging public and private standards offer an opportunity for developing countries to improve their competitiveness, as many of these standards are a 'bridge between increasingly demanding consumers requirements and the participation of distant (and international) suppliers … The process of standards compliance could conceivably provide the basis for a more sustainable and profitable trade over the long-term, albeit with some particular winners and losers'.[640]

A distinction can be made between (1) the cost of meeting the criteria of a label, (2) the certification cost, (3) the issue of who pays the cost, and (4) the impact on the primary suppliers in developing countries.

638 *Ibid.*

639 M.X. Chen, T. Otsuki and J.S. Wilson, *Do Standards Matter for Export Success?* Policy Research Working Paper 3809 (Washington, DC: World Bank, 2006).

640 *Ibid.*, pp.6-3.

The costs of upgrading production to higher standards differ enormously. These costs may depend on such factors as the criteria of the label, the production process, the quality of existing production facilities, the scale of production and management techniques used. If sustainability criteria were to be introduced for bioethanol production in Brazil (see Box 1 above), it is estimated that total production costs could rise by 24–56 per cent, increasing the cost per litre by up to € 0.12. Similarly, complying with sustainability criteria for willow production in the Ukraine (for biomass) could increase total production costs by 14 per cent.
In a brief survey, the Federation of Indian Chambers of Commerce and Industry (FICCI) found that the cost per farmer of meeting EurepGAP conditions is € 1700, a certificate of the British Retailers' Consortium € 4500, and a Kosher Certificate € 3500.[641] For the production of fruits and vegetables, the costs of meeting EurepGAP conditions at the level of individual firms are estimated at about € 100,000 in Tanzania and Guinea for initial expenditures, and ongoing annual costs of € 20,000 to € 30,000 (see *Box 2* below). In order to meet new compulsory hygiene standards for shrimps, which were introduced following detentions of the product in the US and a ban by the EU, Bangladeshi industries had to make investments equal to 2.3 per cent of the total value of the country's shrimp exports over the period 1996–98. For Nicaragua, this figure was 0.61 per cent over the period 1997–2002.[642] It has also been reported that sustainability criteria have lowered cost levels per unit as a result of better process management. The cost indications presented here are difficult to compare. What they do indicate, however, is that the compliance costs may be substantial in relative terms. An increase in the cost per unit of 10–50 per cent is not uncommon.

As long as the product that meets the criteria fetches an equivalent price premium for the producer, the higher standard may create an attractive market segment. Whether this happens will depend on the power relations in the supply chain. If upstream producers are numerous and not globally organized – as is the case for many standardized commodities, fruits and tropical beverages – large trading houses and retailers are likely to have a dominant position in the supply chain. As far as this is the case, the price premium for the labelled product will accrue to the retailer. In a case study on Ugandan coffee, it was reported that farmers had an incentive to invest in lower-quality coffee as regulatory penalties are low compared to the high cost of investment in better processing investment in the presence of a

641 FICCI, *High Cost of Standard Compliance Making Exports to EU Difficult: FICCI Survey* (New Delhi: FICCI, 2006). Available at www.ficci.com/press/highcost-20march.doc.

642 S. Jaffee and S. Henson, 'Agro-food exports from developing countries'.

very low price premium for high-quality coffee.[643] The same source reports case studies in Kenya and Uganda for the flower and fish industries, where investments in quality appear to lead to higher market prices. In the case of fish exports by Uganda, the investments in higher quality have resulted in a higher market share. 'It appears that these premiums, if any, accrue to producers of high-end value commodities or marketing agents closer to the retail end of the production process (i.e. retailers and supermarkets in Europe)'. Small farmers and small and medium enterprises (SMEs) in developing countries are in a difficult position to pocket whole or part of the price premium. NGO-inspired labels such as Fair Trade are an exception, as the existence of these labels relies on the prices primary producers receive.
The certification costs of a particular production process will vary over different processes, the number and strictness of criteria, the ease of measurement, etc. Normally, there are fixed and variable costs. Skal (a third-party certification institute) charges fixed and variable fees for organic certification for processors and importers that want to participate in the certification programme 'Organic Production in the Netherlands'. The variable fee is related to turnover,[644] and applies to processors and agricultural producers. After initial certification, annual audits are required to maintain certification. In general, the scale of production is a determining factor in the per unit cost of certification.

For small-scale producers, group certification is an option. This requires a local organization of producers that has the means to enforce compliance. If the criteria are simple and straightforward, the certification costs are modest, as in the case of ISO norms. More complex criteria (such as biodiversity or Forest Stewardship Council norms) are more costly to certify. As indicated in *Box 2* below, the costs of certification for bioethanol in the São Paulo region are rather modest, around 1 per cent of total production costs.

Box 2 *EurepGap and developing country exports of fruits and vegetables*

EurepGAP is a private certification system established by 22 large European retailers. There is a technical committee for fruits that has formulated a standard for fruits and vegetables. Although suppliers are represented in the committee, none of them are African suppliers. There is no labelling scheme, but certification is required in order to gain access to the large retailers.

643 J.S. Wilson and V.O. Abiola (eds), *Standards and Global Trade: A Voice for Africa* (Washington, DC: World Bank, 2003). Available at http://wbln0018.worldbank.org/eurvp/web.nsf/pages/standards+in+global+trade+b/$file/executive+summary+(english+version).pdf.

644 Skal (2006) Tariff paper 2006 (available at www.skal.nl, click on 'costs').

The standard has 250 control points. Food safety and traceability are the main subjects. Other areas are labour and environmental conditions in production. 'Non-trade concerns' such as provisions for workers (toilets, washing facilities) are part of the EurepGAP protocol for fruits and vegetables.

In a recent report, UNCTAD tried to establish the burden of this set of private standards on local producers in Tanzania, Mozambique and Guinea.[645]
The report includes an inventory of the institutions that need to be in place, and the investments required at the macro-level. It also includes estimates of the costs of EurepGAP compliance and certification for private firms, based on interviews and discussions with producers and officials, as shown in the table below.
Costs of complying with EurepGAP conditions in Tanzania, Mozambique and Guinea (in US$, 2005)

Country	Macro costs (x 1000)*	Micro: setup costs**	Micro: ongoing costs**
Tanzania	2520	98,690	20,500
Guinea	3142	2,197,200	27,000
Mozambique	9250	109,400	23,600

* at the national level

** at the level of the firm

The macro costs consist of the costs of setting up the legal framework, developing certification, inspection and quarantine capacities, participation in international standard-setting bodies, etc. Producers also incur costs, including setting up traceability systems, investing in worker health, safety and welfare provisions, and introducing management systems in several areas (waste, pesticides, fertilizers, soil and substrates). The macro costs can vary significantly, depending on whether countries have already made some progress in creating the institutions needed, and on the size of the sector and geographical dispersion of producers. The cost of EurepGAP compliance is substantial for many producers in the countries concerned as 'it demands a shift from manual and low-skilled labour practices in agriculture and light manufacturing to more sophisticated best practices comparable to those found in developed countries'.[646] This is not a problem for foreign investors who usually bring their know-how on producing according to EurepGAP standards to their affiliates in developing countries. For small and

645 UNCTAD, *Costs of Agri-Food Safety and SPS Compliance: United Republic of Tanzania, Mozambique and Guinea: Tropical Fruits* (Geneva: UNCTAD, 2005). Available at www.unctad.org/en/docs/ditccom20052_en.pdf.

646 J.S. Wilson and V.O. Abiola, *Standards and Global Trade,* p.xxi.

medium-sized local companies and farmers, the costs of meeting the standards (the micro-costs in the table in Box 2) will be prohibitive. Only organizing themselves into associations of sufficient size will give them the scale that is necessary, but the organization costs (monitoring, training, etc.) will be substantial.

The UNCTAD report also describes the experiences in Kenya in adopting EurepGAP standards in order to improve the competitiveness of the horticultural sector. Many large farms are already certified and more than 50,000 small outgrowers are said to be moving towards compliance. Smallholder groups are often associated with exporting companies. A local certification company for EurepGAP has been set up, and training programmes and advisory services have been introduced to help smallholders in matters such as traceability and allowed farm inputs.

3.4.2 Animal welfare labels and developing country exporters

The costs of upgrading animal farming to higher standards in developing countries have not been well researched. Some studies in developed regions, particularly the EU, show that these costs include more and different fodder, more labour, higher capital investment in buildings and more land needed for free-ranging animals. These costs will be different in developing and industrialized countries. In some countries labour will be cheaper and land prices lower, while capital may be more expensive. The increases in cost in the EU give some indication, but care should be taken in applying these data to developing countries. It has been estimated that the production cost of chickens ('broilers') increases by 5 per cent if the stocking density is decreased from 38 to 30 kg/m^2. The same increase applies for slower growth of broilers (from 40 to 50 days).[647] Free-range chicken breast fetches a much higher price premium, which may be as much as 50 per cent.[648] Complying with animal welfare standards may increase the cost of pig production in the UK by approximately 10 per cent (free range compared to minimum standards), which is covered by a price premium.[649]

The effects of labelling schemes on animal food producers in developing countries will vary depending on the type of product, and for producers who operate under very different regional conditions, use different technologies, etc. Research carried out in Brazil by the Dutch Agricultural Economics Research Institute (LEI), suggested 'that it may not be very difficult for Brazilian chicken meat exporters ... to adapt to European 'sustainability' standards that affect market access'.[650] For exporters in other countries, such as Thailand, however, complying with the labelling standards may be more difficult or expensive, according to the LEI report. These exporters would probably remain in the unlabelled market segment (e.g. in the EU if there is no mandatory labelling for negative attributes), or other markets where labelling obligations are less strict.

Thailand is an interesting case. The EU is importing increasing quantities of cooked chicken from Thailand (from 61,105 tonnes in 2003 to 106,503 tonnes in 2005). The import tariff on cooked chicken is 10.9 per cent (*ad valorem*). In the summer of 2006, the EU started negotiations with Thailand on a tariff quota, the idea being to increase the out-of-quota tariff to € 102 per 100 kg, the tariff for frozen poultry. It is difficult to justify an increase in tariff and quantitative barriers on a product imported from a particular country and subsequently to impose mandatory labelling on top of that. As in the case of the sustainability criteria for bioethanol (see section 2.5 above), motives of protectionism are difficult to refute.

3.5 Conclusions with respect to labelling for animal welfare

From the foregoing discussion of the impacts of labelling on animal welfare standards and developing country exports, we can draw the following conclusions.

First, modern consumers demand a large choice among differentiated products, adequate information and a guarantee for a few credence attributes (mainly concerning health aspects). These attributes have the nature of a public good and should be regulated by official standards and/or mandatory labels. It is far from clear, however, whether animal welfare standards have this public good nature. For credence attributes that do not have a public good nature, voluntary labelling is a sufficient and efficient solution to solve the problem of market failures due to information asymmetry.

Second, developing country producers are having to comply with a rapidly increasing number of technical norms and standards. Primary producers in developing countries may be able to profit from higher standards as long as they are able to invest in upgrading their production processes, in certification and marketing. However, financial systems in developing countries might not cater to these investment needs as the firms may be small and lack collateral, and local banks may not operate along the lines of market incentives. Thus higher standards

647 J. Moynagh, 'U regulation and consumer demand for animal welfare', in: *AgBioForum*, vol. 3, no. 2&3 (2000), pp.107-114. See also: Farm Foundation, *The Future of Animal Agriculture in North America*, pp.133-151.

648 As observed by the author in a small butcher's shop in the Netherlands in 2006.

649 H.L.I Bornett, J.H. Guy and P.J. Cain, 'Impact of animal welfare on costs and viability of pig production in the UK', in: *Journal of Agricultural and Environmental Ethics*, vol. 16, no. 2 (2003), pp.163-186.

650 D.J.F. Eaton, J. Bourgeois and T.J. Achterbosch, *Product Differentiation under the WTO: An Analysis of Labelling and Tariff or Tax Measures concerning Farm Animal Welfare* (The Hague: Agricultural Economics Research Institute (LEI), 2005), p.54.

(including voluntary private sector schemes such as EurepGAP) may favour large production companies and retailers.

Third, small producers may benefit if the right institutions are in place to provide training, information and certification at reasonable prices.

Fourth, given the potential problems developing country exporters have in complying with higher norms and standards, which are increasingly being demanded by private importers in rich countries, and often come on top of high tariffs and binding quotas, governments should practice utmost restraint in making decisions that will only add to the regulatory barriers to imports from developing countries. International coordination should prevent the proliferation of different standards, as this will only add to the costs to developing country producers of meeting those standards.

In addition, development cooperation can play an important role in stimulating the export performance of domestic firms in developing countries. Technical and financial support for research, local extension services, and monitoring and testing facilities could assist small and medium-sized firms in setting up and improving export ventures, and help small producers in organizing collective initiatives in labelling, certification and marketing.

CONCLUSIONS

Conclusions

This study has focused on three main issues:

– the consistency of unilateral nPR PPM measures addressing non-trade concerns with the obligations under the *WTO Agreement* (Part 1);
– the relevance of other international agreements for unilateral nPR PPM measures addressing non-trade concerns (Part 2); and
– the economic effectiveness and efficiency, as well as the impact on developing countries, of unilateral nPR PPM measures addressing non-trade concerns (Part 3).

These issues are examined primarily with regard to existing, proposed or still purely hypothetical measures to give effect to the Cramer criteria for the sustainable production of biomass or the protection and promotion of animal welfare. With regard to the WTO consistency of these measures, the table below indicates the most relevant WTO provisions and refers to the legal analysis presented in this report.

Unilateral nPR PPM measures	Relevant WTO provisions	Relevant analysis
Import prohibition on products not produced consistently with nPR PPMs (e.g. an import prohibition on biomass not produced consistently with the Cramer sustainability criteria; or an import prohibition on livestock products not produced consistently animal welfare requirements)	Article XI of the GATT 1994	See p.##.
	Article XX of the GATT 1994	See p.##.
Preferential customs duties for products produced consistently with nPR PPMs (e.g. lower customs duties for biomass produced consistently with the Cramer sustainability criteria; or higher customs duties for meat from animals that have not been kept, fed, transported or slaughtered in accordance with specific animal welfare requirements)	Article I.1 of the GATT 1994	See p.##
	Enabling Clause of the GATT 1994	See p.##.
Country-specific customs duties for imports from countries that have national legislation incorporating specific nPR PPMs (e.g. lower customs duties for biomass imported from countries that have been certified as requiring that the production of biomass conforms to the Cramer sustainability criteria and equivalent criteria)	Article I.1 of the GATT 1994	See p.##
	Enabling Clause of the GATT 1994	See p.##.

Unilateral nPR PPM measures	Relevant WTO provisions	Relevant analysis
Domestic prohibition on the use or sale of products produced inconsistently with the nPR PPMs (e.g. a prohibition on the use in the production of biofuels of biomass produced inconsistently with the Cramer sustainability criteria; or a prohibition on the sale of foie gras of geese that were force-fed)	Article III:4 of the GATT 1994 Article XX of the GATT 1994	See p.##. See p.##.
Technical regulations (mandatory) setting out nPR PPMs for products used or sold (e.g. a technical regulation stipulating that eggs must be produced in conditions where battery cages do not hold more than 8 laying hens per m2)	Article III:4 of the GATT 1994 (and the *TBT Agreement*?) Article XX of the GATT 1994	See p.## and p.##. See p.##.
Government or private standards (voluntary) setting out nPR PPMs for products used or sold (e.g. a standard agreed upon by oil and electricity companies that the biomass they use must meet the Cramer sustainability criteria; or a standard agreed upon by retailers that they will only sell animal-welfare-friendly products)	The *TBT Agreement* and Article III:4 of the GATT 1994?	See p.## and p.##.
Compulsory blending requirements specifying that the products blended must be produced consistently with nPR PPMs (e.g. a regulation excluding from the compulsory blending of fossil and biofuels, biofuels from biomass not produced consistently with the Cramer sustainability criteria)	Article III:4 and III:5 of the GATT 1994 (and the *TBT Agreement*?) Article XX of the GATT 1994	See p.## and p.##. See p.##.
Mandatory or voluntary labelling regarding nPR PPMs (e.g. labelling on livestock products indicating whether they are produced consistently with specific animal welfare requirements)	The *TBT Agreement* and Article III:4 of the GATT 1994	See p.## and p.##.
Voluntary certification programmes or schemes regarding nPR PPMs (e.g. a government or private organization certifying that specific biomass has been produced consistently with the Cramer sustainability criteria; or that livestock products have been produced consistently with animal welfare requirements)	Article III:4 of the GATT 1994 (and the *TBT Agreement*?) Article XX of the GATT 1994	See p.## and p.##. See p.##.

Unilateral nPR PPM measures	Relevant WTO provisions	Relevant analysis
Tax reductions, exemptions or rebates for products produced consistently with nPR PPMs (e.g. a reduction in excise duties on biofuels from biomass produced consistently with the Cramer sustainability criteria; or a reduction in VAT on animal-welfare-friendly products)	Article III:2 of the GATT 1994, the *SCM Agreement* and the *Agreement on Agriculture* Article XX of the GATT 1994	See p.##, p.## and p.##. See p.##.
Border tax adjustments levied on imported products to offset nPR PPM-based domestic taxation	Article II:2 of the GATT 1994 Article XX of the GATT 1994	See p.##. See p.##.
Government procurement requirements favouring products produced consistently with nPR PPMs (e.g. a requirement that public buses must use biofuels from biomass produced consistently with the Cramer sustainability criteria; or a requirement that public hospitals and schools may only buy meat from livestock produced consistently with animal welfare requirements)	Article III:8 of the GATT 1994 and the WTO *Agreement on Government Procurement*	See p.##.
Direct subsidies to assist producers with the additional cost incurred in meeting nPR PPMs (e.g. payments to oil companies or electricity companies to offset the additional costs of using biomass or biofuels from biomass produced consistently with the Cramer sustainability criteria; or payments to farmers to offset the additional costs resulting from compliance with animal welfare requirements)	The *SCM Agreement* and the *Agreement on Agriculture*	See p.## and p.##.
Export refunds to overcome the competitive disadvantage that producers have on the world market as a result of stricter domestic regulation setting out nPR PPMs (e.g. export refunds for meat and livestock products to compensate for the higher production costs resulting from compliance with animal welfare requirements)	The *SCM Agreement* and the *Agreement on Agriculture*	See p.##.
Reporting requirements relating to nPR PPMs (e.g. the requirement for industrial users of biomass (oil and electricity companies) to report whether biomass they use is produced consistently with the Cramer sustainability criteria (and subsequently leaving it to the consumers/civil society to act on the basis of that information)	Article III:4 of the GATT 1994 (and the *TBT Agreement*?) Article XX of the GATT 1994	See p.## and p.##. See p.##.

As the Appellate Body stated in 1996 in *Japan – Alcoholic Beverages II,* WTO Members are free to adopt or maintain unilateral nPR PPM measures addressing non-trade concerns as long as, in doing so, they act consistently with their obligations under WTO law. This report shows that some of the existing, proposed or still purely hypothetical measures to give effect to the Cramer criteria for the sustainable production of biomass or measures to protect and promote animal welfare are clearly WTO-consistent, while others are definitely WTO-inconsistent. For a significant number of measures, however, there is confusion and uncertainty with regard to their WTO consistency. Their WTO conformity will depend, *inter alia*, upon:

– whether, and to what extent, nPR PPMs are relevant in determining whether products are 'like';
– whether there is a jurisdictional limitation on the application of Article XX; and
– whether measures setting out nPR PPMs fall within the scope of application of the *TBT Agreement.*

Relevance of other international agreements for unilateral nPR PPM measures addressing non-trade concerns

Various international agreements on environmental and labour standards and human rights contain trade provisions to further their objectives. Out of the 200 multilateral environmental agreements (MEAs) currently in force, the WTO has identified 14 agreements with trade-related provisions. Common features of these agreements are import and/or export restrictions both between Parties and with regard to non-Parties. In most cases their trade provisions relate to product-related processes and production methods (PR PPMs). But Parties may sometimes choose to adopt unilateral measures addressing non-product-related PPMs in furtherance of the objectives of an environmental agreement. The majority of the trade-related environmental treaties also restrict or prohibit trade with non-Parties to the agreements and/or promote the transfer of environmentally sound technology to developing countries. Both types of measures potentially conflict with relevant WTO rules. Since they violate a priori the GATT non-discrimination obligations (Articles I and III) or the prohibition on quantitative restrictions (Article XI), they must be held against the requirements of the general exceptions and the chapeau of Article XX of the GATT 1994.

Unlike environmental agreements, most human rights agreements do not contain explicit trade-restrictive provisions. The type of human rights measures of concern for the current discussion generally relates to labour standards and is a typical example of non-product-related PPMs. Because of the jurisdictional limitations arguably 'implied' by the WTO dispute settlement bodies thus far, it seems extremely difficult – if not impossible – to justify trade restrictions relating to human rights concerns under Article XX of the GATT 1994. Article XX of the GATT 1994 also lacks an explicit social clause.

The present report notes that a dispute over conflicting obligations under environmental or human rights agreements, and WTO law has not yet arisen. However, there is a need to find proper solutions in order to avoid such disputes in future. An increasing number of regulatory programmes addressing non-product-related social and environmentally sound production is being developed at the international level. The two main conflict rules of Article 30 of the *Vienna Convention on the Law of Treaties* that relate to the aspects of *temporality* and *speciality* are applicable but they may not be able to solve all (potential) problems. A balanced approach to the WTO as a legal system should take into account its place within the wider corpus of international law. Besides using environmental and human rights agreements to determine the ordinary meaning of the terms of the *WTO Agreement*, dispute settlement bodies of the WTO should use these agreements as a factual reference in their interpretation of Article XX of the GATT 1994. If a measure was taken pursuant to a widely ratified environmental or human rights agreement, it should be considered relevant factual evidence that the measure was legitimate. Yet, in the current state of legal doctrine, the direct application of non-WTO norms as 'legal norms' by the WTO dispute settlement bodies is considered a bridge too far.

The best way to address non-product-related PPM concerns remains the negotiation of broad multilateral agreements that expressly contain trade measures to further their objectives. These agreements must be open to all WTO Members and must impose equal obligations on countries 'where the same conditions prevail', so as to avoid discrimination.

Economic effectiveness and efficiency of unilateral nPR PPM measures and their impact on developing countries

The present report has also considered the economic effectiveness and efficiency and possible impact on developing countries of addressing non-trade concerns. It has done so by focusing on and analysing existing, proposed or still purely hypothetical measures that intend to give effect to sustainability criteria for the production of biomass and the protection and promotion of animal welfare. Bioethanol from tropical countries, for example, is deemed to be a product of high potential in order to reduce greenhouse gas emissions in an effective and efficient way. At present it is being precluded from fully realising this potential in the EU because of incoherent trade and agricultural policies. With regard to most unilateral nPR PPM measures, it is questioned whether such measures could ultimately achieve their intended objectives, given the limited leverage of export requirements on the regulatory situation in the economies of exporting countries. Developing countries have good reason to fear forms of eco- or labour protectionism where regulatory systems of importing countries may be captured by rent-seeking groups pursuing other hidden objectives.

It is far from clear whether most animal welfare aspects have a public good nature. For credence attributes that do not have a public good nature, voluntary labelling would seem a sufficient and efficient solution to solve the problem of market failure due to information asymmetry. Primary producers in developing countries may be able to profit from higher standards as long as they are able to invest in upgrading their production processes, and in certification and marketing programmes. Certification of small firms is relatively expensive; collective certification could be a solution but requires costly organization and monitoring/ sanctioning. Big, international firms are often in a more favourable position. To address these problems, international harmonization could prevent the proliferation of different standards, as the latter is adding to the costs to developing country producers of meeting those standards. Development cooperation can play an important role in stimulating the export performance of domestic firms in developing countries.

APPENDIX 1
TERMS OF REFERENCE FOR A SCOPING PAPER[1]

1 TOR drawn up by BZ/DGIS/CE (Ministry of Foreign Affairs, Directorate-General for International Cooperation, Coherence Unit) and agreed with LNV/IZ (Ministry of Agriculture, Nature and Food Quality, International Affairs Department), EZ/BEB/Directie Handelspolitiek (Ministry of Economic Affairs, Foreign Economic Relations, Trade Policy Department), VROM/DIZ (Ministry of Housing, Spatial Planning and the Environment, International Affairs Directorate), SZW/IZ/IA (Ministry of Social Affairs and Employment, International Affairs Department).

Non-trade concerns in te EU and WTO: opportunities and threats for developing countries

Introduction

Non-trade concerns (NTCs) are generally regarded as an important topic of discussion within the WTO and the EU and in the dialogue with developing countries. At the same time, however, there is a great deal of confusion about the precise definition of the term. "NTCs" serves as a collective term for all kinds of societal developments, concerns and wishes in both developed and developing countries, though nearly always in relation to the consequences of regulation and side effects on the liberalisation of world trade. Non-trade concerns thus put additional pressure on WTO negotiations. The preamble to the WTO *Agreement on Agriculture* (AoA) explicitly refers to non-trade concerns, including food security and the need to protect the environment. According to article 20 of the AoA, non-trade concerns should be taken into account in the continuation of the reform process. This is reiterated for agriculture in paragraph 13 of the Doha Ministerial Declaration (November 2001) and in Annex 2, paragraph 2, of the Doha framework agreement (August 2004), without any further definition of non-trade concerns being provided. Paragraph 6 of the Doha Ministerial Declaration also states that an open and non-discriminatory multilateral trading system, protection of the environment and the promotion of sustainable development must be mutually supportive aims. Similarly, the specific form and substance of various trading aspects in relation to non-trade concerns is also determined in other international conventions and declarations (WSSD Declaration (*World Summit on Sustainable Development*), decisions within the framework of the *Convention on Biological Diversity* (CBD), *Biosafety Protocol*, CITES (*Convention on International Trade in Endangered Species*), etc.). In some cases explicit reference is made to the interaction with the WTO.

The EU is the biggest advocate of non-trade concerns in the WTO, particularly in relation to *agriculture*, but also in relation to the *environment* and *labour standards*. In its negotiating proposal of January 2003 for the WTO Committee on Agriculture[2] the European Commission states that its proposals to liberalise trade and decrease trade-distorting domestic support are conditional upon non-trade concerns being adequately addressed in the negotiations. Explicit reference is made to food safety (in particular the precautionary principle), mandatory

2 "The EC's Proposal for Modalities in the WTO Agriculture Negotiations", Brussels 27/1/03 (133 Committee, MD: 625/02 REV4).

labelling,[3] food security for developing countries, environmental protection, rural development (including the economic and social viability of rural areas, conservation of biodiversity, etc.) and animal welfare.

With regard to *animal welfare*, however, the European Commission recognises in a 2002 Communication to the Council of Europe and the European Parliament[4] that achieving consensus in the WTO agriculture negotiations will be difficult due to ethical, cultural, economic and political differences. There is, in fact, little or no support in the Doha Round, especially in relation to market access, with developing countries and the US the chief opponents. Recently the European Commission has even been reticent in seeking acceptance of non-trade-distorting subsidies devoted to animal welfare under the "Green Box" for fear that this might lead to calls to impose a cap on permitted "Green Box" subsidies. As alternative options with regard to animal welfare, it therefore mentions the development of international standards by the World Organisation for Animal Health (OIE), bilateral and multilateral agreements, labelling (either voluntary or mandatory) and scientific work on the link between animal welfare and food safety.

In the context of the Doha Round, non-trade concerns play a part not only in the agriculture negotiations, but also in the fields of trade and the environment through negotiations on greater market access for environmental goods and services and clarification of the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). With regard to environmental goods and services, the aim is further tariff reductions and the elimination of non-tariff trade barriers (paragraph 31 (iii) of the Doha Ministerial Declaration). The EU is the main driving force behind these negotiations, and is first of all seeking to draw up a list of environmental goods and services. Some developing countries are against the list approach, however, and advocate instead a project-based approach with the emphasis on "environmentally preferable goods". This focuses attention on the fundamental discussion concerning the definition of environmental goods: should only the inherent characteristics of the end product be taken into account or should the manufacturing process also be considered?

With regard to the second element (paragraph 31 (i) of the Doha Ministerial Declaration), the negotiations are unfortunately limited in scope to the applicability of existing WTO rules on trade measures among the parties to an MEA. A legal solution to the serious difficulty raised in terms of international law – i.e. the situation of non-overlapping memberships of the WTO and the MEA in question, where the WTO rights of a WTO member who is not a party to this MEA are at issue – is even explicitly excluded. For some considerable time now the Committee on Trade and Environment (CTE) within the WTO has been the forum for an intense debate on this political/legal issue. The Netherlands supports the EU's active commitment in this area. The basic principles are the equivalence of the WTO and MEAs as international agreements, attempts to seek mutual support between the WTO and MEAs and the promotion of a broad-based approach to international and transboundary environmental issues (source-based measures, trade measures where necessary, technology transfer and technical and financial assistance). As a solution to potential tension in trade matters, the EU has proposed an approach based on a "favourable prejudice" in possible WTO dispute settlement for trade measures taken by a WTO-MEA party if this is specifically authorised by an MEA that enjoys broad support. Discussions in the CTE have so far produced little in the way of results due to resistance from developing countries and the US.

Non-trade concerns in relation to *labour standards* did not come up for discussion in the Doha Round. Attempts on the part of the US, in particular, to establish a direct link in a WTO context between compliance with minimum labour standards and the ability to impose trade sanctions met with fundamental resistance from all the developing countries. This even extended to granting the International Labour Organisation (ILO) observer status at the WTO. Paragraph 8 of the Doha Ministerial Declaration merely re-confirms the Singapore Ministerial Declaration (December 1996), which talks about commitment to comply with the internationally recognised "core labour standards" and designates the ILO as the organisation responsible for developing and promoting these standards.

Within the EU, meanwhile, specific legislation is being drafted that relates directly to or touches on non-trade concerns. Some is of an internal nature, such as minimum animal welfare requirements for producers in the EU and specific "Green Box" subsidies. Other requirements concern product-related process and production methods (PPMs) for products from both within and outside the EU. Often this involves environment-related measures such as end-of-life management of electrical and electronic equipment (WEEE), use of hazardous heavy metals (RoHS), eco-design of electrical equipment (EuP) and registration and authorisation of chemicals (REACH). The proposed legislation also concerns mandatory labelling, as in the case of the draft EU Regulation on biological production. More recently the EU has also been exploring ways to make non-product-related PPMs compulsory for imported products. One example is the EU action plan for animal welfare, which includes investigating the possibility of mandatory labelling for both locally produced and imported meat products in accordance with "objective and measurable" animal welfare indicators.

3 Two years previously, in its negotiating proposal for the Committee on Agriculture, the EU spoke about "consumer concerns", presenting better provision of information through labelling as a solution (G/AG/NG/W/90 of 14/12/2000). By January 2003 the EU was no longer talking about "consumer concerns", but mentions mandatory labelling as an independent NTC.

4 COM(2002) 626 of 18/11/02.

The fundamental position of the Dutch government is that attention should be devoted to non-trade concerns for two reasons: because of their intrinsic importance and because insufficient attention may undermine public support for the multilateral trading system. The government must actively consider the extent to which non-trade concerns can and must be respected, what role it can and must play here and what instruments can best be deployed.[5] The guiding principle [6] is that measures that are needed to achieve the underlying non-trade concern objective may not be unnecessarily trade-restrictive or discriminatory in terms of their implementation and must fulfil our WTO obligations. With regard to developing countries, an effort must also be made to ensure that the consequences for these countries are specifically taken into account in the formulation and implementation of such measures (in line with the coherence test in article 178 of the EC Treaty). We must exercise caution in imposing trade sanctions to enforce compliance with environmental protection, animal welfare and public health standards, and instead give priority to positive measures.[7]

The Dutch government is in regular dialogue with civil society and the business community on the subject of non-trade concerns. In response to the 2006 Budget Memorandum and National Budget, the Dutch Federation of Agricultural and Horticultural Organisations (LTO-Nederland), for instance, has argued that import tariffs should not be lowered for products that do not comply with European production standards in the areas of environment, welfare, labour and hygiene: "If this were to happen, it would lead to EU products being supplanted by products that do not meet society's requirements," is LTO-Nederland's view. In parliamentary committee meetings with members of government about European agricultural policy and the Doha Round, non-trade concerns often come up for discussion and the possibility of mandatory legislation on PPMs is raised. In a motion by Dutch MPs Kris Douma and Corien Jonker, which was subsequently carried, the government was asked to urge the EU to focus its efforts in the next WTO round on getting non-trade concerns on the agenda.[8]

For discussion purposes, it is enlightening and, indeed, essential to make a distinction between product-related and non-product-related PPMs. Appendix 1 contains a conceptual framework drawn up by the OECD for environmental measures; this is also applicable to measures relating to animal welfare and labour standards. Environmental measures may be product-related or non-product-related PPMs, while animal welfare and labour standards are non-product-related PPMs as a rule. Whereas product-related PPMs are essentially covered by the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) agreements, this is debatable as far as the second group is concerned.[9] As a result, there is much greater uncertainty about the scope for non-product-related PPMs. The consequences for developing countries are also far from clear when it comes to non-product-related PPMs. Does linking them to market access lead to economic benefits and opportunities for these countries or to new *de facto* and possibly insurmountable trade barriers?

The progressive policy in Brussels with regard to product-related and non-product-related PPMs and the growing debate in the Netherlands about non-trade concerns require the government to take a clear and unequivocal stance.[10] It is no longer enough to make general statements about related measures having to satisfy our obligations within the WTO and towards developing countries. It must be absolutely clear exactly which measures are legally feasible and effective, and also sensible in relation to developing countries. Although much has already been written on this subject, for example by the Agricultural Economics Research Institute (LEI)[11] and the Centre for World Food Studies (SOW)[12] in the Netherlands, the findings are equivocal, to some extent contradictory and do not span the entire

5 "De WTO in de Winkel", policy document on the relationship between the world trade system and consumers, Ministry of Economic Affairs, 1999.

6 Sources: De WTO in de Winkel", Ministry of Economic Affairs, 1999; Memorandum on Coherence between Agricultural and Development Policy, Ministry of Foreign Affairs/Ministry of Agriculture, Nature and Food Quality, 2001; final report of the Interministerial Policy Review on the reorientation of agricultural policy, 2002; final report of the Interministerial Policy Review on the effectiveness and coherence of development cooperation, 2003.

7 "De WTO in de Winkel", Ministry of Economic Affairs, 1999

8 Ministerial Conference of the World Trade Organisation (WTO): Motion by MPs Douma and Jonker, House of Representatives of the States General, 2004-2005, 25074, no. 92.

9 The *SPS Agreement* refers to PPMs, but covers only measures to protect human, animal and plant life or health in the country implementing these measures. In most cases, therefore, these will be product-related PPMs. The *TBT Agreement* lays down rules for technical requirements, which may cover, for example, product characteristics and product-related PPMs. This also includes labelling requirements that are applicable to products or PPMs. The interpretation of the reference to labelling and PPMs is the subject of discussion among WTO members.

10 It should be mentioned here that not only the government is confronted with non-trade concerns, but also the business sector. Businesses respond to this with Corporate Social Responsibility activities and private standards containing environmental, labour and/or animal welfare components. As a consequence, the business sector frequently goes further in its PPMs than the statutory national or EU requirements, and new government measures sometimes have only a limited impact. In this context it is worth mentioning the OECD Guidelines for Multinational Enterprises, which contain standards not only on labour and the environment, but also regarding reporting, combating corruption, consumer interests, science and technology, competition and payment of taxes.

11 "Product differentiation under the WTO: An analysis of labelling and tariff or tax measures concerning farm animal welfare", LEI, report 6.05.11, June 2005.

12 "Labeling and the realization of cultural values" by Michiel Keyzer, *De Economist*, 150, 487-511, 2002.

spectrum of possibilities. There is therefore a need for an up-to-the-minute scoping paper that can catalyse discussions between ministries and with stakeholders.

Purpose of the paper

The scoping paper should help clarify which NTC-related EU instruments are legally feasible within the present WTO framework, and effective in relation to the NTC objectives set, focusing specifically on non-product-related PPMs. This does not affect the commitment of the Netherlands or the EU to seek appropriate solutions to the above-mentioned international law difficulties in the WTO-MEA relationship at some point in the future. For each of the instruments identified, the paper should provide insight into the economic consequences, opportunities and threats for developing countries, with due regard for the diversity of these countries.

Research questions

General:

- What kinds of non-trade concerns can be identified, and what is the range of possible EU instruments that may be linked to these?
- What are the WTO, MEA and other disciplines corresponding to these EU instruments?
- Which of these EU instruments are legally feasible and effective in relation to the NTC objectives set, particularly as regards non-product-related PPMs and, more specifically, non-product-related PPMs that also relate to products from third countries and have only a national impact in these countries (category B-4 in the conceptual framework in Appendix 1)?
- What scope is there for labelling (mandatory or otherwise) to provide consumers with information, particularly about such things as non-product-related PPMs of the product?

In relation to developing countries:

- Which of these EU instruments is of particular importance in relation to developing countries, particularly as regards non-product-related PPMs?
- For which developing countries does the use of such instruments have economic consequences, and what are the opportunities and threats for these countries?
- What are the anticipated implementation costs for the government and for producers in these developing countries?
- What kind of support, in the form of technical assistance and capacity building, can developed countries give these developing countries, and what sort of transition period and/or phased introduction is needed?

Methodology

The paper will be written using available data, academic publications, relevant treaties, agreements and conventions (GATT, SPS, TBT, Subsidies and Countervailing Measures (SCM), Anti-Dumping (AD), MEAs, ILO, etc.), WTO and EU case law, relevant policy documents of the EU and the Netherlands, relevant economic and other studies conducted by the OECD, and other relevant secondary material. The International Centre for Trade and Sustainable Development (ICTSD) must be contacted in order to check to what extent its most recent work on non-trade concerns can be used as input for the paper.

The paper will be written by an interdisciplinary team with the relevant legal and economic expertise and knowledge concerning WTO and EU discussions about non-trade concerns.

Output

The paper will be written in English and will be 25-50 pages in length (including footnotes and references, but excluding appendices). It will also contain a lengthy abstract for policy and discussion purposes ("policy brief").

Procedure and timetable

- The Ministry of Foreign Affairs, after reaching consensus with the ministries of Economic Affairs, Agriculture, Nature & Food Quality, Housing, Spatial Planning & the Environment and Social Affairs & Employment, will ask selected authors to submit proposals by mutual agreement. On the basis of these proposals, it will conclude a contract with each author.
- A maximum budget of € 25,000 is available for writing the paper.
- The contracts will be administered by DGIS/CE (Directorate-General for International Cooperation, Coherence Unit), which will also act as go-between for the authors. DGIS/CE will coordinate internally with the departments involved (DDE/IM (International Markets Division), DIE/EX (European Integration Department), DMW (Environment and Water Department), DES (Economic and Ecological Cooperation Department), DSI (Social and Institutional Development Department)) and externally with other ministries.
- The authors will be responsible for dividing tasks among themselves and for coordinating individual contributions.

– No later than three months after signing the contracts, the authors will deliver a draft version of the paper to the Ministry of Foreign Affairs. DGIS/CE will circulate this internally and to the other ministries involved, and will pass on all the comments received to the authors. A closed meeting may be convened with the authors and the ministries involved to discuss the draft paper. The authors may incorporate the comments received at their own discretion.
– Within one month of receiving the comments, the authors will deliver the final version of the paper to the Ministry of Foreign Affairs (joint narrative report, accompanied by a financial report per author).
– The aim is to complete the task by the beginning of September.
– The authors may not distribute the report themselves and cannot assert copyright.
– The authors must be available for any follow-up required (e.g. participation in a possible discussion meeting with representatives from Dutch civil society and the business community). Interministerial discussions will take place in due course concerning details of the procedure to be followed.

Conceptual framework

(based on a classification of PPMs according to their environmental effect)

	Category A	Category B			
Environmental externality	**Consumption externality***	**B-1**	**B-2**	**B-3**	**B-4**
		Production externality**			
PPM requirement	Product-related: - PPM which affects product characteristics - *TBT and SPS Agreements* cover this category	Non-product related: - PPM which does not affect product characteristics - Outside the scope of TBT and SPS			
Environmental effect	National***	Transboundary pollution	Migratory species and shared living resources	Global concerns	National
	Imported products pollute or affect domestic human and animal health and the environment. (e.g. plant pests, hazardous wastes and chemicals, pine nematode infested timber)	The environmental effect is transmitted to other jurisdictions or areas beyond national jurisdiction (e.g. transmitted air, water or land pollution)	The environmental effect involves more than one jurisdiction or areas beyond national jurisdiction. (e.g. conservation and management of migratory animals, birds and fish and other shared living resources)	The environmental effect has global consequences (e.g. depletion of the ozone layer, climate change, harm to biodiversity, effects on threatened or endangered species)	The environmental effect is limited to the country using the PPM.
Harmonisation of PPM requirement	National -International requirements are desirable. Countries may deviate, under certain conditions, from such requirements. Transboundary and global -Harmonisation is desirable to the extent possible.	Transboundary and global -Harmonisation could be relevant.			National -Harmonisation is highly problematic and may be undesirable.
Trade policy aspects **- Trade restrictive measures**	-The trade-restrictive measures would represent enforcement of national product requirements. -GATT rules require equal (non-discriminatory) treatment and transparency.	-Trade measures designed to impose PPM requirements used in importing country on exporting country may have extra-jurisdictional effects. -Multilateral environmental agreements may identify trade measures as an appropriate tool under certain circumstances.			A country can take the primary responsibility for setting any PPM requirement within its jurisdiction through non-trade policy measures
- Like-product issue	Product differentiation based on product requirements is allowed within multilateral trading rules.	Objective methods for product differentiation based on criteria which are not physically embodied in the products have yet to be developed. Method might include examination of whether implemented or proposed measures/requirements are transparent, predictable, feasible or are disguised restrictions on trade.			

* Consumption externality: environmental impact is transmitted by traded products

** Production externality: environmental impact is not transmitted by traded products

*** This may sometimes link to transboundary or global environmental issues

Source: OECD, *Processes and production methods (PPMs): conceptual framework and considerations on use of PPM-based trade measures*, No. OECD/GD(97)137. Paris, 1997