



CHAPTER 18

TRADE AND ENVIRONMENTAL POLICY

The health and economic well-being of people living in poverty depends on a wide range of environmental resources: fresh water for drinking, sanitation and agriculture; fertile soil and healthy fisheries for the production of food; and the diverse products of forest and marine ecosystems. Moreover, the diversity of nature—its aesthetic, nutritional and pharmacological variety—greatly enriches people’s physical and spiritual experience. But when natural resources are depleted, or when air, soil and water are polluted, poor and economically vulnerable people suffer the most.

The natural environment is thus clearly linked with human development. And sustaining environmental resources becomes critical for human development through the dimension of intergenerational equity. The present generation must ensure that its policies do not diminish the development potential of future generations. Human development today must not be at the cost of human development tomorrow. Thus the links between economic liberalization, environmental protection and human development lie at the core of the debate on sustainable development.

It is difficult to draw definitive conclusions about whether the overall impact of economic liberalization on a country’s natural environment will be positive or negative. Properly managed, economic liberalization can contribute to human development. But it can also place added stress on the scarce natural resources on which present and future generations depend. As a result governments often intervene in markets to regulate access to scarce natural resources and to protect their country’s environment and citizens from risks associated with particular products and activities. When these environmental measures directly or indirectly affect market access or the competitiveness of imported products, they can give rise to conflicts with international trade rules.

Globalization has increased the interaction between environmental measures and trade rules. As trade grows and spreads, domestic regulators can become more sensitive to risks associated with imported products. For example, many countries have put in place trade regulations aimed at banning or controlling imports of hazardous wastes or of genetically modified organisms. And with the expansion of our understanding of what is meant by the environment, environmental regulators are increasingly designing measures aimed at protecting not just the domestic

environment but also environmental assets of shared global concern, such as the ozone layer, the climate system and biological diversity. While some of these measures are supported by multilateral environmental agreements, others have been imposed unilaterally, raising questions about their legitimacy and fairness.

Both industrial and developing countries use trade-related measures to achieve environmental and human health objectives (WTO, 2002). But industrial country governments, which hold the keys to the most important markets, have applied these measures more often and with a greater impact on international trade. Trade-related environmental measures have sometimes been used as a form of trade protectionism, choking off markets to products from countries with lower or merely different environmental standards. Producers in developing countries often find it difficult or impossible to meet these environmental standards. When designed unilaterally, the standards tend to be based on technologies, perceptions of risk and other cultural biases that favour, intentionally or unintentionally, the products of industrial country producers. Developing country governments and producers have had little choice but to adjust their own standards to meet these demands—or lose market share.

This tension between environmental policy and free trade has been further complicated by the role of the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO; box 18.1). While not an environmental organization, the WTO has jurisdiction over any measure that has an impact on trade in products between its members, including environmental measures. Discussion within and around the WTO has rarely moved beyond polarized extremes of industrial and developing countries—or dipped below the level of international politics to assess the issues from a human development perspective. But participants in the 2001 WTO Ministerial Conference in Doha agreed to place environmental issues back on the substantive agenda of multilateral trade negotiations. Negotiations will focus on the relationship between the WTO and multilateral environmental agreements, on the liberalization of trade in environmental goods and services and on the reduction of subsidies in the fisheries sector.

This chapter seeks to lay the groundwork for an analysis of the links between environmental policy and free trade from a human development perspective by raising the following questions:

- Why do environmental standards and the measures used to achieve them matter to human development?
- Do societies face trade-offs between maintaining high environmental standards and attracting the trade and investment flows necessary for economic development?
- When trade-offs between environmental and trade policies must be managed, what principles should guide those trade-offs so as to foster human development?
- Which procedures and institutions should be entrusted with managing trade-offs between environmental and trade policies?

Box 18.1 ENVIRONMENTAL POLICY AND GATT/WTO: A HISTORY OF IMPLICIT POLICY-MAKING

The links between trade and the environment have been recognized implicitly in the multi-lateral trading regime since the design of the General Agreement on Tariffs and Trade (GATT) in 1947. But neither the contracting parties to the GATT nor the members of the World Trade Organization (WTO) have agreed on a specific set of principles and approaches for managing these links. The original GATT included, among the policy objectives that a country could invoke to justify a measure that might otherwise violate its rules, the protection of human, animal or plant life or health and the conservation of exhaustible natural resources. In the years that followed, a growing awareness of environmental and health concerns led to higher product-related standards in industrial countries, with a consequent impact on market access and trade.

The need to strike a balance between trade and environmental concerns was recognized at the Stockholm Conference on the Human Environment, the predecessor of the 1992 United Nations Conference on Environment and Development, held in Rio de Janeiro (the Rio Earth Summit), and the 2002 World Summit for Sustainable Development, held in Johannesburg. Studies by the GATT secretariat on these links led to the establishment in 1971 of the GATT Working Group on Environmental Measures and International Trade. But the working group did not meet until 1991, when several European countries requested that the group be convened to address environmental issues in preparation for the Rio Earth Summit.

Nevertheless, the expanding system of trade rules began to extend into areas of environmental policy. Concerned that environmental and other technical standards might erode progress made in opening markets through tariff reductions, the GATT contracting parties called for additional trade disciplines aimed at regulating this growth in technical barriers. During the Tokyo Round of GATT trade negotiations (1973–79) agreement was reached on the Standards Code, which among other things called for non-discrimination and transparency in the preparation, adoption and application of technical regulations and standards. It did not deal specifically with trade and its environmental links.

During the Uruguay Round (1986–94), which led to the establishment of the WTO, the scope of international trade rules expanded dramatically, including into areas of concern to environmental regulators. Under the WTO, global trade rules now explicitly govern the design of measures aimed at protecting human, animal and plant life or health (the Agreement on Sanitary and Phytosanitary Measures), environment-related technical standards (the Agreement on Technical Barriers to Trade), subsidies related to agriculture and the environment (the Agreement on Agriculture) and restrictions on the patentability of inventions necessary to protect the environment (the Agreement on Trade-Related Aspects of Intellectual Property Rights). In addition, the WTO charter generally endorses the need for trade rules to allow the ‘optimal use of the world’s resources in accordance with the objective of sustainable development’. The Uruguay Round did not, however, result in any specific guidance on how the WTO system would reconcile conflicting trade and environmental objectives.

Since the Uruguay Round, trade negotiators have struggled and failed to produce any generally applicable solutions. The WTO Committee on Trade and Environment was established in 1995 to study the interaction between trade and environmental policy. It has held dozens of meetings and produced general recommendations calling on WTO members to design trade and environmental policies in a ‘mutually supportive’ manner. In the interim,

(Box continues on next page.)

however, the GATT and now the WTO dispute settlement systems have processed a series of cases dealing with challenges to environmental and health measures designed to promote clean air, to protect endangered species, to restrict imports of foodstuffs carrying health risks and to ban trade in asbestos. These decisions have produced a patchwork of principles and interpretations that are relevant to the relationship between trade and the environment, but from which it is often difficult to draw general lessons.

Source: UNDP, 1998b; UNDP, 2002b.

WHY DO ENVIRONMENTAL STANDARDS AND THE MEASURES USED TO ACHIEVE THEM MATTER TO HUMAN DEVELOPMENT?

The development and implementation of effective environmental standards can have enormous significance for human development. Whether in industrial or developing countries, environmental damage almost always hits poor people hardest (box 18.2). Ironically, though the poor generally bear the brunt of environmental damage, they are seldom the principal cause. The rich tend to pollute more, contributing more heavily to consumption-driven phenomena such as global warming. The rich also tend to generate more waste, increasing the stress on nature's ability to recover its balance. Environmental standards help conserve natural resources and help prevent and reverse environmental degradation. Both these aspects are crucial for enhancing human capabilities: a secure natural resource base provides economic opportunities, and clean air and water promote good health and nutrition and longer lives.

Environmental standards can also bring indirect benefits to poor people. Compliance with environmental requirements can translate into clean production processes, better working conditions and fewer workplace hazards. All these can enhance labour productivity and improve efficiency, increasing both growth and income. Of course, it can also be argued that higher environmental standards often increase costs, nullifying some of their benefits. But empirical studies show that environmental control costs generally amount to a very small fraction of production costs (Walter, 1973; Robinson, 1988; Grossman and Krueger, 1993). Moreover, by promoting efficient use of energy and materials, environment-friendly production and consumption can release resources for alternative uses. They also generate less waste, reducing the resources required for waste disposal.

Environmental standards, by minimizing environmental harm, can also have a positive gender dimension. Sustainable management of forest and water resources can reduce the time women must devote to collecting drinking water and firewood. And because a lack of appropriate fuel can cause poorer households to slip further down the energy ladder, environmental policies promoting cleaner fuels not only protect forests but also reduce indoor pollution from fuel and firewood—and thus health problems and even deaths among women and girls, the main victims of this pollution.

Box 18.2 EFFECTS OF ENVIRONMENTAL DEGRADATION IN THE DEVELOPING WORLD

- Water-related diseases, such as diarrhoea and cholera, kill an estimated 3 million people in developing countries, most of whom are children under age five.
- Vector-borne diseases such as malaria cause 2.5 million deaths a year. Such diseases are linked to a wide range of environmental conditions or factors related to water contamination and inadequate sanitation.
- Nearly 3 million people die every year from air pollution—more than 2 million from indoor pollution. More than 80 per cent of these deaths are of women and girls.
- As many as 25 million agricultural workers—11 million of them in Africa—may be poisoned each year by fertilizers.
- Soil erosion and other land degradation affect more than 1 billion people, and some 250 million are at risk from falling crop yields.
- Desertification costs the world US\$42 billion a year in lost income.
- Over the past decade 154 million hectares of tropical forests have been lost—almost three times the land area of France.
- About 650 million poor people live on marginal and ecologically fragile lands in the developing world.

Source: Jahan, 1998b; UNDP, 2000.

DO SOCIETIES FACE TRADE-OFFS BETWEEN HIGH ENVIRONMENTAL STANDARDS AND TRADE AND INVESTMENT FLOWS?

Do greater trade and capital flows adversely affect the environment—and do high environmental standards discourage trade and investment flows? Given the highly polarized debate about the links between trade and the environment, it is not surprising that these empirical questions have been raised so starkly, and have often been answered simplistically.

Do trade and capital flows harm the environment? Examining the channels through which environmental impacts are transmitted produces no conclusive answer, though it suggests that the net outcome depends on the objective conditions. The few empirical studies that have examined the trade-environment relationship are also inconclusive (see, for example, Smith and Espinosa, 1996). Private capital flows, such as foreign direct investment or portfolio investment, can have a positive or negative net effect on the environment. But in the absence of data, estimating the net effect empirically is difficult.

Do environmental standards matter for trade and capital flows? Environmental control standards can affect trade patterns by raising production costs, if higher costs reduce a country's trade competitiveness. But this does not usually happen, especially since environmental control costs are an insignificant part of production costs. The comparative advantage created by lax environmental standards is generally overwhelmed by other sources of comparative advantage, such

Box 18.3 ECONOMIC LIBERALIZATION AND THE ENVIRONMENT

Case studies reveal that economic liberalization can have positive as well as negative effects on the environment. In China, liberalizing cotton imports has reduced the land under cotton cultivation by more than 1 per cent (about 92,000 hectares). That reduced the application of chemical pesticides and fertilizers, with positive effects on the environment. But as textile production based on cotton imports grew, so did water pollution and consumption. Thus the increase in export revenues from textiles may be offset by the cost of resource use and environmental damage.

In Argentina, liberalizing the marine fishery sector had serious adverse effects on the sustainability of the most exploited species. Growth in unregulated fishing activity during the 1990s pushed fish stocks beyond their maximum sustainable yield, leading to a direct cost of about US\$500 million. If expansion of the sector had been properly managed, the net economic gains from the same species could have amounted to US\$5 billion over the same ten-year period.

The liberalization of shrimp aquaculture in Bangladesh led to a 70 per cent increase in the sector's exports between 1980 and 1998. But even a partial cost-benefit analysis shows that it also led to significant costs through land degradation, mangrove destruction and human health impacts. The cumulative costs of these adverse effects have been estimated to be 20–30 per cent of the revenues from shrimp production.

Source: UNEP, 2002.

as differences in infrastructure, technologies, resource endowments, the macro-economic policy framework and human and physical capital. So, higher environmental standards do not reduce comparative advantage and thus do not undermine trade competitiveness.

WHAT PRINCIPLES SHOULD GUIDE THE MANAGEMENT OF TRADE-OFFS BETWEEN ENVIRONMENTAL AND TRADE POLICIES?

In general, protecting the environment and promoting trade and investment flows should not be characterized as mutually exclusive policy objectives. Nevertheless, in some circumstances environmental measures can adversely affect trade, and trade and investment liberalization can adversely affect the environment. Links between economic liberalization and environmental protection can result in either synergy or conflict, depending on how the relationship is managed (box 18.3).

Trade-related environmental measures designed to manage this relationship can take a variety of forms (UNDP, 2002b):

- *Environmental taxes.* To internalize the costs of environmentally harmful products and to encourage consumers to purchase environmentally preferable alternatives, taxes could be levied on product content (such as the carbon content of a fuel) or on production processes (the energy intensity of production). If an environmental tax is linked to a production process and is levied on an imported product, it can raise trade concerns if it is seen as seeking to regulate behaviour in the exporting state.

- *Environmental subsidies and procurement policies.* To encourage environment-friendly economic activities, governments can provide direct or indirect payments to producers who meet environmental standards and government agencies can use their purchasing power to support environment-friendly products. Where such payments or purchasing policies directly or indirectly favour domestically produced goods, they may run counter to free trade rules.
- *Environmental technical standards.* Governments can protect consumers and the environment by supporting the use of environmental technical standards, such as content requirements or energy efficiency standards. These can be mandatory standards that must be met before the product can be imported or marketed, or they can become part of voluntary schemes designed to promote best practice.
- *Trade bans and quarantines.* Governments can take the extreme step of banning the import and sale of products. Such bans most often take the form of sanitary or phytosanitary measures designed to protect human, animal or plant life or human health from pests or diseases carried by a product or to prevent the import of such dangerous materials as asbestos and hazardous waste. Some governments have gone further, banning the import of products that do not in themselves pose a risk to the environment but whose production may have harmed the environment.
- *Environmental labelling.* Governments may use labelling schemes to alert consumers to the hazards or benefits associated with certain products. Such schemes can be mandatory or voluntary. Those that seek to distinguish between otherwise identical products on the basis of how environment-friendly their production process is have been criticized as advocating measures that run counter to free trade disciplines.

When deciding whether to apply such measures, governments may assess the potential costs and benefits of market intervention, including potential welfare gains and losses like those described above. Governments of WTO member countries also need to take into account the compatibility of any such measures with their trade obligations. Moreover, any trade-offs that need to be made between environmental and trade policies must be guided by principles that serve—or at least do not undermine—the interests of poor people. At present, however, national and international institutions with the authority to manage such trade-offs appear ill equipped to effectively incorporate the human development dimension.

While the disciplines of the WTO vary from agreement to agreement, trade rules generally assess the legitimacy of trade-related environmental measures on the basis of whether they limit market access to imported products or otherwise directly or indirectly discriminate against ‘like’ imported products. If a trade-related environmental measure is challenged in the WTO system, any restrictions that it places on trade will be tested to see whether they are necessary to achieve a legitimate environmental objective. Global trade rules are designed to weed out trade-related environmental measures that restrict trade more than necessary to achieve such an objective, that are arbitrarily or unjustifiably discriminatory or that

Box 18.4 THE SHRIMP-TURTLE DISPUTE

India, Malaysia, Pakistan and Thailand used the WTO dispute settlement system to challenge US restrictions on the import of shrimp caught with nets known to drown endangered sea turtles. The US ban affected all countries that did not require shrimping boats in their jurisdiction to use essentially the same 'turtle excluder devices' US shrimping boats had to use. Developing countries' main objection to the ban was that it distinguished between otherwise identical shrimp on the basis of how they had been caught. By conditioning access to its huge consumer market, the US was in effect using its economic clout to coerce other countries into changing their environmental standards.

The WTO dispute settlement process found that this trade-related environmental measure was arbitrary and unjustifiable, because it required exporters to use essentially the same environmental technology used in the US in order to gain market access. The WTO process required the US to redraft the measure so that it would allow exporters to demonstrate that other, equally effective but more locally appropriate techniques for protecting turtles were in use. It also encouraged the US to make greater efforts to engage its trading partners in bilateral negotiations and to provide financial and technical assistance to countries wishing to comply with the US requirements.

The outcome angered many developing countries, since it allowed the US to continue its import restrictions. Still, WTO disciplines led to the redesign of the measure to take better account of development concerns.

Source: UNDP, 2002b.

amount to disguised protectionism. Scientific risk assessments and internationally agreed standards often provide the main reference points for determining the legitimacy of trade-related environmental measures.

For developing countries the WTO disciplines can act as both a sword and a shield when applied to trade-related environmental measures. WTO disciplines can provide a basis for challenging measures put in place for the illegitimate purpose of protecting markets from competition, helping to moderate the potential harm of one country's trade policies on another's development choices (box 18.4). But WTO disciplines can also provide a means for challenging trade-related environmental measures put in place by developing countries.

For example, a number of developing countries, including China and Sri Lanka, have sought to restrict imports of genetically modified crops, citing health, environmental and socio-economic concerns. Many developing countries fear that introducing genetically modified crops could undermine traditional farming practices and increase the economic dependency of poor farmers on the patented technologies of multinational seed suppliers. Industrial country exporters have pressured these countries to suspend their trade restrictions, by invoking WTO trade disciplines and the need to justify concerns about the risks of genetically modified organisms with 'sound science'. Although no formal dispute relating to genetically modified organisms has arisen at the WTO, there can be little doubt that the threat of potential WTO-backed sanctions has helped pry open markets to these products.

From a human development perspective, the issue is not simple. Some have argued that genetically modified seeds can enhance food security in developing countries by incorporating genetic traits that increase crops' productivity, nutritional value and resistance to drought and diseases. At the heart of the debate is a question about how much freedom each country should have to balance trade and domestic concerns in the way it deems best, given its human development objectives.

By relying on scientific disciplines and internationally agreed standards to test the legitimacy of trade measures, the WTO system may disadvantage countries that lack technical capacity and are marginalized from international standard setting. When developing countries have played a more forceful role in shaping international trade policy outside the WTO system, they have helped design trade rules more sensitive to development concerns. For example, under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, exporters are required to seek the prior informed consent of an importer before any shipment can take place. Under the Cartagena Protocol on Biosafety, which will govern international trade in genetically modified seeds and other products, a developing country has the right to demand that the potential exporter of a covered product pay for a scientific risk assessment before deciding whether to allow its import.

In the WTO negotiations, however, many developing countries see support for trade-related environmental measures as driven largely by environmental interests in high-income countries. Many developing country trade negotiators argue, at least implicitly, that environmental quality is a luxury good matching consumer preferences in industrial countries. Environmental standards to meet legitimate environmental and health concerns of a country's own population are broadly acceptable. But controversy arises when those standards appear to be arbitrarily high or designed to force changes in the environmental standards of the exporting country. Developing countries see such standards as *green imperialism* or *eco-imperialism*, arguing that if the trading system continues to develop in this way, it will endanger their growth and development in the long run.

Moreover, trade restrictions in the name of environmental standards seem to run counter to the trade liberalization reforms that developing countries have been encouraged to pursue in recent years. And complying with environmental standards imposed by industrial countries could increase dependency for many developing countries, because it may require acquiring clean production technology and environmental quality certifications. These have price tags. And the technology may be available from only a few firms, allowing them to charge monopoly rents for its use and licensing.

Industrial country governments and consumers increasingly support the use of eco-labels showing that such products as fish, timber and agricultural commodities have been produced in an environment-friendly way. Most of these schemes are voluntary, but the political and commercial pressure to display eco-labels is growing in

many sectors important to developing countries. Such schemes require assessing the ecological impact of goods during their life cycle, from production through consumption and disposal. Developing country producers not only have to pay for eco-labels but sometimes feel compelled to obtain multiple eco-labels for the same product if they intend to export it to different markets. And many have difficulty obtaining appropriate and timely information on eco-labelling schemes as well as import regulations.

For all these reasons many developing country trade negotiators have a negative, even hostile, view of the trade and environment debate. They have resisted the opportunity to propose their own principles for managing trade-offs between trade and environmental objectives in ways that could help distinguish legitimate environmental policy from disguised protectionism. But outside the WTO the international community has endorsed a number of broad principles applicable to the trade, environment and development interface (box 18.5).

From a human development perspective, these general principles can be distilled into three central insights relating to trade-related environmental measures:

- Each country should be free to manage its domestic environmental problems consistent with its human development priorities. Trade measures designed to protect a country's consumers and its national environment from hazardous products are a legitimate part of its human development strategy. But trade measures designed to coerce the harmonization of domestic environmental standards by another country are fundamentally protectionist. It is inappropriate to use trade policy to negate a legitimate source of comparative advantage conferred by differences in environmental endowments, pollution assimilation capacities or social preferences relating to environmental outcomes. Such trade measures, by imposing specific environmental standards that may not be appropriate, may conflict with the development priorities and policies of the exporting country. Coercive measures, unilaterally designed and imposed, are inherently undemocratic and run counter to the principles of human development.
- Trade measures targeted at global or transboundary environmental problems, if designed unilaterally and without consultation with the trading partners affected, are likely to be inefficient and inequitable instruments for correcting market failures. Multilaterally negotiated standards and policies based on the assignment of property rights, the creation of markets and production or consumption interventions are economically more efficient and more equitable. Such standards should reflect the principle of common but differentiated responsibility: domestic environmental standards aimed at achieving global environmental objectives must take into account differences between countries in economic development levels and financial and technical capacity.
- Trade measures nonetheless have a useful role to play in securing participation in and compliance with internationally agreed standards such as multilateral environmental agreements. The threat of trade sanctions may be enough to alter the behaviour of would-be free-riders.

Box 18.5 RIO PRINCIPLES FOR MANAGING TRADE-OFFS BETWEEN TRADE AND THE ENVIRONMENT

At the 1992 United Nations Conference on Environment and Development, held in Rio de Janeiro, more than 100 heads of state and delegations from 178 countries adopted the Rio Declaration on Environment and Development. This declaration sets forth principles that reflect an international consensus on how to balance trade-offs between environmental and trade objectives and that have guided the negotiations of environmental treaties and trade disputes. Following are four of those principles:

- States should co-operate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus. (Principle 12)
- States should effectively co-operate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health. (Principle 14)
- States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries. (Principle 11)
- In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (Principle 15)

In general, using trade-restrictive measures for environmental purposes is more legitimate when the aim is to enlist participation and compliance for addressing widely recognized global environmental problems.

These general principles can take shape only when applied to specific trade-offs. Thus the legitimacy of trade-related environmental measures must be tested case by case.

WHICH PROCEDURES AND INSTITUTIONS SHOULD BE ENTRUSTED WITH MANAGING TRADE-OFFS BETWEEN ENVIRONMENTAL AND TRADE POLICIES?

Reaching an international consensus on how to manage trade-offs between environmental and trade policies, beyond a set of general principles, has proved difficult. The WTO Committee on Trade and Environment (CTE) has missed an important opportunity. Rather than seeking synergies between environment

Box 18.6 PROPOSALS IN THE 1990s ON ENVIRONMENT AND TRADE

- Introduce a new general exception under GATT/WTO to supplement the existing exceptions for measures designed to protect human, animal and plant life or health and to conserve natural resources. Debates have focused on the appropriate scope for the exception. A loosely worded exception would allow wide-ranging departures from existing GATT/WTO disciplines, while a tightly worded and constrained exception would be both hard to draft and difficult to enforce.
- Encourage the use of case-by-case, negotiated waivers that would exclude from WTO jurisdiction certain categories of trade-related measures, such as those authorized under multilateral environmental agreements. But waivers require unanimity in the WTO, and there has been no consensus on how to proceed.
- Negotiate environmental revisions to existing WTO articles, perhaps in a special trade and environment mini-round. Many problems may arise here. One is that it could potentially be argued that nearly every WTO article requires rewriting on environmental grounds.
- Take more targeted approaches to trade and environment, such as revising relevant WTO articles to clarify their environmental content. The problem here is that in the past WTO articles have been clarified through the route of dispute settlement and panel reports, and while this might appear to be the obvious approach, the outcomes have come under severe attack.

Source: UNDP, 2002a.

and trade as equally legitimate policy objectives, the CTE has explored how to fit environmental concerns within the framework of existing trade regimes (Ewing and Tarasofsky, 1996). It has focused narrowly on two issues: whether eco-labelling schemes constitute non-tariff trade barriers and whether there should be a 'safe harbour' within the WTO for the trade-related measures included in the many multilateral environmental agreements. While failing to produce any concrete outcomes, the CTE process has covered analytical issues, institutional concerns and political questions. And from observers of and participants in the environment-trade debate, several suggestions emerged in the 1990s on what could be done to promote the global interest and what developing countries could do (box 18.6).

The work programme of the WTO agreed at the Doha ministerial meeting, and scheduled to run from 2002 to January 2005, gives the CTE a renewed and more focused mandate. The Doha agenda reflects a strange mix resulting from a tough set of horse trades. It has essentially been divided between issues that will be the subject of negotiations and those that will be the subject of further analysis and debate. Negotiations will move ahead on the relationship between WTO rules and specific trade obligations in multilateral environmental agreements and on the reduction or elimination of tariff and non-tariff barriers to environmental goods and services. In both cases, defining the scope of the mandate will be crucial. Which multilateral environmental agreements can be considered to have 'specific trade

obligations? Will the negotiations conclude by privileging measures taken under some multilateral environmental agreements over measures taken under others?

As discussed, some developing countries have championed the strong human development dimension of some multilateral environmental agreements. For example, some developing countries want progress in ensuring that the interface between the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Convention on Biological Diversity will respect traditional knowledge. Others wish to ensure that the Cartagena Protocol on Biosafety, the Basel Convention on Hazardous Wastes, the Rotterdam Convention on Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants protect the ability of developing country governments to use trade measures to protect their citizens and domestic environment. But many developing countries are also concerned that these negotiations will allow multilateral environmental agreements to become a blanket exception for protectionist measures.

The Doha work programme on environmental goods and services carries both opportunities and risks for developing countries. Liberalizing trade in environmental products could promote developing country access to environment-friendly technologies and know-how. And it could open industrial country markets to environmentally preferable products from developing countries, including organic agricultural products and sustainable forest products (UNCTAD, 2002). But developing country negotiators must be careful to ensure that privileging certain environmental goods in market access negotiations does not lead to trade barriers based on process and production methods. They also need to take care in the negotiations on the liberalization of environmental services. Concerns have been raised that these negotiations could be used to pry open to foreign investors such environmentally and developmentally sensitive sectors as forestry, fisheries and water services delivery.

Under the Doha agenda, negotiations will also move ahead on fisheries subsidies. Many developing countries and environmentalists have found common ground in calling for reducing these subsidies, which are distorting international markets and pushing some species towards extinction. The world spends about US\$14–21 billion—equivalent to 20–25 per cent of global fisheries revenues—each year to shore up inefficient fisheries operations. The subsidies create overcapacity among the producers they benefit, encouraging them to overfish and endangering species.

Other areas for substantive negotiations related to the environment and human development are on the Doha agenda of WTO bodies other than the CTE. These include the relationship between the TRIPS Agreement and the Convention on Biological Diversity in the context of the protection of traditional knowledge and folklore, and negotiations on the reform of agricultural subsidies, including those designed to protect the rural environment and promote sustainable rural livelihoods.

Relegated to further analysis in the CTE are several issues of critical concern to developing countries. The Doha agenda calls for the CTE to continue its analytical

work on the effects of environmental measures on market access, especially for developing countries. This work will focus on environmental labelling requirements, relevant provisions of the TRIPS Agreement and situations in which eliminating or reducing trade restrictions and distortions would benefit trade, the environment and development ('win-win-win' scenarios). The work will continue to look at unresolved issues relating to the internalization of environmental costs; process and production methods, where WTO rules have increasingly come into conflict with global product life-cycle perspectives; and the gradual removal of domestic energy, chemical and water subsidies that distort trade and damage the environment.

Finally, during the Doha-mandated negotiations the CTE and its sister organ, the Committee on Trade and Development, are each expected to act as a forum to identify and debate the developmental and environmental aspects of the negotiations, to help ensure that sustainable development is appropriately reflected. This could open a new opportunity for developing country governments and civil society to assess the potential environmental and development impact of international trade rules as they are negotiated.

Without significant new efforts by developing countries and their negotiating partners, the WTO's treatment of environmental issues is likely to remain unsatisfactory from a human development perspective. Other institutions that might have asserted jurisdiction over such issues in a manner better reflecting a human development perspective, such as the Commission on Sustainable Development, have been unable or unwilling to intervene. Nor did the process leading up to the September 2002 World Summit on Sustainable Development contribute much.

The summit's plan of implementation usefully re-emphasizes that trade policy should be seen as a means to achieving sustainable development and eradicating poverty. It highlights the need to reform subsidies that damage the environment and to support domestic and international markets for environment-friendly goods and services. It recalls the Rio principles for managing the links between trade and the environment by discouraging unilateral trade measures and encouraging international consensus on measures to address transboundary or global environmental problems. And it stresses the need for more technical assistance and capacity building to promote effective participation of developing countries in trade and environmental policy-making. But most of the text was drawn from existing agreements, including the Doha agenda, and it provides little concrete guidance on how to resolve any conflicts between trade, the environment and development.

A WAY FORWARD

The trade and environment debate remains polarized and heated, with developing countries playing a largely defensive role. Many developing countries fear protectionism and a 'green capture' of policies by environmental lobbyists in industrial countries. And they feel as if they are often bypassed by multilateral

policy discussions. For these reasons the post-Doha work programme points to the need to ensure that developing countries participate effectively in setting standards and have greater access to legal, scientific and economic advice.

Empowered and informed developing countries can promote a positive, human development–based agenda in a new round of negotiations on trade and the environment. Such an agenda could seek to ensure:

- That trade policy allows countries to pursue locally appropriate solutions to their domestic environmental challenges without fear of facing trade sanctions by countries with different environmental priorities. This flexibility should include the ability to impose import restrictions to protect against health and environmental risks associated with specific products.
- That the evolving relationship between global trade rules and multilateral environmental agreements respects the principle of common but differentiated responsibilities. Domestic environmental standards aimed at achieving global environmental objectives must take into account differences between countries in economic development levels and financial and technical capacity.
- That efforts to liberalize trade in environmental goods and services help identify products and sectors that will open new opportunities for developing country exporters, rather than constructing new conditions for market access.
- That developing country policy-makers and civil society participate fully and effectively in assessing the potential environmental and development impact of any new trade rules negotiated.
- That negotiations on environment-related issues of agricultural reform and intellectual property rights reform take into account the human development dimension. As discussed in greater detail in other chapters, initiatives in this area should allow developing countries to retain trade policies that support food security and rural livelihoods (chapter 5) and ensure respect for traditional knowledge (chapter 11).

All these issues must be addressed in the context of human development rather than purely from the perspective of market liberalization or environmental protection. The ultimate aim should be to coordinate trade and environmental measures so that they help enhance human capabilities and expand human choices. All countries, developing and industrial, should work towards this goal.

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