Issues and Challenges in Trade

Issues and Challenges in Trade:

Environment and Sustainability

By

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ABSTRACT

The book proposal on "***Issues and Challenges in Trade: Environment and Sustainability*"** is basically a study of the various issues and inter-linkages concerning trade, environment and sustainability. The book covers various subjects/topics/chapters such as trade and environment policy formulation which include the study of the following aspects i.e. policy formulation at the national level, policy formulation at the international level, contentious issues on agriculture, its trends and future directions, biotechnology, its trends and future directions, enhanced domestic policy making, promoting participation, issues on climate change and energy, environmental goods and services, its trends and future directions, border tax adjustments, dispute resolution in trade versus environment, environmental services, environmental services of export interest to developing countries, its trends and future directions, environmental technologies, context on trade and environment, illegal trade in natural resources, environmental black markets etc., The other aspects dealt in this book include issues relating to intellectual property rights which covers access and benefit sharing, traditional knowledge and geographical indication.

The topics on investment issues in the context of trade, environment and sustainability having inter-linkages and implications with aspects such as multilateral environmental agreements, policy coherence, environmental governance, its trends and future directions, standards and labeling, developing country syndrome, its trends and future directions, regional integration, trade and global value chains in the Asia-Pacific region, cross border investment, decarbonizing global value chains, decarbonizing steel and cement sectors, climate change mitigation technologies, new regional trade agreements in Asia and the Pacific, greenfield investments of multinationals shift to high-tech and green energy sectors, recent developments in international investment agreements, green investments and recent trends in Asia and the Pacific, climate change and global value

chains, relationship between global value chains and climate change, embedded emissions accounting frameworks, trade policy as climate change policy have also been delineated in the study, among other issues.

The global resource outlook and the key messages conveyed by UNEP on subject matters relating to trade, environment and sustainability issues have also been covered in the book proposal which include aspects such as increasing resource use is the main driver of triple planetary crisis, climate and biodiversity impacts from material extraction and processing greatly exceed targets based on staying within 1.5 degrees of climate change and avoiding biodiversity loss, delivering on the SDGs for all requires decoupling so that the environmental impacts of resource use fall while the well-being contributions from resource use increase.

A chapter on trade governance and environmental governance have been studied and analyzed in order to bring out the inter-linkages between trade, environment and sustainability and its policy implications in the light of these issues gaining traction and being discussed in various multilateral fora such as the UNFCCC, IPCC, UNEP, COP-28, G-20, BRICS, proliferating FTAs, regional and plurilateral agreements. These aspects are increasing diversity of environmental provisions, multilateralizing environmental provisions, multilateral scenarios, transatlantic trade and climate and a strategic roadmap, de-risking green supply chains by identifying vulnerabilities, standardize interoperability among climate approaches, balancing trade and environmental sustainability and its legal frameworks and related case studies, trade agreements and environmental provisions, trade law and environmental protection, related and relevant case studies and environmental justice and challenges to international economic ordering.

The concluding chapter covers suggestive approaches for understanding and analyzing the concepts of trade, environment and sustainability and their inherent complexities as these issues have gained traction and prominence in the global fora, in order to achieve balanced economic development, international cooperation and policy coherence in various countries/economies/regions across the world. These approaches are strengthen and harmonize environmental provisions, enhanced enforcement

mechanisms, transparency and information sharing, international cooperation, public awareness and engagement, balance sovereignty and sustainability and evaluation and adaptation. This would go a long way in achieving the United Nations Sustainable Development Goals and the 2030 Agenda.

KEY WORDS: IPRs, Trade Environment Sustainability, UNEP, IPCC, COP-28, UNFCCC, Environmental Goods and Services, Policy Coherence

CHAPTER 1

INTRODUCTION

The Evolution of the Trade and Environment Debate at the WTO

By the close of the 1990s, the field of trade and environment was receiving much more attention than at its start. Among other issues, eco-labeling, trade in genetically modified organisms (GMOs) and perverse subsidies in natural resource sectors were providing policy makers with a host of new challenges. The relationship between trade and environment has evolved over time. The inclusion of environmental issues on the negotiating agenda of the World Trade Organization (WTO) at the Doha Ministerial in 2001 moved this relationship into the spotlight. However, this is by no means a new relationship indeed, as this is a relationship that has gone through many phases and would continue to evolve in the future. At a fundamental level, the production and exchange of goods and services relies on the environment in the form of natural resources. Trade in everything from shrimp to shampoo implies an environmental impact of some sort. The trade environment relationship is, in fact, imbedded within the original text of the General Agreement on Tariffs and Trade (GATT), which was adopted in 1947 as the basis for the post-war global trading system. Among the exceptions to the GATT's core principles were provisions stating that nothing in the GATT would prevent member countries from adopting or enforcing measures either "necessary to protect human, animal or plant life or health" or "relating to the conservation of exhaustible natural resources" (Article XX, paragraphs (b) and (g), respectively. However, Article XX also says that such measures cannot be disguised restrictions on trade applied for protectionist intent. This provision has since become a focal point for the trade and environment debate at the GATT and WTO. Amidst growing environmental awareness that emerged in the late 1960s and the early 1970s, GATT members

established a Group on Environmental Measures and International Trade (EMIT) in 1971. However, without a single request for it to be convened, the EMIT Group lay dormant for twenty years. Nevertheless, trade and environment lingered in the GATT hallways. At the 1972 UN Conference on the Human Environment in Stockholm, the GATT Secretariat presented a paper on the implications of environmental protection policies and how these could become obstacles to trade. Further, discussions during the Tokyo Round of the GATT (1973–79) over trade-related technical regulations and standards implemented for environmental purposes led to the adoption of the Agreement on Technical Barriers to Trade (TBT) or the Standards Code in 1979. The TBT Agreement called for transparency in the application of technical regulations and standards and marked the first reference to the environment in a GATT agreement. While the trade officials were factoring the environment into international trade agreements, trade measures were being used as a tool to advance global environmental goals. In 1975, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) entered into force, mandating a system of trade bans and restrictions on traffic in endangered species. Trade restrictions subsequently formed key elements of other multilateral environmental agreements (MEAs), including those on trade in ozone-depleting substances (Montreal Protocol, 1987) and hazardous wastes (Basel Convention 1989). By 2003, according to a paper released by the WTO Secretariat, there were no fewer than 14 MEAs with trade related provisions, including a number of others with potential trade effects. The two streams of international interaction on environment and trade continued to evolve in parallel until they began coming into increasing contact with each other in the 1990s. The 1990s marked the coming of age of the trade environment debate. In 1991, the European Free Trade Association (EFTA) finally prompted the EMIT Group to meet in order to study the trade and environment linkage and provide input to the 1992 Rio Earth Summit. Leaders at the Rio Summit recognized the substantive links between international trade and environment by agreeing to make policies in the two areas mutually supportive in favor of sustainable development. The entry into force and implementation of several major MEAs that included trade restrictions as enforcement measures was starting to draw the concern of the trade community.

Meanwhile, Northern environmental groups were increasingly worried that GARR rules could chill or roll back domestic environmental legislation. The 1990s also saw the conclusion of the eight-year Uruguay Round negotiations and the creation of the WTO on January 1, 1995. By then, the trade body's ranks had increased to 128 Members, over three-quarters of which were developing countries. In addition to including preambular language claiming sustainable development as an objective, the WTO agreements established a Committee on Trade and Environment (CTE), included a new Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures, and instituted a strengthened dispute settlement mechanism. The regular meeting of all WTO Members was mandated to identify the relationship between trade and environmental measures and make appropriate recommendations on whether any modifications to WTO rules were required. While the Committee has provided a valuable forum to enhance understanding of the trade environment relationship, it has struggled to fulfill its mandate. The SPS Agreement elaborated on Article XX by setting out parameters for the application of measures to protect human, animal and plant life or health. The new dispute settlement mechanism rules, which made it virtually impossible for losing countries to overturn decisions by panels or the new Appellate Body (AB), were a major concern for environmental groups. They were worried that the WTO now had the power to force countries to dismantle environmental laws, should these come under challenge in the multilateral trading system. A number of WTO disputes added further depth to the trade environment debate, and underlined the difference in approach to the issue between developing and developed countries, notably the United States. By the close of the 1990s, the field of trade and environment was receiving much more attention than at its start. Among other issues eco-labeling, trade in genetically modified organisms (GMOs) and perverse subsidies in natural resource sectors were providing policy makers with a host of new challenges. Supply chain issues were gaining prominence and the use of private sector green procurement schemes, for instance, by European grocery retailers, was leading to a reorganization of international production and of relations between exporters, distributors and consumers.

Key Actors and the Evolution of the Trade and Environment Debate

The table below reflects the key actors and the evolution of the trade and environment debate.

It is to mention that the European Union frequently supported like-minded countries such as Switzerland and Norway has been the central proponent of including environment issues in trade discussions at the multilateral level. This position is informed, to a great extent, by the EU's support for multilateral environmental solutions and the influence of environmental groups. However, most other countries have remained suspicious of Europe's enthusiasm for environmental issues at the WTO, particularly its support for the precautionary principle in instances of scientific uncertainty. Developing countries, in particular, are wary of European efforts to push eco-labeling and the clarification of the MEA-WTO relationship. They view these efforts as an attempt by the EU to seek additional space to block imports in sensitive sectors and obtain trade-offs for concessions in other areas such as agriculture.

Developing countries have engaged in trade and environment issues at the GATT at least since the 1980s. In 1982, a number of developing countries at the GATT expressed concern that products prohibited in developed countries due to environmental hazards, health or safety concerns such as certain chemicals and pesticides continued to be exported to them. With limited information on these products, developing countries made the case that they were unable to make informed decisions regarding their import. Domestically prohibited goods (DPGs) subsequently became a standing item on the agenda of the CTE, though the issue has received less attention since 2001 due to the focus of CTE discussions around the Doha issues.

While developing countries have been active contributors on trade and environment at the WTO, they have traditionally taken a defensive position. This is due primarily to concerns that trade related environmental measures could be used as barriers to their exports. Developing countries have also strongly objected to any leeway in WTO rules for the use of unilateral or extraterritorial trade measures to enforce environmental norms.

Table: 1 Key Actors on Evolution of Trade and Environment Debate

Actors	Pre-1990s	1990s	Seattle-Doha	Post-Doha
Europe	• Intra-EU harmonization • Support for multilateral solutions to environmental problems	• Support for MEAs	• Support for clarification of MEA-WTO relationship • Seek recognition of eco-labeling in WTO agreements	• Push for broad interpretation of Doha mandate • Support negotiations on eco-labeling
United States	• Support for MEAs	• Use of unilateral trade-based solutions to environmental problems	• Support for increased transparency and NGO participation	• Not a demandeur on WTO-MEA negotiations • Support liberalization of environmental goods and services • Rejection of the precautioary principle in trade acceptance of WTO
Developing Countries	• Concern over trade in domestically prohibited goods (DPGs) • Support for MEAs • Suspicion over use of trade measures for environmental purposes	• Market access concerns, especially over unilateral use of trade measures for environmental purposes • Support for TRIPS-CBD linkage	• Resistance to inclusion of environmental negotiations in the WTO	• Reluctance acceptance of WTO environmental agenda • Push for narrow interpretation of Doha environment mandate • Strengthened Southern agenda

IGOs (including MEAs)	• Some key agreements adopted: Montreal Protocol, Basel Convention, UNEP, OECD contribute on coordination and analysis	• Implementation of MEAs with trade measures and negotiation/adoption of new MEAs • Rio Earth Summit highlights trade-environment linkages	• UNEP, WTO and UNCTAD collaborate on building synergies • Important capacity building role • Certain MEAs accredited as observers to CTE	• Limited inclusion of MEAs and UNEP at CTE negotiations on MEA-WTO relationship
NGOs	• Little NGO involvement	• Rapid emergence of civil society groups focusing on trade and environment	• Major protests at Seattle highlight public concern • Lobbying in Europe and elsewhere pressures the WTO to include trade and environment on agenda	• Concern over MEA-WTO mandate • Important contributions made through capacity building, analysis and increasing specialization and knowledge

Source: WTO, 2004.

They argue that countries should be able to set their own environmental priorities, taking into account their level of development, and that they should not be subject to the domestic environmental standards set in other countries.

Intergovernmental organizations have played a key role alongside WTO Members in the discussions on the trade environment relationship. Secretariats from relevant MEAs have been regular invitees to the CTE and have participated in a limited fashion in the environment negotiations in the Doha Round. The United Nations Environment Programme (UNEP) has played a useful role in highlighting synergies and mutual supportiveness between MEAs and the WTO. UNEP has been an observer at the CTE since 1995 and, as host of the 1992 Rio Summit, was instrumental in elaborating the links between the trade and environment regimes. Together with the United Nations Conference on Trade and Development (UNCTAD), UNEP has engaged in extensive capacity building and research activities for developing countries on trade and environment.

Trends and Future Directions

Over the next five to ten years, the environment is likely to remain on the trade agenda, in different ways. Once WTO Members come closer to mutually agreed terms around the relationship between WTO rules and MEAs, further space could open up to address areas of trade and environment concern to developing countries. China, India and Brazil all members of the Group of Twenty (G20) of developing countries opposed to Northern agriculture subsidies can be expected to bring their own trade environment priorities to the table, including the environmental benefits of reductions in agricultural support. The question of GMOs is also likely to challenge the trade environment relationship for years to come. Changes in modes of international production, partly as a result of trade negotiations, are likely to shift issues of priority in trade and environment to more concrete areas, such as negotiating mutual recognition agreements for different product standards in different countries. Global supply chains and consumer preferences can also be expected to play an increasingly important role. Some developing countries, which can afford to, have

already adopted their own domestic labeling and certification schemes in response to consumer preferences in the North. To continue meeting these challenges and to advance sustainable development, all countries will have to resist pressures to build protectionist fences and instead promote cooperation on green spaces. As neighbours in a globalized world economy, trade and environment cannot afford not to get along.

CHAPTER 2

LITERATURE REVIEW

A detailed literature review of the subject have been undertaken by consulting various research publications, working papers, occasional papers, books from reputed international organizations such as the United Nations(UN), UNCTAD, UNEP, UNFCCC, IPCC, ADB, World Bank, IISD, ICTSD, WIPO, IEA including research papers/articles of reputed authors published in multidisciplinary international journals of repute, among others, have been referred to in order to analyze, examine, assess, compile and consolidate materials in preparation of the book proposal. The following are the list of references referred to in preparation of the book proposal viz;

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CHAPTER 3

TRADE AND ENVIRONMENT POLICY FORMULATION

Policy Formulation at the National Level

All "trade and environment" issues involve more complex policy formulation processes than do the issues that are mainly commercial in nature. They typically involve a broader set of interests, a broader set of actors and a broader set of fora within which policy deliberation and formulation take place. At the national level, a multitude of different actors can be involved in the formulation of trade and environmental policies, including governmental bodies, industry, non-governmental organizations (NGOs), various international organizations and, in many developing countries, aid agencies. Governmental actors can consist of the different agencies responsible for trade and for environmental policy or, depending on the issue, more specialized institutions dealing with natural resources (such as ministries of fisheries or energy). At the national level, industry is involved in policy formulation mainly in order to advance the "economic point of view" on an issue, and NGOs to advance the economic, developmental or environmental angles. The regional offices of international organizations such as the World Bank, the International Monetary Fund (IMF), the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP) can influence policy formulation by giving policy guidance to governments, or funding targeted studies and projects. Moreover, aid agencies in developing countries can play a particularly influential role in giving policy advice and direction to governments.

Whereas the coordination process at the national level among different actors and stakeholders is often led by trade agencies, some countries have established special inter-ministerial task forces to explore the trade and

environment policy interface. These tend to act as more neutral fora for policy deliberation, supposedly giving equal weight to environmental considerations as they do to trade.

Policy Formulation at the International Level

On the international stage, the actors depend on the institutions in which trade and environment, or environment and trade, discussions take place. The principal trade institutions are the WTO and the United Nations Conference on Trade and Development (UNCTAD), and the principal environmental institutions are multilateral environmental agreements (MEAs) and UNEP. To a large extent, however, trade and environment discussions at the international level revolve around developments in the WTO. There are a number of reasons for this. First, while MEAs often negotiate trade measures for environmental purposes within their agreements, there are no institutional spaces within MEAs in which governments may discuss all aspects of the trade and environment relationship, nor is there such a forum within UNEP. The WTO's Committee on Trade and Environment (CTE) a forum exclusively reserved for trade and environment discussions among governments has no parallel in any other international institution. To explain, whereas discussions may be held in the Convention on Biological Diversity (CBD) on the relationship between the WTO Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) and the CBD, other aspects of the trade and environment relationship cannot be discussed in that MEA. Thus, in MEAs, the trade and environment relationship is only addressed in a fragmented way. While this is not a weakness of the MEAs, and could perhaps even be their strength in that they are able to address narrower and better defined sets of issues, it still means that the WTO offers the only platform at the international level for a more general, cross-cutting debate. Second, because much of the trade and environment discussion at the international level is designed to influence WTO rules (with the environmental community wanting to relax or "green" those rules), and because trade and environment disputes have a tendency to gravitate towards the WTO, the WTO has come to occupy centre stage.

Interests and Fault Lines

Many assumptions are made about policy formulation at the international level in the trade and environment field. The first is that all policies are formulated and are the result of active governmental deliberation. The second, related assumption is that policies at the international level are determined by decisions at the national level, and not the reverse. The third is that inconsistent positions taken by countries in different international fora must be the result of insufficient national coordination. A country taking one position in a trade forum, and another in an environmental forum, must be a country whose trade and environment officials are not properly coordinating. While these assumptions are sometimes true, sometimes they are not. WTO deliberations show that the realities of the policy formulation process are complex and simple assumptions seldom explain the course that decisions take. In the WTO, different countries have shown different levels of engagement in trade and environment negotiations. While numerous proposals have been forwarded by developed countries in the newly launched negotiations, there have been very few proposals from developing countries to the CTE-SS. Asian developing countries, followed by the Latin American, are the most active. However, not a single African proposal had been submitted to the CTE-SS (as of May 2007). There are various factors that may explain the more limited engagement of developing countries in trade and environment negotiations. While some disengagement is the result of deliberate decisions that governments take, some is also the result of countries underestimating the gains that may be achieved from more active participation.

Issues and Debates

Agriculture

Agriculture lies at the heart of the current round of trade negotiations. This is an area in which developing countries are seeking to rectify historic imbalances due to massive developed country subsidies and high levels of protection, including tariff escalation. Certain developing countries are looking for new market opportunities, while others are seeking to protect

their vulnerable rural populations consisting mainly of subsistence farmers. While some developed countries have offensive interests, others are seeking both to continue to support their farmers in addressing "non-trade concerns" such as the environment, rural landscapes and food security and to manage the adjustment of a highly distorted sector towards greater market orientation, which will involve dealing with powerful vested interests. Agriculture is a major polluter and driver of global environmental change. The environmental impacts of agriculture are expanding as the agricultural frontier reaches more remote areas. This expansion takes place at the expense of natural habitat, leading to biodiversity loss. Habitat protection also leads to the maintenance of important ecosystem services, such as carbon sequestration and watershed management, which have no market value.

Trends and Future Directions

Global agriculture is characterized by volatile and declining commodity prices, as well as strong market concentration and vertical integration of agribusiness. Farmers are retaining less and less of the profits derived from agriculture and, with liberalization, the pressure to become more efficient (and cut corners) will increase. Farm size is on the increase, the number of farmers on the decrease. The likely medium-term outcomes of the Doha Round agriculture negotiations will change the global distribution of agricultural production, and lead to more agricultural products being traded internationally. The accompanying environmental changes and challenges will surely be enormous, but are not well understood. Take climate change: agriculture can serve both as a source of carbon emissions and a carbon sink, while also being directly impacted by atmospheric carbon fertilization and a changing climate, including unpredictable local weather patterns and increasing extreme weather events. Increased global transport of agricultural commodities and produce leads to higher emissions of carbon dioxide. Different crops and different regions of the world will be affected by climate change in different ways, but exactly how, is not yet known.

Biotechnology

Biotechnology continues to capture public attention worldwide. A wide range of interest groups are united in their opposition to it, expressing concerns over environmental risks, impacts on rural livelihoods, the economic dominance of multinational companies and ethical complications. On the other side are those who are equally convinced of the potential of biotechnology to contribute to food security and environmental protection as well as powerful business interests. The need to address the potential environmental risks of biotechnology found international recognition in Agenda 21, adopted at the Rio Earth Summit in 1992, which includes an entire chapter on the environmentally sound management of biotechnology. Also negotiated in 1992, the Convention on Biological Diversity (CBD) explicitly refers to the need to "regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology" and calls for a protocol to regulate the "safe transfer, handling and use" of such organisms. In the context of the CBD, biotechnology is defined as "technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use." The Convention also recognizes the importance of facilitating access to and transfer of biotechnology, in particular for developing countries that provide the genetic resources. The concerns and uncertainties, coupled with strong opposition to biotechnology in some countries, have given rise to a whole range of import regulations and measures targeted at biotech products. At the multilateral level, it was during the negotiations of the Cartagena Protocol on Biosafety that trade considerations came to the fore, turning the negotiating process into a delicate balancing act between trade interests, on the one hand, and environmental and health concerns on the other.

Trends and Future Directions

Given continued scientific uncertainties, high economic stakes, deep-seated divisions and ongoing trade liberalization that will bring the various perspectives into ever closer contact, the biotechnology debate is likely to remain controversial for some time. Developing countries are often stuck

in the middle of these debates, facing the challenge of assessing their interests and evaluating them against associated risks and opportunities. Strengthening scientific, regulatory and institutional capacities including to better understand countries' regulatory flexibility to take measures that respond to their self-defined goals in light of multilateral trade interests and obligations combined with inclusive policy-making processes and priority setting, will be fundamental perquisites to allow for informed decision-making on their biotech future.

Enhanced Domestic Policy Making

For most countries, a major policy challenge consists of integrating environment, development and trade objectives into a mutually supportive policy framework that maximizes the net sustainable development gains from trade. First, the definition of domestic interests needs to be framed in the broader context of the national sustainable development strategy and developed through a participatory process involving both state and non-state actors. The interests identified through this process then form the basis of the country's negotiating positions, the orientations and content of domestic regulatory reforms, and the trade promotion strategy. Finally, roles are attributed and resources are allocated to pursue those policy objectives.

Promoting Participation

International trade rules affect a broad range of stakeholders concerned with multiple agendas, such as fish stocks management, water sanitation, biodiversity conservation, soil erosion and pesticide use. While governments should maintain their role as decision-makers and arbitrators between different national interests, inclusiveness and participation in policy-making are fundamental for assuring legitimacy, good governance and acceptable results for the society at large. It is also essential to ensure integrated policy making that goes beyond short-term mercantilist interests and reflects broader public policy concerns. Traditionally, the conception of stakeholders or constituencies in the trade and environment field has been narrow, limited mostly to ministries of trade and ministries of environment. This conception needs to be broadened to include the variety

of actors who are actively involved in sustainable development policy-making.

The table below depicts the stakeholders who should participate in policy formulation

Table 2: Stakeholders participation in environmental management and policy formulation

Stakeholder Groups	Relevant Institutions
Trade Policy Makers	Ministry of Trade, Ministry of Foreign Affairs, Ministry of Finance, Permanent Missions (New York, Geneva, Brussels)
Sustainable Development Policy Makers	Ministry of Environment, Ministry of Agriculture, Ministry of Health, Ministry of Education
The Legislature	National Parliaments
Non-State Actors	Private Sector, Academia, Research Scientists, Farmers, Fisher Groups, Community Based Organizations, Indigenous People Consumers, Development and Environment NGOs, Trade Unions, Media

Source: Mark S. Reed, October 2008.

Climate Change and Energy

At the global level, climate change mitigation and adaptation and trade liberalization are managed under separate and complex legal regimes. The UNFCCC and Kyoto Protocol do not mandate specific policies and measures but set targets for emissions reductions that countries must reach, binding targets, in the case of Kyoto. Countries have multiple regulatory measures at their disposal. Climate change may appear to be rather a non-issue at the World Trade Organization (WTO). There has been some discussion of the UN Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol within the debate on the relationship

between the WTO and multilateral environmental agreements (MEAs) in the WTO Committee on Trade and Environment (CTE), but this discussion has yielded little in concrete terms. However, climate change is an emerging issue at the WTO. It can be seen as a new generation environmental challenge that transcends the confines of a limited, traditional definition of an environmental problem to be resolved by a targeted environmental treaty with some accommodation in the trade realm. Dealing with climate change is fundamental to economic activity in all its form show, as we produce, use and trade energy and goods. Emissions of carbon dioxide, the number one greenhouse gas amongst the six covered by the Kyoto Protocol, is a side effect of most production processes. Therefore, climate change mitigation measures have implications for most WTO agreements in some form or other, be it rules on subsidies, taxation, intellectual property, technology transfer, agriculture or environmental goods and services. The use of fossil fuels for the production of energy to power industrial processes and transportation is leading to the buildup of an atmospheric shield of carbon dioxide, which traps heat and warms up the Earth. The result is changing patterns of precipitation and drought, increasing extreme weather events and sea-level rise. These changes affect poor countries and vulnerable people disproportionately, in the form of failed crops, devastating floods and vector-borne diseases. Species and habitat loss is also exacerbated. Efforts to curb climate change particularly focus on how we use energy.

As countries have multiple regulatory measures in their ambit, these measures, the Protocol states, “should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade,” and they should be implemented in ways that minimize adverse trade effects. International trade negotiations may impose constraints on countries implementing climate and sustainable energy measures if the links between climate change mitigation and adaptation goals and trade supported instruments are not clear. Therefore, actively pursuing the right to retain and expand the necessary policy space in trade negotiations, allowing Members the flexibility to enact policy in support of climate change mitigation and adaptation had increasingly become a consideration for some countries in the Doha Round.