

TRADE, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT: A DEVELOPING COUNTRY VIEW OF THE ISSUES, INCLUDING IN THE WTO CONTEXT

By Martin Khor, Director, Third World Network

I. INTRODUCTION

This paper sets out some of the issues and problems relating to the relationship between international trade, environmental degradation, and sustainable development. It is a complex and controversial relationship, with many strands that need to be sorted out. It is beyond the scope of the paper to deal comprehensively with this set of complex issues. The paper will, however, attempt to draw attention to some of the critical aspects of the trade and sustainable development relationship.

The first parts of the paper deal with the more conceptual and empirical aspects of the trade and environment/sustainable development relationship. The subsequent parts of the paper deal with how the issues should be or are being treated in the context of the World Trade Organisation. Some proposals are also given on various aspects of the issue.

International trade has played a crucial role in promoting and extending particular types of technology and patterns of production and consumption across the globe. These are now recognised as inappropriate in many ways, as well as "unsustainable" from a longer-term environmental perspective.

International trade has also been characterised by an international pattern of division of labour, mainly between North and South countries, in which the commodities exported mainly by developing countries are exchanged for industrial products and services exported by developed countries. The terms of trade between these different categories of goods and services have been continuously declining against the South. Many countries of the South have become dependent on imports of food and some other essentials, whilst the prices of their export commodities have declined substantially. This has contributed greatly to the crisis of debt, balance of payments deficits and seemingly persistent poverty.

Trade has thus been linked to worldwide environmental degradation, as well as to international inequalities in the sharing of benefits and losses, and to continuous poverty in many Third World communities.

"Sustainable development" may still mean different things to different people. However it is widely recognised now that the term incorporates at least two main elements: environmentally sound and "sustainable" production practices; and the capacity to fulfil basic and human needs of present and future generations. In order that this process be carried out, there must be at least a certain degree of equity among and within nations. Past and present inequities in control of

and access to resources have greatly contributed to resource waste and environmental degradation as well as to the co-existence of great affluence and terrible poverty.

There is a clear relationship between the recent patterns of international trade and unsustainable development. Thus, a major component in operationalising sustainable development at international and national levels is the reform of trade. The conceptualisation and operationalisation of such a reform will be a complex and very difficult operation, involving major social and economic changes internationally and nationally.

Most importantly, trade and economic reforms should be conceptualised within the context of sustainable development, with appropriate emphases on environmental as well as developmental principles, and with fairness and equity in North-South relations.

Adjustments in trade to take into account environmental imperatives should not be carried out in a manner by which the strong and rich pass the burden on to the weak and poor.

This paper discusses some major problems associated with present trade and sustainable development relations, and makes some broad proposals for moving towards reforms in trade and economic relations.

2. TRADE AND THE SOUTH-TO-NORTH TRANSFER OF RESOURCES

2.1 The Problems

The colonial pattern of trade, in which colonies exported raw materials and colonial master countries specialised in producing industrial products, has continued in the main to the present. Many Southern countries still mainly export primary commodities (mainly to the North) and import industrial products (mainly from the North). As the terms of trade of commodities has been falling continuously against manufactured goods, many Southern countries have suffered tremendous losses.

According to United Nations data, the terms of trade of non-fuel commodities vis-a-vis manufactures fell from 147 in 1980 to 100 in 1985 to 80 in 1990 and 71 in 1992. This catastrophic 52% fall in terms of trade has had catastrophic effects. A paper by the UNCED Secretariat showed that for Sub-Saharan Africa, a 28% fall in terms of trade between 1980 and 1989 led to an income loss of US\$16 billion in 1989 alone. In the four years 1986-89, Sub Sahara Africa suffered \$56 billion income losses, or 15-16 per cent of GDP in 1987-89. (UNCED 1991:p9).

The UNCED study also showed that for 15 middle-income highly indebted countries, there was a combined terms of trade decline of 28% between 1980 and 1989, causing an average of \$45 billion loss per year in the 1986-89 period, or 5-6 percent of GDP.

The income losses from falling terms of trade probably constitute the largest single mechanism by which real economic resources are transferred from South to North. These losses adversely

affect the sustainable development prospects of the South, as they contribute to the debt problem and to persistent poverty in many communities.

It should be obvious that the world trading system has been grossly unfair to Southern countries that have been dependent on raw materials export, a pattern that was introduced by force through colonialism.

Many Southern countries have lost their self-reliance in terms of producing their own food, as lands were converted to export crops that in many cases yielded unsatisfactory results in terms of instability of price and demand.

Attempts were made by developing countries to obtain fairer prices and more stable demand conditions for their commodities through commodity agreements under UNCTAD auspices. Most of these agreements collapsed when the industrial countries withdrew support in the 1980s. Many Southern countries, especially in Africa, are thus today even more subjected to the vagaries of the commodity markets.

With oversupply of many commodities (often caused by advice given or even imposed by international agencies such as the World Bank to many countries simultaneously to expand production of the same products) and stagnating demand (caused by development of substitutes and reduced raw material content in end products), those Third World countries still dependent on commodity exports seem trapped in a bad corner of the world trading system.

The situation could well deteriorate further, and dramatically, when Northern countries develop laboratory substitutes for many Third World agricultural products through biotechnology. The development of cheaper laboratory vanilla products is expected to displace 100,000 farmers now exporting naturally grown vanilla. Other crops expected to be affected include sugar, cocoa, coffee, tobacco, are coconut.

2.2 Proposals

- (a) The problem of longterm and current decline in commodity prices and in the South's terms of trade should be seriously addressed through an international conference or convention. It is imperative that such huge income losses incurred by poor countries should be stemmed.
- (b) In particular, the Northern countries should rethink their negative attitude towards commodity agreements, since leaving commodity trade to the full force of monopoly markets has resulted in negative social and environmental effects. The North should initiate a new round of commodity agreements aimed at rationalising the supply of raw materials (to take into account the need to reduce depletion of non-renewable natural resources) whilst ensuring fair and sufficiently high prices (to reflect ecological and social values of the resources).
- (c) The improvement of the South's terms of trade vis-a-vis the North would be a valuable mechanism to stem and reverse the current South-to-North flow of economic resources.

It would help create conditions for a more equitable trading system, reduce resource wastage and unsustainable consumption patterns, and expand financial resources in the South for the transition to sustainable development.

- (d) The relevant international agencies should monitor the implications of biotechnology for Third World commodities. Measures should be taken to control biotechnology if impact assessments show significant negative effects on incomes and livelihoods in the South.

3. TRADE AND THE TRANSFER OF INAPPROPRIATE PRODUCTS AND TECHNOLOGIES

3.1 The Problems

Trade per se need not necessarily be environmentally harmful. There could for example be an exchange of environmentally sound technologies and safe products. However, there has on balance been a transfer through trade of environmentally harmful technologies and products, especially from North to South. Some of these have even been banned in the countries of origin but exported to countries with less stringent regulations.

Examples of the trade of inappropriate technologies and products include:

- (a) Hazardous products and substances including pharmaceutical drugs, contraceptives and pesticides banned years ago in Europe, the US or Japan but sold to the South; cigarettes containing higher tar and nicotine content than levels in the North; and asbestos products phased out in the North but exported to the South.
- (b) Inappropriate products such as commercial infant milk products that have replaced breastfeeding, with increased malnutrition and illness of babies; and expensive alcoholic or tinned drinks that take up a large part of the budget of poor families.
- (c) Toxic and dangerous industries with standards of occupational safety, pollution and waste far below the requirements in the companies' countries of origin. The Bhopal gas-leak tragedy is an outstanding example of possible effects. The South-wards movement of the toxic chlorine-based and other chemical industries is another example.
- (d) The trade in toxic wastes has been a major scandal, with Third World countries becoming the targets as waste regulations tightened in Northern countries. This trade has been significantly curbed by the Basel Convention, where a ban on exports from OECD to non-OECD countries was recently imposed.
- (e) The Green Revolution, with its package of inorganic fertiliser, chemical pesticides and hybrid seeds, replaced agricultural diversity in the South with crop monocultures, and is leading to soil infertility and water pollution. The fall in yields is also showing up the production limits of this technology.

- (f) Modern trawl fishing, often introduced as part of aid programmes, has in many cases displaced or disrupted traditional ecologically-sound fishing practices and led to overfishing, depletion of fishery resources, and higher consumer prices.
- (g) Genetic engineering in agriculture is rapidly developing, and there are already signs that research, experiments and releases involving genetically engineered organisms are being transferred to the South. These organisms, when released into the environment, could harm existing plant and animal species as they can mutate, migrate and cannot be recalled. Most developing countries do not have the capacity nor the regulatory framework to monitor, let alone control, this technology.
- (h) The introduction of commercial, large-scale logging activities in primary forests, often on traditional lands of indigenous peoples, and the sale of mega-dams in the forests areas of many Third World countries. These activities have often been funded by aid programmes.

Now that these activities are found to be harmful to the global ecology, Northern countries are putting environmental conditions on aid and loans to developing countries to restrict the activities. These restrictions themselves result in adjustment problems as some countries are now dependent on export earnings relating to activities that deforest.

The effects of the trade in inappropriate products and technologies have included: increased health problems including deaths of those consuming the products or suffering the occupational effects of the technologies and products; loss in agricultural and marine biodiversity; other ecological problems such as pollution of soil and water resources; displacement of ecologically-sound traditional activities; and loss of livelihood and incomes among those displaced or adversely affected by the introduction of inappropriate technologies and environmentally damaging practices.

The above analysis demonstrates that international trade in the past many decades has contributed to serious adverse effects on the environment and on health and safety in the Third World, through the transfer of inappropriate products and technologies.

3.2 Proposals

- (a) There should be a comprehensive review, conducted by intergovernmental institutions, of the past and present effects of the trade in products, substances and technologies on the environment, health, safety and sustainable development, particularly in the South.
- (b) Taking the Basel Convention as a possible model, there should be studies and negotiations to prevent the export of hazardous substances, products and technologies from OECD to non-OECD countries, particularly those that have already been banned or restricted in the North. A start could be made with pesticides and other toxic chemicals; asbestos; pharmaceutical drugs; and activities related to genetic engineering.

- (c) Double standards in the safety aspects in the marketing of products (such as pharmaceutical drugs, contraceptives and pesticides) and in standards relating to occupational safety and product safety by the same transnational corporations operating in the North and South countries should be monitored and prevented.
- (d) The United Nations should establish a technology assessment centre or unit to assess technologies for environmental, health, safety and socio-economic impacts; and take effective measures to discourage the trade in technologies or products that have net negative effects in the importing countries.
- (e) The issue of the export of domestically prohibited products is included in the WTO work programme on trade and environment. It should be given a high priority by Member States, so that the WTO can work towards at least a prior informed consent system for such products.

4. TRADE AND CONSUMPTION PATTERNS

4.1 Problems

Whilst more studies have been conducted on the effects of trade on the production patterns and technologies in the South, less attention has been paid on the impact of trade on consumption patterns, ways of life, cultural patterns and lifestyles internationally.

The consumption patterns and lifestyles in the North have been the subject of increasing study, including during the UNCED process, and especially at the Commission on Sustainable Development session in May 1994. It is now increasingly recognised that many of the present consumption patterns are "unsustainable", wasteful of resources, and indicative of social inequities.

The process of international trade has also facilitated the transfer of consumer tastes from North to South. Northern-based companies have aggressively promoted their products to all corners of the globe, making use of high-powered advertising and other sales promotion tactics. These sales tactics not only promote foreign products but an entire set or range of lifestyles, role models, motivational forces and consumer tastes.

They have effect not only on the elite in the South, but also on the other sections of Third World society, including the poor. As a result, the expenditure patterns of poorer communities have become distorted, so that a larger part of the family budgets may be spent on inessentials or even products that promote ill-health at the expense of basic goods and services. For example, it is not untypical for relatively poor families to spend a significant part of the family income on tobacco, infant milk products, canned drinks such as Coca-Cola, alcoholic drinks, motor-cycles (on hire purchase) etc. whilst too little income is left over for nutritious foods, education and health services. The changing pattern of infant nutrition, with mothers in developing countries shifting from breastfeeding to bottle feeding of their babies, due to the

influence of the sales promotion of milk companies, is an outstanding example of the transfer of inappropriate consumption patterns to the South.

On a more general level, production and trade patterns have followed the vastly unequal structures and patterns of ownership, control and access to resources. The unequal distribution of incomes internationally and within nations have led to correspondingly unequal consumption patterns, with the co-existence of over-development (with luxury cars, other products and entertainment services etc) and under-development (with malnutrition, lack of access to health, shelter and water supplies etc). International trade may not be the main cause of worldwide inequalities, but it helps to facilitate and perpetuate these unequal patterns, and it is the channel through which unequal and unsustainable consumption patterns are transmitted worldwide.

4.2 Proposals

- (a) An international review should be conducted on the international transfer of unsustainable consumption patterns and the mechanisms causing this. This process should be subjected to constant monitoring, with a view to reducing negative effects.
- (b) A code of ethical conduct should be drawn up for corporations promoting their products and services, and for the media, to reduce the negative effects they may have on unsustainable consumption patterns.
- (c) In reviewing consumption patterns, and in proposing measures to change these patterns, priority should be given to ensure that the burden of the necessary adjustments should be carried by the well-to-do sections of society and by the richer countries, and not by the weaker countries and sections of society.

5. TRADE, TRADE LIBERALISATION AND THE ENVIRONMENT

A major issue in the trade and environment discussion is whether trade liberalisation has good or bad effects on the environment.

Most governments and international agencies, including the GATT Secretariat, have argued that trade liberalisation or "free trade" is the best route to environmental protection. Their reasoning is as follows: trade liberalisation increases wealth and production for every country, and the increased revenues enables governments to spend more on environmental protection measures, as a result of which pollution is curbed.

This view tends to ignore the role that resource depletion and unsustainable production and consumption patterns play in environmental degradation, and the role of trade in facilitating these processes and their transfers.

If trade liberalisation increases production, and this is based on the same patterns of production and consumption that now exist and which are recognised as unsustainable, then there will be an acceleration of the depletion and degradation of resources. Moreover, the increase in trade

based on these same patterns will also accelerate the transfer of these patterns to other parts of the world.

If it were true that trade expansion promotes environmental protection, then the tremendous increase in world trade of the past one or two centuries would have led to a better world environment. Yet the reverse has happened, and the world faces a serious global environment crisis. We have thus to recognise that unbridled trade, based on the present technologies, production, distribution and consumption patterns, has greatly contributed to the environmental problem, and that the negative environmental effects of trade have to be dealt with.

As many environment groups have argued, the present pattern of trade has helped accelerate environmental degradation worldwide. As the Northern countries depleted their natural resources, such as forests and minerals, they sought the resources of other territories, subjecting the present Southern countries to extraction and export of raw materials (and degradation of forest, land and mineral resources) under colonial rule. The industrial activities of the North (and now, increasingly in the South) have also meanwhile greatly polluted the world's atmosphere, water and land resources, leading to toxicity, pollution, ozone loss, the Greenhouse Effect and global warming. This international division of labour, and this global pattern of production and trade, continues to the present.

And as shown earlier, the pattern of trade, with raw materials extraction in the South and industrial production and services in the North, and with the control of trading institutions by Northern monopolies, have also been major factors keeping many countries of the South impoverished.

Trade can thus be shown to have had negative effects on the prospects for sustainable development, both in terms of environment and the fulfilment of basic and human needs.

The OECD has been conducting studies on the environmental effects of trade. It uses an analytical framework of examining the potential environmental effects of trade, both positive and negative, in terms of scale, products and structure. It concludes that trade, and trade liberalisation, could have both positive and negative effects on the environment. Trade expands the scale of economic activity, which can provide more resources for environmental protection, but can also heighten ecological problems. Trade facilitates the international diffusion of environmentally-beneficial products and services, but is also the vehicle for exchanging goods that harm ecosystems. Trade also influences the international structure of production and consumption that can have positive or negative ecological impacts. The study also concludes that trade liberalisation can have positive or negative environmental effects in terms of products, scale and structure as well as regulatory effects. (OECD 1994, pgs 7-8).

At this stage, the OECD studies have focused on the environmental effects of commodity or primary production and of transport, but not industry. It also looks at products or sectors (such as forestry, fisheries and agriculture) but not so much at processes, such as the effects of trade on changes in technology, production patterns and consumption patterns.

A proper analysis would also look at the impact of trade, trade liberalisation and trade measures on processes, including changes to production patterns and the use of technologies; and on consumption patterns, cultural patterns and lifestyles.

As discussed in Sections 3 and 4 above, trade has facilitated the transfer of inappropriate and ecologically harmful products, technologies and production patterns, as well as unsustainable consumption patterns. These aspects of the impact of trade should be studied in a comprehensive assessment of the environmental effects of trade and trade liberalisation.

Another point worthy of note is that the term "trade liberalisation" is often used in a misleading way. Trade liberalisation is often taken to mean free or freer trade, but this is usually not so. "Free trade" should be taken to mean the free and competitive exchange of goods, usually between small firms and farms in a market with many producers and consumers.

In reality, much of the world market is characterised not by free trade but by monopoly trade, dominated by a few giant corporations that are able to dictate prices and conditions of trade. The Opium War in China in the 19th century was a good case study demonstrating that "free trade" was a banner used to promote the freedom of monopolies to impose trade on weaker parties. The Uruguay Round is a contemporary example of how monopolies can also impose protectionism to further their interests, in the name of trade liberalisation, as shown in the introduction of the TRIPS (trade-related intellectual property rights) agreement, which clearly protects technological monopolisation.

6. THE NEED FOR FAIR AND COMPREHENSIVE TREATMENT OF THE NEGATIVE ENVIRONMENTAL EFFECTS OF TRADE

Once there is the admittance or recognition that trade and trade liberalisation can and does have negative effects on the environment, the question arises how these negative environmental effects can and should be tackled. If care is not taken to answer this question properly, there is a real danger that policy choices will be determined by the powerful to shift the burden of adjustment to the weaker parties, countries and sections of society.

The key dilemma in trade and environment could be summarised as follows: How can we recognise and identify the negative impacts of trade on the environment, and take measures to counter or rectify these negative impacts in a fair manner, so that the products of weaker trading countries are not discriminated against, and that the environment is not misused as a protectionist weapon by the strong against the weak?

In other words, can we devise a framework for dealing with the negative environmental effects of trade in a fair and non-discriminatory manner, and in fact in a manner that makes use of positive discrimination in favour of the weaker countries, so that the Northern countries carry the main bulk of the burden of adjustment towards more ecological production and trade patterns?

The rationale for this is as follows: The North has been and is mainly responsible for global environmental problems (as it accounts for four-fifths of global consumption, resource use and pollution), has been the main beneficiary of past and present trade, and has the "cushion" of higher incomes to absorb adjustments. The South, many of whose countries are impoverished, cannot afford to bear more burdens, especially since it is already enduring heavy debt repayments and difficult conditionalities through structural adjustment programmes.

The way discussions on trade and environment are being conducted, there is a danger that the burden of trade adjustment could fall mainly on the South. Most discussions of trade and environment tend to focus on the impacts of the production and trade of Third World commodities, such as tropical wood and minerals. It is true that the extraction of Third World natural resources have had, and continues to have, devastating environmental impacts. Measures should indeed be taken to reduce these negative impacts, and even to reduce the volume and rate of extraction, production and trade.

However, this must be done in a way that does not have negative social impacts on the people, and especially poor communities in the South. For example, within the framework of new North-South commodity agreements aimed at promoting sustainable development, the South could agree to produce and to export less physical quantities of wood, minerals and agricultural products, but be paid significantly higher prices for these commodities, taking into account the social and ecological values in these products. Supply of the products can thus be rationalised and reduced, whilst at the same time, high enough prices are guaranteed. Under such schemes, the South may produce less (and thus cut down on resource depletion) but would not have to suffer economically. The attainment of higher commodity prices within an agreement to control and even reduce output is one way towards fairer and more ecological trade.

This, however, is only one part of the answer. Whilst we have to deal with the environmental impact of Third World commodities, it is even more important to look at the production and trade of Northern products, including industrial products, which also have negative and sometimes devastating impacts on the environment.

If we are to deal with the trade in tropical wood, we should also focus on the trade in timber from temperate and boreal forests. The environmental impacts of the timber trade as a whole should be countered, as there is a great need to conserve forests. But this exercise must look at all timbers and forests, not only the tropical varieties. On the other hand, it is also incorrect to take the position that we should not be concerned about trade in timber, as it cannot be denied that logging and timber production and trade is a major contributory factor to forest loss, land and water degradation, and erosion of biodiversity.

When we examine commodity trade, we should thus look at all trade and not exclusively at Southern commodities. Even more important, we should not confine the exercise to raw materials, but must extend it to the environmental impacts of industrial products and technologies. For instance, whilst we are concerned about timber and minerals, we should also be concerned about the impact of producing, using and trading motor vehicles. As is well known, private cars are inefficient as means of transport, compared with bicycles or the use of

public transport. They use up immense quantities of raw materials and energy, take up valuable land space, are a major pollutor contributing to the Greenhouse Effect and global warming. We should therefore curb the production, use and trade in motorcars as much or even more than being concerned about the environmental effects of trade in wood and minerals. The same argument also applies to other industrial products, especially those whose production involves toxic substances, high pollution and results in hazardous wastes.

What is required, in other words, is an objective study of and approach to all products, services and processes, exported by both North and South, and the establishment of a framework for taking measures on this whole range of products in a fair and equitable manner. The fear of many people in the South is that Northern governments (and also some NGOs) may take the lead in defining what constitutes environmentally harmful trade, and this definition may (wittingly or otherwise) be biased against products exported by the South. If such a definition is used, the fear is that there will be arrangements for adjustments to world trade in a manner that is to the advantage of the powerful countries, and thus most of the burden of adjustment will fall onto the South once again, as was done in the resolution of the international debt crisis.

7. THE SEARCH FOR APPROPRIATE INSTITUTIONAL MECHANISMS TO DISCUSS TRADE AND ENVIRONMENT LINKAGES

7.1 Some Key Issues

The increasing concern of many environmental groups about the adverse environmental effects of trade, as well as the Uruguay Round process in GATT, have catalysed intense interest in finding international mechanisms to discuss and resolve trade and environment issues. This interest has been intensified because the GATT Ministerial Meeting in Marrakesh in April 1994 adopted a Work Programme on Trade and Environment for the World Trade Organisation (WTO).

The introduction of the trade and environment issue in the WTO has sparked intense debate about the designation of roles and areas of competence among the different international institutions.

The concepts of fair sharing of the burdens and benefits of adjustment to environmental sustainability (described earlier, especially in Parts 1 and 6 of this paper) have been accepted in the context of the UN Conference on Environment and Development in Rio 1992. The principle of "common but differentiated responsibility" was the anchor with which UNCED was based. This principle accepted that the Northern countries had a greater responsibility to meet the costs of adjustment due to their larger role in environmental degradation as well as their economic capacity to absorb more costs; whilst the developing countries would still need to grow and develop (sustainably, of course) to meet their people's needs. The North also made a commitment to provide adequate financial resources and technology transfer to facilitate the South's transition to sustainable development. Thus, UNCED and its agreements, documents and follow-up institutions (such as the Commission on Sustainable Development, the Biodiversity and Climate Change Conventions, and various other bodies) provide the

appropriate contextual and institutional framework for general multilateral discussions on trade and sustainable development.

In the GATT/WTO, the treatment of the environment is still new and evolving. There does not exist the same body of experience and agreement as in the UNCED and post-UNCED process on the North-South sharing of responsibilities, costs and benefits in relation to economics, trade and environment. There tends to be a bias in the world trading system to reward the stronger and more successfully competitive parties and countries, and this includes the activity of trade negotiations which sets the rules. Whilst the GATT had the principle of "special and differential treatment" in favour of developing countries, many analysts have concluded that the principle has been eroded through the Uruguay Round so that in the WTO it is weaker than previously. Moreover, it is yet to be seen how and whether the UNCED principle of "common but differentiated responsibility" will be operationalised in the WTO context.

In March 1994, the Third World Network (TWN) issued a position paper on "The WTO, Trade and the Environment" welcoming the decision to set up the WTO work programme on trade and environment but cautioning against empowering the WTO as the agency charged with developing the international framework for determining the relationship between trade and environment. The TWN paper argues that the GATT and the WTO, because of their narrow trade focus, lack the jurisdiction, competence and capacity to be a coordinating agency to handle these complex interlinked issues.

Moreover, as the closing phase of the Uruguay Round showed, the GATT's decision-making is dominated by only a few major countries or entities, and a majority of countries have to accept many of the decisions and deals arrived at by these few. Given the reality of this decision-making process in GATT (and in all likelihood, in the future WTO), rules developed in this imbalanced forum would most likely serve to legitimise the use of trade weapons which the North and the powerful can use against the South and the weak. The manner in which the environment is sought to be defined and linked to trade issues is likely to be weighted against the weaker partners, which might then be unfairly subjected to undertake a disproportionately large share of the adjustment burden under the threat of trade penalties and sanctions.

The paper argues against increasing the WTO's scope through introducing concepts such as "trade related environment measures", which would then become the subject of a new GATT/WTO negotiating process. It also opposes proposals, made by some Northern governments and NGOs, to get the WTO to deal with a set of new trade and environment concepts, namely processes and production methods (PPMs), internalisation of environmental costs, and eco-dumping. These concepts have not yet been adequately studied and discussed with all their economic and social ramifications, particularly in the international trade context. PPMs refer to the process and method by which a product is produced. 'Ecodumping' implies that a country where environmental standards are lower is having an unfair competitive advantage when exporting its goods which are produced by environmentally inferior methods or technologies. 'Internalising external environmental costs' refers to the inclusion in the price of a product the estimated adverse ecological effects of producing and distributing it.

The three concepts are thus inter-related. When discussed in the GATT/WTO context, the implication is that if a country has lower environmental standards in an industry or sector, the cost of that country's product is not internalised and the prices are thus too low (being unfairly subsidised), and that country is practising "eco-dumping." As a result, a second country that is importing from the first would have the right to impose trade penalties, such as levying countervailing duties, on goods exported by the first country.

This set of ideas poses complex questions relating to concepts, estimations and practical application, particularly as they relate to the international setting. Developing countries are likely to find themselves at a disadvantage within the negotiating context of the WTO. These concepts as applied in international trade relations need to be analysed in much greater depth, in an inter-disciplinary way, before being brought into the WTO for discussion, if at all.

Indeed, fora other than the WTO are more appropriate for hosting a comprehensive review and discussion of trade and environment issues. Linkages between trade and environment should be examined in the broader context of sustainable development, which takes into account both the environment as well as the development aspect of human needs. A more suitable forum for integrating these issues would be the UNited Nations, such as in the Commission on Sustainable Development and UNCTAD, as the UN can provide the forum or fora in which the issues can be discussed in the broader perspective of environment and development, and in a more open and democratic manner. At the end of such a process, GATT/WTO can be given the mandate to handle those matters where it has been determined it is competent or appropriate to deal with.

The TWN paper suggested that the following areas should be highlighted instead in the WTO work programme on trade and environment: (1) the implications of the TRIPS agreement on environment and sustainable development; (2) trade in domestically prohibited goods; (3) export restrictions by developing countries on natural resource products to gain value added and earnings to enable them to protect their environment and promote sustainable development; (4) the relation between MEAs and WTO rules.

The issue of trade and environment was also a major focus of attention at the Commission on Sustainable Development session in May 1994. Many NGOs were active in discussions on this issue, and reached the conclusion that the GATT/WTO should not be made a lead agency to coordinate the issue. Instead, they suggested that the CSD play a leading role in bringing together relevant agencies, including UNCTAD and UNEP, to view the issue in a multi-dimensional way. The CSD intergovernmental forum itself recommended that various agencies play their respective roles, and did not suggest that the WTO play a leading part.

Nevertheless, there is a legitimate fear on the part of Southern governments that the issue will be pushed in a certain way by some major Northern countries through the WTO, and that the interests of weaker parties may be adversely affected.

In the terms of reference of the WTO Committee on Trade and Environment (see Part 8 of this paper), the issues of PPMs and eco-dumping are not directly named as such. However, several items on the work agenda have a strong relationship to PPMs, which could thus be brought into

the WTO discussions. These include, in particular, item 1 (trade measures for environmental purposes), item 2 (environmental policies/measures relevant to trade) and item 3 (which includes eco-labelling). For instance, the issue of eco-labelling could also deal with the nature of the production process (and not just products). Thus standards or values relating to the environmental soundness or appropriateness of production methods and processes can be brought up in the context of eco-labelling.

7.2 Proposals

- (a) The issue of the links between trade and environment should be viewed comprehensively in a multi-dimensional way, taking full account of the interests of weaker countries as well as communities, especially in the South.
- (b) Trade and environment should be examined in the broader context of sustainable development, taking the development needs of the South into account, and making use of equity as a central operational principle.
- (c) In the examination of this issue, attention should be given not only to differences in environmental standards at present, but also the historical and past processes and inequities.
- (d) The concepts of cost internalisation, ecodumping and processes and production methods should be extensively discussed outside of the WTO negotiating context, in more open and democratic fora.
- (e) Due recognition and importance should be accorded by the international community to UNCED institutions and principles in discussions on trade and environment, as well as to other UN agencies such as UNCTAD and UNEP. General discussions on trade and environment issues should be held in the UN framework. Arising from such discussions, the role of the WTO and the trading system can be determined and assigned in the light of their specific areas of competence and in the context of the principles derived.

8. THE WTO TRADE AND ENVIRONMENT PROGRAMME: A REVIEW

8.1 General

The GATT Ministerial Meeting of Marrakesh which adopted the Uruguay Round Final Act on 15 April 1994, also adopted a Decision on Trade and Environment which set out a work programme to be carried out by a new WTO Committee on Trade and Environment (CTE).

According to the Decision, the CTE's terms of reference are to (a) identify the relationship between trade measures and environment measures in order to promote sustainable development; and (b) to make appropriate recommendations on whether any modifications of

the provisions of the multilateral trading system are required, compatible with the open, equitable and non-discriminatory nature of the system.

The Decision gives the CTE a broad mandate, covering all areas of the WTO's functions, including goods, services and intellectual property rights. In its preamble, the Decision specifically takes note of the UNCED Rio Declaration, the work programme in the Decision on Trade in Services and the Environment, and relevant provisions of the TRIPs Agreement, and later on defines the latter two as an integral part of the CTE's work.

The Decision also asked that the CTE report to the first WTO Ministerial Conference, "when the work and terms of reference of the Committee will also be reviewed in the light of recommendations of the Committee."

The CTE first met in February 1995, and has since met ten times to June 1996.

The CTE has ten items on its work programme (most of which had been set out in the Ministerial Decision):

1. The relationship between the trade system and trade measures for environmental purposes (including MEAs or multilateral environment agreements).
2. The relationship between environment policies relevant to trade and environment measures with significant trade effects and the provisions of the trade system.
3. The relationship between the trade system and (a) charges and taxes for environmental purposes; (b) requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling; (c) adequacy of WTO rules on packaging, handling and other environmental regulations, requirements and standards.
4. The trade system's provisions on transparency of trade measures for environmental purposes, and environmental measures and requirements with significant trade effects.
5. The relation between the dispute settlement mechanisms in the trade system and those in MEAs.
6. The effect of environmental measures on market access (especially for developing countries, in particular LDCs) and environmental benefits of removing trade restrictions and distortions.
7. The exports of domestically prohibited goods.
8. Trade related aspects of intellectual property rights (TRIPS) and the environment.
9. Services and the environment.

10. Appropriate arrangements for relations with NGOs and transparency of documentation.

Almost all the above topics have been discussed at least once at the CTE. The items that have assumed most importance seem to be item 1 (trade measures for environmental purposes, as well as the link between WTO and MEAs), item 3 (ecolabelling), item 6 (environmental measures and market access) and item 8 (TRIPs and environment).

A review of the deliberations of the CTE, and discussions with developing country diplomats, reveal that the main concern of developing countries is the fear that new environment measures, or proposals to modify WTO rules, could affect their market access or reduce their competitiveness. Much of the efforts of the South is to respond to proposals being put forward by the Northern countries, especially in relation to trade measures for environmental purposes, the WTO-MEAs relation; and eco-labelling. In addition, some Southern delegations have put forward proposals on issues in their interest, in particular TRIPs and the export of domestically prohibited goods.

The following is the state of affairs in some of the key issues in the WTO.

8.2 WTO and MEAs

In February 1996, the EC put forward a proposal to the CTE to recommend to the Singapore Ministerial Meeting that WTO rules be changed to take into account trade measures made under MEAs. The EC proposal is that GATT Article XX (the general exceptions article) and the WTO Dispute Settlement Understanding be amended to enable ex ante WTO approval (or exception) for trade measures to be taken in MEAs (ref: C. Raghavan 1996). Its definition of an MEA would include not only agreements convened by the UN and open to all its members (and commanding near-universal consensus or adherence) but even agreements drafted by a few countries which then invite others to join (and which would then enjoy exemption or protection in the amended WTO rules).

This proposal has met with a negative response from many developing countries. Article XX already permits exemption from GATT obligations for measures necessary to protect human, animal or plant life or health and the conservation of exhaustible natural resources. Developing countries are guarding against attempts to amend GATT/WTO rules that would then allow the imposition of a country's domestic environmental values or policies onto other countries (e.g. by exercising extraterritoriality of domestic environment laws).

Most developing countries are against an amendment to Article XX. Such an amendment is an "ex-ante approach", in which all MEAs are in future given exemption. The grounds cited include: (a) Article XX is already flexible enough to enable exceptions to accommodate environmental objectives; (b) Conditions in Article XX reflect the checks and balances in the GATT system to prevent abuses of exceptions; the tampering of this delicate balance would carry enormous risks for the future, including effects not envisaged at present; (c) The EC proposal (and definition of an MEA) would allow a few countries to fashion MEAs, which could then enable them to take restrictive measures in their trade interests, instead of taking positive measures to encourage others to gradually enhance their own standards (which is the

step preferred by developing countries). The main concern is that developing countries will lose out in trade terms and be made victims of environmental agreements or measures to which they are even not party to; (d) Moreover, with an amendment allowed on environmental ground, the road would be opened to further amendments to Article XX in response to other domestic pressures.

The preference of developing countries is for either retaining the status quo, or for an "ex-post approach". According to Magda Shahin, of the Egyptian Mission to the WTO, in the ex-post approach, a waiver could be granted under Article XXV:5 that could provide adequate and reasonable solution for MEAs that have trade measures inconsistent with WTO. This approach is also based on the rationale that no challenges have so far been raised on the trade provisions contained in no more than 18 out of about 160 environment agreements. Thus there is no great urge or need to change Article XX on environmental grounds. As for future MEAs, to ensure consistency between trade provisions in MEAs and WTO obligations, there should be better national coordination between the government officials responsible for MEAs and WTO. (Ref: M. Shahin 1996).

8.3 TRIPS and Environment

The Marrakesh Ministerial Decision on Trade and Environment accords a prominent place for a review of the WTO TRIPS agreement to meet the objective of sustainable development. In the CTE, the issue of TRIPS and environment is placed as Item 8 and has already been the subject of discussion twice (in June 1995 and March 1996).

In the CTE work programme, two issues have been designated to the the item TRIPS and environment: (a) the relationship of TRIPS agreement to access to and transfer of technology and the development of environmentally sound technology; and (b) the relationship between the TRIPS agreement and MEAs which contain IPR-related obligations.

A key issue, as defined by NGOs and some Southern governments, is an important clause in the TRIPS agreement relating to patentability and non-patentability of biological materials, i.e. the issue of "patenting of life forms."

So far the issue of TRIPS and environment overall has not received the adequate attention of the mainstream Northern environment groups. However, it is a most crucial issue of highest priority for many Southern NGOs and social movements (such as farmers' organisations). It is also seen by several Southern government delegations as a trade and environment issue of major interest to developing countries.

At the March 1996 meeting, India presented a paper, a brief outline of which is as follows. The paper states that the five types of intellectual protection (IP) covered in TRIPS are relevant in this context: patents, plant variety protection, layout designs of integrated circuits and undisclosed information. Two types of technologies incorporating IP are distinguished: those that harm and that benefit the environment. The use of the first should be discouraged, the second encouraged, by the international community.

On patents, for technologies harmful to the environment, measures needed to discourage their global use may include exclusion from patentability (so that incentives are not given to generate such technologies) and ban of their use or commercial exploitation. The TRIPS agreement recognises this reasoning in Article 27.2 which allows exclusion from patentability "inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect ordre public or morality, including to protect human, animal or plant life or health or to avoid prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law."

For environmentally-beneficial technologies, to encourage their global use, and in cases where other measures for technology transfer are not possible, India proposes three points: (a) Members may have to exclude from patentability to allow free production and use of such technologies as are essential to safeguard or improve the environment. Such an exclusion is not incompatible with TRIPS and may have to be incorporated through a suitable amendment; (b) For currently patented technologies, Members may revoke patents already granted, if this is done in consonance with the Paris Convention and must be subject to judicial review; (c) To encourage the use of environmentally beneficial technology, Members should be allowed to reduce the term of patent protection from the present minimum of 20 years to say 10 years, "so as to allow free access to environmentally-beneficial technologies within a shorter period."

On plant variety protection, under TRIPS, IP protection can either be provided by patents or by an effective sui generis law. This and other provisions of Article 27.3 (b) are subject to review by 1 Jan. 1999. The India paper states: "As it now stands, Members are free to incorporate in their sui generis laws any measures for exclusion, revocation, use without the authorisation of the right holder, reduction in the term of protection and even for sharing of benefits with traditional communities, in the context of discouraging the production and use of plant varieties which are injurious to the environment and encouraging the production and use of those that safeguard or are beneficial to the environment, provided that these provisions are otherwise consistent with the TRIPS agreement." It urges the CTE to give this interpretation in its report to the Ministerial Conference. These are other related issues in the context of biotechnological inventions and biodiversity should be borne in mind during the review by 1999.

The paper also deals with layout designs of integrated circuits and protection of undisclosed information.

It suggests that amendments to the TRIPS agreement may be required in Section 5 (articles 27, 31, 32, 33), Section 6 (articles 36,37,38), Section 7 (art 39), and an understanding on plant variety protection (Art 27), dispute settlement (Art 64) and undisclosed information (Art 39).

8.4 Patenting of Life Forms, Community Rights and Environment

At the June 1995 meeting of the CTE, the issue of patenting of biological materials was also discussed in some detail. This issue has been highlighted by several NGOs.

In the crucial and relevant section, the TRIPS agreement (Article 27: 3b) states: "Members may also exclude from patentability plants and animals other than microorganisms, and

essentially biological processes for the production of plants and animals other than non-biological and microbiological processes. However, members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement."

This subparagraph is rich with implications for issues including the nature, evolution and ownership of knowledge in the use of biodiversity, the sharing of benefits derived from the use of biodiversity, the nature of "invention" in matters relating to nature and biological processes and products (life forms), the rights of local communities, the ecological, social and ethical impacts of modern biotechnology (in particular, genetic engineering).

The sub-paragraph can be open to different interpretations in its many parts. Some issues and interpretations are examined below.

(a) Protection of plant varieties

Article 27(3)(b) of TRIPs obliges Parties to provide for the protection of plant varieties. This they may do either by patents or an effective sui generis system or any combination of these. The only such system available now is that under UPOV which favour plant breeders. Each country is, of course, free to set up its own system. But the text's requirement that it be "effective" suggests that an external criterion will be applied by major industrial countries. This term, which appears in US regulations (e.g. section 301 of the Trade and Competitiveness Act of 1988) has been used to retaliate against countries whose IPR legislation is at variance with US standards.

A distinction is drawn between genetic material developed mainly in the North by the technologists and corporations and that which has been developed mainly in the South by local communities of farmers or indigenous populations. Essentially, there is a clash of definition of knowledge systems. TRIPs tends to recognise only the Western industrialised model of innovation and to ignore (or not recognise) the more informal, community-based system of innovation through which Southern farmers produce, select, improve and breed a diversity of crop and livestock varieties. This collective intellectual property of local communities is in danger of being denied recognition, and hence protection.

For traditional societies, biodiversity is common property, and knowledge related to it is in the intellectual commons. For biotechnology corporations, biodiversity becomes private property through their investments, and TRIPs are the means for such privatisation. Additionally, IPRs are only recognised when knowledge and innovation generates profits, not when it meets social needs. Article 27.1 makes clear that to qualify for patenting, an innovation must be capable of industrial application. TRIPs could lead to an extension of the domination of multinational corporations over production and distribution of products involving or derived from biological materials, including genetic material from plants, crops, animal and human life. At the same time, innovation in the public domain which is mostly for domestic, local and public use could rapidly be undermined and the related institutions dismantled. This will deepen the North-South rift with the ensuing unfair and unequal exchange.

Millions of farmers in the South could increasingly face a situation where they to buy patented seeds which originate in the South. This will discourage the continuation of seed diversity and create highpriced dependency by farmers. Similarly, consumers will have to pay exorbitant prices for pharmaceutical drugs developed from genetic material and often, from the knowledge of indigenous forest communities, of the South.

Some NGOs and also a few governments are now examining alternative interpretations of what could constitute a "sui generis" system of intellectual protection for plant varieties that is based on a recognition of the evolution of knowledge and innovation by local communities in the use of biodiversity.

(b) Patenting of Life

Parties may exclude from patentability plants and animals, but this exclusion may apply only to what are considered naturally-occurring plants and animals. Those considered to be technologically improved varieties may not be exempted. Microorganisms are not excluded from patentability. Again, microbiological processes are not exempted. The implication could be that plants and animals which contain genetically-engineered microorganisms are not exempted from patentability.

Biotechnology has opened great opportunities for the commercial exploitation of genetic resources in various fields. Though still largely unrealized, promises of biotechnology have prompted a race for patenting of life forms, including subcellular elements such as genes. The TRIPs agreement provides a basis for appropriation through patent rights of microorganisms and cells, while admitting the non-patentability of plants and animals (at least until the relevant provision is revised, four years after entry into force of the agreement).

In the US, the Supreme Court has created a precedent by holding that microorganisms modified minimally (by shuffling genes) are not naturally occurring and are patentable. This is the slippery slope which has led to the patenting (and ownership) of a wide variety of life forms, including human genes. (The US Commerce Department for instance applied to patent a cell line of the whole Guyami population of Panama.) The terminology of the TRIPs provision is strikingly similar to that of the US and is an attempt to globalise the US position. As TRIPs now stands, WTO parties will be required to enact national laws for the compulsory patenting of microorganisms and eventually all life. The implications of appropriation through patent rights of parts of nature are far reaching, not only in economic but also in ethical and socio-political terms.

(c) Biosafety

The biotechnology industry plans to release a wide range of genetically modified organisms (GMOs) into the environment, with unknown and potentially serious or even devastating health and environmental hazards.

Because they are alive, genetically engineered products are inherently more unpredictable than chemical products. They can reproduce, mutate and migrate. They cannot be recalled. There is

increasing scientific evidence of the serious damage that genetically engineered plants, crops, animals and fish, and food can do to the ecology and to biodiversity as well as human health. There is also evidence that experiments, projects and products containing GMOs are being transferred to the South, often without the knowledge or prior informed consent of governments or people of recipient countries.

In acknowledgment of the potential threats, the Biodiversity Convention in November 1995 agreed to begin negotiations on an international legally-binding biosafety protocol.

Amendments to TRIPS should be considered to take into account the need to discourage the spread of hazards, should scientific evidence increase about the need to protect health and the environment from these biohazards.

8.5 Eco-Labeling

Eco-labelling is another controversial issue. Each country has the right to institute domestic regulations on eco-labelling on products. The concern of some developing-country governments is that eco-labelling will be used for protectionist purposes, applied or encouraged by some countries selectively to products that are imported or that compete with their own products. Examples of these concerns are given below.

At a CTE meeting in October 1995, Malaysia (on behalf of the Asian group), speaking on labelling requirements (relating particularly to timber), said the Asian group was not against such requirements but they should be fair, equitable and implemented in a non-discriminatory way (ref: C. Raghavan, 1995). While labelling requirements to advance sustainability was appreciated, such schemes were promoted in consuming countries ostensibly in the name of sustainability but coloured by political and economic expediency. Labelling requirements should be based genuinely on the need to ensure sustainability of the world's forest and timber and hence labelling schemes should include both temperate and tropical forests. Timber also competed with other substitutes such as plastic, aluminium and steel; hence similar measures about sustainability must cover these products also. Any credible labelling scheme also requires a realistic implementation time-frame.

According to Egyptian WTO diplomat, M. Shahin (ref: 1996), developing countries are concerned about pressures exerted to reach some kind of multilateral recognition on the validity of setting ecolabel standards. The main risk attached would be the introduction of process and product methods (PPMs) in the WTO. According to Shahin: "Developing countries make clear we do not want any standardisation of ecolabelling or anything relating to PPMs being introduced through the backdoor in WTO, especially those which are not related to the end product." As environmental standards and PPMs are based on values that differ from one society to another, it would be difficult to internationalise PPMs and require all countries to follow the same production methods. "On the other hand we have nothing against dealing with environmental standards which are product related, such as disposal and handling, which have at any rate to be distinguished from non-product related standards. We favour disciplining ecolabelling schemes on the basis of equivalences and mutual recognition, where each country has to set its standards according to its own values as stipulated nby Agenda 21."

8.6 Exports of domestically prohibited products

There was a work programme in GATT dating back to 1982 (and revived in 1989) and a working group which dealt with the issue of trade in domestically prohibited goods. The aim was to provide at the minimum GATT notification and transparency to enable importing governments to act, and for decisions to be taken along with the Uruguay Round package. However, this issue appears to have been quietly buried along the way, because of the position of the US which wanted to exempt pharmaceuticals, pesticides and other chemicals and also automobile spare parts.

This issue has become one of central importance to environmental movements and policy making in the South, as the export of hazardous goods, substances, technologies and wastes to the South (usually without the South's knowledge) is a major mechanism by which environmental damage is taking place in the South. (This is dealt with in Part 3 of this paper).

In May 1996, Nigeria put forward a proposal to the CTE on domestically prohibited goods (DPGs). It would like to include products such as food additives, cosmetics and other consumer products. Doubts of some delegations that these do not directly relate to the environment reflect too narrow a reading of the CTE mandate. It proposes a notification scheme within the WTO which would "fill the gaps" left by international agreements and instruments (which have gaps in product coverage, and some of which are voluntary in nature).

The Nigerian proposal can be seen as a minimal position, in which countries exporting DPGs would merely have to place a notification through the WTO. The onus would be on other countries to look through the WTO/GATT notifications and choose, if it so desires, to restrict imports. The government of the exporting country cannot even be asked to stop its enterprises from exporting the DPGs.

Given the experience and record in the export of banned and hazardous products and wastes, the notification procedure, even if adopted, would be inadequate and should only be a first step. At the least, a system of "prior informed consent" should be established, in which the intended importing country should be informed adequately about the nature of the product, and should grant an approval, before the domestically-prohibited product is traded.

9. MULTILATERAL INVESTMENT AGREEMENT AND ENVIRONMENT

Perhaps the most important single issue facing the Singapore WTO Ministerial Conference is the treatment of the proposal by some Northern governments (particularly EC and Canada) to introduce a work programme for a multilateral investment agreement (MIA) in the WTO. Some developing countries have taken a strong position against this proposal and many more are wary about it.

The proposed MIA will undoubtedly have important implications for environment and sustainable development, and should be analysed also in that light.

From a reading of the EC proposal, the proposed MIA would oblige signatory governments to grant free access for foreign firms to enter and establish themselves with 100% equity in all sectors and activities except security. It would also grant "national treatment" to foreign investors, so that foreign companies and in some cases foreign nationals would be treated like locals. Moreover further "accompanying measures" (such as the right to full profit repatriation, changes to tax and company laws to remove existing favourable treatment to locals, etc) would be adopted to create favourable conditions to foreign investors.

The Third World Network has produced a critique of the proposed MIA (ref: Third World Network 1996, Martin Khor 1996) from a development perspective. Due to the present lack of capacity of local firms in developing countries, they will not be able to compete successfully, should foreign firms be allowed in without regulation or conditions and be given national treatment. Moreover, governments, being unable to regulate the entry and conditions of foreign investment, would be deprived of a vital instrument for macroeconomic management and development planning. Removing the ability of states to impose conditions such as foreign investment volume and quality, equity, financial flows and technology transfer, could also lead to balance of payments difficulties. National treatment for foreign investment would also deprive countries of support to and affirmative action for local firms and farms, thus making the development of domestic economic capacity very difficult or impossible.

For these and other reasons, the TWN is against the introduction of a MIA in the WTO. Discussions on the link between investment and trade can be conducted in an agency like UNCTAD, where there is a greater opportunity for the wider development perspective to be taken. The recent UNCTAD-IX Conference held in South Africa in April-May 1996 has given UNCTAD a clear mandate as a forum for discussing the trade-investment linkage and the implications of a MIA. The WTO, with its tense atmosphere of legally-binding rules and agreements, is an inappropriate venue for the exploration of such an issue.

The aim of the proposed MIA is to create the conditions for the rapid acceleration of investment liberalisation. This will have massive implications for many facets of the environment and sustainable development. In earlier parts of this paper, the role of trade and trade liberalisation has been examined in terms of environmental impacts, such as the transfer of products, production systems and consumption patterns, resulting in environmental degradation. The accelerated liberalisation of foreign investments, coupled with measures to erode or remove the right of states to regulate investments, can be expected to generate more mechanisms with adverse global ecological effects, as well as having serious effects on the possibilities to attain sustainable development. This is an issue that deserves to be explored urgently.

NOTE: Some parts of this paper were prepared for an earlier paper, "Operationalising sustainable development in trade."

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