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WORKING PAPER SERIES

Paper No. 5

Trade and Development Assessing the Impact of Trade Liberalisation on Sustainable Development

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June 2004

ISBN:

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**TRADE AND DEVELOPMENT : ASSESSING THE IMPACT
OF TRADE LIBERALISATION ON SUSTAINABLE
DEVELOPMENT**

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Forthcoming in *Journal of World Trade*, June, 2004

1. INTRODUCTION

Successive international meetings of the rich and poor countries – most recently at the 2002 Johannesburg World Summit on Sustainable Development - have confirmed a shared commitment to achieving the goal of sustainable development, and have subscribed to the need for policies that are more globally responsible and supportive of development.

Trade liberalisation and a strengthening of world trade rules are seen by many as key means of achieving sustained economic growth and reducing world poverty. The Charter of the World Trade Organisation (WTO) establishes sustainable development as the fundamental goal of the organisation, and the fifth Ministerial Meeting at Doha, in November 2001, adopted a comprehensive programme for trade liberalisation measures which were intended to lead to a genuine ‘development round’ of negotiations. But the failure of the most recent WTO meeting at Cancun in late 2003, largely due to conflict over the ‘Singapore issues’ and the obduracy of the US and EU regarding agricultural trade liberalisation, has raised new doubts about the willingness of the advanced economies to move beyond the rhetoric of their international proclamations.

The purpose of this paper is to describe a new methodology, sustainability impact assessment (SIA), for assessing the potential impact of trade policy reform on sustainable development. Sustainability Impact Assessment (SIA) differs from traditional policy assessment methods in a number of important ways. First, it adopts an integrated approach which considers the economic, social and environmental impact of policy. Second, it goes beyond the simple identification of potential impacts and promotes the assessment and adoption of accompanying measures which will enhance the positive impacts of the proposed reform while mitigating potential negative impacts. Third, it includes processes for consultation with, and involvement of, stakeholders in the assessment process. Finally, it is consistent with the international trend towards better governance and governance reform, which has focused attention on the principles of transparency and accountability in decision-making and has encouraged the use of evidence based approaches to policy assessment and decision-making. The remainder of the paper details the methodology, and reports on the results of applying the SIA approach to the Doha Development Agenda proposals for the liberalisation of international trade in goods and services. There are four further sections to the paper. The second section discusses the broader trade and development context within which WTO trade negotiations take place, and then describes the main components of the

Doha 'Development Agenda'. Section 3 provides a detailed description of the sustainability impact assessment methodology for assessing the potential impact of trade liberalisation on sustainable development. The fourth section provides the results of applying the SIA methodology to the main areas for WTO negotiations on the Doha Agenda. The final section summarises the results of the analysis, discusses the key challenges that remain for the further development of the SIA methodology, and highlights the lessons for trade negotiators and policymakers.

2. TRADE AND SUSTAINABLE DEVELOPMENT

The trade negotiations that are currently taking place between the member states of the World Trade Organisation (WTO) are at the centre of the process of economic globalisation, and form a focus for the international debate on trade and development. This debate spans a wide range of views. The further development of world trade is seen, on the one hand, as being an essential component of sustainable development (WTO, 2003), and on the other as being potentially damaging, particularly to the interests of developing countries (Khor 2003). Intermediate positions favour the strengthening of world trade rules, but argue that the potentially positive contribution they can make to sustainable development may not materialise, or may be negative, if the rules that are established are inappropriate or poorly implemented (Hoekman et al. 2002; WWF, 2002).

At the third WTO Ministerial Conference held in Seattle in 1999, the failure to reach agreement on a new round of multilateral trade negotiations occurred largely because developing country representatives considered that the proposals did not take sufficient account of their developmental needs. The preparations for the subsequent fourth WTO Ministerial Conference in Doha in 2001 took these concerns into account, and agreement was reached on further multilateral trade negotiations (although it is now clear that the deadline will not be met). In setting out the terms for these negotiations, the Doha Ministerial Declaration made a firm commitment to the objective of sustainable development, and placed considerable emphasis on responding to developing countries' needs. (WTO, 2001)

Any individual trade measure, such as improved market access for a particular type of good or service, can have a wide range of economic, social and environmental effects, differing from country to country. One of the main aims of sustainability impact assessment (SIA) is

to provide a better understanding of these effects, so that negotiators and policy makers can take them into account in their negotiations, and in the design of flanking policies to mitigate any adverse impacts or maximise beneficial ones (George and Kirkpatrick, 2004). A second aim is to evaluate the overall effect on sustainable development of the full set of proposed trade measures.

The most widely used definition of sustainable development comes from the report of the World Commission on Environment and Development, as development which:

'meets the needs of the present without compromising the ability of future generations to meet their own needs'. (WCED, 1987)

The needs referred to in the definition, and the ability to meet them, have economic, social and environmental components. While needs vary between countries and within them, a set of internationally agreed development goals has been identified in the UN General Assembly's Millennium Declaration and its plan of implementation, as reaffirmed at the Johannesburg 2002 World Summit on Sustainable Development. These agreements cover both present needs and key factors in the ability to meet future ones.

One of the principal Millennium Goals is the aim to halve, between 1990 and 2015, the proportion of people living in extreme poverty, with incomes less than one dollar a day. Progress during the 1990s was disappointing, leaving the bulk of the target still to be achieved. A secure rules-based world trading regime can make a direct contribution to meeting this need, by providing improved opportunities for international trade. It may also have indirect effects, through the impacts which changed trade rules may have on the development processes that are needed to transform countries' economies and social structures. The direction and magnitude of such effects will depend, however, on policy measures and regulatory frameworks in place in individual countries.

The trade measures covered by the Doha Ministerial Declaration fall into three groups: those with a pre-existing negotiation mandate; those introduced into the WTO negotiation agenda at the 1996 Ministerial conference in Singapore (the Singapore issues); and further issues subject to discussion under the Doha agenda. These are listed in Table 1. Negotiations are already under way for the measures with an existing negotiation mandate. For the Singapore issues, it was agreed in Doha that negotiations would take place after the Fifth Session of the Ministerial Conference in 2003, on the basis of a decision to be taken by explicit

consensus at that Session on modalities of negotiations. The other issues are currently subject to discussion only, but could be included in the negotiation mandate after the 2003 Ministerial Conference. With the failure to reach the required consensus at the Cancun Ministerial Conference, negotiations on the Singapore issues and other issues have not begun so far.

Table1. Trade measures in the Doha agenda

Existing negotiation mandate	<ol style="list-style-type: none"> 1. Agriculture 2. Market access for non-agricultural products 3. Services 4. Trade and environment 5. Dispute settlement 6. Trade Related Aspects of Intellectual Property Rights (TRIPS) 7. WTO Rules (anti-dumping and subsidies; regional trade agreements) 8. Implementation issues in developing countries
Singapore issues	<ol style="list-style-type: none"> 9. Trade and investment 10. Competition policy 11. Trade facilitation 12. Transparency of government procurement
Measures subject to discussion	<ol style="list-style-type: none"> 13. Other measures <ul style="list-style-type: none"> Electronic commerce Small economies Trade, debt and finance Technology transfer Technical cooperation and capacity building Least-developed countries Special and differential treatment

3. THE SUSTAINABILITY IMPACT ASSESSMENT METHODOLOGY

While the adoption of the Millenium Development Goals (MDGs) has led to an increasing recognition of the need for a more systemic analysis of the potential economic, social and environmental impacts of development policy reform proposals, progress in developing tools for policy appraisal which integrate the sustainable development targets of the MDGs, has so

far been limited (World Bank, 2003). Practice has largely failed in combining the economic, social and environmental ‘pillars’ of sustainable development into an integrated and holistic approach to development policy analysis. Instead, economic, environmental and social assessment methods typically have been formulated and applied in separation from each other.

Sustainability impact assessment (SIA) is a method of integrated policy appraisal which accords the same level of consideration to economic, social and environmental impacts and provides a means of assessing the potential impact of policy measures on sustainable development (Kirkpatrick and Lee, 2000; Wilkinson et al. 2002). Unlike the impact assessment studies of trade agreements that have been used by the governments of the United States and Canada, initially for the North American Free Trade Agreement (NAFTA), to provide information mainly on environmental effects in their own countries(DFAIT,2001,2002; USTR,1993), the SIA methodology adopts a broader approach, to evaluate impacts in all three sustainable development spheres (environmental, social, economic).

The main stages of the SIA methodology are: screening and scoping; detailed assessment of proposed measures; assessment of alternative mitigating and enhancing measures; and monitoring and post-evaluation proposals (Kirkpatrick and Lee, 2002; Kirkpatrick,2003).

Under screening the proposed trade reform measures are assessed to see whether any are sufficiently minor as to not need detailed assessment. Those remaining are scoped i.e. detailed terms of reference for the SIA of each measure are agreed. This involves simple causal chain analysis which links each proposed trade measure to its eventual significant impacts both positive and negative. When detailed assessments are carried out, needs, methods and data have to be reconciled with time, budget and other real-world constraints. A range of methods including economic modelling, statistical estimation, case studies and the use of expert opinion can be used to carry out the detailed assessment. At the fourth stage, the mitigation and enhancing measures need to be judged on the basis of their impact on sustainable development, their cost effectiveness and their feasibility. Finally, monitoring and evaluation serves to check the predictions against the ensuing reality. This can be considered as a further mitigating and enhancing measure and should be seen as a part of the SIA methodology.

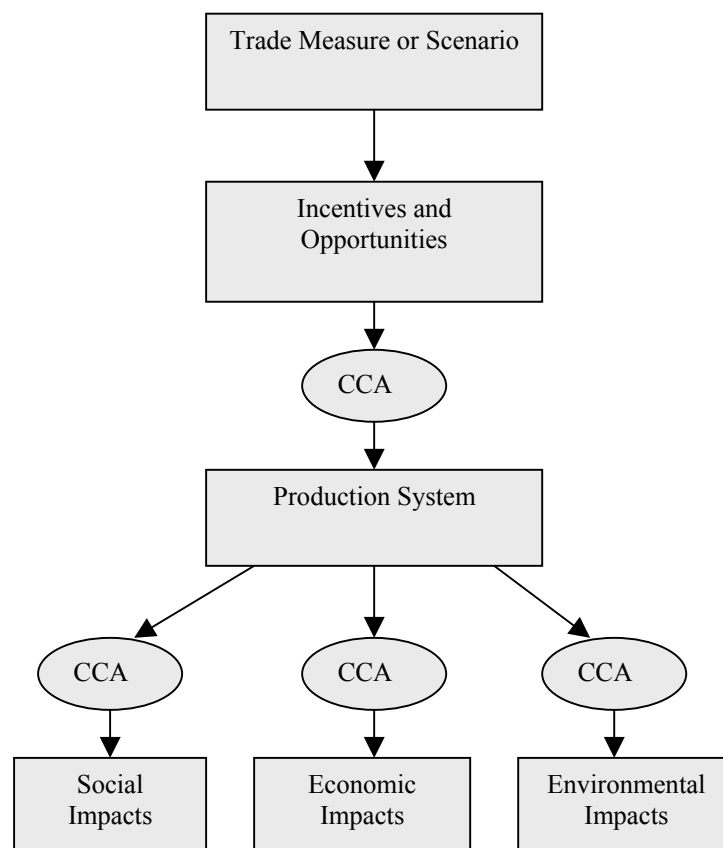
A key component of the methodology is consultation and stakeholder participation in the assessment process, to achieve a high degree of transparency. Consultation serves three main purposes: to identify issues of concern, such that they are included in the scope of the study and subjected to informed debate; to make use of specialist expertise in the prediction and evaluation of sustainability impacts; and to expose the quality of the assessment to open scrutiny.

The generic causal linkages which have to be analysed are described as in Figure 1, which shows the sequence of significant cause-effect relationships, starting with the negotiated change in trade policy, or scenario. For example, a change in tariff levels will directly alter the pattern of prices facing producers and consumers, or a change in competition policy will alter the market conditions. The new structure of incentives and market opportunities will induce a change in the economic behaviour of producers, consumers and intermediaries. Changes in behaviour will affect the production system, inducing changes in the scale, composition, and technology of production.

The next stage in the causal chain analysis is to assess the significance of the linkages from the economic effects on production relationships, to sustainability impacts. A change in economic production may give rise to significant changes in employment, investment and/or income. Environmental impacts may arise from the effect of changes in the production system on environmental quality, natural resource stocks and/or biodiversity. Changes in the production system may also be linked to significant social impacts, where, for example, production shifts affect the level and distribution of household income, and may also impact on the gender balance of paid and unpaid labour services. Changes in prices of essential goods and services may also have a significant impact on livelihood and poverty levels.

Figure 1 does not convey the full complexity of the linkages between each stage in the causal chain. The changes represented in the figure do not occur instantaneously or simultaneously and the speed of adjustment will vary in different parts and at different stages in the causal chains. There may also be feedback processes during the intermediate stages of the cause-effect relationships, before the final impacts on sustainable development occur.

Figure 1. Causal Chain Analysis of the impact of a trade measure on sustainable development



The SIA studies handle the causal chain analysis by making a distinction between short-term adjustment effects, pseudo-steady-state effects, and longer-term process effects. The short-term effects are the immediate economic, social and environmental reactions to a changed trade measure, while the pseudo-steady-state effects can be thought of as the ‘equilibrium’ outcomes. Longer term process effects are those which may result from the influence of the trade measure on a country’s economic growth rate, resource consumption patterns and other sustainable development processes. It is often important to identify the adjustment path between the short -term and ‘equilibrium’ outcomes, as the significance of the impacts can change during the adjustment period.

For tariff changes and some of the other measures under negotiation, widespread use has been made of computable general equilibrium (CGE) techniques to model the first stages of the causal chain shown in Figure 1, from a change in trade measure to changes in the production system, and on to project the equilibrium economic impacts in quantitative terms. The results of such studies are made use of as part of the detailed impact assessment. In addition, the assessment of economic impacts needs to take account of the following factors. First, the extent to which the model fully represents the causal chains associated with the scenario must be considered, together with uncertainties in modelling assumptions and data. In some cases, a separate analysis of causal chains may be needed to provide qualitative information on effects which may not have been fully or appropriately modelled.

Second, the results of CGE studies represent an ‘equilibrium’ economic impact once the economy has adjusted to the change in a trade measure. Other economic impacts will occur during the period of adjustment. These are assessed by causal chain analysis, making use of CGE results for the equilibrium impact, where available, for information on the type and magnitude of the adjustment that has to be made.

Third, as well as changing the equilibrium state of the production system, the change in a trade measure may influence development processes, which in turn affect the rate of growth of different sectors of the economy. The economic impacts of these process effects are again assessed by CCA.

Social and environmental impacts may then be assessed as in Figure 1, using causal chain analysis to evaluate the relationships between economic, social and environmental effects. For those trade measures which cannot be adequately modelled, the CCA is carried out for the entire set of linkages shown in Figure 1.

Where quantitative information is available, either from modelling studies or case study experience, impact significance may be evaluated directly in relation to the appropriate base situation, taking account of the significance factors discussed below. Otherwise, a more qualitative judgement is made of the likely significance of the impact.

The SIA methodology is designed to show the level of significance of the predicted impacts. Three levels of significance are defined:

- *non-significant impact* – compared with the base situation
- *lesser significant impact* – marginally significant to the negotiation decision, and if negative, a potential candidate for mitigation
- *greater significant impact* – significant to the negotiation decision, and if negative, merits serious consideration for mitigation.

In assessing the level of significance of impacts, the following factors need to be taken into account: the extent of existing economic, social and environmental stress in affected areas; the direction of changes to base-line conditions; the nature, order of magnitude, geographic extent, duration and reversibility of changes; the regulatory and institutional capacity to implement mitigation and enhancement measures. Furthermore, in interpreting these definitions, judgements have to be made on the importance of the predicted change in relation to the base situation, i.e. the prevailing circumstances.

The significance criteria are applied to a SIA methodology uses a set of core indicators. For the Doha Development Agenda study, a set of nine core indicators plus two process indicators were used. These are:

Economic:	real income; fixed capital formation; employment
Social:	poverty; health and education; equity
Environmental:	biodiversity; environmental quality; natural resource stocks
Process:	sustainable development principles; sustainable development strategies

Many of the trade measures under negotiation interact with each other, such that impacts due to one will be dependent on actions taken under another. Interactions of this nature are identified in the analysis of each measure. In addition to these interactions between measures, they all combine to contribute to a number of cross-cutting effects, such as an increase or decrease in production volumes or international transport. These cross-cutting issues are examined also in relation to the impacts on sustainable development of the Doha agenda as a whole.

The final requirement of the SIA methodology is to specify the policy change or options that are to be assessed. This will involve at least two scenarios. The base scenario will specify

the expected outcome if there is no change in the policy. This will not necessarily be a 'no change' scenario, since we can expect other changes to occur during the assessment period, but it does provide the base against which incremental change will be assessed. The other scenarios will specify alternative possible policy options. By assessing a number of alternative scenarios it is possible to give policymakers information on the sensitivity of the impact on sustainable development of alternative policy choices.

Much of the analysis is based on reviews of the wide range of theoretical and empirical studies of various impacts of international trade that have already been carried out, and their interpretation in relation to the Doha agenda. This is done within a systematic framework which examines the justification of these studies' findings, in order to draw balanced conclusions. Consultation and stakeholder participation play a major role throughout the process, as discussed above.

4. SIA OF THE DOHA DEVELOPMENT AGREEMENT

Since 1999, the European Commission has made a commitment to undertake a sustainability impact assessment of the EU's main bilateral and multilateral trade negotiations. This involves an evaluation of the impacts in all three spheres of sustainable development (economic, social and environmental), within Europe itself, and in all other countries involved in the trade agreement. A major part of the European SIA trade programme has been the assessment of the WTO negotiations. This work began in 1999, immediately before the aborted Seattle Ministerial Meeting, and has continued since then with assessments of the Doha Development Agenda as a whole, and of individual areas for negotiation within the overall Agenda. These studies aim to provide information which will be of use to all countries' negotiators, and will also serve the wider international process of ensuring that the negotiated agreements are supportive of, not detrimental to, globally sustainable development. The current authors have been involved in advising the Commission on the development of the SIA methodology being used in the SIA studies of trade agreements, and as members of the consortium responsible for undertaking the SIA- WTO work programme have also been involved in applying the methodology (George and Kirkpatrick, 2003a,b; Kirkpatrick and George, 2003).

Because the purpose of SIA studies is to provide information for policymakers and stakeholders during the policy formulation stage, the SIA needs to give an indication of the likely impacts of the options available. The study is based on two scenarios:

- a '*base*' *scenario* representing the starting point from which the negotiations are taking place, which assumes full implementation of existing agreements; and
- a '*further liberalisation*' *scenario* which represents the strongest probable implementation of the negotiations that were agreed to at the Ministerial Conference in Doha.

The results that are assessed for the second scenario, in comparison with the base situation, represent an outer bound of the likely impacts. For measures such as tariff changes, the impacts of any other potential outcome to the negotiations may be estimated by interpolation or extrapolation in either direction from the results. Policymakers and stakeholders therefore, can, therefore, estimate the likely impacts of other potential agreements from the results that are given.

Other negotiating proposals may call for discrete policy changes and for this type of measure, interpolation or extrapolation from the reference points of two scenarios is not practicable. In such cases, the analysis therefore takes a qualitative view of the types of issue being negotiated, and considers discrete options individually where appropriate.

The full SIA study examines impacts in high income countries (EU and non-EU) and developing countries. In this paper we consider the potential impacts of the Doha agenda negotiations only on developing countries. There is clearly considerable heterogeneity within this country grouping which may be reflected in differences in the significance of the potential sustainability impacts the alternative Agenda scenarios. The assessment focuses, therefore, on country characteristics which influence potential impacts, such as whether they are net importers or exporters of a product or service, or the level of industrial development.

The following sections summarise the results of applying the impact assessment methodology to three major areas of the existing negotiation mandate of the Doha Development Agenda, namely agriculture, manufactures and services. Fuller details are given in George and Kirkpatrick (2003), along with references to the sources used. Each area for negotiation is discussed under three headings: negotiation issues and scenarios; likely sustainability impacts; mitigation and enhancement measures.

Agriculture

Negotiation issues and scenarios

The Doha Ministerial Declaration commits WTO members to comprehensive negotiations covering: substantial further improvements in market access beyond those committed under GATT; reductions in all forms of export subsidies with a view to phasing them out; substantial reductions in trade-distorting domestic support; special and differential treatment for developing countries, to effectively take account of their development needs, with particular mention of food security and rural development; non-trade concerns (such as environmental protection, animal welfare, food security and rural development), as provided for in the Agreement on Agriculture.

The *base scenario* assumes that no new agreement on agriculture is reached, but that the provisions of the Uruguay Round relating to agriculture are fully implemented. These include the conversion of quotas to tariffs, tariff reductions, reduction of export subsidies and limits on domestic support, as defined in the existing agreement.

The *further liberalisation scenario* assumes: further reductions in tariffs, export subsidies and domestic support, by percentages similar to those agreed in the Uruguay Round; retention of the blue and green boxes, with some additional support for non-trade issues; strengthened provisions for special and differential treatment for developing countries.

Impacts in developing countries

The principal driving effects for impacts in developing countries are a rise in world market prices due to reductions in agricultural support, particularly in the EU and the US, and increased market access for exports, to other developing countries' markets as well as developed ones. These changes are expected to have the following effects.

- An overall economic welfare benefit in most countries, (but with potential losses in the Middle East and North Africa).
- A rise in consumer prices, which is felt particularly in least developed countries and net food importing developing countries. Higher prices may also have an adverse effect on low income non-farming communities in other developing countries, notably on the urban poor.

- Higher world prices will discourage agricultural imports and encourage exports. This will have beneficial effects on agricultural employment in commercial agricultural areas, and hence on incomes and associated social factors.
- Adverse effects on food security. With greater agricultural trade, any future increase in world prices for basic foods will have an adverse effect on supply in developing countries, particularly the least developed, where the cost of food is a large proportion of household income. The net effect of liberalisation may therefore be increased susceptibility to food security crises.
- The opportunities created by trade liberalisation are expected to be tapped primarily by commercial agriculture. This may result in an overall fall in rural employment, with a net increase in rural poverty, and migration to the cities in search of alternative livelihoods.
- Changes in production patterns may also have significant gender impacts. In some areas women are mainly involved in traditional food production, while new jobs for commercial farm workers go mainly to men. Other areas such as floriculture may employ large numbers of women, but in conditions that may be less healthy than more traditional agricultural occupations.
- Potential environmental effects include:
 - Reduced pressure for conversion to agriculture of natural or semi-natural habitat, with beneficial effects on deforestation and degradation of marginal land;
 - Increased commercialisation may lead to higher intensity inputs, and higher levels of agricultural pollution;
 - An increase in commercial livestock production for export markets may cause some nutrient overloading from animal wastes;
 - Increased processing in developing countries may have significant impacts on air and water pollution;
 - Complex effects, both positive and negative, may result from increased adoption of transgenic crops.
 - Increased international trade in foodstuffs can be expected to increase the environmental impacts of transport.

Mitigation and Enhancement Measures

Actions to mitigate potential adverse impacts which may be taken at the national level include:

- strengthening environmental and health regulations and market-based environmental mechanisms;
- promotion of appropriate agricultural technologies and management techniques associated with water use, nutrient control, fertilisers, pesticides and herbicides;
- education and training policies to assist the take-up of new employment opportunities.

Potential mitigation measures at the international level may include:

- technical assistance and capacity building in support of these national actions;
- provision of food aid and other support to LDCs and NFIDCs, as is being discussed as one of the implementation issues related to the Marrakesh Decision of 1994;
- strengthened international financing and support to protect against food security crises.

Summary of sustainability impacts

The potential impacts of the further liberalisation scenario discussed above are summarised in Table 2.

Table 2. Agriculture - potential impacts of further liberalisation scenario: Developing Countries

Developing countries				
<u>Economic</u>				
income	most Middle East, North Africa	higher exports terms of trade		△ ▽
employment	all	adjustment	domestic policy	△▽
<u>Social</u>				
poverty	all	economic growth	development strategy	△

poverty	LDCs, net food importers and urban poor	higher consumer prices	implementation of Marrakesh decision	▽
	all	traditional to commercial agriculture	development strategy and policy	▽
	all	increased competitiveness	existing extent of commercial agriculture	△
equity, gender	all	traditional to commercial	development strategy and policy	▽
food security	all	import dependence	international financing and support mechanisms	▽
health	all	increased use of chemicals	regulation, consumer pressure	▽
<u>Environmental</u>				
agricultural pollution	all	commercialisation	regulation, consumer pressure	▽
industrial pollution	all	increased processing	regulation	▽
deforestation, degradation of marginal land	all	increased yield	demographic effects	?
water consumption	all	trend to less water intensive crops, removal of subsidies	competitiveness of different crops	△
salination	all	more efficient water use	irrigation techniques	△
nutrient runoff	all	increased livestock production, commercialisation	management techniques	△▽
<u>Process</u>				
development strategy	all	commercialisation of agriculture	pace of liberalisation, industrialisation	?

Symbols used to show impact significance

- blank impact has been evaluated as non-significant compared with the base situation
- △ positive lesser significant impact
- ▽ negative lesser significant impact
- ▲ positive greater significant impact

- ▼ negative greater significant impact
- △▽ positive and negative impacts likely to be experienced according to context (may be lesser or greater as above)
- ? effects are uncertain

Market Access for Non-Agricultural Products

Negotiation issues and scenarios

At the Fourth Session of the WTO Ministerial Conference in Doha, WTO members agreed to negotiations which would aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries.

Key issues in the negotiations relate to which tariffs are to be reduced, the treatment of relatively high tariffs, and whether countries reduce proportionally and in stages. Tariff peaks (*ad valorem* duties above 15%) are often concentrated in products of export interest to developing countries. Tariff escalation is another issue expected to feature prominently in the negotiations (where importing countries apply progressively higher levels of protective tariffs according to the level of processing).

The treatment of non-tariff barriers (NTBs) in the market access negotiations overlaps with those for other measures under various WTO agreements.

The *base scenario* represents the situation that will prevail when existing commitments have been fully implemented, using 2005 as the time horizon date.

The *further liberalisation scenario* assumes the most probable extent of liberalisation of market access that can be achieved during the WTO negotiations, varying between sub-sectors; a target of full liberalisation (zero tariffs) for non-sensitive sectors such as pharmaceuticals; less complete liberalisation for more sensitive sectors such as textiles and clothing; commitments are made by 2005, and implemented by 2010 (later for developing countries).

Impacts on Developing Countries

Impacts differ significantly between countries at different stages of development. In least developed countries, manufacturing exports are limited, but where domestic capacity exists, it may be adversely affected by increased competition from imports. In newly industrialised countries, where a competitive manufacturing base has already been established, liberalisation is likely to increase export opportunities. The following economic, social and environmental effects are anticipated.

- A beneficial economic effect can be expected from imports of more competitively priced products, set against a loss of tariff revenues, and adverse short-run economic and social effects from loss of employment.
- Exporting developing countries achieve both a short-run and a long-run economic gain. Associated with this, employment in manufacturing rises, absorbing job losses in other sectors (primarily agriculture). In those countries producing high value-added products (e.g. in the automotive sector, electronics, and certain parts of textiles and clothing), higher wages translate into a social gain. In those producing low value added products, such as textiles and clothing with high labour content and low wages, the social gain of manufacturing employment will not necessarily offset the social loss from falling livelihood opportunities in traditional agriculture. The overall social effect will depend strongly on interactions between the two sectors.
- Social effects may include impacts on gender and child welfare, related to changes in government revenue and expenditure, and the distribution of employment.
- The environmental effects of increased production may be negative in those developing countries with weak environmental regulation, which generally include the least developed ones.
- Some of the instruments that have been used in the past to promote particular industries may be restricted by WTO rules. The further liberalisation scenario assumes that provisions such as those for Special and Differential Treatment will provide some continued scope for the use of such measures, particularly in least developed countries. Overall however, the scenario is expected to have a constraining effect on the use of these instruments.

Mitigation and Enhancement Measures

National development strategies play a role in the creation of effective WTO compatible approaches to promoting industrial development. Potential national and international

mitigation and enhancement measures for this and other factors which affect impact significance include:

- strengthened strategic policy mechanisms for industrial development;
- the introduction of appropriate competition law and policy, and market-strengthening regulation policy;
- education and training policies targeted at potential growth areas;
- strengthening gender-related and child welfare policy;
- strengthening environmental regulations and market-based environmental mechanisms;
- international technical assistance and capacity building in support of these national actions.

Summary of sustainability impacts

The potential impacts of the further liberalisation scenario discussed above are summarised in Table 3.

Table 3. Market Access for Non-Agricultural Products - potential impacts of further liberalisation scenario: Developing Countries

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
<u>Economic</u> income	Asian countries Latin America sub-Saharan Africa and small island states			▲ △ ▽
employment	developing some developing	loss of tariff revenues short term adjustment, e.g. textiles and clothing	competitiveness, domestic policy	▽ ▽

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
<u>Social</u> equity equity, poverty, gender, child welfare	some developing developing	short term employment short and long term employment	domestic policy domestic policy, labour value added	▽ ?
<u>Environmental</u> pollution	developing	increased production	effectiveness of regulation	▽
<u>Process</u> development strategy	East Asia other developing	accelerated industrialisation limits on development strategy	 flanking measures on development policy	 △ ▽

Symbols used to show impact significance

- blank impact has been evaluated as non-significant compared with the base situation
- △ positive lesser significant impact
- ▽ negative lesser significant impact
- ▲ positive greater significant impact
- ▼ negative greater significant impact
- △▽ positive and negative impacts likely to be experienced according to context (may be lesser or greater as above)
- ? effects are uncertain

Services

Negotiation issues and scenarios

A new round of GATS negotiations was launched in February 2000, and ongoing negotiations have been incorporated into the Doha agenda. Negotiations are mandated on most-favoured-nation exemptions, with a view to reducing their number, and on domestic regulation, qualification requirements and procedures, technical standards and licensing procedures. Negotiations are also mandated on the GATS rules which cover emergency safeguards, government procurement and subsidies. A provisional set of disciplines has

already been agreed for accountancy rules, and will come into force at the end of the negotiations. For negotiations on national schedules the Doha Ministerial Declaration set dates for the submission of requests (30 June 2002) and offers (March 2003). The deadline for completion of negotiations is 1 January 2005, when agreed new GATS commitments will form part of the single undertaking.

The *base scenario* assumes that no new commitments are made, but that the provisions of existing commitments are fully met.

The *further liberalisation scenario* represents the strongest probable implementation of the negotiations agreed to at the 4th Ministerial Conference in Doha:

- restrictions are presumed to remain primarily for difficult areas such as air transport and movement of natural persons;
- with these exceptions it is assumed that a majority of countries bind according to a notional schedule across the four modes of
 - Mode 1 (cross-border trade) – minimal restrictions other than for consumer protection
 - Mode 2 (consumption abroad) - no restrictions
 - Mode 3 (commercial presence) – removal of the market access restrictions listed in Article XVI of GATS and of all scheduled restrictions on national treatment (Article XVII)
 - Mode 4 (presence of natural persons) – further commitments on temporary movement of intra-corporate transferees and contractual service suppliers.

Impacts on Developing Countries

Business services (including professional and computer)

Reduced trade barriers for computer-related services are expected to have a significant beneficial effect for purchasers of more cost-effective services, and for suppliers in developed and some developing countries (such as India). For professional services, the scenario suggests an economic benefit to developed countries and a possible decrease of professional employment in developing ones, depending on the extent to which purchaser preferences for developed country qualifications offset the lower wage rates of local professionals. Impacts for other business services are not expected to be significant

Communication services

Communications in general, and telecommunications in particular, are an increasingly important component of business competitiveness in developed countries, and in the formal sectors of the economy in developing countries. The potentially positive economic and developmental benefit may be highly significant, but will depend on countries' ability to introduce appropriate regulation.

Construction and related engineering services

Export opportunities are expected to increase for developed countries and those developing ones which have established an internationally competitive construction sector, such as China. In other developing countries a decrease in professional employment may occur, along with a benefit from the transfer of skills and technology. Greater involvement of overseas companies may in some cases reduce potentially adverse environmental impacts. In general, many of the potentially significant economic, social and environmental impacts associated with the sector are related to the expansion of construction activity, rather than trade liberalisation as such.

Distribution services

An economic gain is expected in exporting countries from the return on investment, and in importing countries from increased economic efficiency. Efficiency gains lead to lower consumer prices, particularly for higher income urban communities. The number of small traders is expected to decline, with a smaller number of jobs becoming available in new outlets, giving a net adverse effect on employment and associated social factors. Goods are expected to be sourced from a wider area, including internationally, with associated environmental effects from the additional transport. Improved effectiveness is expected for those distribution services which supply modern industrial and commercial equipment to other sectors of the economy, with an enhancing effect on developing countries' growth rates.

Educational services

The further liberalisation scenario is not expected to have major impacts.

Environmental services

For water and wastewater, economic benefits are expected in developed countries from overseas investments, and in developing countries through increased efficiency due to

competition. Increased efficiency is expected to lead to improved overall availability of water, although regulatory and subsidy frameworks are critical to maintaining access for poorer communities. There may be a short term loss of jobs in both the formal and informal sectors. Some environmental benefits are expected, while others are uncertain, depending on regulation and the quality of the service. Developed countries and some developing countries also benefit economically from increased export opportunities in solid waste management. In developing countries an environmental benefit is expected from better management. Health benefits are associated with environmental ones. There may be some loss of livelihood opportunities for waste pickers. For services associated with air, water and land quality, noise abatement, and protection of biodiversity and landscape, the effects are expected to be small.

Energy services

Greater services trade flows are expected from developed countries to developing ones, with anticipated economic benefits to both. Increased efficiency is expected to improve availability, particularly for electricity, but sophisticated regulatory and subsidy frameworks are needed to prevent the formation of private monopolies, and to maintain access for poorer communities. There may be some loss of local employment, but this may be more than offset by a high degree of skill transfer. This may translate into the creation of competitive domestic energy services, depending on national strategies for social and economic infrastructure.

Financial services

Improved financial services of different types can contribute to the growth of a wide range of activities, and hence to overall economic growth. Liberalisation can enhance the efficiency of the domestic financial sector, strengthen its stability, and increase access to lending for SMEs, with strong potential for direct social benefits for some types of service (e.g. microfinance). In some cases however, where foreign-owned banks are inadequately regulated, they may be less effective than domestic ones in lending to SMEs, addressing gaps in the credit system for disadvantaged regions, and in responding to macroeconomic and balance of payments management needs. This may have potentially adverse effects on both growth and stability. Strong regulation and a controlled pace of liberalisation are key factors in avoiding adverse effects and achieving intended benefits, and should be considered as potential M&E measures.

Health-related and social services

Developed countries are expected to gain economically, and many developing ones are expected to benefit from downward pressure on health service costs (although poorer countries are less well placed to benefit). Improved health service management can be expected to lead to better controlled medical wastes, with environmental as well as health benefits. There is also potential for developing countries to become major exporters, either by attracting foreign patients or by temporarily sending health personnel abroad. To reap such benefits, and at the same time improve their own health services, developing countries may need to make strategic investments in their competitive advantage of low cost professional skills.

Tourism and travel-related services

Most of the potential impacts associated with the sector derive from development of a tourist industry, rather than from trade liberalisation as such. Further liberalisation may accelerate the growth of the industry, although the effect is expected to be small. An economic gain is expected in countries with strong international tourism companies. In developing countries a benefit is expected from increased FDI and foreign exchange earnings, although it will be offset by the repatriation of profits to investing countries. The widening of the skill base from foreign expertise is expected to be beneficial, both in the short term and through its long term influence on development processes. A small beneficial environmental effect is expected from faster spread of improved management practices.

Recreational, cultural and sporting services

No major effects of the further liberalisation scenario are anticipated for this sub-sector.

Transport services

For air transport services the further liberalisation scenario presumes that little progress will be made, and that impacts will be minimal. For maritime transport services, including shipping, ancillary and port services, a degree of progress in liberalisation has already been made. Nonetheless the scenario is expected to result in a further reduction of shipping costs, with an overall benefit to most countries, including greater competitiveness in international trade, with consequent potential for accelerated development. Small adverse social effects may occur in the short term, through low skilled jobs being replaced by fewer high skill ones. A small positive impact on the marine environment may occur, through improvements in service quality.

Mitigation and Enhancement Measures

For many services, the magnitude and significance of potential impacts depend strongly on the policy and regulatory frameworks in place. There are two main factors:

- the policy and regulatory frameworks needed to contain or avoid adverse social or environmental impacts
- the regulatory frameworks necessary to achieve the intended benefit

The frameworks in place in many developing countries may be inadequate. A further concern relates to re-negotiation penalties which may apply to countries which identify a need for stronger regulations after they have entered into market access commitments. For both of these factors, controlling the pace of liberalisation through appropriate phasing or sequencing should be considered.

Summary of sustainability impacts

The potential impacts of the further liberalisation scenario discussed above are summarised in Table 4.

Table 4: Potential Impacts of Services Liberalisation: Developing Countries

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
Business services (professional)				
<u>Economic</u>				
employment	developing		purchaser preferences	▽
<u>Social</u>				
<u>Environmental</u>				
<u>Process</u>				
Communication services				
<u>Economic</u>				

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
income	developed, NIC developing	market access economic efficiency	effective regulation	▲ △
<u>Social</u>				
<u>Environmental</u>				
<u>Process</u> SD strategy	developing	higher growth	effective regulation	▲
Construction services				
<u>Economic</u> income employment	developing	market access		△ ▽
<u>Social</u>				
<u>Environmental</u> general	developing	better management	corporate standards	△
<u>Process</u> SD strategy	developing	skill transfer	commercial factors	△
Distribution services				
<u>Economic</u> income employment	developing developing	market access economic efficiency and consumer prices efficiency		△ △ ▽
<u>Social</u> equity poverty	developing developing	loss of employment, closure of SMEs employment		▽ ▽
<u>Environmental</u> pollution	global	transport		▽
<u>Process</u>				
Environmental services				
<u>Economic</u> income	developing	efficiency		△

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
employment	developing developing	cost of facilities short term job loss		▽ ▽
<u>Social</u> equity poverty	developing developing	access to water loss of livelihoods, waste pickers	regulation alternative employment, social policy	?▽ ▽
<u>Environmental</u> water resource water quality	developing developing	efficiency service quality	service quality	△ ?△
<u>Process</u> polluter pays	developing	user charges		△
Energy services				
<u>Economic</u> income professional employment	 developing developing	 efficiency job loss	 security of supply	 △ △ ▽
<u>Social</u> equity	developing	access to electricity	regulation	?▽
<u>Environmental</u> pollution	developing	improved technology		△
<u>Process</u> SD strategy	developing	skill transfer	social and economic infrastructure	△
Financial services				
<u>Economic</u> income	NIC developing	market access economic efficiency	effective regulation	▲ △
<u>Social</u>				
<u>Environmental</u>				
<u>Process</u>				

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
SD strategy	developing	higher growth	effective regulation	△
Health services				
<u>Economic</u> income	developing, less benefit to LDCs	market access for qualified staff	government policy	?
<u>Social</u> health	developing	better service for non-poor		△
	developing, less benefit to LDCs	loss of or investment in trained staff	government policy	?
<u>Environmental</u> medical waste	developing	better management		△
<u>Process</u>				
Tourism services				
<u>Economic</u> income	developing	foreign exchange, repatriation of profits		?△
<u>Social</u>			effects due to growth of industry rather than liberalisation	
<u>Environmental</u> pollution, waste	developing	better management		△
<u>Process</u> SD strategy	developing	skill transfer		△
Transport services (maritime)				
<u>Economic</u> income employment	all	cheaper shipping costs		△
	developing	short term loss of jobs		▽
<u>Social</u>				

Impact	Type of country affected	Causal factors	Factors affecting significance	Potential significance
poverty	developing	employment, short term		▽
<u>Environmental</u> marine pollution	developing	better management		△
<u>Process</u> SD strategy	developing	export competitiveness		△

Symbols used to show impact significance

blank	impact has been evaluated as non-significant compared with the base situation
△	positive lesser significant impact
▽	negative lesser significant impact
▲	positive greater significant impact
▼	negative greater significant impact
△▽	positive and negative impacts likely to be experienced according to context (may be lesser or greater as above)
?	effects are uncertain

This section of the paper has provided an overview screening and scoping SIA of the main negotiation areas of the Doha Agenda , which is intended to identify those aspects which would benefit from a more detailed SIA study. For these more focused studies it would be necessary to allow for a detailed examination of the potential impacts, which would be recorded using the set of social, economic and environmental indicators, with the degree of significance shown using a scaling or ranking metric. The detailed SIAs should also give a broad indication of the likely duration of adjustment impacts, and of any major variations for particular impacts. In particular, attention should be paid to the possibility that social or environmental factors may take longer to adjust than the economic effects which cause them.

The mitigation and enhancement assessment in the SIAs of individual measures would also need to be more detailed than in the overall assessment. In Box 1 further guidance is given, for use in sectoral SIAs, on the selection of the types of M&E for particular types of impact, and for assessing the likely effectiveness of proposed M&E measures.

Box 1. Applicability of different types of M&E measure

Measures within a WTO agreement

These are M&E measures which are closely trade-related and which might be built into a WTO agreement itself. Typically, measures of this nature will be appropriate for those types of assistance to developing countries that are defined within existing WTO agreements. This includes provisions for special and differential treatment, particular support for LDCs and small economies, technical cooperation and capacity building, and specific WTO decisions such as the Marrakesh Decision on LDCs and net food importing developing countries (NFIDCs). The evaluation of potential M&E measures in this category may consist of reviewing existing support, assessing its likely effectiveness, considering specific alternatives for how it may be strengthened, and estimating the likely effectiveness of the additional support.

This type of measure would be implemented through closely related side or parallel agreements between WTO member countries, or in regional agreements which may ‘nest’ within international agreements. The most common types of agreement in this category are Regional Trade Agreements (RTAs). M&E in this category may be appropriate when the SIA identifies a common need across a number of developing countries in one or more regions covered by RTAs. The assessment would need to include a review of existing support within the RTA, and its relevance to the issues identified in the SIA.

Joint initiatives related to other international agreements

This category refers to collaborative agreements and other joint initiatives between international organisations to clarify the relationship and strengthen the consistency between international trade agreements and other types of international agreements. M&E in this category will be particularly appropriate for impacts of a cross-cutting nature, as discussed above.

Technical cooperation and capacity building

These measures consist of international and regional initiatives to promote technical cooperation and capacity building in developing countries. In part, this form of M&E is a sub-set of the measures discussed above, implemented within a WTO agreement. There may however be many other cases where this category is appropriate, when relevant WTO agreements do not contain appropriate provisions. In some circumstances the introduction of such provisions might be considered, but more commonly the assistance would be provided through separate multilateral or bilateral development assistance programmes. In the context of this SIA programme, the EU’s own development assistance may be a particularly suitable vehicle, or those of its Member States. Possible needs for wider international cooperation should also be considered, for example through joint initiatives between the EC and the World Bank.

Measures by national governments

This category of M&E measures are those which may be implemented by developing countries’ governments themselves, to remedy market imperfections, regulatory failures or social inequalities which are harmful to sustainable development, and whose removal could reduce potentially adverse impacts or enhance the contribution which the trade measure may make to sustainable development. For many types of impact, this may be the most important form of mitigation or enhancement. Many of the entries in column 4 of the impact summary tables refer to the effectiveness of national regulation or policy frameworks as a key factor influencing impact significance. In these cases the detailed SIA would clarify the issues involved, but it would not normally be appropriate to evaluate specific alternatives, which is the prerogative of national governments. The SIA would however consider the extent to which technical cooperation or capacity building might assist governments in addressing the issue.

5. SUMMARY AND CONCLUSIONS

“Trade policy, the true engine of economic development, has to be made compatible with the management of natural resources, the quality of the environment and social development, and how this is done must be discussed with civil society. SIA studies were conceived as a key component of the machinery that would enable us to do this.” (Lamy, 2003).

This paper has provided a preliminary sustainability impact assessment of the main negotiation areas in the WTO’s Doha Declaration and has assessed the potential impact on sustainable development in developing countries of various measures of multilateral trade liberalisation. The results of the study are intended to provide policymakers and other stakeholders with an evidence-based assessment of the anticipated significant economic, social and environment impacts of ‘further liberalisation’, in order to inform WTO trade liberalisation negotiations. The SIA analysis has also included an assessment of any necessary flanking measures that might be introduced to mitigate negative impacts on sustainable development and enhance positive ones.

The major findings of direct relevance to negotiations and stakeholders are as follows:

- Each of the measures assessed in the study is expected to have social and/or environmental impacts, in addition to economic impacts. If trade policy is to contribute to the goal of sustainable development, negotiators and policymakers need to take this wider range of possible consequences into account.
- Each of the agreements is expected to have negative, as well as positive impacts. Improved market access has potential negative social impacts, during the period of domestic adjustment to increased imports. Liberalisation of certain services, for example, the delivery of water services may also have adverse consequences, for access to and affordability by the poor.
- The impacts (positive and negative) are likely to be unevenly distributed between different types of developing countries. For example, some developing country textile producers will be adversely affected by the removal of quota-based market access, while other more competitive producers will gain from increased exports

- The impacts of different agreements cannot be assessed in isolation from each other, since there are potentially significant inter-sector linkages. The potential impact of trade negotiations on sustainable development will depend on the combined effects of the set of measures included in the Doha Development Agenda (DDA).
- The sustainability impacts of each sectoral agreement vary according to (a) a country's economic, social and environmental characteristics and (b) its capacity to respond to the opportunities and pressures which the agreement creates. Where a country's economic development level, social support system and environmental protection practices are at, or near to, minimum stress threshold levels, the significance of an impact (positive or negative) will be increased. In the same way, a country's institutional and broader governance capacity will affect the significance of the potential sustainability impacts. These mediating characteristics and capacities tend to operate less effectively in developing and least developed countries. Securing the potential gains from multilateral trade liberalisation requires well-developed markets, effective regulatory institutions, and a stable and predictable policy framework. Where these conditions are absent or weak, trade liberalisation is unlikely to make a significant contribution towards achieving sustainable development.
- The study has identified a number of mitigating and enhancing measures by which significant negative impacts may be reduced and positive impacts may be enhanced in individual countries. Though the details of these measures differ between sectors and countries, a common feature is that their adoption and effective implementation has a major influence on the final impact of the agreements on sustainable development. Where regulatory failures or limitations in public policy and governance capabilities constrain the effective implementation of mitigation and enhancement measures, the potential contribution of trade liberalisation to sustainable development is likely to be significantly diminished. It is important to assess the coherence and overall impact of the mitigation and enhancement measures as a whole. A potentially important component of the mitigation and enhancement package is provision for monitoring the implementation of the Agreement as a whole. This should cover: whether all sectors of the Agreement, and the supporting mitigation and enhancement measures, are being satisfactorily implemented; and whether the measures are having their intended economic, social and environmental effects, and if not, whether additional

measures are needed to deal with under-achievements and unexpected, adverse impacts.

- The involvement of stakeholders in the development of trade policy has an important role to play in achieving progress towards sustainable development, as recognised in the commitments made in the Doha Ministerial Declaration. Trade-offs between economic, social and environmental issues, within individual countries and internationally, are a major factor of trade and sustainable development policy. Negotiators can help resolve these issues by addressing the differing stakeholder perceptions of the issues involved, as identified in the SIA studies.

Sustainability Impact Assessment (SIA) of trade has a relatively short history, having begun at the end of the 1990s. The adoption of SIA by the European Commission marked a turning point in international trade negotiations, by explicitly linking questions of trade, environment, social welfare and sustainable development both within the Community and its trading partners. While doubts have been expressed as to the Commission's motives in linking trade and the environment in this way, the adoption of SIA did symbolise the European Union's response to the calls made in Agenda 21 and the Rio Declaration to mainstream international social and environmental concerns into trade policy.

Not surprisingly, the use of SIA for the ex ante assessment of trade policy has stimulated much debate and criticism. (WWF 2002, SUSTRA, 2003). Many detailed lessons have been learned and are contributing to the ongoing process of refinement of the SIA methodology and its application (CEPII, 2003; European Commission, 2003; George et al 2003). Some of the key challenges that currently confront the further development of the SIA approach as applied to trade policy have been highlighted in the preceding sections of the paper. Here, we concentrate on just two of these issues - dealing with uncertainty and assessing impacts on growth and development processes.

It must be accepted that high levels of uncertainty are inevitable in this type of strategic assessment. In many areas, the SIA can only identify impacts which may occur at a significant level, rather than making firm predictions. In order to deal with this, it is essential to build effective monitoring into the overall programme, and to introduce sufficient flexibility into the policy making process to be able to respond to impacts which occur in practice. In the more fully established and arguably less complex area of strategic

environmental assessment, it is widely understood that 'SEA requires great adaptiveness and flexibility in its decision context, as it deals with a range of mixed forces, operating in many fronts, different societal values, and high levels of uncertainty in terms of expected outcomes' (Partidario 2000). This need for adaptive and flexible decision-making processes is a particular challenge for trade agreements, which are determined through an arduous process of negotiation. Once an agreement has been made, changes can normally be made only through re-negotiation.

Dealing with this effectively may require significant changes to the negotiation process, such that, for example, agreements become dependent on the establishment of a monitoring programme, and are subject to amendment according to the results of that programme. Such arrangements may require significant changes to WTO procedures. SIA may itself be used to make the case for such changes, which, if implemented, would greatly enhance the contribution which SIA can make to strengthening the role of international trade agreements in achieving sustainable development.

The SIA studies have shown that the potential impact on sustainable development of growth processes may be much more significant over time than the direct impact on economic, social or environmental factors. This too presents a significant challenge for the negotiation process, as well as for the SIA process. The Doha Development Agenda was specifically agreed as a development agenda, in contrast with previous negotiating rounds with narrower, trade-oriented objectives. Trade negotiators have traditionally based their analyses and arguments on economic efficiency and trade economics, rather than development theory and processes. To be effective in helping to make the Doha agenda a true development agenda, and beyond that, a sustainable development agenda, there needs to be a shift in understanding in the decision-making framework. Trade policy needs to be seen as a means towards an end, and not as an end in itself. SIA can serve as a vehicle for strengthening this debate on the complex relationships between trade, development and environment, within the negotiating chamber and outside it.

To conclude, there is a growing recognition that international trade can make a major contribution to the economic progress of developing countries. But, if this contribution is to be consistent with sustainable development and the achievement of the Millennium Development Goals, then this will require consideration to be given to the potentially adverse social and environmental effects of economic growth. Sustainability impact

assessment is intended to assist in identifying these effects and in designing appropriate flanking measures that can mitigate any adverse impacts. For this to happen, policymakers need to improve policy coherence at the national and international level, in the pursuit of the goal of sustainable development. Policy coherence is a particular priority in relation to trade since it is a cross-cutting issue that affects many other areas of national and international policy. This has implications for policymaking within the EU and the WTO. Ultimately, better integration of economic, social, environmental and development goals will facilitate the implementation of sustainable development and the achievement of the Millennium Development Goals by 2015.

REFERENCES

CEPII (2003) *Methodological Tools for SIA. Report of Workshop*, Brussels, 7-8 November, 2002. Paris: Centre D'Etudes Prospectives et D'Informations Internationales.

DFAIT (2001) *Framework for Conducting Environmental Assessment of Trade Negotiations*, Department of Foreign Affairs and International Trade, Ottawa.

DFAIT (2002) *Initial Environmental Assessment: Trade negotiations in the World Trade Organisation*, Department of Foreign Affairs and International Trade, Ottawa

European Commission, DG Trade (2003) *Sustainability Impact Assessments of Trade Agreements -Towards Joined- Up Thinking*. Report of Proceedings of DG Seminar, Brussels, 6-7 February, 2003. Brussels: European Commission.

George C and Kirkpatrick C (2003a) *Sustainability Impact Assessment of Proposed WTO Negotiations: Preliminary Overview of Potential Impacts of the Doha Agenda, Final Report* Institute for Development Policy and Management, University of Manchester (www.idpm.man.ac.uk/sia-trade)

George C and Kirkpatrick C (2003b) *Sustainability Impact Assessment of Proposed WTO Negotiations: Preliminary Overview of Potential Impacts of the Doha Agenda: Assessment of Individual Trade Measures*, Institute for Development Policy and Management, University of Manchester (www.idpm.man.ac.uk/sia-trade)

George C and Kirkpatrick C (2004) 'Putting the Doha Principles into Practice: the Role of Sustainability Impact Assessment' in Katrak H and Strange R (eds) *The WTO and Developing Countries*, Palgrave Macmillan, Basingstoke

George C, Kirkpatrick C and Mosedale S (2003) 'Participation in European Governance Reform: The Role of Sustainability Impact Assessment', presented at Conference on 'Participation: From Tyranny to Transformation? Exploring New Approaches to Participation in Development' IDPM, University of Manchester, January.

Hoekman B, Mattoo M, and English P (eds), *Development, Trade and the WTO: A Handbook*. Washington DC: World Bank

Khor M (2003) 'Globalization, global governance and the dilemmas of development,' in Chang H-J (ed) *Rethinking Development Economics*, Anthem, London

Kirkpatrick C (2003) 'Sustainability Impact Assessment Methodology: SIA Study of Proposed WTO Negotiations' in CEPII, *Methodological Tools for SIA. Report of Workshop*, Brussels, 7-8 November, 2002. Paris: Centre D'Etudes Prospectives et D'Informations Internationales (CEPII).

Kirkpatrick C and George C (2003) *Sustainability Impact Assessment of Proposed WTO Negotiations: Sector Studies for Market Access, Environmental Services and Competition*. Executive Summary. IDPM, University of Manchester (www.idpm.man.ac.uk/sia-trade)

Kirkpatrick C and Lee N (eds) (2000) *Sustainable and Integrated Appraisal in a Developing World*. Cheltenham: Edward Elgar

Kirkpatrick, C. and Lee, N. (2002) *Further Development of the Methodology for a Sustainability Impact Assessment of Proposed WTO Negotiations* (Final Report), IDPM, University of Manchester.

Lamy P (2003) 'SIA – Towards Sustainable Development?' in *Sustainability Impact Assessments of Trade Agreements -Towards Joined- Up Thinking*. Report of Proceedings of DG Seminar, Brussels, 6-7 February, 2003. Brussels: European Commission

Partidario M (2000) 'Elements of a SEA framework: improving the added value of SEA' *Environmental Impact Assessment Review*, 20, pp647-663.

SUSTRA (2003)'Sustainability Impact Assessment'Policy Brief Paper (www.agro-montpelleillier.fr/sustra)

USTR (1993) *The North America Free Trade Agreement: Report on Environment Issues*. Washington DC: The Office of the US Trade Representative.

Wilkinson D, Ferguson M and Ten Brink P (2002) *Sustainability Impact Assessment: Background Paper*. London: Institute for European Environmental Policy

World Bank (2003) *A User's Guide to Poverty and Social Impact Analysis*. Washington DC: World Bank.

WTO (2001) *Ministerial Declaration*. Ministerial conference. Fourth Session. Doha. 9-14 November. WTO, Geneva. WT/MIN(01) DEC/1.

WTO (2003) *World Trade Report, 2003*. Geneva: WTO.

WWF (2002) *Making Trade and Investment Work for Sustainable Development*. Gland, Switzerland: WWF.

World Commission on Environment and Development (WCED) (1987) *Our Common Future*, Oxford University Press, Oxford.