

## Chapter 9

### TRADE APPLICATIONS

Earlier approaches to trade assessment, such as that used by the OECD (1994), addressed only economic and environmental aspects in the analysis. More recent methodologies continue to adopt this narrow view, eg the “Environmental Review” (proposed in the USA by the Executive Order 13141, 1999) and “Environmental Assessment” (proposed in Canada by the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program, 1999). They analyse only economic and environmental aspects make no reference to social issues. A similar approach is also used by Norway.

#### 9.1 The UNEP framework

Widening the scope from conventional environmental assessments of trade policies and agreements, UNEP has developed a manual for the “integrated assessment of trade -related policies” (UNEP 2001) comprising economic, environmental and social impacts or the “linkages between trade, the environment and development” (Box 9.1). UNEP commissioned numerous sectoral country case studies, and Oxfam and WWF have also commissioned case studies about the environmental and social effects of trade measures. Furthermore, WWF proposed elements of a methodology for sustainability assessment – though originally named “environmental assessment” – of trade agreements (Perrin 1999; WWF 1998; WWF 1999). WWF defines sustainability assessment as a “*tool which aims to inform policy-makers and other stakeholders about the economic, environmental and developmental implications of trade and investment*”<sup>1</sup>, and thus embraces the three pillars of sustainability.

#### **Box 9.1: UNEP manual for integrated assessment of trade policy**

A significant effort to widen the sustainability approach and include social aspects in analysis is being made in the context of the sustainability impact assessment of trade policy (SIATP) – at least in theory. For instance, the UNEP Reference Manual for the Integrated Assessment of Trade Related Policies” (UNEP 2001) states (section iii) that its purpose is to help conduct “*integrated assessments of the economic, environmental and social impacts of trade policy and trade liberalization*”.

To achieve this, the manual reviews a broad range of available methodologies to carry out SIATP, paying attention to the three dimensions of sustainability. In addition, most of the empirical studies carried out under another UNEP’s initiative, “Integrated Assessment of Trade Liberalization and Trade-Related Policies, Country Studies – Round II”, include the assessment of economic, environmental and social impacts. By comparison, Round I concentrated only on economic and environmental issues. UNEP has recently launched Round III of this project, in which social objectives such as poverty alleviation are paramount.

<sup>1</sup> See <http://www.balancedtrade.panda.org/>

There is no single, all-encompassing approach to the *integrated assessment* of trade-related policy. Rather, UNEP has prepared generic guidance on the theory and practice of conducting assessments in which a variety of approaches are presented, along with supporting evidence. This framework is designed to help and to encourage countries to design assessments that respond to the policy priorities and circumstances that are unique to each situation.

International trade can have both positive and negative economic, environmental and social effects. These effects vary across individuals, households, regions and eco-systems, across companies and across industries. Trade can promote the efficient allocation of resources world-wide and therefore reduce the pressure caused by the over-exploitation of global natural resources. It can make people better off, through the expansion of production, employment, and consumption opportunities, which raises living standards and improves social indicators. Higher income levels can lead to higher investment in environmental management and protection.

Without appropriate environmental policies and regulations, trade liberalisation can increase transport-related pollution, for example, by facilitating the movement of hazardous substances. Increased production and consumption may translate into greater waste emission and greater demand for natural resources – hastening environmental degradation and depletion. A number of theories have been developed in the trade-environment literature to explore these relationships. Two of the most important are the Environment Kuznets Curve hypothesis and the Pollution Haven hypothesis.

The Environment Kuznets Curve asserts that in the process of economic development, a country pollutes more in the early stages, but that economic growth and greater wealth means that countries, in later stages of development, can invest in environmental improvement. The Pollution Haven hypothesis, on the other hand, contends that international trade agreements will cause pollution-intensive industries to migrate to countries where environmental standards are more relaxed – which is likely to be poorer, developing countries. Both theories contain elements of truth. Both continue to attract controversy.

The growing interest in the social impacts of trade liberalisation suggests that in order to conduct a full assessment of the impact of trade policy on sustainable development, the trade-environment relationship must be extended to include social interdependence. It is this full range of relationships and impacts that an *integrated assessment* aims to investigate.

An *integrated assessment* serves a number of purposes: exploring the linkages between trade, the environment and development, informing policymakers across government departments and international negotiators, developing policy packages to integrate policy objectives on trade, the environment and development, and increasing transparency in policymaking.

An assessment can be undertaken as part of negotiations within national governments deciding approaches to trade policy and liberalisation. It can be undertaken before, alongside, or following international trade negotiations, to investigate the environmental and social impacts of policies that may be, or have been, introduced. *Ex-ante* assessments can help to plan the nature and timing of trade measures, and the introduction of complementary policies. *Ex-post* assessments provide a retrospective examination of the environmental and social impacts of a trade policy, and can provide evidence of effects that can be mitigated or encouraged through the introduction of complementary policies designed to promote sustainable development. Both *ex-ante* and *ex-post* assessments can provide lessons and data for future assessments.

Central to a successful *integrated assessment* is the meaningful participation of stakeholders. This provides data, insights and information that is not available to the traditional economic policy analyst. There are a number of ways in which meaningful participation can be encouraged at various stages in the process. The benefits extend beyond simply enhancing the quality of the exercise to encouraging co-operation, building relationships, building capacity and enhancing support among stakeholders who might otherwise oppose the measures under consideration.

Given this broad remit, one challenge in conducting an *integrated assessment* lies in identifying what assessment methodologies are appropriate, what types of policy should be assessed, and what types of impacts should be measured. Also important is the issue of data constraints in the countries and sectors to be covered by the assessment. In some cases, a lack of data can make it difficult to identify impacts and assess specific policy options. Moreover, though some modelling techniques have been shown to perform well when applied to environmental assessment, their extension to measuring social well-being – central to an *integrated assessment* – has not been proven. It is often necessary, therefore, to include both qualitative and quantitative techniques as part of an assessment.

Other challenges include the lack of consensus on appropriate indicators for environmental and social variables, compared with those used routinely in economics. Furthermore, environmental and social data are scarce in some instances, and some variables are difficult to quantify. This has hampered theoretical and empirical efforts to integrate economics, environmental and social indicators into a systematic model incorporating all the varying effects.

There is an emerging consensus that one way forward is to adopt a range of approaches. In addition to formal modelling exercises on the one hand, or qualitative analysis on the other, this Manual presents a number of other approaches that can be used in an *integrated assessment*. These include such tools as benefit-cost analysis, risk assessment, multi-criteria analysis, extended domestic resource cost analysis, life-cycle analysis, global commodity chain analysis and scenario building.

The aim of an *integrated assessment* is to influence policymaking. This Manual suggests that policy responses can take the form of the modification of trade agreements or policies, prior to implementation. Alternatively, policies can be adopted following the implementation of a trade agreement to mitigate any harmful impacts of trade liberalisation on the environment or society and to promote positive effects. These policies can be implemented at the national, regional or global level. Such “flanking” policies promote the simultaneous pursuit of economic, environmental and social development goals.

An adjustment to a trade related policy or agreement might include modifying the nature of a specific trade measure, such as a subsidy, or adjusting the timing of the implementation of the trade agreement so that complementary measures can be introduced. In other cases, where there are positive impacts, an agreement might include provisions for accelerated tariff reduction on environmentally or socially beneficial products or inputs.

Where a trade agreement or a trade measure is expected to have significant environmental or social impacts there may be time, as a result of an *ex-ante* assessment, to propose a parallel regime that will address environmental and social issues in conjunction with the implementation of trade liberalisation. This can occur at the national level or, where the issues cannot properly be addressed domestically because of their cross-border or global character, at the regional or multilateral level.

“Flanking” policies can be developed and implemented by countries both before the introduction of a policy or following its introduction, and before an international negotiation or following its conclusion. The range of policy instruments includes the implementation of market-based instruments targeted to address market distortions arising from environmental and social externalities, traditional command-and-control measures including legal reforms and regulations and standards, or the adoption of voluntary measures in the private sector, such as the promotion of environmental management systems or eco-labelling.

Finally, it is important to examine how the results of an *integrated assessment* translate into successfully implemented policies in practice, and the extent to which they meet their specified goals. *Integrated assessments* therefore need to include specific provisions for evaluation and monitoring. A follow-up process might also be warranted to track the long-term effects of economic activities, induced by trade measures and agreements, and so to identify where future *integrated assessments* might be needed.

## 9.2 The EC approach to sustainability impact assessment of trade policy

Since 1999 the European Commission has been working on a methodological framework to assess the impacts of trade policy on sustainable development – the so-called Sustainability Impact Assessment (SIA)<sup>2</sup>. It aims mainly at “*providing an in-depth analysis which should provide a basis for the European Commission to identify likely changes induced by the agreement on economies, social development and the environment in any geographical area potentially impacted*” (EC, 2004:5). One of its stated principles of implementation is that “*all three pillars of sustainability (economic, social, environmental) should be equally tackled*” (EC, 2004:9).

In 1999, the Directorate General for Trade of European Commission (DG Trade) commissioned the Institute for Development Policy and Management (IDPM) at the University of Manchester to undertake an independent assessment of the impact that WTO multilateral trade negotiations may have on sustainable development. The main objectives are to develop a methodology for sustainability impact assessment (SIA) and to use it to make a broad qualitative assessment of the impact upon sustainability of the WTO trade negotiations. The work is being conducted through a number of phases (Box 9.2). Lee and Kirkpatrick (2001) discuss the methodological challenges faced in undertaking SIA at different stages in multi-lateral trade negotiations.

In parallel to trade negotiation between the EU and Chile, DG Trade commissioned Planistat (Luxembourg) - a consultancy company – to undertake an SIA of the major potential trade measures under discussion. The SIA involved three key steps:

- A “global preliminary SIA” – an overview analysis (using both quantitative and qualitative approaches) of potential impacts on sustainability (in the EU and Chile) of the proposed trade-related measures – proposing two scenarios (with and without a trade agreement);
- Sector studies – assessing the impacts on the fisheries, mining and forestry sectors; and suggesting ‘flanking measures’ to maximise positive impacts of further liberalisation/changes in rule-making, and options for mitigating and enhancing measures;
- Final synthesis.

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<sup>2</sup> The DG Trade of the EC commissioned the Institute for Development Policy and Management (IDPM) at the University of Manchester to develop such a methodology

## **Box 9.2: Sustainability impact assessment of WTO multilateral trade negotiations**

**Phase One** (July -September 1999): literature review of potential methodologies, evaluation of specific trade policies and agreements; and development of SIA methodology.

**Phase Two** (September-November 1999)

(a) Broad, qualitative, preliminary appraisal of a specified range of trade-related measures to identify where these might have potentially significant sustainability impacts to be taken into consideration when formulating and finalising the agenda for the Seattle inter-ministerial meeting in December 1999; and development of proposals for further measures to enhance the impact of the New Round outcomes on sustainable development. The preliminary appraisal involved:

Information checklists to assist in applying the methodology

- *Possible measures for negotiation which may be included in the New Round Agenda*
- *Possible scenarios to be analysed for each measure*
- *Groupings of countries for which appraisals are to be undertaken*
- *Sustainability impact indicators and significance criteria to be used in the appraisals*
- *Methods, consultation procedures and information sources to be used in the appraisals*

Main stages

- *Screening: to determine which of the measures, listed in A. above, require SIA*
- *Scoping: to establish the appropriate coverage of each SIA*
- *Preliminary sustainability assessment: to identify potentially significant effects, positive and negative, on sustainable development*
- *Mitigation and enhancement analysis: to suggest types of improvements which may enhance the overall impact on sustainable development of New Round Agenda measures*

(b) Development and refinement of the SIA methodology for Phase Three - building on the findings of the first phase – through an open dialogue (continued through the project) with interested stakeholders via an email address ([chk@man.ac.uk](mailto:chk@man.ac.uk)). The SIA methodology being used in Phase 3 aims to assist negotiators and other interested parties in the post-Doha WTO trade negotiations, and to help those involved in identifying the likely economic, social and environmental consequences for their region or country, of one negotiated set of outcomes compared to another.

**Phase Three** (commenced April 2002):

A preliminary overview assessment has been undertaken of the Doha Development Agenda (DDA) to identify major impacts on sustainability of proposed measures:

- *Existing negotiation mandate:* Agriculture, market access for non-agricultural products, services, trade and environment, dispute settlement, trade related aspects of intellectual property rights (TRIPS), WTO rules (anti dumping and subsidies; regional trade agreements), implementation issues in developing countries;
- *Measures introduced at the 1996 Singapore Ministerial Conference:* trade and investment, competition policy, trade facilitation, transparency of government procedure;
- *Measures subject to discussions under the Doha agenda:* electronic commerce; small economies; trade, debt and finance; technology transfer; technology cooperation and capacity-building; least-developed countries; special and differential treatment

taking into account potential impacts associated with inter-sectoral linkages, and identifying those areas where more detailed assessments should be carried out at the next stage in the process.

In parallel, three sectoral SIA studies have been undertaken: (a) market access (with special emphasis on pharmaceuticals, non-ferrous metals, textiles); (b) environmental services (with special emphasis on water and waste treatment); and (c) competition policy.

The final report on the overview assessment (George and Kirkpatrick 2003) presents a review of international trade, sets out the SIA methodology used, provides preliminary sectoral findings and recommendations for further sectoral SIA studies, and proposes refinements to the SIA methodology framework for these detailed studies and for completing the overall SIA of the DDA.

#### ***Methodology for preliminary overview SIA of the Doha Development Agenda***

The assessment was undertaken within a broad screening and scoping update of the earlier preliminary SIA study of the pre-Seattle broad agenda. It involved screening the Doha agenda as a whole, including cross-sectoral linkages and cumulative impacts likely to result from the implementation of the Doha agenda measures. The components included:

- Specification of the content and scope of the *trade measures*;
- Elaboration of *negotiation scenarios* – a *base scenario* (full implementation of existing agreements); and a *further liberalisation scenario* (representing the strongest probable implementation of the negotiations agreed at the 4<sup>th</sup> Ministerial Conference in Doha);
- Focus on *country characteristics* which influence potential impacts. The subsequent detailed SIAs will assess impacts in four *country groupings* (EU, non-EU developed countries, developing countries, least developed countries);
- Assessment methods – based on *causal chain analysis* using information from econometric modelling and case studies where appropriate:
  - Identification of effects of market incentives and opportunities resulting from negotiated change to a trade agreement;
  - Assessment of significance of linkages (from effects – long- and short-term - on production relationships to sustainability impacts);
  - Evaluation of cumulative effects of trade measures on sustainable development processes and outcomes;
- Assessment of the *significance of impacts*;
- Use of core *sustainability indicators* (complemented by second tier and process indicators for detailed SIA studies):
  - 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;
- Assessment of *cross-cutting issues* (classified in five broad groups: scale, technology, structural, location and regulatory) and *overall impact*;
- Preliminary indication of *mitigation and enhancement measure*, e.g. trade-related measures that might be built into WTO agreement, side or parallel agreements, collaborative agreements, international and regional agreements, and measures by national governments;
- *Consultation process* (dialogue with stakeholders, comments by network of experts, published reports on dedicated website with facilities for comment, civil society meetings)

The preliminary overview SIA involved only limited analysis. Detail is still to be added by further

individual sectoral SIAs. These will aim to inform and assist negotiations up to their conclusion in January 2005.

Documents and reports for this initiative are available for review and comment on the project website (<http://idpm.man.ac.uk/sia-trade>)

The main methodological stages in the SIA, based on the work of the University of Manchester, are listed in Table 9.1.

**Table 9.1: SIA of EU-Chile trade negotiations**

(Source: [www.planistat.co./sia](http://www.planistat.co./sia))

	<b>Stage</b>	<b>Task</b>
1	Definition of study task and role	Full description of the trade agreement or other policy change for which SIA is needed.  Description of scenarios: Baseline scenario (with no trade agreement); 'Policy change' or 'trade agreement' scenarios (based on estimate trade measures since the full contents of the trade agreement were not available to the study)
2	Identification of effects to be studied and methods of analysis	Comprehensive <i>screening</i> of the initial effects of the trade agreement to determine which areas potentially contain sustainability impacts (informed by a macro-economic model); <i>Scoping</i> to establish the appropriate coverage and methods to be used for each of the more detailed analyses.
3	Identification of methods of assessment and main sustainability impacts	Assessment of the results of detailed studies to determine whether any constitute a significant impact on a comparable and comprehensive set of indicators of economic, social and environmental sustainability Comparison and evaluation of uncertain and <b>conflicting information</b> .
4	Response to identified sustainability impacts	Analysis of possible and beneficial activities that can be undertaken to mitigate any negative, and enhance any positive, subsidiary impacts

### 9.3 Other applications

A similar approach has been followed by a group led by PricewaterhouseCoopers to undertake an SIA of the negotiations to establish economic partnership agreements (EPAs)<sup>3</sup> between the EU and ACP<sup>4</sup> countries ([www.sia-acp.org/acp/uk/index02.php](http://www.sia-acp.org/acp/uk/index02.php)).

WWF has been involved in NGO consultations with the EC's DG Trade on its SIA programme. It takes the view that sustainability assessment should be "a process for engaging a wide range of stakeholders affected by trade and investment flows and policies – from private business to NGOs, local organisations and environment ministries – and for debating difficult policy choices based on case-study analysis and evidence" (Perrin 2003). But they conclude that, so far, SIA studies have been conducted at arms length from policy formulation and that policy-makers have paid little attention to the tool and are not actively engaged in the process. Perrin (2003) suggests two reasons for this:

SIA's are conducted too late in the course of pursuing new trade agreements to meaningfully input to shaping the agreements. It is doubtful if there is true political will to change the way trade policy is made and ensure that it is more sustainable.

Recently, the EC has adopted the SIA approach with the intention to apply it to all its policy proposals. This is described in the chapter on policy assessment.

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<sup>3</sup> The primary building block of EPAs is the establishment of a free trade area, which progressively abolishes substantially all tariffs between the Parties, as well as all non-tariff measures, such as quotas and measures having equivalent effects.

<sup>4</sup> 77 African, Caribbean and Pacific countries defined by the Cotonou Agreement.