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METHODODOLOGICAL TOOLS FOR ASSESSING THE  
SUSTAINABILITY  
IMPACT OF THE EU'S ECONOMIC POLICIES,  
WITH APPLICATIONS TO  
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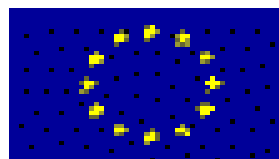
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sustainability impact assessment methodology: SIA Study of  
proposed WTO Negotiations

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EUROPEAN COMMISSION  
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RESEARCH



# **SUSTAINABILITY IMPACT ASSESSMENT METHODOLOGY : SIA STUDY OF PROPOSED WTO NEGOTIATIONS**

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Assessing the Sustainability Impact of EU's Economic Policies,  
with Applications to Trade Liberalisation Policies'**

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## 1. Introduction

The development of a methodology for assessing the sustainability impact assessment of policy interventions is still at a formative stage, and the use of sustainability appraisal in decision-making has only begun to gain acceptance in recent years. Much of the early work on sustainability impact assessment (SIA) has focused on trade policy and has only recently begun to be extended to other policy areas.

The types of assessment methods used in trade-related appraisal studies are quite diverse, ranging between expert judgments, semi quantitative local case studies and quantitative global systems modelling. This diversity in the assessment methods applied to trade measures is only partly explained by the formative nature of the subject. More fundamentally, it arises from differences in the *purpose* of assessments (ex ante or ex post, integrated or specialised etc); the *nature* of the trade measure being assessed (e.g. changes in tariff barriers or rule changes; the breadth and diversity of the measure's constituent components; the geographical extent of its application); and the *decision-making context* in which the assessments will be used (for example, the range of stakeholders involved, the negotiating culture, and the stage(s) in the negotiating process at which the assessments are to be used).

The European Commission has been at the forefront of developing SIA, and in particular, in the application of SIA for the appraisal of international and regional trade policy initiatives. DG Trade is committed to undertaking a sustainability impact assessment of all major new trade negotiations, and SIA studies are currently being undertaken for the Doha Development Agenda, the MERCOSUR agreement, the EU-Chile trade agreement and the trade agreement between the EU and ACP states. More generally, sustainability impact assessment has been adopted by the Commission as part of its policy appraisal process, and from 2003, all major initiatives will be subjected to sustainability impact assessment, using new methodology guidelines.

The current interest in SIA within the European Commission, and more widely, can be explained in terms of the capacity of the SIA approach to address a number of key issues and concerns in the area of public policy formulation and decision-making. These include: the shift towards 'evidence-based' decision-making; the trend towards 'better' governance and governance reform; and the adoption of sustainable development as the overarching objective for public policy. In the case of SIA of trade policy, recognition of the need to 'act globally' has been a further motivation for the use of the sustainability impact assessment approach in decision-making.

This paper develops these themes in greater detail, with the objective of identifying the key requirements of a 'good' SIA methodology. There are five sections to the paper. Part 2 briefly reviews the existing methodology for SIA of trade negotiations, which began in 1999, and is currently being applied in carrying out a series of studies relating to the WTO-Doha Development Agenda. Part 3 considers a number of practical constraints and requirements, which need to be considered in the development of a SIA methodology. Part 4 will discuss the key trends in public policy and civil society whose convergence has led to the current interest in SIA and argue that the SIA methodology currently being used for the assessment of WTO trade negotiations addresses many of the requirements for a 'good' SIA methodology. At the same time it is recognised that the approach will inevitably need to be refined and adapted as experience in its application is accumulated. The final section provides a short summary and conclusion.

## **2. The SIA Study of WTO Trade Negotiations**

### **2.1 A Definition of Sustainability Impact Assessment (SIA)**

For the purposes of the SIA-Trade studies, SIA is defined as a methodology for assessing the impact of a trade policy change on sustainable development. The assessment will usually be ex ante (potential impact) but could include ex post (actual impact) evaluations as part of the process. Sustainable development is taken to incorporate economic, environmental and social development.

SIA is both a *method* and a *process* for assessment. As a method, it systematically and consistently examines economic, environmental and social impacts arising from a policy intervention; includes both negative and positive impacts; and indicating the likelihood and scale of the impacts. As a process, SIA adheres to the principles of transparency, accountability, and consultation and participation.

### **2.2 The EC's SIA of WTO Trade Negotiations**

The EU began its SIA studies of WTO trade negotiations in 1999. The Institute for Development Policy and Management at the University of Manchester was contracted to develop a SIA methodology (Phase I) and to undertake a preliminary assessment of the Seattle agenda (Phase II) prior to the Seattle Ministerial Meeting in Seattle in late 1999. In 2001 a further study was completed which developed the Phase I Methodology. This extended methodology is currently being applied to the Doha Development Agenda (Phase III), where the objective is "to provide an analysis of the sustainability impacts of agreed policy options or scenarios, and to present this analysis in such a way as to give a concrete input for negotiators in their search for a balanced set of policies, including any necessary flanking measures."

Phase III, which will continue over several years, will consist of a preliminary global SIA (all sectors); a series of detailed sector studies; and a global SIA of provisional agreements. The first year of Phase III (April 2002-March 2003) involves the preliminary global overview study, and detailed sector studies for market access (pharmaceuticals, non-ferrous metals, textiles); environmental services (water and waste treatment); and competition policy.

The Phase I, II and III reports are available on the project website: <http://idpm.man.ac.uk/sia-trade>.

### **2.3 The Main Stages in the SIA Process**

This section describes the main stages in the SIA methodology proposed by the contractors for use in Phase III.

The main stages in the SIA process are:

- Stage 1 : screening and scoping.
- Stage 2 : Detailed assessment of proposed measures
- Stage 3 : Assessment of alternative mitigation and enhancing measures (ie, optional analysis)
- Stage 4 : Monitoring and post-evaluation proposals.

#### **Stage 1: Screening and Scoping**

The fundamental purpose of these scoping studies is to systematise the determination of the terms of reference for the SIA of each measure, which is to be assessed. This will involve determining:

- The specifics of each trade measure to be negotiated (and of those of its components) which should be submitted to detailed assessment at the next stage in the process. Different types of measures (e.g. tariff reductions, rule changes) may need to be assessed in somewhat different ways.
- The specific scenarios (i.e. potential negotiation outcomes) for each measure/component, which should be analysed in the detailed assessment.
- The criteria by which the significance of the sustainability impacts is to be assessed.
- The country groups and/or individual countries for which the sustainability impacts should be assessed.
- The time horizons over which the impacts should be assessed.
- The cumulative impacts, likely to result from the implementation of the New Round as a whole, which should be assessed.
- The methods, data sources and sustainability indicators to be used, and the consultations to be undertaken, in the detailed assessments and in subsequent stages in the assessment process.

Scoping is expected to involve simplified forms of causal chain analysis (CCA) which help in identifying the potentially important sections of each causal chain which link, in sequence, each trade measure to its eventual, significant impacts. Scoping should also include a preliminary identification of the types of M and E measures that might need to be appraised later in the SIA process, classified according to the individual trade measure scenarios to which they relate, and for the Round as a whole.

### Stage 2: Detailed Assessment

Causal chain analysis is used to trace, both analytically and empirically, the main causal links between each trade measure, its main components and their eventual sustainability impacts. A number of the core sustainability indicators may be subdivided into 'second-tier' indicators. Additionally, in order to capture some potentially important long-term sustainability impacts, a limited number of SIA process indicators may also be used. The impact significance categories and their boundaries need to be defined explicitly and supporting evidence, for the significance 'scores' obtained, will be required.

Detailed assessments will attempt to capture the more important variations in significant impacts within country groupings. This can be done by extending the sustainability analysis to selected, contrasting countries within each major country group being studied, and examining likely major variations within these, according to region and/or socio-economic category.

The main findings of the detailed assessments can be presented at different levels of aggregation – for example, for individual components of a trade measure as well as for the trade measure as a whole; for different scenarios; for contrasting countries as well as for country groups as a whole. These need to be supported by both a textual explanation and an evidence-based justification for the principal findings they contain.

### Stage 3: Assessment of Alternative Mitigation and Enhancing Measures

Given the importance which the Doha Ministerial Declaration attached to the needs and interests of developing countries, and in particular to the vulnerability of the least developed countries, public discussion has focused on the assessment of M and E measures which might be used to mitigate and enhance the impact of trade measures on sustainable development in the developing and least developed countries.

The overall coverage of the measures considered for inclusion, is broadly defined to include:

- Measures which are closely trade-related and which might be built into a WTO agreement itself.
- Closely related side or parallel agreements between WTO member countries, or in regional agreements which may 'nest' within international agreements.
- 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.
- International and regional initiatives to promote technical cooperation and capacity building in developing countries.
- Measures by national governments to remedy market imperfections, regulatory failures, social inequalities, which are harmful to sustainable development and whose removal could enhance the contribution which trade measures may make to sustainable development.

The range and types of M and E measures that have been identified need to be assessed as the third main stage in the process for full SIA assessment.

The findings of each sectoral assessment, in terms of the end-impacts on sustainable development, should be examined using the detailed causal chain analyses that were developed at stage 2 (detailed assessment), in order to identify where the introduction of M and E measures could have a significant benefit. The most promising M and E options should then be separately appraised for their potential sustainability impact. Criteria for assessing M and E measures should include:

impact on sustainable development: the likely economic, social and environmental consequences of the M and E measures, assessed in terms of either the core or second-tier target indicators, and process indicators, proposed for Phase Three

cost-effectiveness: the size, type and distribution of costs associated with the implementation of the M and E measures

feasibility: the capacity of political, institutional and financial processes for effective implementation of the M and E measures.

The application of these assessment criteria should identify a set of 'best' M and E measures that are cost-effective, feasible and likely to have a significant effect in terms of mitigating the negative sustainability impacts and/or enhancing the positive sustainability impacts, that were identified at the detailed assessment stage.

The assessment of the impact of the 'best' M and E measures on the core economic, social and environmental indicators should then be introduced into the detailed assessment findings, as a modified scenario for the relevant trade measure.

#### Stage 4: Monitoring and Post Evaluation Proposals

There is growing interest and concern, both in the assessment field, generally and in the trade policy assessment field, in particular, that *ex ante* appraisals of proposed new measures should be complemented by an *ex post* evaluation of those same measures after they have been approved and implemented.

Provision for monitoring and evaluating the sustainability impacts of the New Trade Round Agreement, as finally approved, should be considered, therefore, as a potentially important mitigation and enhancing measure for inclusion in the final agreement on the New Round.

The MPE proposal should contain a number of components. These should include provision for:

- Monitoring the implementation of the provisions of the New Round agreement itself (This should draw upon the assistance of the WTO).
- Monitoring and undertaking an *ex post* evaluation of the sustainability impacts of the New Round agreement, as implemented.
- Post-evaluation of the *ex ante* Phase Three SIA studies i.e. comparing their predictions with actual outcomes and explaining any significant differences between them.
- Making recommendations relating to: any implementation problems which have been encountered; additional M and E measures which may be needed to address any significant, unanticipated or unresolved sustainability impacts; strengthening existing *ex ante* and *ex post* SIA methodologies and their use in practice.

There is a substantial, increasing general literature on monitoring and evaluating the implementation of sustainable development strategies, as well as a more specialised literature on the evaluation of the economic, social and environmental impacts of previously adopted trade agreements. Based upon this literature, and the practical experience on which it draws, a number of preliminary suggestions may be made:

- Monitoring and evaluation should engage the interest and commitment of the key stakeholders, in international and national administrations, and within civil society. Particular attention should be paid to the involvement of stakeholders from developing countries.
- Monitoring and evaluation should be both clearly focused and strategic in nature, and avoid the collection and analysis of less important and unnecessarily detailed information.
- Monitoring and evaluation should be sufficiently independent and transparent to ensure the objectivity and credibility of its findings. The findings, including recommendations for improvements, should be published at agreed, regular intervals and be subject to consultation and comment.

### **3. Some 'Fitness for Purpose' Considerations in the Development of the SIA Methodology**

The SIA methodology needs to provide an analysis of the sustainability impacts of various policy options or scenarios in a way that is accessible to policy makers and will contribute to the negotiation process. It should also have other, wider uses. These include the use, and if necessary adaptation, of the methodology by other users to carry out their own assessment of the likely sustainability impacts of trade policy proposals.

The methodology also needs to be adaptable to meet the SIA requirements at the different stages in the negotiating process in which the resultant assessments are to be used. In addition, it needs to take account of the real world constraints within which the particular assessment will be prepared. These constraints include: the limited availability of appropriate 'on the shelf' assessment tools; limited availability of appropriate and reliable data for use with these tools; and limitations in time and resources for delivering assessments within the schedules of the trade negotiation process.

The SIA methodology should be sufficiently feasible to allow for different levels of detail, while retaining a comprehensive and strategic level focus of analysis. Given their global scope, SIAs of international trade agreements will inevitably be more 'strategic' than 'specific'

in character and relatively small increases in the level of detail and precision in such assessments can, depending on the circumstances of the particular case, substantially increase their technical data and/or resource requirements. No general rules exist on the 'best' level of detail for assessments. This can only be determined and justified on a case-by-case basis, which should be separately established as part of the 'screening and scoping' stage of the SIA methodology (see above).

Consultation is an integral part of the SIA process, and provides a means by which stakeholders can contribute to the assessment, both as experts and as interested parties. The form and procedures for consultation and participation in the SIA process will also vary on a case-by-case basis, and will need to be determined at the beginning of the SIA.

Each study will need to bring together, therefore, a number of different components (figure 1):

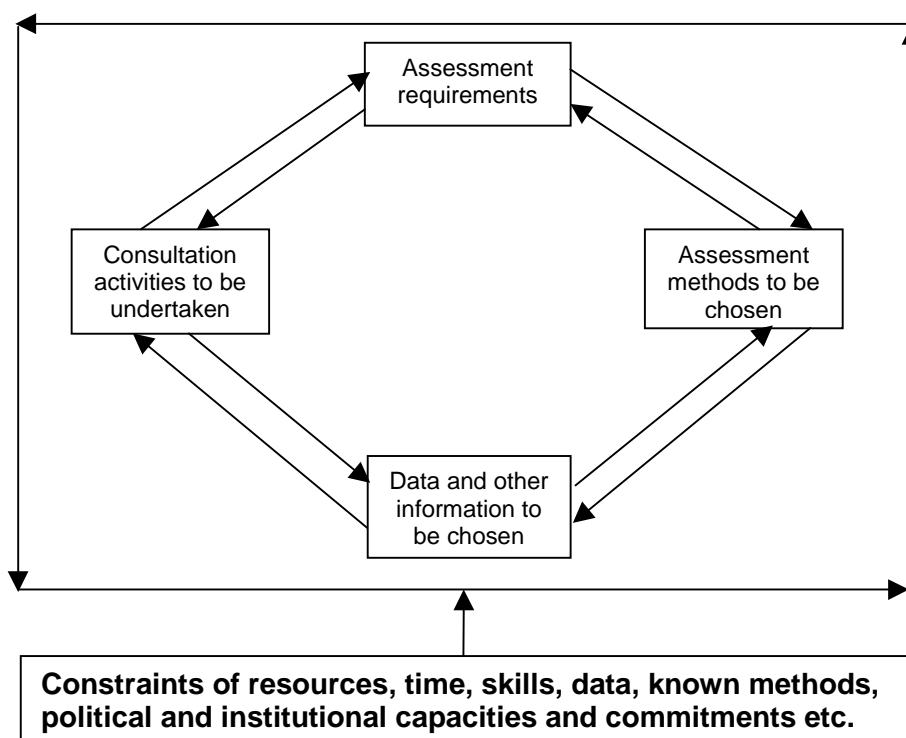
#### SIA Method

- The assessment tasks to be undertaken
- The assessment methods required to undertake these tasks
- The data needed to apply the assessment methods and the sources from which the data may be obtained

#### SIA Process

- Consultation activities to be undertaken.

**Figure 1 : The Assessment Methodology Cycle**



Each of these four components has to be consistent with others. For example, if there is sufficient data available, the choice of assessment methods may need to be modified and the assessment requirements may need to be more modestly defined. Also, the specification of all of the components within the assessment method cycle is constrained by the resources, skills, methods, data and institutional capacities and commitments which exist. The more restrictive these are, the more modest will be the practical assessment methodology which can be chosen. It follows, therefore, that the methodology approach – the preferred

combination of requirements methods, data and consultations – is likely to be case-specific, and will need to be clarified in the specification of the approach to be used for each policy measure which is to be assessed.

The scheduling of the SIA process for each trade measure should ideally correlate with the scheduling of its negotiation. The SIA process should commence sufficiently early to enable the sustainability appraisal itself, and the consultations based upon it, to be completed in sufficient time for negotiators to take them fully into account before any agreement is reached and later approved.

Additionally, the scheduling of each SIA study should be correlated with arrangements for consultations relating to the SIA. The synchronisation of key stages in the SIA process (including accompanying arrangements for consultant with key stages in the negotiation process) is the ideal, but in practice will probably be difficult to realise fully.

## **4. The Contribution of SIA to Good Governance**

### **4.1 SIA and 'Evidence-Based' Policy Analysis**

The credibility of policy proposals with decision-makers and with stakeholders, is strengthened if the proposal is based on an 'objective' analysis of the potential benefits and costs that would ensue from its adoption. SIA as a method of analysis, provides a framework for the assessment of the potential impacts on sustainable development.

The Communication from the European Commission on Impact Assessment was published in June 2002. Here the Commission announces its intention to launch impact assessment as a tool to improve the quality and coherence of the policy development process. Gradually, from 2003, all major initiatives will be subjected to the new impact assessment method which will replace all existing impact assessment arrangements by building on them and implementing them into the new tool.

The impact assessment procedure will consist of a preliminary assessment giving an overview of the problem identified, possible options and sectors affected and an indication of whether an extended assessment is needed. An extended impact assessment will carry out a more in-depth analysis of potential economic, social and environmental impacts and will consult with interested parties and relevant experts according to the minimum standards for consultation following the guidelines given in the Communication on Consultation.

The role of SIA in providing a methodological framework for evidence-based ex-ante policy analysis has been highlighted in the post-Doha trade arena. If the Doha Work Programme is to be successful, the WTO-led process of discussion and negotiation will have to demonstrate that the lessons of Seattle have not just been incorporated into the WTO's rhetoric, but are being effectively translated into practice.

The driving force behind the prominence given to the development dimension in the Doha Agenda was the developing countries' concern about the implementation of the results of the Uruguay Round. Implementation-related issues included: the limited gains to developing countries from the Uruguay Round; the backloading of liberalisation in textiles and clothing; the use of special safeguards; anti-dumping measures; more restrictive rules of origin to limit potential benefits from tariff liberalisation; and the limited progress in liberalising trade in agriculture. Developing countries also argued that a number of commitments to take special account of their needs, for example, in the Anti-Dumping Agreement, had no legal force and were not applied in practice. A further concern related to the difficulties and costs to the developing countries in participating fully in the WTO, and in meeting their obligations under the WTO Agreements.

The Doha Ministerial Declaration recognised the implementation-related issues and concerns of developing countries: “We attach the utmost importance to the implementation-related issues and concerns raised by Members and are determined to find appropriate solutions to them..... We agree that negotiations on outstanding implementation issues shall be an integral part of the Work Programme....” (para. 12.).

One lesson to be learnt from the implementation issue is the need for negotiators to be better informed on the likely outcome of adopting a particular market access or rules measure. It will no longer be sufficient to rely on the general presumption that trade liberalisation will always produce a ‘win-win’ outcome for all parties. This highlights the need in any future negotiations to carry out detailed assessment of the costs, and benefits of market access and rules commitments. This assessment needs to be *ex ante*, undertaken prior to the negotiation stage, thereby serving to inform negotiators of the potential impact of any proposed measure for inclusion in a new round of trade negotiations. The assessment process should also include detailed monitoring and *ex post* evaluation of the implementation process, something which was not done by the WTO on a systematic and comprehensive basis, in respect of the Uruguay Round.

To be credible with policymakers, the assessment of trade measures needs to be well grounded in analysis and fact, demonstrating an understanding of the processes that are taking place (what we have referred to as causal chain analysis). A key issue is the terms in which the assessment will be conducted. Logically, this will be set by the objective, or goal, of the policy being considered. Traditionally, the goal of multilateral trade liberalisation has been defined in terms of economic welfare, which has set the yardstick or numeraire, for assessment of impact in economic terms. Economic analysis of trade measures is, therefore, the most obvious and easily provided form of policy analysis. One of the defining features, however, of the Doha Declaration is the commitment to the goal of sustainable development. Thus, while economic analysis is likely to provide the initial, or ‘first round’ assessment of impact, it will need to be complemented by assessment of environmental and social/poverty impacts.

Methodologies for environmental and social/poverty impact assessment at the strategic, or policy level, are less well developed than for economic assessment. Environmental impact assessment (EIA) was originally designed and applied at the project level, and it is only comparatively recently that the methodology for strategic environmental assessment (SEA) has been developed. Application of SEA to trade policy analysis has proceeded mainly by the use of descriptive, case study methods. These are largely empirical in nature and make use of both quantitative and qualitative data. In most cases they are *ex post* assessments. A difficulty with this approach is that the methodology may be insufficiently developed, and the causal links between the trade measure and its eventual environmental outcome may be inadequately explained. There are however, an increasing number of studies which have addressed these difficulties, and have refined the practical use of environmental assessment methods applied to trade policy.

There has been comparatively little detailed assessment of the social/poverty impact of trade policy measures. In part, this reflects the methodological difficulties in establishing the causal chain between a particular trade measure, and its impact on poverty at the disaggregated individual household or community level.

In summary, *ex ante* assessment of the Doha Agenda is a necessary part of the process of ensuring that the Agenda moves forward, from agreement in principle to implementation in practice. This assessment needs to incorporate the WTO’s commitment to the goal of sustainable development, by allowing for the potential economic, social and environmental impacts of any proposed trade measure.

In assembling the information and evidence base for the assessment of impacts, the IDPM-SIA methodology proposes the use of Causal Chain Analysis (CCA).

The fundamental purpose of causal chain analysis (CCA) is to identify the significant cause-effect links between a proposed change in an existing trade agreement and its eventual economic, environmental and social impacts (i.e. its impacts on sustainable development). CCA can be used at different levels of aggregation and detail, depending on the context and requirements of the situation. It can also be used at different stages in the SIA process. The aim of CCA is to distinguish the *significant* cause-effect links in the chain. Significance criteria have to be formulated and then used to eliminate non-significant sections and terminate further analysis beyond these sections. The analysis is usually undertaken, in logical sequence by section, from 'cause' to 'effect'. However, a useful crosscheck can be undertaken by reversing the analysis (i.e. sequentially, by section, from 'effect' to 'cause') to ensure that the projected SD impacts are sufficiently 'explained' by the trade agreement change. Both the causal chain analysis itself, and the causal chain analysis findings, may be presented in the form of a causal chain diagram (sometimes called a cause-effect diagram). This shows each of the cause-effect sections which have been investigated (plus some sub-sections, in more detailed diagrams) in their logical order of causality, distinguishing those that are significant from those that are not.

The CCA will be supported by other, more specialised assessment tools for analysing, modelling, predicting cause-effect links in the chain.

A wide range of assessment methods exist which might be used in the elaboration of causal chains and in the empirical estimation of sustainability impacts. These include: modelling methods, data-based (statistical estimation) methods, descriptive (case study) methods, expert opinions and consultation methods.

Surveys of these different methods, examples of their application to trade policies and supporting literature reviews confirm that there is no single type of method which can currently satisfactorily meet all of the assessment requirements for SIAs of trade agreements. A package of methods is most likely to be required, where each package varies to some degree, according to the characteristics of the trade measure(s) being assessed and the context (e.g. regional and country characteristics) in which the assessment is being carried out. The strengths, limitations and possible applications of the main types of methods which might be included in an SIA methods package, as briefly reviewed:

- Modelling methods Models are simplified, structured representations of systems. Each has its own analytic structure and to this extent it shares the same strengths and weaknesses as the analytic methods described above. Some models are essentially theoretical. However, most of the trade-related models, are empirical in the sense that they use data (mainly in a quantitative form) and predict likely future impact outcomes, or explain previously observed impact outcomes, based on these. Whilst this might suggest that models are superior to analytic methods, this depends on the relevance and quality of both the modelling and the data which are used.

Examination of the relative merits of different types of models for use in SIA studies leads to the following conclusions:

- i. There is no single modelling system currently in being which satisfactorily assesses economic, social *and* environmental impacts likely to result from changes in specified international trade policies. Most existing models are still confined to elements of that system. They are mainly limited to the trade-economy sectors, but some extend to include parts of the environmental or social sectors.
- ii. Most models have been developed to assess impacts resulting from price changes due to trade liberalisation. Much less attention has been paid to how, and how far, the impacts of changes to trade rules and other kinds of trade measures may be satisfactorily assessed, using modelling methods.

iii. Because of the complexity of the systems involved, and known limitations in data availability, existing models (though appearing to the layman to be very complex) are greatly simplified to make them operational. Therefore, it is important to check the underlying logic of the model itself (i.e. its assumed cause-effect links) and the assumed values (coefficients) of those linkages.

- Data based (statistical estimation) methods These use time series and/or cross-sectional data to test for possible causal links within a trade-sustainable development framework. In particular, they test for a statistically significant relationship between specified parameters of a proposed trade measure and changes in the values of one or more of the selected SD indicators and/or (at a more detailed level) between cause and effect variables on particular sections of the causal chain.

A potential advantage of these types of methods is that they provide opportunities to test, empirically, specific hypotheses (preferably, which have sound theoretical formulations) about the nature of cause-effect links within a trade-sustainable framework and to establish their statistical significance. Further, if the data used has been carefully collected from a sufficiently large and representative sample (e.g. from individuals, households etc.), the results may be generalised to different geographic and socio-economic aggregates (village, region, country, women, minority groups etc.). The findings may then be valuable in their own right within SIA studies or may be used in conjunction with other assessment methods – for example, in specifying functional coefficients within SIA trade models, in enriching descriptive case studies and/or in assisting to make expert judgements.

Like all other assessment methods, they also have their drawbacks and limitations. They generally have a more limited role to play in assessing cause-effect changes where these are of a more qualitative nature. This is part of a more general problem that qualitative changes within the SIA framework tend to get neglected or be treated inadequately (as is also the case in a number of modelling studies). Many statistical estimation studies use time series data which produce estimates of coefficients etc. which may be historically correct but not necessarily appropriate to future conditions. Because of practical difficulties (lack of certain types of data etc.) the hypotheses which are tested may implicitly over-simplify the causal chain (e.g. by excluding some of its intermediate cause-effect links) leading, over time, to incomplete explanations of change and increasingly inaccurate assessments due to the growing influence of excluded variables.

Further, as in all empirical studies, much depends upon the quality of the data which are collected and used. As in the case of modelling studies, there is always some risk that greater attention will be given to the appropriate application of the statistical technique than the appropriateness and quality of the information which it assembles and processes. However, it must also be recognised that gathering new data, of the types and quality required for SIA studies, is likely to be an expensive and time consuming exercise.

Studies, based on the use of statistical estimation methods, should make a useful contribution SIA studies, though in many cases this will be supplementary to the contributions from other assessment methods. As with modelling studies, it is important that, in each case where these methods are used, the statistical estimates themselves and the quality of data employed are evaluated. It is assumed that most use will be made of *existing* statistical estimation studies. Some selective *new* applications of existing statistical estimation methods, which use *existing*, readily accessible data, may be undertaken. New data gathering for use with these methods is unlikely to be feasible, given time and other constraints.

Descriptive (case study) methods This group of methods is less well-defined than the other types of methods reviewed in this section and is probably the most heterogeneous. In most cases, these methods are mainly empirical in nature and make use of both quantitative and qualitative data. They tend to focus upon a particular sector (e.g. mining,

fishing); a national, regional or local community; and/or a particular socio-economic group (especially disadvantaged groups). In most cases they contain *ex post* assessments; relatively few systematically examine the likely future effects of proposed new agreements.

These types of studies are potentially useful to SIAs in a number of ways. They often consider different types of questions, at less aggregated levels of assessment, using different methods of investigation to those mainly used in modelling and statistical estimation. At their best, they can show a deeper understanding of the ways in which internationally-agreed trade measures may have greatly varying sustainability impacts.

A difficulty with a number of descriptive studies is that their methodology is insufficiently developed or explained. Several studies make relatively simple 'before-and-after' impact comparisons. For the most part they do not sufficiently examine the causal chains which link the trade measure to its eventual economic, environmental and social outcomes. Also, they often ignore the counter-factual question and fail to take account of the additional impacts that would have occurred even if the new measure had not been introduced. Additionally, there are sometimes uncertainties (as in other studies) over precisely what data have been used, their levels of reliability and how they have been analysed and interpreted in reaching conclusions.

However, there is an increasing number of empirically based, more disaggregated studies being produced which address a number of these difficulties. Some, for example, carefully use inductive methods for investigation, which are rooted in an explicit, well-defined methodology, to develop a rich understanding of cause-effect relationships, and assemble different kinds of good quality information to assess trade policy impacts on local communities, disadvantaged groups etc. Others use a combination of descriptive cause-effect analysis (possibly then formalised in a simple model) and some statistical estimation analyses to provide a combined quantitative and qualitative analysis of trade impacts on a local or regional area. Additionally, there have been a number of regulatory-based impact studies using somewhat different forms of juridical and organisational analysis, which have contributed to the impact assessment of rule changes within international trade agreements.

It is recommended that selective use be made of descriptive methods of impact assessment within SIA studies. They could be particularly helpful in understanding the variations in impacts at more disaggregated levels – sector, area and socio-economic group – and especially, where more qualitative assessments are appropriate. A focus on assessments within particular countries should assist in screening and scoping the existing descriptive studies to be submitted to more detailed analysis. They should be individually evaluated for their quality and relevance before final acceptance. Some assistance from local experts may be needed in the evaluation and interpretation of their findings. Due to resource and time limitations it is unlikely that a programme of new descriptive studies could be undertaken but more limited arrangements for some gap-filling may be feasible, with the aid of local experts.

Expert opinion From time to time, surveys are undertaken of the range of assessment methods in existence, and of the frequency with which each is used in practice. Among those methods which appear on an ever-lengthening list, it is the least formalised and sophisticated – expert opinion – which is often the most frequently used, though possibly the least publicised. Therefore, some reference should be made to its potential role in Phase Three studies. It is likely to be important in SIA studies for the following reasons:

- There is no standard SIA methodology which is applicable in all circumstances. It has to be 'tailor-made' for, and 'case specific' to, each assessment situation. Expert opinion will need to play a significant role in the development of the 'case specific' methodology, through the screening and scoping updates and consultation based on these.

- There is no comprehensive SIA methodology in being which is yet fully operational. It has to be welded together from a number of different parts – which are trade, economic, environmental and society-related. Expert opinion, with other forms of supporting assistance, will need to play a central role in making this fusion work.
- There are many gaps in method, knowledge and data within the components which will form the comprehensive SIA methodology. This is not surprising in a new and innovative field of assessment. Only to a limited degree, can these gaps be filled through additional research, data gathering and new empirical studies over the lifetime of the Phase Three studies. In most cases, the ‘second-best’ solution will lie in using expert opinion, to make most effective use of the methods, knowledge and data already available.

Where expert opinions are used, it is important that the evidence and analysis upon which they are based are made explicit. In other words, they should be substantiated and justified.

Different types of experts should be employed on SIA studies and play differing roles within them. They include:

- Core team experts who will be involved in overseeing the development and successful application of all of the methodologies to be used in Phase Three studies. Between them, they should possess sufficient skills and knowledge relating to the main methods to be used and have the capacity to integrate them successfully within a single unified methodology.
- Sector experts who should possess skills and knowledge appropriate to the particular sectoral assessments in which they will be involved.
- Region/country experts who possess assessment skills and knowledge appropriate to the regional or country context in which part of an SIA study is to be conducted.
- Other external experts who belong to the international network of SIA experts who may be consulted about the specifics of a particular case, or methodological and data issues.
- Other consultees (e.g. stakeholder organisations, NGOs) who may be asked for their opinions on matters contained in screening and scoping updates and later full assessments or may be asked for opinions and advice on specific issues arising during the assessment process.

Data constraints, in terms of quality and availability, will partly determine the practical assessment methodology which can be chosen, and the level of detail at which it can be applied. The data constraints are likely to be case-specific, and are likely to arise in a number of different forms. They include:

- the definition used for the collection and measurement of data may diverge from the ideal definition required for sustainability assessment purposes. For example, the ‘ideal’ measurement of real income includes the social and environment costs and benefits of economic activity, whereas the actual measure of real income (at the national level) does not allow for these externalities.
- the data gathered may diverge from the measurement definition. There may be differences in accounting and estimation procedures between countries, which make cross-country comparisons difficult. A lack of comparability in price and exchange rate information, for example, makes cross-country comparisons of real output levels and growth rates difficult.

- some data may be unavailable, or inaccessible for reasons of confidentiality. In these cases, the 'missing' data may have to be estimated or extrapolated on the basis of historical data or expert opinion.
- different sources of data relating to the same indicator may be incompatible or difficult to use in combination. For example, data on real income which is gathered from household survey sources may not be easily reconciled with national accounting statistics on aggregate household real income. Different sources of data may be better suited to particular assessment methods, for example, trade modelling will normally use national accounting statistics, whereas case studies will rely more on household-level data. If there are difficulties in reconciling and combining different data sources, it may limit the ability to make use of the range of assessment methods, at the screening and scoping update and full assessment stages.

The data constraints mean that the available data will typically be an *approximation* of the ideal data requirements for sustainability impact assessment. In judging the suitability of data for use in sustainability impact assessment, it is recommended that the data requirements be defined as precisely as possible. The available empirical data that approximates this definition should then be identified. Finally, the degree of discrepancy between the definition and the empirical data should be assessed and a judgement made on whether the data is to be used in the assessment. Where the data is used, any significant discrepancies or limitations should be recorded at the screening and scoping stage, and acknowledged in the presentation and interpretation of the assessment results.

The EC Communication on Impact Assessment discusses the use of quantitative and qualitative impact data and states "Where it is not possible to assemble all relevant data within a reasonable time frame, qualitative or partial data will be used". This could be interpreted as suggesting that qualitative data will be used only when insufficient quantitative data is available. This would be regarded by many practitioners of impact assessment as a mistake. The consensus among researchers has been for some time now that a judicious mix of quantitative and qualitative methods is usually required. Both have strengths and weaknesses and can be creatively used to complement each other.

Qualitative research methods e.g. semi-structured interviews, focus groups, participatory appraisal methods, are essential for developing an accurate as possible picture of competing hypothetical realities – the core function of SIA. To understand complex realities where people's values, perceptions and judgements will affect their response to policy and therefore affect policy impact requires going beyond a purely quantitative picture of reality.

To investigate hypothetical impacts of proposed policy change and establish causal chains, which turn out to have credibility in terms of accurate prediction i.e., are supported by impact analysis at the ex-ante stage, requires methods which go beyond the strictly quantitative. In order to answer questions as to *what* impacts will occur SIA has to find some answers to *how* and *why* they occur.

## **4.2 Participation and Consultation**

The EC's Communication on Impact Assessment (June 2002) states "Impact assessment is an aid to decision-making, not a substitute for political judgement. Indeed political judgement involves complex considerations that go far beyond the anticipated impacts of a proposal". Two pages later it states that "The aim of the impact assessment process is that the Commission bases its decisions on sound analysis of the potential impact on society".

Participation imposes costs, and participants need to have confidence that the time, effort and expense involved are worthwhile. Potential participants have a fundamental choice as to whether or not they participate in any given consultative process. Indeed one of the current problems in governance, particularly for international organisations, is the large number of

NGOs and activists who have declined to take part in consultation and instead chosen to operate from outside the conference room. These include people with sophisticated analyses who have come to the conclusion that much consultation is “greenwash”. Consultation undertaken for cosmetic purposes can only undermine genuine efforts to contribute to good governance.

The Communication on Impact Assessment identifies those policy proposals which will qualify for impact assessment. It also states “However, certain types of proposal will normally be exempt from the impact assessment procedure. This would include proposals like Green Papers where the policy formulation is still in process”. What is of concern here is the implication that it is only those proposals where policy formulation is *not* still in progress that are suitable for impact assessment.

If impact assessments cannot affect the formulation of policy it is difficult to see how to justify the considerable effort of carrying them out. At a later stage in the document it is stated that “as to the policy choice, the final options will emerge through the impact assessment process” (page 9) thus indicating that indeed impact assessments are expected to contribute to policy formulation as one would expect. Do these two examples of apparently inconsistent statements reflect a lingering ambiguity in the Commission’s approach to public participation in policymaking?

#### **4.3 The Contribution of SIA to Good Governance – the Example of the EU**

The European Commission identified the reform of European governance as one of its four strategic objectives in early 2000. In its White Paper on European Governance it noted that “many people are losing confidence in a poorly understood and complex system to deliver policies that they want”. The White Paper proposes “opening up the policy-making process to get more people and organisations involved in shaping and delivering EU policy”.

Identifying openness, participation, accountability, effectiveness and coherence as the five principles underpinning good governance the Commission recognises that the very legitimacy of the EU depends on involvement and participation.

The White Paper also discusses how the EU should apply the principles of good governance to its global responsibility, including aiming to improve the effectiveness and legitimacy of global rule-making and helping to complement international action with new tools.

One outcome of the White Paper has been the publication of a proposal for general principles and minimum standards for consultation of interested parties by the Commission. Another significant outcome was the Mandelkern Group’s Report on Better Regulation published in November 2001. This emphasised the need to address the whole life cycle of policy (inception, design, legislation, implementation and review) and its recommendations included embedding a new, comprehensive and suitably resourced impact assessment system as an integral part of the policy making process. The report also stressed the importance of consultation and identified one of the potential benefits of impact assessment as the framework for such stakeholder involvement which it can provide.

Sustainable impact assessment (SIA) can provide a bridge between current practices in policymaking and the sort of visionary aim expressed by the European Commission in its White Paper on European Governance:

“... the linear model of dispensing policies from above must be replaced by a virtuous circle, based on feedback, networks and involvement from policy creation to implementation at all levels”. (page 11)

The underlying philosophy of, and best practice in, SIA relates to these and other aspirations of the White Paper. Here SIA is defined simply as the process of identifying, and assessing the likelihood and scale of, the economic, social and environmental impacts of any policy

change whether positive or negative. Such a process clearly requires the active participation of a wide group of stakeholders. And the purpose of it is to ensure that those charged with making policy have the best and most complete information possible to guide them in their decision-making.

The EU's approach to better governance has recently led to a decision to implement SIA for all policy proposals of a certain level of significance.

## **Sustainable Development**

Two months prior to publishing its White Paper on European Governance the Commission published its proposal for "A sustainable Europe for a better world: a European Union strategy for sustainable development". The Commission identifies the Brundtland Commission's definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" to be a global objective and states that, in the long term "economic growth, social cohesion and environmental protection must go hand in hand".

The Commission considers that its sustainable development strategy should be "a catalyst for policymakers and public opinion in the coming years and become a driving force for institutional reform and for changes in corporate and consumer behaviour". A new approach to policymaking is identified as requiring urgent action. Although many EU policies address the economic, social and environmental dimensions of sustainability "these have developed without enough coordination. Too often, action to achieve objectives in one policy area hinders progress in another".

Therefore assessments of policy proposals must include estimates of their economic, environmental and social impacts inside and outside the EU. "It is particularly important to identify clearly the groups who bear the burden of change, so that policymakers can judge the need for measures to help these groups to adapt". And, recognising that EU policies have consequences far beyond its geographical borders, "policies must actively support efforts by other countries – particularly those in the developing world – to achieve development that is more sustainable".

## **5. Summary and Conclusions**

This paper has described a methodology for the sustainability impact assessment of trade policy measures, which aims to achieve a balanced coverage of economic, social and environmental impacts (both positive and negative), and at the same time, to be practical, accessible to decision-makers, transparent to stakeholders, and participatory in its approach. In so doing, it addresses current concerns for evidence-based policy formulation and for broader reforms in governance processes. Thus, while the approach may be judged and lack technical sophistication, it is considered appropriate to the task and the circumstances in which it can be used.

The current phase of the application of this SIA approach in assessing the sustainable development impact of the Doha Agenda, on developing countries and on the EU, will be completed in Spring 2003 (the results will be disseminated widely, with invitation to comment, on the project website: <http://idpm.man.ac.uk/sia-trade>). This is already providing a valuable test of the methodology and of the need for any further refinement, as a result of the experience gained and the comments received.

It is hoped that this first application of the methodology in carrying out detailed SIA studies of specific trade measures and of the Doha Agenda as a whole, will demonstrate to policymakers and other interested parties, both the feasibility and desirability of using the SIA approach as a tool for informing policy formulation and decision-making.

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