

SUSTAINABILITY IMPACT ASSESSMENT OF PROPOSED WTO NEGOTIATIONS

OVERALL PROJECT FINAL REPORT

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Project Reports and information about the project are available from
the project website:

<http://www.sia-trade.org>

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EXECUTIVE SUMMARY

The European Commission is committed to ensuring that its policy choices are consistent with the overarching objective of sustainable development, and impact assessment has been adopted as the instrument for ensuring that policy choices are informed by an assessment of their potential economic, social and environmental impacts. As part of this commitment, DG Trade has been engaged since 1999, in an ongoing programme of Sustainability Impact Assessment (SIA) studies of all EU trade negotiations. The SIA studies are intended to provide an analysis of the potential impacts of the proposed trade agreements on sustainable development, and of any necessary flanking measures, the adoption of which would enhance positive impacts and mitigate negative impacts on sustainable development. The results of the SIA are expected to inform the trade negotiation process and to support a negotiated outcome that is consistent with the goal of sustainable development.

The Framework Agreement on Sustainability Impact Assessment of Proposed WTO Negotiations is in its fourth and final phase. The aim of Specific Agreement 4 is to provide the following studies:

1. A final global overview Trade SIA of the potential impact on sustainability of the Doha Development Agenda (DDA) negotiations as a whole
2. A Trade SIA of Fisheries

This Project Final Report for Specific Agreement 4 has the following sections:

1. Executive Summaries of the Final Reports for the Global Overview SIA and the Fisheries SIA
2. Update on Consultation Process and Networking Activities

Comments and suggestions are invited on the contents of this report and in contributing to the development of future actions, particularly in relation to the questions identified below. The list is not intended to be comprehensive, and observations relating to other aspects of the study are also welcomed.

- Is there any important evidence of which you are aware that has not been taken into account, such that the assessment of impacts is misleading or incorrect?
- Are there faults in the analysis which may have led to incorrect conclusions?
- Do you have any suggestions for monitoring and evaluation of the SIA?
- Do you have any suggestions for further development of the SIA methodology and communication with experts and other stakeholders?
- Do you have any suggestions for capacity building in partner countries?

Comments and suggestions may be sent to the project email address:

sia-trade@man.ac.uk

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1. EXECUTIVE SUMMARY OF THE GLOBAL OVERVIEW SIA INCEPTION REPORT AND THE FISHERIES SIA INCEPTION REPORT

1.1 Global Overview SIA

This report presents the results of the global overview sustainability impact assessment of the Doha Development Agenda. This Final Overview SIA builds on the results of the Preliminary Overview SIA and sectoral studies that were undertaken in the preceding phases of the contract. It aims to inform trade negotiators and other interested parties on the potential economic, social and environmental impacts of the WTO negotiations that are due to be finalised by end-2006. The SIA is also intended to identify and assess potential flanking and preventive measures that can be implemented to enhance positive impacts, mitigate negative impacts, and more fully integrate the trade reforms with wider actions to promote sustainable development.

The report has seven sections. Section 1 provides a short introduction which describes the WTO Trade-SIA programme. Section 2 summarises the main results of the Hong Kong Ministerial meeting in December 2005, and describes the agreements reached in the main negotiation areas of the Doha Development Agenda. Section 3 describes the main features of the SIA methodology used in the current studies, including the refinements and developments described in the Project Inception and Mid Term Reports. Section 4 provides a comprehensive review of recent studies that have used economic modelling techniques to assess the economic, environmental and social effects of DDA trade liberalisation. Section 5 gives an assessment of the potential sustainability impacts for Agriculture, Non-Agricultural Market Access, Services, Rules and Other Measures, and the overall impact of the DDA as a single undertaking. Section 6 provides a discussion of the opportunities for enhancement, prevention or mitigation of potential impacts of the DDA as a single undertaking, and Section 7 presents proposals for future action.

The global economic impact of the Doha Development Agenda is likely to be modest, and smaller than had been predicted in earlier years. Although there are potential aggregate economic welfare gains to be made from the trade liberalisation measures that can reasonably be expected to be agreed in the Doha negotiations, these are not necessarily shared by all countries or all socio-economic groups within these countries. Furthermore, the social and environmental impacts of trade liberalisation can be adverse, where existing environmental and social protection measures are insufficiently effective.

Economic impacts differ between resource reallocation and dynamic effects. Economic welfare gains arise from the reduction of price distortions and the reallocation of resources, primarily from increased imports of some goods or services and increased exports of others, with labour and other resources moving between sectors. Dynamic impacts result from changes in investment and productivity that may be stimulated by changed market opportunities and greater exposure to international competition. For most countries the potential economic welfare benefits are relatively small, expressed as a share of GDP. In some low income countries, the economic impact may be negative, but again relatively small. The potential economic benefits are likely to increase in the longer term, largely as a result of market adjustments to new conditions, the productivity improvements and increased investment induced by greater trade openness.

The economic welfare gains accrue after a period of resource reallocation. This transition period is often associated with significant adjustment costs as labour and capital move from less to more efficient uses. Labour markets typically adjust less rapidly than other markets, and as a result, the adjustment period is often associated with increased unemployment or underemployment. These adjustment costs can be severe in developing countries where social protection is weak or absent.

The global impact of trade liberalisation on social welfare is also modest, with a small reduction in absolute poverty levels in developing countries as a group. The impact on poverty reduction is

expected to be favourable in some large developing countries, such as India and China, that are expected to benefit economically from trade liberalisation. In some of the poorest countries, in sub Saharan Africa for example, poverty may worsen as they stand to lose economically from trade liberalisation and face severe supply side constraints. Most countries experience beneficial impacts for some sections of society, but adverse short term impacts on others, as resources shift between different production activities in response to trade-related incentives, and household livelihoods are correspondingly affected. The adverse effects will be particularly severe in countries with high initial levels of protection and little or no comparative advantage in sectors where other countries' markets become more open. Most of the adverse effects are likely to be short to medium term, and may be highly significant if liberalisation is rapid or not accompanied by effective social policies. These impacts may continue into the longer term in the absence of appropriate policies to support the creation of new employment opportunities. Countries with high initial protection may also experience a significant loss of tariff revenues, with possible negative indirect social impacts if expenditure on health, education and social support programmes is reduced. Women tend to be among the most vulnerable to adverse impacts, although opportunities also arise for higher skilled jobs and improved working conditions.

Global environmental impacts are expected to be negative as the volume of international trade increases. The impacts on climate change and global biodiversity are adverse overall, arising primarily through increased transport and pressures for increased agricultural production in biologically sensitive areas. Local effects occur for water, air and soil quality, water quantity, soil erosion and biodiversity, and are particularly significant in areas of high existing stress. These adverse environmental effects can in principle be countered by technology or regulatory measures. However, in many developing countries, environmental regulation tends to be insufficiently strong to counter adverse effects.

Trade liberalisation *per se* is not the main driver for a more sustainable development. It may however, be one of several policy mechanisms that can, under appropriate circumstances, contribute to growth on a more sustainable basis. Other economic and developmental reforms and measures that are tailored to the specific requirements of each developing country would need to be implemented alongside greater trade liberalisation. Trade can be a catalyst for sustainable development in most countries, but may hamper development in those countries that appear to be particularly vulnerable to liberalisation and are the least prepared for deeper trade integration and globalisation. It is this latter group of countries that particularly needs special consideration in WTO negotiations.

The main finding of the SIA is that although there are potential, aggregate *economic welfare* gains from the Doha Development Agenda, these are not necessarily shared by all countries and all socio-economic groups within these countries. Further, in a number of the cases considered, the *environmental* and *social* impacts are negative, especially where existing environmental and social protection measures are insufficiently effective. The potential impacts between developing countries differ, depending on context and policy specific factors relating to the countries concerned. As a group, developing countries are expected to gain from the Doha trade liberalisation measures. But some countries, particularly in the LDC group, are likely to experience economic costs, at least in the short term. The social and environmental impacts are similarly differentiated.

The implication of these findings is that the achievement of a trade Round that is truly a 'Development Round' will necessitate a set of additional and complementary measures to be agreed and implemented by the members of the WTO and the wider international community, as acknowledged in the Hong Kong Ministerial Declaration. There is a broad consensus that the aid for trade agenda should include trade related technical assistance to build capacity to (i) formulate a locally owned trade policy (ii) participate in trade negotiations (iii) implement trade agreements. It should also include assistance to build supply side capacities, including trade related infrastructure, to benefit from WTO agreements.

There is less agreement on whether support to address supply side constraints should be confined to reducing trading costs, particularly through trade facilitation measures, or should be extended to

include support to increase the capacity of specific productive activities. Nor is there a clear consensus on whether compensatory assistance with adjustment costs resulting from trade-induced changes should be part of the aid for trade agenda.

If the potential losses by some countries are not to become an impediment to the successful conclusion of negotiations whose potential overall benefits for sustainable development exceed its costs, then it is important that negotiators and policymakers establish a consensual and realistic understanding on the aid for trade package that will be implemented at the conclusion of the Doha Round negotiations. Credibility and predictability of funding is important both for the successful conclusion of the negotiations and for a developmental outcome from the Doha Round.

Equally, if trade liberalisation is to make a meaningful contribution to economic growth, the various aid for trade initiatives that have been proposed need to be integrated in a coherent programme of support which uses trade opportunities as an engine for growth. Enhancing the Integrated Framework with a larger Trust Fund to support multi-year programmes of capacity building that would lead to more effective incorporation of trade into PRSPs, strengthen in-country capacity for implementation, and provide resources to finance project preparation to accelerate implementation of priority actions, offers one way of improving the effectiveness and impact of the Integrated Programme.

The need for additional aid for trade resources should be seen in the general context of the increased flow of resources to developing countries that is needed if the Millennium Development Goals are to be met. If aid for trade is properly integrated with broader development strategy and planning, its impact will extend beyond the immediate trade area and support efforts to achieve the MDGs by 2015. Trade liberalisation alone is unlikely to have a significant impact on long term sustainable development trajectories. However, a carefully sequenced process of liberalisation which is matched by assistance in strengthening the domestic economy's capacity to adjust and respond to new trading opportunities, can make a significant contribution to the process of sustainable development, particularly in poorer countries.

1.2 Fisheries SIA

The overall objective of the study is to assess the potential economic, social and environmental impacts of trade measures arising from the Doha Development Agenda (DDA) negotiations that have an impact on fisheries production and trade. These trade measures include:

- Market access (i.e. tariff and non-tariff measures) as part of the negotiations on non-agricultural market access (NAMA);
- Subsidies to the fisheries sector in different forms, which are being discussed by the WTO Negotiating Group on Rules; and
- Other trade issues, e.g. eco-labelling, and services incidental to fisheries.

The economic and fishery context for the analysis relates particularly to the rapid expansion in fisheries catch, production of processed products and trade over recent decades, notably the expansion in value of trade i.e. from about US\$ 15 billion in 1980 to US\$ 63 billion in 2003, with developing countries as a whole contributing approximately 50% of the total. Projections point to a further expansion of production (especially from aquaculture sources) and trade. At the same time, capture fisheries is an industry in crisis as the natural resource limits of the oceans, coastal regions and many inland water bodies have been reached in that about two thirds of the world's major fisheries are either overfished or fully fished.

Screening work pointed to the following trade measures as being of particular relevance for this study:

Non-agricultural market access (NAMA) – Tariffs: Developed countries often have zero or relatively low levels of tariffs on fish, but there are cases of escalation with some peaks (e.g.

processed tuna). EU rates are on average are around 11%, but zero rates apply for ACP and LDC states. As part of the on-going WTO trade negotiations, the EU favours tariff reductions based on a Swiss formula with flexibilities for developing countries. Although coefficients have not been agreed as yet, it is likely (i.e. hoped) that this will result in maximum tariffs of about 10% for imports into developed countries and about 15% for developing countries respectively.

Non-agricultural market access (NAMA) - non-tariff measures: Although it is likely that there will be little progress in this area as part of the NAMA negotiations, there has been substantial work undertaken by the WTO Members notifying non-tariff barriers (NTBs) they face in importing countries.

Subsidies – The Declaration adopted at the WTO Hong Kong Ministerial Conference in December 2005 reaffirms the Doha mandate, which *inter alia* provides that in the context of Rules negotiations, participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.

The DDA also addresses labelling requirements for environmental purposes (i.e. eco-labels), in order to clarify the impact of eco-labelling on trade and examine whether WTO rules contradict eco-labelling policies.

The outcome of WTO GATS (General Agreement on Trade in Services) is unlikely to affect fisheries trade, and is therefore not being analysed in detail. Nevertheless, in view of the growing importance of major retailers in the fish marketing system, there are lessons that can be learned from the SIA study of Distribution Services.

Initial screening and scoping has led to the following country case studies being undertaken: Ghana, India, Peru, Seychelles, Thailand, and Uganda. In addition, partial case studies have been prepared for China, European Union, Japan and USA.

The importance of stakeholder consultation and participation has increasingly been recognised as the SIA methodology has been developed. In particular, the importance of involving developing country stakeholders is emphasised. As a result, a number of developing country stakeholders and institutions have been involved, in particular in country level case studies.

This final analysis of the impacts resulting from potential DDA outcomes was undertaken using both case study material and secondary literature. In particular, the impacts are grouped along the lines of economic, social, environmental, and process impacts for the four country groupings identified. Prevention, mitigation, and enhancement (P, M&E) measures are analysed in relation to impact on sustainable development, cost effectiveness, and feasibility.

Key findings of the case studies

NAMA – tariff measures

For the EU in particular, and also the USA the expectation is that significant expansion in imports will be generated through WTO impacts, whilst for Japan the outcome may be more muted. Many economic fundamentals, in addition to potential WTO effects, point towards expansion in imports across a wide range of fishery products for the EU. Overall, WTO impacts resulting from tariff reductions are expected to benefit a number of developing country exporters, but some will also lose as a result of preference erosion – notably ACP countries.

Developed countries – European Union

Tariff impacts will be greatest where current rates are relatively high and for product areas of major importance in EU markets (i.e. shrimp and tuna). The key economic fundamental underlying competition from developing country suppliers is their lower (often very substantially lower) labour costs. Spain (main EU tuna canner) and to a lesser extent Italy and France will lose out to low cost Asian canners for all but the highest quality speciality products. Shrimp processing increasingly moves to developing countries (an on-going process that is likely to be reinforced) with negative implications for processors in Northern Europe. The coldwater shrimp fishing industry will find already low prices dropping further. Whitefish is also likely to be affected but tariffs here are quite low and changes arise mainly because of economic fundamentals. Eastern EU processors of whitefish and small pelagics will equally be affected as processing moves on to lower cost areas in Asia. Lower tariffs in export markets (e.g. Russia) would likely result in increased EU exports of small pelagics. The main EU winners of tariff reductions will be consumers, retailers, and food services as a consequence of declining prices.

There will be social implications in areas affected by factory closures, also because a high proportion of female workers are likely to be affected. As for environmental impacts, capture primarily depends on catch control. As a consequence, increased imports do not necessarily mean less pressure on fish stocks.

Developed countries – Japan and USA

Tariff changes are unlikely to impact on levels of Japanese consumption given current duty levels, but there could be some effects in the USA. In the US market changes could strengthen existing consumption in high value fish and crustacean markets in particular and have a more marked effect in trade terms because of the likely ongoing transfer of processing capacity to low cost producing countries. Thus the growing deficits in these items could be emphasised. Impacts in Japan are likely to be more muted with regard to trade and processing patterns.

Non-ACP/LDC developing countries

The overall impact of tariff reductions on non-ACP/LDC countries is expected to be either neutral or positive in economic terms. WTO impacts as a result of tariff changes are likely to be relatively small for China given the pattern of Chinese fish production, consumption and major trading partners (e.g. importance of domestic market). As for India, the impact of more relaxed tariffs is expected to be positive in terms of consolidation of its market share and diversification into other markets. Given that Peruvian fishmeal and fish oil exports currently face low tariffs, any further liberalisation will have little or no major impact on the market for these products. Thailand is set to become a major beneficiary of trade liberalisation and the expectation is for an increase in economic activity, exports and foreign exchange generation from both tuna canning and shrimp farming, with the EU market an important factor in both cases. Thailand is also likely to benefit at the expense of ACP suppliers such as Seychelles (e.g. canned tuna).

As for social implications, positive developments are expected where employment will increase. Whilst this may trigger social changes, women are likely to benefit where fish processing industries will be further developed (e.g. Thailand).

Negative environmental impacts are expected as a result of aquaculture expansion. For example, there may be further loss of agricultural land and water pollution, and eco-systems will be affected through increased demand for feed (e.g. small pelagics used for fish meal). Thai tuna processors may be less prepared to demand that raw material comes from well managed fisheries, which could negatively impact on stock levels.

ACP/LDC countries

Preliminary case study analysis of the possible impacts of the Doha Round indicate that a substantial reduction of tariffs on imports into developed countries (i.e. by about 50%) is likely to have the greatest impact on ACP/LDC countries that largely depend on preferential market access for their exports. This is due to preference erosion resulting in the loss of their competitive advantage, which in turn is expected to lead to lower profits as a consequence of declining prices and lower volumes traded. Increased competition will force fish processing plants to attempt to reduce costs through measures such as paying lower prices for raw material or laying off workers. There is a danger that some processing industries (e.g. tuna canneries) will collapse, threatening the viability of transshipment centres such as Mahe in the Seychelles. In addition, government revenues (e.g. tax income) will be reduced, and a drop in foreign exchange earnings may lead to greater exchange rate instability.

Unemployment is expected to increase where workers will be laid off or processing plants will close, and women will be particularly affected in plants employing a high proportion of female workers. Higher levels of unemployment, in turn, will lead to increased poverty amongst the workforce of affected industries, including input suppliers, and knock-on effects are likely to impact on health and education. The latter may be aggravated through reduced government spending as a consequence of lower revenues.

As for environmental impacts, a declining fisheries and processing sector could well lead to a reduced national management and administration capacity, resulting in a reduced commitment to monitoring, control and surveillance (MCS) activities by governments in affected countries.

As for process impacts, there will be an issue over the need for increased regulation to meet environmental demands and to ensure that the export industry meets increasingly stringent hygiene and other standards.

Subsidies

Developed countries – European Union

As part of the WTO negotiations, the EU position lies between the “top-down approach” of the Friends of Fish group (e.g. New Zealand, Chile, Peru, USA) and the “bottom-up approach” by countries such as Japan, Korea, and Taiwan. The EU approach is based on boxes (i.e. red and green) whereby subsidies contributing to overcapacity are prohibited (e.g. subsidies for vessel construction or renovation). On the other hand, capacity decreasing subsidies and support for the development of alternative income sources in affected fishing communities are acceptable. Significantly, the EU is also advocating more transparency and effective enforcement mechanisms. Some of the subsidy reducing measures have already been put in place as a result of the EU’s reformed Common Fisheries Policy (CFP). The contributions of vessel owners as part of Fisheries Partnership Agreements (FPAs) are slowly being increased.

A positive environmental impact as a result of subsidy reductions is likely to happen in the medium to long-term when the current generation of fishing fleet will reach its useful life.

Developed countries - Japan and USA

Subsidies have been used extensively in the past in the fisheries sectors of both Japan and the USA. In Japan subsidies have been particularly prevalent in support of the fishing fleet. The US has also engaged in subsidising various components of the fishery sector including research and development and the development and expansion of the fishing fleet. More recently the US approach has been to seek to restrict fleet capacity through buy-back programmes.

Japan and the US are at opposite ends of the current debates on subsidy issues. The US view (along with other members of the “Friends of Fish” group), is that the WTO SCM measures do not go far enough in terms of environmental and developmental concerns. Japan in contrast argues that subsidies are an issue only where they lead to distortions in trade.

To the extent that a reduction in subsidies leads to an increase in fishing costs, then this might be expected to diminish production, consumption and/or trade, with an offsetting beneficial impact on fish stocks.

Non-ACP/LDC developing countries

With regard to subsidies it is difficult to predict future Chinese action, but state involvement in economic planning and the direction of economic activity remains strong in a number of key fishery areas. Part of the current pattern of subsidies is switching towards capacity reducing activity (i.e. reduction in the domestic fleet size), but in other areas is clearly supporting expansion – notably for a range of aquaculture support measures. The impact of more recent action on subsidies, notably the attempt to reduce capture capacity, especially when combined with attempts to promote more sustainable management regimes, may imply reduced catch and hence some combination of reduced consumption and/or trade, especially for higher value demersal species that are most under threat from over-fishing.

As part of the liberalisation of India’s economy, a number of measures have been taken that reduced subsidies to the fisheries sector in one way or another, namely, reduction or removal of subsidies on inputs (e.g. fuel), fishers sharing part or whole of the cost of public investments, reduction or removal of tax preferences, reduction in subsidised lending and credit provision arrangements, and reduction in provision of public service under the Structural Adjustment Programmes. Although it is argued that a complete withdrawal of direct fisheries subsidies is unlikely to affect the conditions in the supply chain, a further reduction of indirect subsidies (e.g. fuel price increases) might affect the viability of fishing operations. This would have negative social consequences, but a positive impact on the environment.

The Peruvian government only provides some small subsidies by way of exemption or reduction of fiscal obligations in order to stimulate inland aquaculture. Free use by the artisanal fishermen of government terminals to land fish might also be considered an unquantifiable subsidy. However, services provided by the terminal, such as the wholesale market and sale of ice are paid for by the artisanal fishermen. In view of this, there would not appear to be any serious impact on the Peruvian fishing sector if subsidy removals were to be introduced.

The overall impact of subsidies on the Thai seafood sector is believed to be currently limited, though research has clearly generated benefits in the past. However, it is possible there could be a converse indirect benefit as, were there to be a general global abandonment of direct subsidies throughout the sector, this could enhance Thailand’s competitive position.

ACP/LDC Countries

Subsidies to the fisheries sectors of ACP/LDC countries show substantial variations and can include items such as fuel at lower or no tax, credit provision on favourable terms, capacity building such as skill training, tax exemptions on inputs destined for fish processing plants, research and management, and license fees paid to governments as part of fisheries access agreements. In general, the impact of subsidies is dependent on the type of fisheries management in place. The more effective a management regime, the lower the impacts that can be expected as a result of subsidies.

Ghana’s government, for example, provides some subsidies largely to support artisanal fishermen (e.g. fuel tax exemption) and women processors (e.g. skill training and soft loans). It is expected that a removal of these subsidies would lead to a significant number of fisherfolk going out of business, with

negative knock-on effects on poverty, primary health care and education, but potentially positive implications for the environment as fishing effort will be reduced. Also, it is argued that a removal of subsidies to foreign fleets to fish outside their territorial waters will help replenish the stocks of Ghana's EEZ.

As for Uganda, it is estimated that subsidies to support small-scale fishers have a negligible distorting impact on the international fish trade although their removal could cause increased hardship. Removal of the subsidies supporting processing operations would reduce their ability to compete.

As for Seychelles, it is suggested that abandonment of the FPA agreement could significantly reduce government receipts, potentially affecting resource management as FPA compensation is partly ring-fenced for fisheries management, especially MCS. Abandoning direct subsidies would have limited impact as they appear to have failed to achieve their objectives of expanding the artisanal fishery.

Other trade measures

SPS related seafood export bans imposed during the 1990s by the EU in Uganda, and EU, Japan, and US in India had significant short- and long-term impacts. Uganda's Nile perch export bans represented major shocks for the fishery sector, leading to short-term loss of exchange earnings, bankruptcies and unemployment. In the medium, to long-term, however, the sector has recovered well, with a smaller but better equipped processing sector, improved marketing strategy, and strengthened institutions. As for India, among the different trade measures, the SPS Measures have been by far the most significant in terms of their impact upon the seafood export sector in the country and led to a virtual reorganisation of its structure and operations. The gains were in terms of improving the local standards to international level, whilst the negative consequences have been the high cost of upgrading the industry, loss of livelihoods and reduced profitability. The TBT Measures, which affected India in the form of a ban on shrimp exports to the US for not using appropriate measures to reduce turtle mortality caused by trawlers, had much less impact upon the sector.

India is one of the six countries affected by anti-dumping measures (ADM) imposed by the US on shrimp imports. As a result of shifting markets from the US to the EU, the impacts of the antidumping tax are barely visible. The loss of US markets may have kept the shrimp prices more or less stable, even showing a marginal decline in terms of unit value realisation but this might also reflect a global trend. ADM measures also remain critical for other countries as to the extent to which the US chooses to pursue them in future and the extent to which they will be challenged through the WTO system.

No in-depth analysis of Rules of Origin (RoO), Regional Fisheries Management Organisations (RFMOs), fisheries related services, and anti-dumping measures has been undertaken as part of the country case studies given that the potential outcome of current WTO negotiations appears to have little impact on these issues.

Prevention, mitigation, and enhancement (P, M, and E) measures

To prevent, mitigate and/or enhance the identified impacts, the following recommendations are being proposed:

Economic and trade related measures

- Gradual (rather than precipitate) reduction of tariffs to allow fisheries and processing industries to adapt to changes;
- In relation to non-tariff measures, capacity building of standard boards;
- Investments for the provision of infrastructure, support systems and modern efficient technology to make developing country suppliers more competitive;

- Marketing initiatives such as development of new domestic, regional or overseas markets, and targeting of ‘higher-end’ quality markets;
- Development of aquaculture into a medium to large-scale commercial industry; (e.g. Africa);
- Development assistance or other support from the international community to help cover losses from preference erosion.

Social measures

- Design and implementation of alternative livelihoods and employment programmes;
- Retraining and skill development measures in particular for women;
- Existing social subsidies should be continued and strengthened to help the poor in the fisheries sector using more holistic indicators of poverty (e.g. India);
- Support for the shrimp sector around the Gulf of Mexico and specific programmes geared to native communities in North America;
- Special and Differential Treatment of small-scale and artisanal fisheries.

Environmental measures

- Application of an ecosystem approach in response to environmental concerns related to aquaculture production as well as capture fisheries;
- Development of fishmeal substitutes;
- Private sector initiatives and public, private partnerships;
- Eco-labelling should be considered as a tool to achieve both fisheries management and marketing objectives;
- Stopping of illegal, unreported, and unregulated (IUU) fishing;
- Reduction or redeployment of fishing capacity.

Process related measures

- Capacity building and institutional support including measures such as:
 - Support for the Regional Maritime Academy in Ghana;
 - Institutional capacity to understand the possible implications of the DDA and to develop the ability of coping with possible changes (e.g. Uganda);
 - Monitoring, control and surveillance (MCS) capacity, also if Fisheries Partnership Agreements were to be abandoned or downscaled (e.g. Seychelles).
 - Resource assessment studies to determine the potential availability of marine (inshore and offshore) and brackish-water resources and their current levels of exploitation (e.g. India). Also, more pro-poor orientation in policymaking and implementation has been suggested in India.
- Government regulation (e.g. in the context of the environment and the rapidly growing seafood sector in countries such as Thailand);
- Engagement with institutions and in international debates affecting the fisheries sector (e.g. China).

2. UPDATE ON CONSULTATION AND NETWORKING ACTIVITIES

2.1 Consultation Process

Consultation processes are an integral part of the SIA methodology. Previous studies undertaken as part of the SIA of WTO Trade Negotiations have incorporated procedures for consultation with stakeholders, and have provided regular updates on the development of the experts network, website usage, dissemination activities, and contributions made by the consultants to SIA policy debates with experts in other countries and organisations.

These procedures have continued during the current phase of the programme. A Public Meeting was held on the Mid Term Reports, on 26th March 2006, and a report on the consultations is available on the project website. The Experts Network and List of Consultees were notified of the draft Mid Term Reports and comments received by email have been responded to (see below). The Reports were placed on the project website (www.sia-trade.org). Further consultation will take place on publication of the draft Final Reports.

The comprehensive nature of the global overview SIA is such that dialogue with stakeholders representing all these constituencies should cover all the areas of the Doha agenda, for all WTO member states. The principal mechanism for achieving this will be through the experts network database which has been accumulated through the SIA programme. This includes stakeholder organisations and individuals in the European Community member states, other developed countries, developing countries and least developed countries, including experts with knowledge in a wide range of environmental, social and economic areas. The number of participants in the database has increased from about 500 in April 2004, to over 1300 in May 2006.

Electronic communication with stakeholder representatives is being supported by the posting of reports and other information on the project website, and through the website's feedback facility and email correspondence with participants.

Comments from stakeholders on the Mid-Term Reports have been responded to, as shown in table 1.

Table 1: Correspondence with Stakeholders

Correspondence	Date	Comment	Response
James Howard, International Confederation of Free Trade Unions (ICFTU)	02/05/06	Integrating decent work indicators in SIA.	Comments received with thanks and will be addressed in the final report.
Charly Poppe, Friends of the Earth Europe	28/04/06	NGO criticism of the negotiations have not been taken into account in certain chapters. Opportunities for Enhancement chapter does not refer to any policy changes needed of the EU's trade position.	Comments received with thanks and will be addressed in Final Report.
Charly Poppe, Friends of the Earth Europe	28/04/06	Comments on the Fisheries Mid-Term Report and the Overall Project Mid-term report.	Comments will be addressed in Final Report.

Direct dialogue with stakeholders will continue to be pursued through attendance at international events involving civil society and governmental representatives.

Stakeholders are invited to respond to a specific set of questions on the Final Reports, or on any other issue:

- Is there any important evidence of which you are aware that has not been taken into account, such that the assessment of impacts is misleading or incorrect?
- Are there faults in the analysis which may have led to incorrect conclusions?
- Do you have any suggestions for monitoring and evaluation of the SIA?
- Do you have any suggestions for further development of the SIA methodology and communication with experts and other stakeholders?
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Impact Assessment Research Centre
Institute for Development Policy and Management
University of Manchester

2.2 Website Use

The contractors have continued to run the open access website at www.sia-trade.org. The existing database of more than 1300 stakeholder organisations and individuals was used to distribute electronically an announcement of the commencement of the current phase of the work programme. Details of the dates for completion of the inception, midterm and final reports, and the timetable for consultation on the reports, have been provided. All interested parties, whether individuals or organisations have been invited to participate in the current phase of the SIA programme, using the dedicated email address for comments – sia-trade@manchester.ac.uk

The contractor will continue to respond to the comments received, using the feedback-comment function that is incorporated in the website to facilitate dialogue with stakeholders and other interested parties.

The project website has had an average of 939 ‘visits’ per month from January 2005 – April 2006. Table 2 shows the number of visits to the website during that time. Table 3 shows the number of times that online reports have been accessed from January 2005 through to April 2006.

Table 2: Numbers of visits to the website (January 05 – April 2006)

Month	Jan – Feb 05	Mar – Apr 05	May – Jun 05	Jul – Aug 05	Sept – Oct 05	Nov – Dec 05	Jan-Feb 06	Mar-April 06	Total hits	Average hits per month
Hits per month	1435	1232	981	1328	1453	1868	2205	4527	15,029	939

Table 3: Number of times that online reports have been accessed from Jan 05 – Apr 06

Report	Jan – Feb 05	Mar – Apr 05	May – Jun 05	Jul – Aug 05	Sept- Nov 05	Dec 05- Feb 06	Mar 06	Apr 06	Total Hits Jan05-Apr06
FINAL REPORTS [Year 1, Phase 3]: May 2003									
Executive Summary	102	70	82	275	155				684
Environmental	230	188	496	185	305	166	43	25	1638
Market Access	323	51	314	300	625	210	28	26	1877
Competition	126	114	65	159					464
Preliminary Overview	92	96	55						243
Assessment of Individual Trade Measures	160	368	326	309	746	169	55		2133
INCEPTION REPORTS [Year 2, Phase 3]: April 2004									
Overall Project Report	74	166	238						478
Forest Study	147	312	332	349	265				1405
Agriculture Study	157	126	182	275	83				823
Distribution Services	98	53	280	409	93				933
MID-TERM REPORTS [Year 2, Phase 3]: Jan 05									
Overall Project Report	538	744							1282
Forest Study	1205	476	87	87	581	23	33	22	2514
Distribution Services	1156	446	64	154	263	79			2162
Agriculture Study	2358	1596	114	305	744	136		45	5298
FINAL REPORTS [Year 2, Phase 3]: Drafts April 05 / Final Sept 05									
Overall Project Report			1626	619	1601	2047	123	161	6177
Forest Study			823	626	1886	1188	70	100	4743
Distribution Study			906	496	1067	923	73	50	3515
Agriculture Study			1673	977	1629	581	60	38	4958
INCEPTION REPORTS [Final Phase]: January 2006									
Overall Project						74			74

Report	Jan – Feb 05	Mar – Apr 05	May – Jun 05	Jul – Aug 05	Sept- Nov 05	Dec 05- Feb 06	Mar 06	Apr 06	Total Hits Jan05-Apr06
Report									
Global Overview						125	45		170
Fisheries Study						76	39		115
MID-TERM REPORTS [Final Phase]: 07 April 2006									
Overall Project Report								30	30
Global Overview								84	84
Fisheries Study								32	32

2.3 Networking and Contributions to Policy Debate

The contractor has continued to engage in the wider policy debate on issues relating to trade policy analysis, impact assessment and sustainability impact assessment. The contractors contributed to the **Trade SIA Stocktaking Conference** held in Brussels on 21-22 March 2006, and made three presentations on various aspects of the SIA methodology at the conference.

Other networking activities during the current phase of the WTO SIA programme include:

- Participation in the UNEP Experts Group on International Framework for Integrated Sustainability Appraisal, February 2006
- Partner in the European Network on Better Regulation (funded by DG Research)
- Presentation at the SIA-EMFTA Civil Society Meeting, Brussels, 20 March 2006
- Regional Workshop on Trade and Environment Capacity Building, Muscat, Oman, 25-27 March 2006 (ESCWA-LAS-UNEP/ROWA).
- Presentation at the Trade Assessment Section of the International Association For Impact Assessment, Annual Conference, Stavanger, Norway, May 2006
- Presentation at the MCSD, Cyprus, May 2006

The contractors have continued to disseminate the results of the SIA programme through academic publications. These include:

George C and Kirkpatrick C (eds)(2006), forthcoming, *Impact Assessment for Sustainable Development: European Perspectives and Experience*. Edward Elgar: Colchester

Kirkpatrick, C., George, C. and S. Scriciu (2006) "Trade liberalisation in environmental services: why so little progress?" *Global Economy Journal*, Vol. 6, Issue 2 (May) (electronic journal: www.bepress.com/gej/).

Lee N. and C. Kirkpatrick (2006) "Evidence-based policy-making in Europe: an evaluation of European Commission integrated impact assessments", *Impact Assessment and Project Appraisal*, Vol. 24 (1): 23-33.

George C. and Kirkpatrick C. (2006) 'Assessing national sustainable development strategies: strengthening the links to operational policy' *Natural Resources Forum*, 30 pp146-156

Scriciu, S (forthcoming) “How useful are applied general equilibrium models for sustainability impact assessment?”, in George, C. and C. Kirkpatrick (eds.) *Impact Assessment for Sustainable Development: European Perspectives and Experience* Cheltenham: Edward Elgar, 2006

Scriciu, S. and A. Blake (2005) “General Equilibrium Modelling Applied to Romania (GEMAR): Focusing on the Agricultural and Food Sectors”, IDPM Development Economics and Public Policy Working Paper no.11/2005, *Institute for Development Policy and Management (IDPM)*, School of Environment and Development, University of Manchester;

Scriciu, S. (2004) “Assessing the Economic Impacts of Incorporating Romania’s Agricultural and Food Sectors into EU’s Customs Union: an Applied General Equilibrium Approach” *Romanian Journal of European Affairs*, vol.4 (3): 57-76

Two issues of the SIA Newsletter have been produced and widely disseminated in paper and electronic copy. A further Trade-SIA newsletter will be issued on completion of the programme.

3. PROJECT MANAGEMENT

3.1 Project Outputs

The outputs of the project are:-

1. *Final Global Overview Trade SIA* of the potential impact on sustainability of the Doha Development Agenda (DDA) negotiations as a whole.

This study will:

- Draw together the results of the earlier studies, with further analysis as necessary, to provide an assessment of the impacts on sustainability of the DDA.
- Propose preventive, mitigation and enhancement measures in different areas of public policy, including trade policy.
- Identify the generic issues (potential sustainability impacts and policy options for optimising outcomes) which can inform negotiators and policy-makers.
- Evaluate the Trade SIA methodology and identify areas for further development and refinement in future Trade SIA studies.
- Provide proposals for the ongoing monitoring of key sustainability indicators affected by trade liberalisation and for ex-post evaluation of the Final Global Overview SIA.
- Contribute to enhancing the dialogue concerning the final global overview Trade SIA with interested stakeholders, inside and outside of the EU.
- Produce an SIA-Trade Newsletter and distribute in electronic and paper format.
- Contribute to the development of a credible international network of Trade SIA experts in other countries and within other international organisations.

2. *Trade SIA of Fisheries*.

This study will provide:

- An update of the Trade SIA methodology and assessment tools to be used.
- A clear overview of the current trade situation, a definition of the options/scenarios to be considered and a clear analysis of the causal chain analysis, the mechanisms through which the different options will affect social, economic and environmental areas, in the fisheries sector.
- An analysis of the expected significance of these impacts for the sector, using appropriate measures and indicators for assessment of impacts and making use of appropriate qualitative and quantitative techniques.
- Identification cross-cutting links between fisheries and other sectors.
- Propose preventive as well as flanking measures or other adjustments that would prove effective in tackling any adverse impacts of liberalisation, and/or in promoting positive impacts, in the fisheries sector.
- Contribute to enhance the dialogue concerning the above Trade SIA with all interested stakeholders: inside and outside of the EU.
- Contribute to the development of a credible international network of Trade SIA experts through participation in policy debate on Sustainability Impact Assessments with experts in other countries and within other international organisations.

3.2 Reporting Procedures

Timing of Reporting

Inception Report: end January 2006
Mid term Report: end March 2006
Final Report: mid May 2006

Contents of Final Reports

Global Overview SIA

The final report will provide:

- The methodology used for the final global overview Trade SIA, including refinements and development of the methodology
- Recommendations for further development of the Trade SIA methodology
- The outcomes and findings of the final global overview Trade SIA
- Proposals for flanking measures.
- Proposals for monitoring sustainability indicators and evaluation of the final global overview Trade SIA of the DDA
- Proposals for maintaining the SIA-Trade Experts Network and for Trade SIA capacity building, particularly in partner countries.

Fisheries SIA

The final report will provide:

- The methodology used for the SIA study
- The outcome and results of the assessment
- Proposals for flanking measures
- Communication actions, networking activities
- Conclusions
- References and key sources

The Global Overview SIA is being undertaken by the Impact Assessment Research Centre, University of Manchester, UK.

The Fisheries SIA is being undertaken by the Natural Resources Institute, University of Greenwich, UK

The overall project is managed by the Impact Assessment Research Centre. The project directors are Professor Colin Kirkpatrick and Mr Clive George. Both can be contacted using the project email address (sia-trade@manchester.ac.uk).

All reports are posted on the dedicated website (www.sia-trade.org).