Analytical Note
SC/AN/TDP/FTA
Original: English

ANALYSIS OF THE DRAFT INTERIM TRADE SUSTAINABILITY IMPACT ASSESSMENT (TSIA) OF THE EU-CENTRAL AMERICA FTA

SYNOPSIS

Currently, the EU and Central American countries are negotiating a free trade agreement. The European Commission commissioned a Trade Sustainability Impact Assessment (TSIA) which is estimated to be completed by August 2009. On 6 April 2009, the draft interim technical report was published (in English).

This paper assesses the draft interim TSIA and its annexes. The main conclusions are:

- Main sustainability issues in Central America identified in the report are not sufficiently addressed such as regional integration (economic), unemployment (social) and deforestation (environmental).
- The results of the CGE model, and the data input and scenarios overstate the benefits of the FTA.
- The conclusions of the TSIA are not always supported by the results.
- Sensitivities in areas such as sugar and coffee are ignored through aggregation of sectors, e.g. into "other agriculture" or "processed foods/beverages and tobacco".

In short, the draft interim TSIA remains inadequate to serve as a reference document for the negotiations, when its deficiencies are not addressed.

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Table of Contents

1. TRADE SUSTAINABILITY IMPACT ASSESSMENT OF THE FTA UNDER NEGOTIATION BETWEEN EU AND CENTRAL AMERICA

In June 2007, negotiations for an Association Agreement between the EU and Central America (CA) were launched. Since then, 7 full rounds of negotiations took place, as is shown in the table below.

Table 1: EU-CA negotiation rounds

Round	Date
1	22-26 October 2007
2	25-29 February 2008
3	14 April 2008
4	14-18 July 2008
5	06-10 October 2008
6	26-30 January 2009
7	30 March – 1 April (suspended)

The establishment of a Free Trade Agreement is the most important pillar of an Association Agreement. During the course of these trade negotiations, the European Commission commissioned a Trade Sustainability Impact Assessment (Trade SIA).

Trade SIAs are studies conducted by external consultants with the objective to 'study the likely impact of trade liberalisation in areas such as income, employment, capital investment, equity and poverty, health and education, gender inequality, environmental quality of air, water and land, biological diversity and other natural resource stocks.'[1]

The European Commission signed a contract with ECORYS at the end of December 2008 to conduct a Trade SIA of a free trade agreement between EU and Central America. ECORYS did studies on EU-Ukraine, EU-India and EU-ASEAN free trade agreements following a similar methodology.

Central America in this context is composed of 6 countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. Belize has signed up to another free trade agreement with the European Union (CARIFORUM EPA).

An inception report was published before the 7th round in the beginning of March 2009 in which ECORYS presented their approach to the study. A draft interim technical

[1] http://ec.europa.eu/trade/issues/global/sia/faqs.htm

report with modeling results was made public during April 2009. Later this year, by August 2009 at the latest, a draft final report and final report will materialize.

This Analytical Note examines the draft interim technical report of April 2009.[2] Ideally, it should be read together with the draft interim report.

2. MAIN OVERALL RESULTS

A) The basis of the report: a CGE model

The core of the draft interim report and its conclusions revolve around a Computational General Equilibrium (CGE) model, a common tool to estimate how economies react to trade policy changes. The conclusions of the report are primarily based on the results of this CGE model.

A CGE model creates a simulation of the working of actual economies through a series of equations that establish the relationship between economic variables. Such trade models are not meant to be forecasts of economic outcomes, because many factors will determine the actual impact of trade policy changes on the real world. The reliability of findings from CGE models is constrained by data limitations and the necessity to simplify economic realities in order to make the models computable.

What a CGE model can do is to provide a comparison of the relative effects of alternative trade policy proposals or scenarios when all other factors are held constant. It is therefore vital that the model is well-constructed and assumptions, simplifications and data considerations are as realistic and relevant as possible.[3]

Secondly, the CGE modelling can provide the first indication of likely sustainability effects resulting from the macroeconomic level.[4]

Sustainable development has an economic, social and environmental dimension. The report identifies regional integration (economic), unemployment and the large share of the informal sector (social) and deforestation (environmental) as the main sustainability issues in Central America.[5]

[2] It can be downloaded from http://ec.europa.eu/trade/issues/global/sia/studies_geo.htm#can
[3] See also Polaski (2006), "Winners and Losers: Impact of the Doha Round on Developing Countries", p.6, retrievable under http://www.carnegieendowment.org/files/winners.losers.final2.pdf
[4] Page 4 of the draft interim report
[5] See executive summary of the draft interim report. Poverty, income / gender equality and rising trafficking of drugs and related crimes are mentioned as additional social issues

B) Main sustainability issues not addressed

While the draft report states that the model should provide the first indication of likely sustainability effects, it fails to provide relevant results in all the main sustainability issues.

In the economic dimension, the draft report does not indicate whether and to what extent regional integration will be affected by the EU-CA FTA. According to the European Commission, the issue of regional integration and the region to region dimension of any agreement are among the key outstanding issues.[6]

A straightforward indicator to measure regional integration is the increase in intra-regional trade flows. If intra-regional trade increases (or increases relative to EU trade with the region) as a result of the EU-Central America FTA, it will be an indication that the FTA supports regional integration.

In the absence of projected changes in intra-regional trade flows, regional integration as the main economic sustainability issue remains unaddressed. However, it should pose no huge problems to calculate these trade figures, as the CGE model is a trade model.

In the social dimension, unemployment is not addressed by the model. The TSIA uses a "classic" trade model, in which full employment is assumed. Any increase in labour demand will be shown in the model results as rising wages. This assumption is highly inaccurate for the labour markets of Central America. Section 3 will discuss the limitations and results of the model in the area of labour.

Finally, in the environmental dimension, deforestation is not sufficiently addressed. The model includes a natural resource use analysis to assess potential environmental impacts of the FTA. The most obvious 'natural resource' of Central American countries is its forests which is not included in this analysis. Section 4 will go into more detail with respect to the natural resource use analysis.

[6] European Commission, DG Trade, 133 Trade Priorities for first half 2009

C) The main overall results

In this report, the basis of comparison primarily will be results for scenario 1c which assumes a comprehensive FTA in the long run with Panama.

Although Panama is only an observer in the current negotiations, it has already completed bilateral treaties with other countries in the region and full incorporation into the Secretariat for Economic Integration in Central America (SIECA) is expected.

According to the European Commission, the outgoing administration has sent signals expressing its wish to become a full member.[7]

In a "comprehensive FTA", it is assumed that starting from day 0 after signing, tariffs on all goods will be reduced by 90% (no exclusions), and trade costs in services will immediately be reduced by 25%. Furthermore, a one-off reduction of 1% of value of trade due to lower non-tariff barriers is modelled. All cost and duty reductions are modelled in a symmetric way. Table 1 summarizes the results.

Apart from these overall results, the model generates sector specific results – changes in output/income, employment, prices and trade. The main sector specific results will be discussed in more detail in section 6.

Table 2: Summary of CGE modelling results of a comprehensive FTA with Panama in the long run

Outcomes according to the CGE model	EU	CRI	NIC	GTM	PAN	ES	HON
National income (% change)	0.0	1.7	0.2	0.3	0.8	0.9	1.3
National income (€ Mio Euro)	1749.8	436.2	21.1	199.0	248.4	303.1	254.8
Unskilled real wages (% change)	0.0	1.0	0.6	0.4	-0.6	N/A	N/A
Skilled real wages (% change)	0.0	0.7	0.4	0.1	-0.9	N/A	N/A
Total exports (% change)	0.0	7.7	2.4	3.1	10.9	2.9	5.7
Total imports (% change)	0.0	8.9	1.3	1.7	8.2	N/A	N/A
Labour displacement across sectors (standard deviation)	0.2	6.3	2.1	3.5	15.2	4.9 (XCA)	
Terms of trade effects	0.0	2.3	-0.2	-0.5	7.9	-0.2 (XCA)	
Land for veg./fruit (% change)	-0.9	13.9	2.0	0.2	40.4	3.8 (XCA)	
Land for livestock (% change)	0.3	-12.0	-0.2	0.1	-15.0	-0.7 (XCA)	
Land for grains (% change)	0.4	-12.8	-1.2	-0.3	-14.3	-1.7 (XCA)	

Source: Tables 3.1, 3.2, 3.3 and 3.5 of the draft interim report
XCA = El Salvador, Honduras and Belize combined.
N/A = not available

[7] The EU's relations with Central America, http://ec.europa.eu/external_relations/ca/index_en.htm

According to the interim draft technical report, the FTA is beneficial for Central America, in terms of additional GDP growth. These long-run (dynamic) outcomes are more positive than the short-run effects. The EU is poised to gain around 1,750 million euro and all Central American countries combined approximately 1,450 million euro.

While the model predicts a one-off increase in national income, other indicators show that some of the Central American countries could expect real wage decreases, substantive labour displacement, deterioration in their terms of trade and/or large changes in land use patterns due to a free trade agreement with the European Union.

D) Honduras and El Salvador: lack of data and results

Honduras and El Salvador are not separate regions in the model, but lumped together with Belize in region XCA – "the rest of Central America".[8] As a consequence, there are no separate results for Honduras and El Salvador, except for national income and exports. Annex III of the draft interim report clearly shows that the model was fed with data for all three countries in the region XCA. The report is unclear how the drafters were able to separate Honduras and El Salvador, and remove Belize from their analysis. The figures for El Salvador and Honduras should therefore be taken with a grain of salt.

E) Increase in national income is modest

Individual ASEAN countries are projected to gain between 1.6% and 10.2% additional GDP growth in the long run (with the EU gaining 0.1%), according to the ECORYS EU-ASEAN study.[9] This pales in comparison with an increase between 0.2% and 1.7% for Central American countries. Furthermore, the EU stands to benefit more in absolute terms than Central America, which is different from other impact studies, such as those on EU-ASEAN and EU-India.

F) Gains do not include adjustment costs

The model does not provide estimates for adjustment costs. Examples are adjustment costs caused by tariff revenue loss, costs related to labour displacement (unemployment benefits, retraining) and investment in land conversion (e.g. irrigation).

[8] See GTAP 7.0 Data Base Regions, https://www.gtap.agecon.purdue.edu/databases/v7/v7_regions.asp
[9] Draft interim report EU-ASEAN FTA:
http://www.tsia.ecorys.com/images/ASEAN/interim%20report%20v2.pdf

G) Benefits are based on unrealistic baseline and trade liberalisation scenarios

The scenarios used could overstate the benefits of the FTA. For example, EU FTAs with competitor countries are not included in the baseline scenario and the trade liberalization assumption presumes a very high degree of liberalization. Section 5 gives some suggestions for more realistic assumptions.

H) Specifications of the model: justification

Not all technical specifications of the model are disclosed. While the draft report has made a great effort to refer to other sources in describing several features of the model, some key features of the model are not sufficiently described.

For instance, the way 'enabling services' such as financial services and energy are dealt with in the model. The draft report concludes that increased imports of financial services and insurance services cause prices to go down which leads to price decreases of other goods and services. It is relevant to know how the positive effects of lower prices for these services are modelled.[10]

Other salient issues that should be highlighted are the determinants of labour demand and the modelling of the relationship between labour demand and wages. The changes made from the inception report to the interim draft report (table 3) should also be explained since they are fundamental departures and affect the results.[11]

Table 3: Change of assumptions from inception report to interim draft report

Issue	Inception report	Interim draft report	Comments
Trade liberalization scenario: Comprehensive FTA	'50% bilateral services reduction' assumed (p. 23)	'25% reduction in trade costs to services trade' assumed (p. 7)	EU-ASEAN FTA study follows the methodology of the EU-CA FTA inception report. Why this change?
Trade liberalization scenario: Very comprehensive FTA	'75% bilateral services reduction' assumed (p. 23)	'75% reduction in trade costs to services trade' assumed (p. 7)	
CGE sector specifications: processed foods, beverages / tobacco products	Processed foods and beverages / tobacco products separate sectors	Processed foods and beverages / tobacco aggregated in 1 sector	Processed foods and beverages provide considerable employment, sugar is a sensitive issue, and is projected to have significantly lower post-Doha tariff
Trade balance (export – import)	Model assumes trade equilibrium, i.e. export equals import (p.22)	Model assumes fixed trade balance, i.e. trade surplus for Costa Rica and trade deficit for rest of CA (p.9)	Effect of change on result unclear, clarification sought

[10] Page 43 draft report. Another question is which sectors are considered an 'enabling' industry.
[11] Inception report: http://trade.ec.europa.eu/doclib/docs/2009/march/tradoc_142620.pdf

3. IMPACT ON LABOUR

One of the reasons to conclude a free trade agreement is the prospect of job creation, especially in Central America. This chapter zooms in on the model and its results as presented by the draft report. It questions the model's usability to predict positive impacts on the labour market. Additionally, the results seem to indicate that nominal wages remain virtually at baseline. Further analysis is required to explore the pertinent question whether the FTA will bring about employment or not.

A) Unemployment and informal sector is not modelled

The Sustainability Impact Assessment identifies unemployment in the Central American economies as a main social problem. However, the CGE model assumes full employment. It cannot allow for the conclusion that trade affects the level of unemployment; and can only predict a change in relative demand for workers. In addition, the model does not take into account the informal sector. The key question whether a free trade agreement between the EU and Central America creates or sheds jobs remains unanswered.

B) Why a wage increase is less likely than the model would indicate

This model translates a higher labour demand into a higher wage level. Hence, an increase in wages could be seen as a positive impact. However, there are several mechanisms at work not accounted for in the model, making wage increases less likely than the model would indicate:

i) A large latent supply of labour

In economies with a highly elastic labour supply, e.g. a large latent supply of labour before trade reform, exporters can expand production by attracting those workers at existing wages. Typically, this takes place in the form of rural-urban migration or a switch from informal to formal employment.

ii) Labour migrants returning home due to the global economic crisis

The model did not take into account the economic crisis. In the short run, many labour migrants could be forced to return home as a result of the crisis, if they cannot find work or if working permits expire. This results in an increase of the labour supply and could drive down wages.

iii) Labour migration across countries

Wage increases may be tempered in countries with a high negative migration of labourers. For instance, Nicaragua experienced a negative net migration of 210,000 – the number of employees leaving the country – between 2000-2005 according to the sustainability indicators provided for in the draft interim report.[12]

If the FTA induces an increased domestic labour market demand, it could prompt people to take up employment in their own country rather than to migrate. This leads to a higher domestic labour supply and thus lower wages assuming all other things equal. This is also relevant for El Salvador, Guatemala and Honduras. El Salvador's population numbers about 6.0 million while approximately 1.2 million live in the United States.[13]

iv) Regional labour market integration

The labour markets of Central American countries are already quite integrated and in the long run, regional integration will make them even more integrated. This means workers can relocate more easily between countries in the same sector.

If one sector experiences a decline in one country while in another country the same sector experiences an increase, labourers could relocate to the latter thereby increasing the labour supply in this sector. In other words, when labour is more mobile as a result of regional labour market integration, an increase in labour demand does not necessarily translate into higher wages.

v) Decrease in diversification

An FTA is thought to reinforce current comparative advantages. In the case of Costa Rica, this is underlined by the prediction that the electronics and vegetables/fruits sectors will be gaining to the detriment of virtually all other sectors. These products already constitute the lion's share of Costa Rica's exports to the EU.

Several labour economists highlight the importance of diversification as they find that within a region, a drop in the proportion of high-paying jobs reduces bargaining power of workers in all sectors. [14]

If an FTA would lead to less diversification and there are high-paying jobs in Costa Rica in sectors other than electronics and vegetables/fruit, it could result in a general

[12] Annex II, page 21
[13] Myths and Realities: The economic impact of international labour migration in rural El Salvador, Katharine Andrade-Eekhoff, http://www.yorku.ca/cerlac/migration/eekhoff.PDF
[14] Beaudry, Green and Sand (2007), Tschopp (2009).

wage level drop. Data on the average sector wages – before the FTA enters into force – could therefore be informative to assess whether this effect is likely to occur.

C) Model shows results for the average wage earner, not the median wage earner

Even if we would assume that the model took into account all the factors mentioned before, the results shows only the difference in average wages.

The evolution of average wages can deviate significantly from the evolution of median wages. In other words, if wages are unequally distributed it can mean that only the top-earners will receive higher wages and other wage earners do not benefit. This is a pertinent issue for governments if it affects the median incomes since they can be a determinant for election outcomes.

D) Nominal wages and costs of living

Turning to the results of the model, average nominal wages actually drop or remain at baseline in all Central American countries, except in Costa Rica (see table 4).

Table 4: Changes in prices

	EU	CRI	NIC	GTM	PAN	XCA
Land	-1.2	39.4	3.3	1.6	95.8	8.6
Vegetables/fruit	-0.5	17.6	1.4	0.3	50.8	3.5
Skilled wages	0.0	1.9	-0.1	-0.3	0.0	0.2
Unskilled wages	0.0	2.3	0.1	0.0	0.4	0.6

Source: Annex, tables III.23-28 of the draft interim report
XCA = El Salvador, Honduras and Belize combined

In all Central American countries, land and food prices increase more than the nominal wages. In the EU, an opposite relation is observed.

In the case of Panama, no change in nominal wages is expected while prices of vegetables and fruit increase by 50.8% and land prices almost double (95.8% increase). This has severe poverty implications since the major share of wages is spent on housing and food, especially in low-income groups.

Soaring costs of food may lead to protests and riots, as happened during last year(s) in several countries. For instance, the 2008 food riot in Haiti was the result of price increases of up to 50% for rice, beans and fruit.[15]

[15] Food riots turn deadly in Haiti, 5 April 2009, http://news.bbc.co.uk/2/hi/americas/7331921.stm

E) "Good" labour displacement?

Substantial labour displacement is shown in the model to take place in all Central American countries. The draft report concludes that migration between sectors is driven by pull factors and described as a "good" labour displacement, i.e. a move towards sectors where wages are increasing. However, this could be just the result of the model's assumptions. In that case, it should not be one of the main conclusions of the report.[16]

F) Labour displacement figures: absolute number of displacements and related costs

The model cannot predict job reallocation within sectors. However it predicts relative changes of employment across sectors. The measurement used – standard deviation of percentage change of sectoral employment – provides information on the magnitude of labour displacements *vis-à-vis* other countries. In essence, it shows that labour displacement in Central American countries is more substantial than in the EU (negligible effect).

What would be more relevant for Central American policy makers is the absolute number of people moving from and to sectors, so the adjustment costs of labour displacement could be estimated in monetary terms.

Furthermore, moving costs should be taken into account. Moving costs are quite high according to some recent studies. Artuç, Chaudhuri and McLaren (2007) estimated the average moving costs at 6 to 13 years' worth of income.[17]

[16] Executive summary, fourth bullet point under 'main overall results from quantitative impact analysis'
[17] Trade Shocks and Labor Adjustment: A Structural Empirical Approach, http://www.nber.org/papers/w13465.pdf

4. ENVIRONMENTAL SUSTAINABILITY: NATURAL RESOURCE USE ANALYSIS

A) Deforestation

The report carries a natural resource use analysis which should provide information on the potential environmental impacts of the FTA. Accordingly, table 3.5 of the report shows the results of the change in land for some products (grains, vegetables / fruit and livestock) and the change in fish production.

Central America's forests are not considered in the natural resource use analysis, which means that the report fails to provide an indication whether deforestation will occur.

Deforestation is a major environmental problem in Central America. The problems associated with deforestation include loss of biodiversity, soil erosion, more landslides and greater flooding. Cutting down forests also releases a large amount of carbon dioxide to the atmosphere.

The forestry sector is important from a social and environmental perspective. In the civil society dialogue, ECORYS responded to WWF Costa Rica that biodiversity is an important consideration in the TSIA.[18]

In the conclusions, the report notes that in the short-run forestry exports to the EU are seen to go up, but that this effect disappears in the long-run. That may be the case, but products made from wood see a dramatic increase in exports to the EU (table 5).

Table 5: Increase in exports to EU (%)

Country/region	Forestry	Wood products	Paper products
Costa Rica	0.0	+8.1	+5.3
Guatemala	+1.3	+10.1	+0.4
Nicaragua	0.0	+3.4	+0.5
Panama	(-7.7)[19]	+2.6	+16.8
Rest of Central America (XCA)	0.0	+5.7	+1.5

Source: Annex, tables III.53-57

[18] Annex, table IV.2

[19] This result is caused by the fact that Panama exported no forestry products in 2004 (Annex, table III.7). A decrease in exports seems to be impossible.

Costa Rica and Guatemala's share in Central America's exports of forestry, wood and paper products is over 80%. Only looking at these 2 countries, the results indicate that in the long run forestry exports increase (Guatemala) or remain the same (Costa Rica) and that exports of wood and paper products increase. Results on import and export changes without Panama are not available.

These results seem not to support the report's conclusion on forestry: the FTA has an impact on forestry and the effect does not disappear in the long-run. Furthermore, products made from wood see a large increase.

B) Exclusion of land used for forestry products and agricultural products such as coffee, sugar and live plants

The natural resource use analysis includes fish production and land for grains. This is problematic, since Central American exports to the EU of these products are minimal (see table 6).

Natural resource projections for fish production and land for grains results should therefore be interpreted with caution and preferably be replaced by more important export sectors. These include forestry and wood/paper products, "other primary food" and "other agriculture". The latter two include coffee, live plants and sugar. All of these are major export earners and land use is considerable for these products.

Table 6: Natural resource use analysis: important sectors not analyzed. Central American exports to the EU (Mio Euros)

Sector	With Panama	Without Panama	Included in natural resource use analysis
Vegetables, fruits and nuts	1,095	716	Yes
Other agriculture	513	511	No
Forestry, wood and paper products	123	121	No
Other primary food	37	36	No
Grains	7	6	Yes
Primary fishing	3	1	Yes

Source: table 3.5 and Annex, table III.7

C) 'Reallocation' of land use: misleading conclusion

The interim report summarizes the natural resource use analysis as:

> *"projected changes in natural resources use show a strong reallocation to land use for vegetables and fruits, away from land use for grains and livestock"* [20]

This is misleading since it suggests that land for grains and livestock is merely replaced by land for vegetables and fruits. Apart from the fact that land used for livestock cannot always be used to grow vegetables and fruit, this statement does not seem to be supported by the results of the study. Table 7 is a reproduction of the table which is used as basis for this conclusion. The table shows only percentage changes instead of absolute changes. Unfortunately, there is no data available on the absolute change in annual resource of these three categories.

In terms of EU exports, the Central America's grains sector can be considered very small, as table 6 shows. In fact, Central America imported in 2007 more than $1 billion worth of cereals – most of it from the United States - with virtually no exports.[21]

Most likely more land is used for vegetables and fruits than for livestock. If we assume they both take up the same area of land before conclusion of the FTA, some other natural resource has to be sacrificed to accommodate the increase of land used for vegetables and fruits. This is seen most clearly in the case of Panama.

It follows that other natural resources, not listed in table 7, will experience a decline. This could be forests, or land used for coffee, live plants or sugar.

Table 7: Percentage change in annual resource use in the long run, comprehensive scenario (reproduction of Table 3.5, p. 35)

	Land for vegetables, fruits	Land for livestock	Land for grains
European Union	-0.9	0.3	0.4
Costa Rica	13.9	-12.0	-12.8
Guatemala	0.2	0.1	-0.3
Nicaragua	2.0	-0.2	-1.2
Panama	40.4	-15.0	-14.3
Honduras, El Salvador	3.8	-0.7	-1.7

[20] Chapter 6 Conclusions, page 49
[21] ITC Trademap, HS Chapter 10 Cereals

5. SCENARIOS SHOULD BUILD IN MORE REALITY

A) Baseline scenario should be more realistic

Macroeconomic data is extrapolated from 2004 to 2018 using relatively standard projections, which fails to account for the global economic crisis. The report should recalculate the results with more recent projections from third sources, such as those provided by the IMF in its World Economic Outlook of April 2009. In addition, the baseline data should be included in the Annex.

The results indicate an increase of output in the vegetables & fruits sector, especially for Costa Rica and Panama.[22] This is based on the assumption that the post-Doha tariff cut for this sector is a mere 1.2% (from 56.3% to 55.7%) and that this tariff will drop by 90% to 5.6% for Central America after signing of the FTA. In other words, Central American countries are assumed to enjoy the difference of 50 percentage points in the long run.

The main reason for the 1.2% Doha tariff cut lies in the designation of sensitive products which result in limited duty reductions for Central America (but higher TRQ).[23]

Lack of progress on agriculture is one the main reasons why Doha is stalled. Furthermore, the EU promised new market access for agricultural goods, including sensitive products.[24] It is therefore highly unlikely a tariff cut of 1.2% will be enough for a successful Doha completion. Consequently, the post-Doha tariff for vegetables fruit should be lower than 55.7%. The current baseline scenario overstates the benefits of the EU-CA FTA: the higher the Doha tariff cut, the lower the benefits of the EU-CA FTA.

In addition, several important trade arrangements such as the CARIFORUM EPA, the West-African EPAs and the Latin American banana deal are not included in the baseline scenario. Non-inclusion overstates the additional benefit for Central America of increased market access to the EU.

[22] "Other agriculture" (coffee, live plants) is more important for the other Central American countries. The report remains silent on this sector.
[23] TRQ = tariff rate quotas. The (higher) tariff is only applied once imports exceed a certain threshold. Increase in tariff rate quotas amounts to a decrease in ad valorem equivalent duties
[24] http://trade.ec.europa.eu/doclib/docs/2005/december/tradoc_126413.pdf

B) Trade liberalization scenarios should be more realistic

The two trade liberalization scenarios ('comprehensive' and 'very comprehensive') assume reciprocal tariff reductions on each good, without a phase-out schedule. The 'comprehensive' scenario assumes a bilateral tariff reduction level of 90% and the 'very comprehensive' assumes 97% reduction. Complementing the model with asymmetric liberalisation and a phase-out schedule would better mimic reality and allow for comparisons between a multitude of scenarios. Furthermore, the 97% tariff reduction seems to be large in comparison with the practice in other free trade agreements, such as the TDCA between EU and South Africa.

The 'very comprehensive' scenario assumes a 75% reduction in services trade costs plus additional cost reductions of 3% of the value of trade. This seems to amount to creating an internal services market with the EU, just as the EU member states have among themselves. Modelling service liberalisation in itself is a complicated matter. Estimates of EU barriers against extra-EU partners are derived from ongoing research with DG Trade.

The results do not distinguish the separate macroeconomic outcomes as a result of goods liberalization and services liberalization. This is important since goods liberalization in a comprehensive FTA could lead to negative results which can be masked by more beneficial outcomes from services liberalization. Furthermore, the possibility of a 'goods-only' FTA could be considered in the negotiations.

The analysis assumes that all sectors are subject to liberalization. However, some sectors should be excluded since no or limited liberalization is envisaged in those sectors, by either party. For instance, the EU excludes public utilities from liberalization in its FTAs. This is in line with the horizontal reservations made by the European Community at the WTO. 'Public utility' is a broad concept: it could also include scientific and technical consulting services, R&D services on social sciences and humanities, technical testing and analysis services, environmental services, health services, transport services and services auxiliary to all modes of transport.[25]

Air transport is generally dealt with in 'open skies' agreements rather than free trade agreements and most air transport services are excluded in EC FTAs. In addition, maritime cabotage and audio-visual services are excluded.[26] In the sector "Other transport", it is impossible to have services in the cross-border modes in some instances: there are no roads, rails or pipelines between Central America and the European Union. The CGE model is constructed to attribute more positive outcomes to liberalisation of

[25] See the WTO Services database (tsdb.wto.org) and the CARIFORUM EPA Annex IV A
[26] Article 66 CARIFORUM EPA

'enabling' industries. The results overstate the positive impact of the FTA if in reality no liberalisation in (part of) these industries is pursued, such as transport.

6. SECTORAL IMPACT

A) Small sectors may yield magnified and unrealistic results

According to the report, Nicaragua and Guatemala see textiles, chemicals and machinery grow. However, Nicaragua exports only 1 million euros to the EU in each of these sectors.[27] In fact, Nicaragua will experience an output decline in 4 out of the top 5 EU export sectors (see Annex I).

The CGE analysis may yield magnified and unrealistic results when working with small numbers. Conclusions based on such numbers should not be part of the summary or main conclusions, and should at least be substantiated. [28]

B) Report fails to mention effect of FTA on the most important export sectors

The report remains silent on the top 5 exports sectors of Guatemala, Nicaragua, Honduras and El Salvador. Annex I below lists these sectors and the output effects at sector level.

C) "Other agriculture", "Processed foods, beverages/tobacco"

"Other agriculture", which presumably includes coffee, is the most important export sector in 3 regions in terms of export value (Guatemala, Nicaragua and Rest of Central America). The report does not justify the basis for this aggregation; neither confirms which sectors are part of "other agriculture". Sugar, an important and sensitive issue for Central America has been aggregated into the combined sectors "other primary food" and/or "processed foods, beverages/tobacco".

[27] Annex, table III.7
[28] Summary of chapter 3 (grey box, last bullet point), page 29 of the draft report

D) Construction and chemicals

The report sees a potential in the construction and chemical industry:

"the surge in construction and chemicals helps to fuel the rise in investment in Central America and can cause subsequent dynamic gains"[29]

One of the main limitations mentioned in the executive summary is the model's inability to incorporate Foreign Direct Investment (FDI). The results do not imply that the FTA gives a boost to FDI, since it is not included into the model. However, implicitly the model states that import of (cheaper) capital goods contribute to an increase in the domestic capital stock. In other words, the import of cheaper bricks is seen as contributing to an increase in investment.

The question is why construction and chemical sector are chosen to be included in the executive summary. Limited bilateral trade exists between Central America and the EU in the construction service sector: total value of trade amounts to 41 million euro, of which 22 million were EU exports to the "rest of Central America".

Chemicals already constituted 1/8 of total Central American import value in 2004. According to table III.8, the trade balance was 448 million euros in favour of the EU.

E) Sectoral mitigation measures

Several sectors will experience an output decline and rise in unemployment. Financial and insurance services, the motor vehicles & parts and transport equipment sectors will experience a decline in all Central American countries. In Guatemala and Nicaragua, the electronics sector is expected to decline.

A Trade SIA provides guidelines for the design of possible policy measures to accompany the trade agreement. Mitigation measures, including exclusion of liberalisation, could be based on the basis of the modelling results. In order words, if a sector is projected to be adversely affected it could be (partially) excluded from liberalisation.

[29] Executive summary

7. SUMMARY OF RECOMMENDATIONS

A) Improve relevancy

A Sustainability Impact Assessment should provide information on the likely sustainability impacts of a free trade agreement. The draft report identifies regional integration, unemployment and deforestation as the main sustainability issues for Central America. However, the model built for this analysis does not generate results to assess the impact.

- Regional integration: estimate the projected impact of the FTA on intra-regional trade flows.
- Unemployment: change the model to include unemployment.
- Deforestation: rerun the natural resource use analysis by including natural resources such as land for forests and its products, land for "other agriculture" and land for "other primary food".

In any event, regional integration, unemployment and deforestation should be included as horizontal issues.

B) Remove or change conclusions not supported by the results

The executive summary or chapter summaries contain conclusions which should be substantiated or removed, since they are not supported by the limitations or results of the model:

- Substantiate the conclusion that wage effects for workers are positive: nominal wages decrease (also in the long-run) for some Central American countries.
- Change the conclusion of the natural resource use analysis to take away the suggestion that land used for grains and livestock is swapped for vegetables, fruits and nuts.
- Substantiate the conclusion that no major impacts of the FTA on forestry production are found. There are significant effects in the long-run, especially when taking into account wood and paper products.
- Substantiate the conclusion that the "surge in construction and chemicals helps to fuel the rise in investment in Central America..." Firstly, it should be made clear what 'investment' is. Is it increase of import of capital goods, or increase of domestic capital or FDI? Secondly, the construction sector is too little to base a main conclusion on: the projected absolute increase in investment is rather small.

- Remove or substantiate conclusions that are based on sectors with low values of trade (e.g. Nicaragua and textiles).

C) Insert reality

Baseline scenario:

- Take into account the global economic crisis in the baseline data.
- Include the Latin American banana deal, West-African EPAs and CARIFORUM EPA.
- A higher Doha tariff cut for vegetables and fruit.

Trade liberalisation scenarios:

- Allow for non-reciprocal liberalisation.
- Lower the duty reduction percentage in goods.
- Run a goods-only trade liberalisation scenario, or separate the effects of goods liberalisation and services liberalisation.
- Exclude services sectors from the analysis in which limited or no liberalisation is expected, such as public services and transport sector.

D) Explanation and justification of assumptions

- Explain why real wages can rise when land and food prices increase more than the increase of nominal wages.
- Mention the impact of the FTA on (some) top 5 export sectors in the executive summary and conclusions (for Nicaragua, Guatemala, El Salvador and Honduras).
- Disaggregate "other agriculture" into smaller sectors to render the results more relevant for El Salvador, Guatemala, Honduras and Nicaragua.
- Provide information on how the results for Honduras and El Salvador can be trusted, since in the model they are together with Belize in the region XCA ("Rest of Central America").
- Provide the justification for aggregating processed foods and beverages / tobacco into one sector.
- Provide the reasons for adopting another method to calculate service liberalisation.
- Provide the justifications for choosing the level of trade liberalization, especially in services and non-tariff measures (25%-75% reduction in services trade cost, cost reduction of 1-3% of value of trade).

E) Transparency

- Provide absolute labour displacement figures.
- Provide absolute changes of natural resources.
- Provide projected imports and exports for scenarios without Panama.
- Provide technical specifications of the model.
    - Countries and regions in the model and correspondence with GTAP database.
    - Sectors in the model with corresponding GTAP codes.
    - The main equations, including the equations relating to employment and labour, natural resources, and the 'enabling' character of financial services, energy and transport.
- Include (sourced) baseline data in the Annex.
- Modify table 1.2 to reflect the services sectors under analysis.

F) Feedback from consultation round

This document together with the recommendations has been considered in the consultation round. In the consultation round, some issues were clarified.

It was pointed out that the model has its inherent limitations. The consultant committed to offer more transparency or clarity on assumptions, baseline data or scenarios. Furthermore, there was indication that certain statements and conclusions could be clarified or qualified.

One of the points under discussion was the projected Doha tariff cut for vegetables and fruit which under the 'most probable' scenario is considered negligible and would stay above 50%. In other words, Doha would not increase market access for Central American agricultural produce. Central America should therefore benefit greatly from an FTA which reduces that figure to around 5%.

Given that a Doha Round would likely not succeed without increased agricultural market access and the fact that other free trade agreements and unilateral measures (West-African EPAs, Latin American banana deal) are not discounted in the baseline scenario, the study runs the possibility to overstate these gains incurred by the FTA.

Regional integration is identified as the most important economic sustainability issue. According to the feedback received, regional integration in terms of intra-regional Central American trade flows was not considered as an issue for further investigation.

From the consultations it was noted that 50% bilateral services reduction as mentioned in the interim draft report (in the 'comprehensive scenario') is equal to 20% reduction in trade costs to services trade as mentioned in the inception report. This implies that the level of liberalisation in services has been increased from the inception report to the interim draft report since 25% reduction in trade costs to services trade is now assumed.[30]

Unemployment and the informal sector do not exist in the model used. In the long-run, it is assumed that labour markets clear. In the model, wage effects are estimated rather than employment effects. It is technically not possible to estimate both effects. Nevertheless, this remains unsatisfactory, and modelling wage effects without unemployment provides a skewed picture, as earlier discussed. The question remains whether the model can look into employment effects rather than wage effects, holding wages constant.

The results indicate land and vegetables/fruit prices increase more than the nominal wages in all Central American countries which raises questions whether the FTA increases poverty levels. Therefore, the consultant indicated they will perform a poverty analysis at country level and for high- and low-skilled wage groups to estimate the distribution of the wage effect.

[30] See also Table 3 – Change of assumptions from inception report to interim draft report), page 6 of this paper

ANNEX I – CHANGE IN OUTPUT IN TOP5 EXPORT SECTORS

Table A – Costa Rica: impact of EU-CA FTA on Top5 export sectors

Sector	Export to EU	Change in output (% change)
Electronic equipment	1,854	+12.3
Vegetables, fruits, nuts	576	+19.8
Business services nec	158	0.0
Recreation and other services	135	+0.7
Processed foods, beverages/tobacco	124	-4.9

Source: Annex, table II.7 and table III.16

Table B – Guatemala: impact of EU-CA FTA on Top5 export sectors

Sector	EU export	Change in output (% change)
Other agriculture	129	-0.3
Processed foods, beverages/tobacco	69	+0.4
Public services and dwellings	67	+0.4
Business services nec	59	-1.0
Recreation and other services	55	-1.4

Source: Annex, table II.7 and table III.17

Table C – Nicaragua: impact of EU-CA FTA on Top5 export sectors

Sector	EU export	Change in output (% change)
Other agriculture	60	-0.4
Other transport	32	-1.0
Processed foods, beverages/tobacco	21	+0.6
Communications	13	-1.1
Air transport	10	-3.1

Source: Annex, table III.7 and table III.18

Table D – Rest of Central America (Honduras, El Salvador and Belize): impact of EU-CA FTA on Top5 export sectors

Sector	EU export	Change in output (% change)
Other agriculture	217	-2.2
Other transport	213	-0.4
Processed foods, beverages/tobacco	133	+0.5
Communications	128	+2.0
Air transport	126	-0.6

Source: Annex, table II.7 and table III.20

Table E – Panama: impact of EU-CA FTA on Top5 export sectors

Sector	EU export	Change in output (% change)
Other transport	457	-3.7
Vegetables, fruits, nuts	213	+64.4
Communications	128	+0.2
Air transport	126	+1.6
Maritime transport	46	+0.8

Source: Annex, table II.7 and table III.19

Chemin du Champ d'Anier 17
Case postale 228, 1211 Geneva 19
Switzerland

Telephone: (41 22) 791 8050
Fax: (41 22) 798 8531
Email: south@southcentre.org

Website:
http://www.southcentre.org