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United Nations Economic Commission for Africa

The Doha agenda: What's in it for Africa, and what next for secured development outcomes and fast integration imperatives?

**A Comprehensive Draft Paper Prepared for the
19th ANNUAL CONFERENCE ON GLOBAL ECONOMIC ANALYSIS**

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List of Abbreviations

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ACP	:	African, Caribbean & Pacific Group of States
AfT	:	Aid for Trade
AGOA	:	Africa Growth & Opportunity Act
AMS	:	Aggregate Measurement of Support
AoA	:	Agreement on Agriculture
ARC	:	Agricultural Risk Coverage
BDCs	:	Beneficiary developing countries
CAADP	:	Comprehensive Africa Agriculture Development Programme
CAP	:	Common Agricultural Policy
CBD	:	Convention on Biological Diversity
CEN-SAD	:	Community of Sahel-Saharan States
CFTA	:	Continental Free Trade Area
COMESA	:	Common Market for Eastern and Southern Africa
COMTRADE:	:	United Nations Commodity Trade Statistics Database
CU	:	Customs Union
DDA	:	Doha Development Agenda
DMPP	:	Dairy Margin Protection Program
DWP	:	Doha Work Programme
ECCAS	:	Economic Community of Central African States
ECOWAS	:	Economic Community of west Africa States
EBA	:	Everything but Arms
EAC	:	East Africa Community
ECA	:	United Nations Economic Commission for Africa
EPA	:	Economic Partnership Agreement
EU	:	European Union
FTA	:	Free Trade Area
GATT	:	General Agreement on Trade
GDP	:	Gross Domestic Product
GSP	:	Generalized System of Preferences
GTAP	:	Global Trade Analysis Project
ICTSD	:	International Centre for Trade & Sustainable Development
IPR	:	Intellectual Property Rights
LDC	:	Least Developed Country
LDNFIDC	:	Least-developed and net-food-importing developing countries
MDG	:	Millennium Development Goal
MPS	:	Market Price Support
MFN	:	Most Favored Nation
MRU	:	Mano River Union
NAMA	:	Non-Agricultural Market Access
NFIDC	:	Net Food Importing Developing Country
NTB	:	Non-Tariffs Barriers
OECD	:	Organization for Economic Co-operation and Development

PLC	:	Price Loss Coverage
PTA	:	Preferential Trading Arrangement
REC	:	Regional Economic Community
SACU	:	South Africa Customs Union
SADC	:	Southern Africa development Community
SCO	:	Supplementary Coverage Option
SDT	:	Special & Differential Treatment
SSG	:	Special Safeguard Clause
SP	:	Special Products
SPS	:	Sanitary and Phytosanitary Measures
STAX	:	Stacked Income Protection
TASTE	:	Tariff Analytical and Simulation Tool for Economists
TBT	:	Technical Barriers to Trade
TFTA	:	Tripartite Free Trade Area
ToT	:	Terms of Trade
TPP	:	Trans Pacific Partnership
TRIPS	:	Trade Related Intellectual Property Rights
TRQ	:	Tariff-Rate Quota
TTIP	:	Trans-Atlantic Trade and Investment Partnership
UDEAC	:	Central Africa Customs and Economic Union
UEMOA	:	West Africa Economic and Monetary Union
UNCTAD	:	United Nations Conference on Trade and Development
URAA	:	Uruguay Round Agreement on Agriculture
US	:	United States
WCA	:	Western Cotton Africa
WTO	:	World Trade Organization

Abstract

The paper reviews Africa's priority issues and interests in ongoing WTO negotiations and re-asserts the findings that Doha trade liberalization agenda in agriculture will have a high positive impact on growth and welfare in Africa relative to the rest of the world, though they will not all gain given the heterogeneity of countries involved. This conclusion is drawn from a comprehensive study carried out to shed light on a number of critical trade related issues of relevance to Africa Union and its Members states.

Taking a twin track approach to investigate the issue of agricultural trade liberalization and its impact on African countries, a critical assessment of the rules governing agricultural trade at the multilateral level is carried out followed with an analysis of the offensive and defensive interests of African countries in the WTO negotiations using the Global Trade Analysis Project (GTAP) model and the GTAP 8.1 database. Some key findings among others include the following: the Doha Development Round has to go beyond the Uruguay Round to make progress on three key issues: market access, agricultural support and S&D treatment; Estimates of welfare changes under the proposed Doha scenario for African regions are quite modest and are estimated at around US\$ 8.3 billion; the study reveals the relative importance of market access issues (namely tariffs) in improving the welfare of Africa; Net gain to Africa is estimated at US\$ 320 million under market access reforms only (i.e. tariff reductions) compared to US\$ 99 million gains under export subsidies and US\$ 4 million under domestic support. The inclusion of Trade Facilitation and removal of NTBs in trade liberalization amplifies the gains from liberalization of goods only but the gains are not necessarily in terms of trade effects but also allocative efficiency. Using the export value of time and import value of time, it is found that the welfare gains are respectively estimated to be US\$ 44 million and US\$ 56 million. By estimating welfare gains using alternative proxies for NTBs, the welfare gain varies from US\$ 64 million to US\$ 18 billion.

Key words: WTO negotiations, trade liberalization, Doha round, market access

Introduction

The key development challenge facing the African region is how to reduce poverty through sustained economic growth. There is an emerging consensus that trade, if well managed, could play an important role in confronting this challenge⁵. This fact has been recognized by African countries as evidenced in the fact that they are beginning to show more interest in multilateral trade negotiations. They are, however, concerned that they have not been able to derive substantial benefits from trade due in part to the protective agricultural policies and trading practices of developed countries.

This paper is meant to provide a concise summary of a comprehensive analytical work that intended to provide a technical support defined as “Technical Support towards Strengthening African Common Position on WTO Agricultural-Related Issues – In Particular Post-Bali/Nairobi Negotiations”. In so doing, the study undertakes a quantitative assessment of the potential economic consequences of multilateral trade reform for Africa, using a framework that explicitly incorporates issues of concern to the region⁶, such as regional & continental integration, NTBs, and trade facilitation.

The summary presented in this paper re-asserts that Doha trade liberalization agenda in agriculture will have a high positive impact on growth and welfare in Africa relative to the rest of the world, though they will not all gain given the heterogeneity of countries

⁵ Expanded trade is an issue of major concern for developing countries as it has long been seen as an effective means that could promote domestic economic growth, especially in small economies, such as the majority of African countries. Albeit, given the ambiguity of the nature of the relationship between trade liberalization and economic growth, developing countries should not rush towards full liberalization. In this regard, it should be noted that the optimal rate of liberalization is country context, i.e., highly affected by the country's stage of development and a wide array of influential, internal and external, factors. It is worth noting here that the extent of benefits of trade liberalization is a function of the effectiveness of national public policies in pushing the economy's resources in the direction of its comparative advantage favoring activities that are capable of generating long term growth.

⁶ The word “region” refers herein to Africa.

involved. This conclusion is drawn from a comprehensive study carried out by ECA to shed light on a number of critical trade related issues of relevance to Africa countries.

Methodological Approach

A twin-track approach is used to investigate the issue of agricultural trade liberalization and its impact on African countries. First, from an analytical point of view, a critical assessment of the rules governing agricultural trade at the multilateral level is carried out. Secondly, we analyze the offensive and defensive interests of African countries in the WTO negotiations. The study expands to take a closer look at the following set of questions with a view to providing some preliminary answers which can assist African trade negotiations to better engage and safeguard the interest of Africa in ongoing negotiations.

1. Identify key elements in the 3 pillars of agriculture negotiations i.e. market access, domestic support and export competition pillars that should form part of the post Bali/Post Nairobi work programme to ensure maximum benefits accrue to African countries.
2. Identify issues that Africa needs to prioritize or take into consideration in the negotiations on agriculture and other areas of the post Bali/Nairobi agenda and the Doha work programme.

The empirical analysis was undertaken using the Global Trade Analysis Project (GTAP) model. GTAP is an established multi-sector and multi-regional general equilibrium model widely used by trade analysts to examine the impact of trade policies. The GTAP 8.1 database was further extended to make data projections in assessing the various experiments.

Extract of Experiment Designs

For sake of keeping the paper under manageable size, the details of the experiment designs are not elaborated to cover all the analytical issues. A brief of model results is provided in the annex section in order to illustrate the agriculture market access pillar only especially the removal or reductions of agriculture distortions in developed countries and implications of these on welfare and trade in the African region.

Main Findings

Some key findings include:

- Several noticeable weaknesses have been described with regard to the current rules governing agricultural trade and need to be addressed in the current round of negotiations.
- After considering the defensive and offensive interests of Africa in the WTO negotiations, it is found that the Doha Development Round has to go beyond the Uruguay Round to make progress on three key issues: market access, agricultural support and S&D treatment.
- Estimates of welfare changes under the proposed Doha scenario for African regions are quite modest and are estimated at around US\$ 8.3 bn.
- The study reveals the relative importance of market access issues (namely tariffs) in improving the welfare of Africa. Net gain to Africa is estimated at US\$ 320 million under market access reforms only (i.e. tariff reductions) compared to US\$ 99 million gains under export subsidies and US\$ 4 million under domestic support.
- The inclusion of Trade Facilitation and removal of NTBs in trade liberalization amplifies the gains from liberalization of goods trade, in terms of both trade effects and allocative efficiency. Using the export value of time and import value of time, it is found that the welfare gains are respectively estimated to be US\$ 44 million

and US\$ 56 million. On the other hand, by estimating welfare gains using alternative proxies for NTBs, the welfare gain varies from US\$ 64 million to US\$ 18 bn.

- The recent developments on the international trading scene with negotiations on the Trans-Atlantic FTA and Trans-Pacific FTA is expected to enhance trade among the participating countries and would have trade diversion impact of trade with Africa region. Indeed, the welfare losses for Africa is around US\$ 290 million under the Trans-Atlantic FTA and US\$ 976 million under the Trans-Pacific FTA.
- There would be substantial gains with CAP reform (2014-20) compared to Farm Bill (2014-2018). The CAP reform will yield around US\$ 7.2 million welfare gains compared to US\$ 1.6 million for the Farm Bill.
- The study provides additional evidence that supports the integration agenda of African countries with welfare and trade effects under both Tripartite FTA and Continental FTA. The Continental FTA is estimated to generate welfare gains at around US\$ 13.4 bn while the Tripartite FTA welfare gains would be around US\$ 2.9 bn.

If the Doha Round is development-focused, Africa, with 31⁷ of its 54 countries classified as LDCs, must be a critical player in the negotiations given that a majority of African countries suffer from a serious development deficit. After all, the very point of featuring development so prominently in a trade round was to pay special attention to countries with a serious development deficit, the majority of which are African. However, African states have been so far rule-takers in the global trading system, not rule-shapers. It's about time to change.

The WTO Ministerial agreement adopted in Bali includes a three page declaration adopting decisions on three pillars: (i) trade facilitation, (i) selected agricultural issues, and (i) selected development-focused provisions. Though the Bali agreement was

⁷ Representing around 65 per cent of the list of LDCs

considered successful as it enabled WTO members to reach consensus on a set of issues, the agricultural modalities text which has been largely in place since December 2008⁸, is waiting until the conclusion on other areas of the negotiations, particularly in Agriculture.

Market Access

Foremost on the African agenda is market access issues - to be given the opportunity to export the goods in which Africa has potential comparative advantages and/or vested interests. Market access includes several issues amongst which the most important ones relate to border protection measures (i.e. import tariffs), rules of origin, and Sanitary and Phytosanitary measures.

Agriculture Tariff Reductions

Agriculture is still sheltered, and world markets distorted, by high tariffs – about three times the level of non-agricultural tariffs. Until these tariffs are substantially reduced the global trade in foods and farm goods will fall short of its potential for meeting the challenges of feeding the world, responding to price instability and adapting to weather-related events. The DDA formula as specified in the draft modalities for reducing both the levels and the dispersion of such tariffs is sound.⁹ Bilaterals and RTAs can move quickly to remove tariffs on all but a few sensitive products, but in the multilateral negotiations such liberalization does not seem possible. So an agreement that included the DDA tariff cuts for agriculture would add to the Bali package in restoring confidence in and commitment to the multilateral negotiation process.

⁸TN/AG/W/4/Rev.4

⁹The level of tariff cuts would be significant (a minimum of 54 per cent cut for developed countries and up to 36 per cent for developing countries), with the higher tiers of tariffs being cut by more. A ceiling of 100 per cent would be placed on most products, though for a limited number of “special” and “sensitive” products the market access would be through expanded low-tariff quotas). This formula will foster greater harmonization of tariff regimes with deeper cuts in higher tariffs.

Erosion of Preferences

Many African countries are faced with the erosion of preferences for countries involved in special market access arrangements with industrialized countries in particular into the EU market. This problem is exacerbated by both multilateral tariff reductions and bilateral Free Trade Agreements (FTAs) concluded by the development partners namely EU and US. Moreover, ongoing reforms to the EU's Common Agricultural Policy (CAP) have reduced EU prices (and prices received by ACP exporters) towards world market prices, most notably for beef and sugar.

African countries can still lobby for compensatory mechanisms which would be provided by preference giving country. In this case, this would involve ways and means to address the supply side constraints, upgrade technical standards influencing trade, help to build institutional capacity to meet rules of origin and product diversification and contribute to the social adjustment. The policy prescription would not be in support of preferences but rather giving out preference dependent countries ways and means to adapt to the changing trade environment. One of the means that has been pointed out is the Aid for trade package. Aid for Trade should aim to help preference dependent countries to build economic resilience as a result of trade liberalization.

Export Competition

Export Competition not only addresses direct export subsidies, believed to be one of the most distortionary policy instruments applied to agricultural trade, but also institutional relationships under which implicit export subsidies may arise. Food aid, officially supported export credit, and exporting state trading enterprises are key issues examined in this area. Export taxes, export promotion activities, and certain domestic policy arrangements, which may be equivalent to export subsidies, are also addressed in Doha Round negotiations, in a variety of venues.

These policies have been detrimental to producers in African countries in at least two ways: They allowed the financially powerful to gain and maintain a disproportionately high share on the market place at the expense of the financially weak. That high market share could also include, in some cases, domestic food markets of some African countries. Thus African producers who cannot compete, in spite of their low cost of production, with foreign products find themselves driven out of business. Consumers, however, benefit from the depressed prices. The second link relates to the fear of rising prices following a possible cut on export subsidies, which cause some serious concerns for the net food importing African countries.

WTO members are still awaiting the elimination of exporting subsidies¹⁰ and the measures to discipline all other forms of export promotion policies following the Hong-Kong Declaration. In addition, export subsidies are still defined in terms of budgetary outlays and quantity commitments, as under the AoA, and not in terms of ad-valorem subsidy equivalents. The reluctance to negotiate on the basis of ad valorem subsidy equivalents would lead to the same loopholes and delays in disciplining export competition. Moreover, as in the other cases, final bound commitments of export subsidy volumes and outlays are being used as a basis for further reduction, not actual levels. Although the objective is to reduce subsidies to zero by the end of implementation period, the modalities involve considerable risk of delaying subsidy cuts for important sectors.

The discipline to be worked out with respect on all aspects of export competition include for instance: reform of food aid and disciplines related to STE's, two issues of much importance to African Countries.

¹⁰ A ministerial decision, [WT/MIN\(15\)/45](#), was adapted at the Tenth WTO Ministerial Conference (MC10), committing developed members to remove export subsidies immediately, except for a handful of agriculture products starting from January 2016. The decision is certainly a remarkable one, as being, rightly, described by DG Azevedo as the "most significant outcome on agriculture in the organization's 20-year history". However, for African countries to exploit the full benefits of the decision, other trade-distorting measures, such domestic support and market access, should also be enabled

Special Safeguard Provisions

Resort to SSG measures have varied widely between countries since the Uruguay Round results began to be implemented in 1995 and many developing countries have not been able to invoke their SSG rights. The revised modalities provide a clear choice between eliminating developed country SSG's (either at the beginning or at the end of the implementation period) or reducing the number of SSG's to 1.5 per cent of scheduled tariff lines. In addition, the criteria for triggering SSG's have been tightened further. This is a balancing item within the market access negotiations - the greater the ambition, the greater the pressure for the second option to be chosen.

In line with the above, African countries must have the right to take action against any temporary surge in imports that might affect their domestic producers. Due to their negotiating ability many developed countries negotiated the possibility of using the Special agricultural safeguard (SSG)¹¹ during the Uruguay round, which relate to the measures to control the price of imported goods. Because it is mainly developed countries that are able to use the SSG, this underlines the urgent need for an appropriate safeguard mechanism for African countries as other general WTO safeguards (e.g. Agreement on Safeguards, the Agreement on Subsidies and Countervailing Measures and related GATT Articles) are cumbersome. African countries need a simple and effective trade remedy instrument that would allow them to introduce safety measures to respond to import surges, particularly in food security crops whether or not the instrument is used frequently¹².

¹¹Special Safeguard (SSG) under the Agreement on Agriculture (AoA), provides those that can use it with the ability to levy additional duties when imports are priced below a certain reference level or in the case of a surge of imports above a specified level

A decision, WT/MIN(15)/W/45, was adopted on MC10 on a special safeguard mechanism that recognizes the right of developing country members to temporarily increase tariffs to address import surges, also responding to developing country priorities.

Domestic Support

The most difficult parts of the post-Bali, Nairobi and upcoming DDA agenda will be getting an agreement on Domestic Support. In many ways the significance of this item is small compared to the gains from better market access and the removal of export subsidies. But it directly impinges on farm policy decisions in industrial countries. Trade negotiators have to be cautious to avoid the perception that they are trading away farmers' support programs. But the domestic political backing for these support programs in developed countries has eroded considerably in the dozen years since the DDA was started, and a period of high prices has made many of these support instruments redundant. So the time is ripe over the next two years for an agreement along the lines of that suggested in Rev. 4 on domestic support.

As various formulas for limiting subsidization under the WTO amber, blue, commodity-specific and non-commodity-specific de minimis categories are proposed, there is potential for much "sleight of hand" to sustain current programs. Agricultural negotiations lay emphasis also on accommodating domestic support for Non-Trade concerns. The concerns tend to be qualitative in nature. One of the most problematic areas facing the on-going trade negotiations within the Doha round is the issue of these 'non-trade' areas, as these areas appear to mean all things to all States or different things to different States. Countries seeking to limit the negative effects of production-stimulating and trade-distorting subsidies will have to be vigilant and forceful.

The African position on the content of the Box regime of the WTO Agreement on Agriculture should essentially favour a reformist stance tempered by strong adjustment and development elements. Indeed, the priority of African negotiators in the WTO negotiations should not be on the level of domestic support but on the rules, under which support is allowed.

Cotton

The C-4 has the same legal case as Brazil on cotton at the WTO and could also launch a dispute case against the US. However, for the C-4, introducing their own dispute settlement would not only be a lengthy and costly process but this could only give them a moral victory. In practice, retaliatory measures are applied to imports. Brazil has many ways to retaliate against the US, but C-4 countries do not import much from the US. Sanctions on this small amount would not hit the US economy hard. Moreover, the dispute settlement has as its objective compliance with existing laws and commitments. What the C-4 wants and needs is a new commitment to effectively eliminate all trade-distorting cotton subsidies. The only means available for that are negotiations within a round such as the Doha Round¹³.

Food security

Many African governments place particular importance on protecting food security and fear WTO liberalization may undermine this objective. High and volatile food prices, and their consequences for the poor, have revived concerns about food security and reinvigorated the debate about the role of strategic storage. Strategic grain reserves have

¹³ A decision, WT/MIN(15)/46, [was](#) adapted at the Tenth WTO Ministerial Conference (MC10), committing developed countries, effective January 2016, to grant duty-free and quota-free market access for cotton and cotton-related products produced and exported from LDCs. The decision calls countries to undertake more efforts to reform their domestic cotton policies. On export competition for cotton, the decision mandates that developed countries prohibit cotton export subsidies immediately and developing countries do so at a later date. The C4 stands to substantially benefit from the decision. Regrettably, traditionally, major non LDC cotton producing African countries, such as Cote d'Ivoire and Cameroon will not equally benefit from the decision. Though, these countries stand also to benefit as a results of the call to reform domestic cotton support and prohibiting export subsidy, thus contributing to leveling the play field. It should be noted here that countries, convened in the WT10, did not agree for the concept of special products under WTO to be extended to cotton as it applied to products that were not competitive in the international market.

been discussed at such high-level forums as the G-8 Summit and have been studied by the New Partnership for African Development (NEPAD) and other regional economic organizations. Against this background, current WTO arrangements already accommodate many proposals for promoting food security, allowing, though on interim nature, Public Stockholding for Food Security¹⁴ purposes is a case in point. Thus, public stockholding of food reserves may be an effective policy instrument to address emergencies and develop grain markets on the continent¹⁵.

To guide future negotiations on food security, the following principles need to be embedded within WTO rules: In terms of physical availability of basic food, WTO members need to define rules that guarantee NFIDCs, particularly the LDCs preferential access to food in times of shortages. Such measures could include the exemption of the World Food Program and LDCs from any export restrictions imposed by any country - including net food exporting developing ones - for reasons of food security; In terms of price volatility and affordability of food in periods of high prices, WTO members will explore and define multilateral mechanisms that limit the price volatility of staple food products to LDC consumers and producers to a predetermined level. The purpose of such mechanisms would be to ensure minimum revenue to LDC farmers in times of low prices and a maximum price for LDC consumers at times of high prices. Such a mechanism, which should respect longer-term market signals, would allow LDCs that do not have the resources to provide farm insurance and food stamp programs as exist in developed

¹⁴ The provision is contentious, as, on one hand, it allows major developing countries, such as India, China and Brazil, to subsidize their own farmers, the matter that would, way or another, affects global prices for major staple crops with these countries are either major exporters or importers. On the other hand, the provision should, in principle, benefit African countries as it would, presumably, have positive effects on small-scale producers. Though, the way the provision currently stands does not allow the majority of African countries to benefit as applying the provision is limited to countries that have been applying the system, with notification to WTO, in prior to the adoption of the interim provision.

¹⁵ Though not necessarily a means to spur agricultural production and enhance food security through providing sound incentives framework for small-scale producers.

countries to nevertheless protect their populations from short-term variations in world market prices of basic staple foods.

The negotiations have suggested that developing countries be provided with special flexibilities in terms of tariff reductions with respect to their commitments for a group of products, which are sensitive with respect to food security, rural development and/or livelihood concern¹⁶s. These products have commonly been referred to as “Special Products”. Based on the draft modalities, for developing countries up to 5 per cent of lines may have no cut and the overall average cut shall, in any case, be 11 per cent.

Allowing extensive special and differential treatment for products cultivated by subsistence farmers is not intended to keep farmers in low-productivity, low-income occupations. It is meant to allow sufficient time for them to become more productive in farming or to find other occupations. These transitions will take time and require targeted development assistance to raise farm incomes and to prepare farmers to cope with changes in global agricultural trade.

Several alternative strategies offer more sustainable solutions to food security and can be provided as green box measures. These include boosting rural transport and irrigation infrastructure, expanding agricultural extension schemes, technical extension schemes, defining rural property rights through titling programs, removing tariffs on fertilizers and other agricultural inputs and promoting effective rural credit institutions, including micro credit, so small farms can invest in productivity enhancing improvements.

Technical barriers

The use of standards and SPS measures appears to have become more contentious in recent years. As tariff barriers are being removed progressively, there are some fears that

¹⁶ Recognizing the challenges Net Food-Importing continue to face, M10 reaffirmed commitment to fully implement the decision on Measures Concerning the Possible Negative Effects of the Reform Programme, including differential treatment in line with the Marrakesh Decision in the context of the agriculture negotiations.

certain technical, safety, and health standards may be used instead to deter imports to shield domestic producers from economic competition. This state of affairs is due to the fact that the SPS Agreement allows the WTO Members to set their own food safety standards, which may be higher than those internationally, agreed and may thus clash with the drive to liberalize trade in agriculture. Though, Article 4 of the SPS agreement, though, requires governments to recognize equivalent health and safety measures adopted by other governments. The difficulty here lies in establishing whether an exporting country's measures are equivalent to those used in the importing country. Moreover, most African countries cannot take advantage of the opportunity to apply up to the allowable SPS measures because this would be inconsistent with the lower standards applicable in their domestic and regional markets. They have also criticized the length of time spent by industrialized countries in carrying out pest and disease studies needed to allow the import of new agricultural products from their countries.

It is a daunting task for poor nations to implement food safety standards that can be traced and monitored from fork to farm. New institutions and resources are needed to make it happen. There is, therefore, a great need to build up the capacity of developing countries to produce up to the exacting standards of importing markets. On the other hand, civil society faces a dilemma: regulations that are well intentioned in some dimensions can have the undesirable effect of reducing income-earning opportunities or blocking technology adoption that would benefit the poor.

An important question that arises is how African countries in particular can meet these requirements and maintain market access for their exports. Calls have accordingly been made to operationalize the technical and financial assistance commitments made by developed countries, as under Article 9 of the Agreements on Sanitary and Phytosanitary Measures (SPS) and Article 10 of the Agreement on Technical Barriers to Trade (TBT).

African countries find provisions of Article 10.1¹⁷ of the SPS Agreement to be insufficiently concrete. To remedy this, they need commitments from developed countries to provide technical assistance to LDCs (as stipulated under Article 9.1¹⁸), along with notification and indication of whether particular SPS and TBT measures took into consideration the interests of developing countries.

To level the playing field, African countries need to play an effective role in standard setting to ensure that international standards increase at a rate that is more consistent with their level of development and that developing standards also reflects their proportion of the membership of the organizations. In practice, the WTO compliant international standards keep going up, reflecting a measure of weakness by participating developing countries in the standard setting bodies. Some of the constraints include low attendance of meetings and weak technology base to justify the relevant levels of risk for SPS regulations.

Agricultural Exporting State Trading Enterprises

Agricultural Exporting State-Trading Enterprises (AESTEs) offer important benefits, particularly in African countries where the private sector is weak or under-capitalized or where it is highly concentrated. The WTO should not prohibit State-Trading Enterprises either explicitly, or de facto, by outlawing policies necessary to the establishment and operation of a single desk seller¹⁹. Export state-trading enterprises have often been

¹⁷In the preparation and application of sanitary or phytosanitary measures, Members shall take account of the special needs of developing country Members, and in particular of the least-developed country Members.

¹⁸Members agree to facilitate the provision of technical assistance to other Members, especially developing country Members, either bilaterally or through the appropriate international organizations. Such assistance may be, inter alia, in the areas of processing technologies, research and infrastructure, including in the establishment of national regulatory bodies, and may take the form of advice, credits, donations and grants, including for the purpose of seeking technical expertise, training and equipment to allow such countries to adjust to, and comply with, sanitary or phytosanitary measures necessary to achieve the appropriate level of sanitary or phytosanitary protection in their export markets.

¹⁹ Within the context of the decision on Export Competition, **WT/MIN(15)/45**, endorsed at MC10, **all** Members, including developing countries, are requested to make their best efforts to ensure that the use of export monopoly, developing and powers by AESTE is exercised in a manner that minimizes trade distorting effects and does not result

criticized on the grounds that they offer a competitive counterweight to concentrated export markets. STEs have real costs and are an obvious temptation for corruption. Nonetheless, if properly overseen and with provision for control by farmers, they have a key role to play.

Reform of food aid

Currently, the WTO reconfirms Members' commitment to ensure adequate levels of food aid and to take into account the interests of food aid recipient countries whereby a 'safe box' for bona fide food will be provided to ensure that emergency situations can be effectively dealt with. On the other hand, to avoid commercial displacement and continuing export subsidization, disciplines will have to be completed on in-kind food aid, monetisation and re-exports²⁰.

The WTO should support international efforts to strengthen and expand the Food Aid Convention to establish a forum where recipient countries have a voice and humanitarian and development concerns are given clear priority over domestic donor needs.

Availability of Policy Space construe

In economic management, particularly for the African states that still have got a long way to go to bridge the development gap; sufficient policy space to manage the economy is extremely important in the face of constraints posed by WTO commitments and the conditions imposed by international financial institutions in exchange for funds. Moreover, currently there are some concerns from developing country coalitions (G33,

in displacing or impeding the exports of another Member. In addition, the operation of the ASTEs shall not circumvent the requirement to reduce and eliminate all export subsidies.

²⁰ A provision was made within the context of the decision on export competition, **WT/MIN(15)/45**, made at MC10, to ensure that this decision would not construe by any way to reduce existing (or affect) commitments to maintain an adequate level of international food aid, to take account of the interests of food aid recipients and to ensure that the disciplines contained in the decision on export competition will not unintentionally impede the delivery of food aid provided to deal with emergency situations.

G90, ACP etc) that the AoA is largely skewed in favour of developed states that were the architects of the same. Such imbalance invariably means that the agreement does not provide “equivalent” WTO consistent measures for African and other developing economies to offer justified protection (e.g. use of subsidies for food security purposes) of their economies and promote development.

Considering that many African economies have limited capacity of using several trade policy instruments (e.g., even the green box measures), it does appear that the allowed policy space is not sufficient, and specific (extra) policy instruments might need to be created for them. Thus, African states must be creative and workout feasible proposals on how to increase and consolidate their policy space.

This call for new structures within the agreement to accommodate the special needs of developing countries and proposals for an entirely new “food security box” and “development box,” should be considered respectively. The objectives are to promote food security and rural employment by enhancing the production of staple foods, increasing agricultural capacity and competitiveness, and protecting rural farmers from world price fluctuations.

Trade related aspects of intellectual property rights (TRIPS)

African perception and concerns about TRIPS agreement should consider that the creation and utilization of knowledge is an important pillar of growth and development. As far as Africa is concerned, the implementation of the TRIPS agreement impedes rather than facilitate trade, particularly in the case of agricultural trade with developed countries. First, obtaining IPR is a costly process, too costly for many African countries, particularly for internationally recognized patents. Moreover, many developing countries fail to establish and protect their IPR simply because they are unaware as to what innovations are patentable. Similarly, as the number of patents and cross-patents held in countries abroad rises, many developing countries may simply not be aware of

possible infringements of IPR that are held by trading partners abroad. Finally, the ability to obtain IPR and to earn royalties from these rights has created incentives to obtain patents for hitherto unprotected germplasm, including by private players from countries abroad.

The following priorities and proposals should thus be considered from the perspective of African negotiators: the review of Article 27.3b and the option for countries to exclude all biological materials or life forms from patentability. African countries should be supported to develop a suitable sui-generis systems of protection for plant varieties, indigenous knowledge and technologies and community rights in line with their national developmental priorities; and to ensure that the TRIPS agreement conforms with the Convention on Biodiversity (CBD).

Other Issues

The DDA for agriculture has been criticized for not addressing current issues. One of these is that of subsidies for biofuels. Certainly there needs to be an agreement on whether such subsidies come under the constraints of the Agriculture Agreement: at present there is no agreement on whether all the variable biofuel products themselves are “agricultural”. But it might be as well to treat this issue along with other energy subsidies, a topic that the WTO may need to visit in the context of the interaction between climate change policies and trade.

In the context of rising food prices, issues of price volatility and food security have become a matter of growing concern to many African governments. This includes promoting in the WTO an appropriate policy framework for dealing with these issues. This is seen as important, since rising prices and volatility are seen as being linked to Uruguay Round reforms.

One aspect of this is the development of rules governing export restrictions and taxes. As indicated above, this could be a useful complement to further market opening. But it may

be best to treat this as one component of the reaction of the trade system to uncertainties from climate events, financial disruptions and economic fluctuations. The first responsibility for addressing such issues is with sovereign governments, but the existence of avenues in Geneva to discuss, coordinate and alleviate the impact of such events on trade flows may be useful. In the case of agriculture, a work programme on food security could be a suitable framework for this activity.

Concluding Remarks

While the Uruguay Round (UR) brought agricultural policies, and trade in agriculture, under GATT/WTO disciplines for the first time, it created minimal market opening and failed to ensure that the main subsidizers; the EU, U.S, and other OECD countries, reduced their extremely high levels of farm subsidies. These farm subsidies of the main subsidizers did not decrease substantially even after the implementation of the Agreement on Agriculture in 2004.

It is for these reasons that the Doha Development Round has to go beyond the Uruguay Round to make progress on three key issues: market access, agricultural support and S&D treatment. This include among other things the elimination of tariff peaks; reduction of tariff escalation; provision of duty-free and quota-free market access for all exports from low-income Sub-Saharan Africa and other LDCs; relaxation of rules of origin; and establishment of a trade adjustment compensation fund for those countries facing preference erosion.

At a more general level, the trade and development dimension of the WTO can be unpacked into four elements: fair trade, capacity building, balanced rules and good governance. By removing the distortions in global markets, caused by their domestic trade policies, and creating greater coherence in global economic policy, developed countries will contribute significantly to allowing the theory of comparative advantage

to work, stimulating increased growth and global economic welfare for both developed and developing countries’.

Although the Uruguay Round AoA is generally marked as an important step towards the progressive liberalization of international trade in agriculture, the successful conclusion of the Doha Round agriculture negotiations, including the small package at the Bali and Nairobi Ministerial Conferences²¹, is only a part of the desired solutions. As the international community wrestles to bring the Doha Development Agenda to a successful conclusion, there is still uncertainty about the financing of adjustment costs facing African countries prepared to embark on major trade reform to better integrate into the world economy. It is thus important that resources are available to address capacity constraints in African Countries as well as trade-related adjustment costs such as infrastructure or social safety nets. In this regard, Aid for Trade could well be the instrument that responds to those needs provided the activities to be financed are not ring-fenced.

²¹ And consequently Marrakech Ministerial conference.

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Annex – Extract of model results and related narratives on agriculture market access

Table A. : Africa WTO Trade Coalitions	
Country	Groups
<u>Algeria</u>	G77
<u>Angola</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Benin</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, Cotton-4, “W52” sponsors
<u>Botswana</u>	ACP, African group, G-90, G-33, “W52” sponsors
<u>Burkina Faso</u>	ACP, African group, G-90, Least-developed countries (LDCs), Cotton-4, “W52” sponsors
<u>Burundi</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Cape Verde</u>	ACP, African group, G-90, Recent new members (RAMs), “W52” sponsors
<u>Cameroon</u>	ACP, African group, G-90, Paragraph 6 countries, “W52” sponsors
<u>Central African Republic</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Chad</u>	ACP, African group, G-90, Least-developed countries (LDCs), Cotton-4, “W52” sponsors
<u>Congo</u>	ACP, African group, G-90, G-33, Paragraph 6 countries, “W52” sponsors
<u>Côte d’Ivoire</u>	ACP, African group, G-90, G-33, Paragraph 6 countries, “W52” sponsors
<u>Djibouti</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Egypt</u>	African group, G-90
<u>Ghana</u>	ACP, African group, G-90, Paragraph 6 countries, “W52” sponsors
<u>Kenya</u>	ACP, African group, G-90, G-33, Paragraph 6 countries, “W52” sponsors
<u>Lesotho</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Madagascar</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, “W52” sponsors
<u>Malawi</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Mali</u>	ACP, African group, G-90, Least-developed countries (LDCs), Cotton-4, “W52” sponsors
<u>Mauritius</u>	ACP, African group, G-90, Small, vulnerable economies (SVEs) – agriculture, Small, vulnerable economies (SVEs) – rules, G-10, G-33, Paragraph 6 countries, “W52” sponsors
<u>Morocco</u>	ACP, African group, G-90
<u>Mozambique</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, “W52” sponsors
<u>Namibia</u>	ACP, African group, G-90, NAMA-11, “W52” sponsors
<u>Niger</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Nigeria</u>	ACP, African group, G-90, G-20, G-33, Paragraph 6 countries, “W52” sponsors
<u>Rwanda</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Senegal</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, “W52” sponsors
<u>Sierra Leone</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>South Africa</u>	ACP, African group, G-90, Cairns group, G-20, NAMA-11, “W52” sponsors, joint proposal (in intellectual property)
<u>Swaziland</u>	ACP, African group, G-90, “W52” sponsors
<u>Tanzania</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-20, G-33, “W52” sponsors
<u>Togo</u>	ACP, African group, G-90, Least-developed countries (LDCs), “W52” sponsors
<u>Tunisia</u>	African group, G-90, NAMA-11, “W52” sponsors
<u>Uganda</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, “W52” sponsors
<u>Zambia</u>	ACP, African group, G-90, Least-developed countries (LDCs), G-33, “W52” sponsors
<u>Zimbabwe</u>	ACP, African group, G-90, G-20, G-33, Paragraph 6 countries, “W52” sponsors
Source: WTO	

Annex 1. Market Access on agriculture (top priority 1)

Table B :The tiered formula for agricultural tariff cuts

Band	Developed Countries		Developing countries	
	Range	Cut	Range	Cut
A	0-20	50	0-30	33.3
B	20-50	57	30-80	38
C	50-75	64	80-130	42.7
D	>75	70	> 130	46.7
Average cut	Min	54	Max	36

Source: WTO

Table C. The following cuts are used based on the 2008 draft modalities:

Tiers	AMS Bound Level	Cuts
1	≤US\$15 billion	45%
2	>US\$15 billion; ≤US\$40 billion	60%
3	> US\$40 billion	70%

1.1.1. Welfare Effects

Another key source of argument among policy makers and researchers is the welfare impact of agricultural trade liberalization. In the GTAP model, we measure the impact of trade liberalization on welfare in terms of equivalent variations (EV) in income. EV represents the money-metric equivalent to the utility change brought about by a change in prices. It measures the amount of money that would need to be taken away from the consumer before the price change to leave her as well off as she would be after the change in prices.

The welfare consequence of our Doha scenario suggests that agricultural liberalization would generate a global gain of \$6.3 billion even without the inclusion of non-agricultural tariff reform. But almost half of these benefits accrue to the EU 28 and Canada. The welfare benefits for the African regions amounts to \$8.26 billion which is 130% of the total welfare gain. The welfare breakdown for African regions is given in the table 5.3 below.

From the initial set of income effect tables, we can see that agricultural liberalization offers a mixed set of results. Not all regions in Africa will extract the same gains from the Round. Differences in initial specialization, initial domestic protection, and factor endowment, are leading to contrasted results. In contrast, countries affected by the erosion of preferences and the changes in relative prices would lose (North Africa, Central Africa, Zimbabwe, Botswana, Namibia, Cameroon and Cote D'Ivoire)

Specifically, we find unexpected welfare effects from agricultural liberalization in the following cases:

- Cameroon and Cote D'Ivoire, who are both net agricultural exporters, and are generally favouring agricultural liberalization. Those countries are usually expected to gain from improved market access in other countries.
- Gains for South Africa are limited. As a big agricultural exporter, it is expected to gain more from liberalization

For some of the regions the explanation of the negative welfare results is due to the fact that the expanding agricultural sectors draw resources from industrial sectors. As a consequence, the industrial sectors have to contract, which has negative implications for welfare because they cannot achieve cost effective scales of production. Therefore, the unexpected negative welfare effects are due in part to the presence of scale economies in some parts of the economy.

Table 1.1.1 : Decomposition of Welfare Effects in Doha (US\$ million)

	Allocative Efficiency	% of total gains	ToT	% of total gains	IS	% of total gains	Total Welfare Gains
Net Importers							
Egypt	42.43	10.27	236.74	57.31	133.89	32.42	413.06
Morocco	-5.77	-11.97	24.79	51.42	29.19	60.55	48.21
Tunisia	43.62	11.14	311.56	79.56	36.41	9.30	391.60
Rest of North Africa	-31.37	17.85	42.40	-24.13	-186.73	106.28	-175.71
Nigeria	-9.66	-23.28	65.79	158.55	-14.63	-35.27	41.49
Senegal	152.47	33.37	181.47	39.72	122.92	26.91	456.86
Rest of Western Africa	407.55	36.02	149.78	13.24	574.10	50.74	1131.43
Central Africa	-17.53	10.54	-64.52	38.78	-84.32	50.68	-166.36
South Central Africa	22.79	27.99	91.42	112.28	-32.78	-40.26	81.42
Madagascar	5.61	5.77	90.20	92.69	1.50	1.54	97.32
Mauritius	4.27	7.93	49.55	91.89	0.10	0.19	53.93
Mozambique	19.98	15.80	92.08	72.85	14.35	11.35	126.41
Zimbabwe	10.19	-37.65	-32.04	118.39	-5.21	19.25	-27.06
Botswana	0.52	-22.57	1.30	-55.74	-4.14	178.31	-2.32
Rest of Eastern Africa	422.45	9.72	2466.07	56.75	1456.67	33.52	4345.19
Rest of South Africa Customs Union	-5.87	-18.64	47.63	151.33	-10.29	-32.70	31.47
Namibia	-1.37	31.95	-3.26	75.70	0.33	-7.64	-4.30
Net Exporters							
Ethiopia	136.74	34.20	65.13	16.29	197.95	49.51	399.82
Malawi	57.98	15.87	294.62	80.62	12.83	3.51	365.43
Tanzania	41.63	14.06	204.22	68.99	50.18	16.95	296.04
Uganda	10.62	11.52	52.05	56.48	29.49	32.00	92.16
Zambia	-46.49	-64.82	109.61	152.82	8.61	12.00	71.72
South Africa	30.09	23.69	147.19	115.90	-50.28	-39.59	127.00
Cameroon	-6.13	30.51	-16.32	81.20	2.35	-11.71	-20.10
Cote D'Ivoire	-2.91	6.53	-42.39	95.15	0.75	-1.68	-44.56
Kenya	23.15	14.09	76.17	46.35	65.02	39.56	164.34

Source: Authors' results from a GTAP simulation

1.2.1. Effects on trade

As shown in Table 1.2.1. , almost all African regions in this scenario increase their overall agri-food exports as a consequence of the simulated liberalization scenario.

Table 1.2.1.: Trade Effects of Doha

Net Importers				Net Exporters	
	% Change in Export		% Change in Export		% Change in Export
Egypt	10.48	Madagascar	69.09	Ethiopia	56.02
Morocco	2.27	Mauritius	20.20	Malawi	55.84
Tunisia	48.55	Mozambique	99.92	Tanzania	57.71
Rest of North Africa	-0.85	Zimbabwe	5.31	Uganda	14.03
Nigeria	-0.33	Botswana	6.98	Zambia	58.92
Senegal	50.10	Rest of Eastern Africa	814.34	South Africa	1.78
Rest of Western Africa	14.21	Rest of South Africa Customs Union	45.58	Cameroon	-1.18
Central Africa	7.41	Namibia	0.59	Cote D'Ivoire	-1.04
South Central Africa	111.14			Kenya	3.41

Source: Authors' results from a GTAP simulation

1.3.1 Welfare Effects with Swiss Formula in Tariffs cuts

In this sub section of the experiment designs, we provide a comparative analysis in terms of welfare by applying the Swiss formula in the case of agricultural trade.

Table 1.3.1.: Welfare Effects of Doha (Swiss based Formula) (US\$ million)

Net Importers				Net Exporters	
Egypt	627.39	Madagascar	29.31	Ethiopia	201.86
Morocco	169.89	Mauritius	173.28	Malawi	283.86
Tunisia	731.66	Mozambique	92.31	Tanzania	171.19
Rest of North Africa	- 124.27	Zimbabwe	130.15	Uganda	62.84
Nigeria	531.30	Botswana	-5.15	Zambia	46.48
Senegal	272.08	Rest of Eastern Africa	4257.65	South Africa	128.49
Rest of Western Africa	455.16	Rest of South Africa Customs Union	299.67	Cameroon	47.36
Central Africa	- 164.01	Namibia	-7.61	Cote D'Ivoire	- 108.00
South Central Africa	102.79			Kenya	160.86

Source: Authors' results from a GTAP simulation

We find that though there are several cross-country variations in terms of welfare gains, the total gain to Africa is almost the same, i.e. US\$ 8.57 bn under Swiss formula as compared to US\$ 8.26 bn under tiered formula (see section 1.1.1 above).

Table 1.3.2. Welfare Effects of removing agricultural distortions (US\$ million)

Net Importers				Net Exporters			
	Tariffs	Domestic Support	Export Subsidies		Tariffs	Domestic Support	Export Subsidies
Egypt	914.07	17.07	-498.42	Ethiopia	-560.78	-0.36	86.95
Morocco	-387.87	3.13	764.42	Malawi	34.54	0.19	17.81
Tunisia	374.71	2.30	-161.87	Tanzania	-124.26	1.34	17.55
Rest of North Africa	2149.96	-3.22	-3082.39	Uganda	-55.56	0.54	-20.45
Nigeria	1928.73	1.10	-2757.45	Zambia	-21.93	-0.13	-63.76
Senegal	-146.63	2.09	8.56	South Africa	1317.72	3.05	-408.01
Rest of Western Africa	-7407.81	41.90	581.26	Cameroon	101.63	3.67	128.64
Central Africa	-1550.43	2.52	-1006.20	Cote D'Ivoire	-21.23	2.81	99.70
South Central Africa	552.09	2.55	-1609.86	Kenya	-98.37	0.51	305.67
Madagascar	-22.18	0.09	-68.56				
Mauritius	-42.92	0.33	21.06				
Mozambique	-28.09	0.63	37.78				
Zimbabwe	1036.28	1.47	78.19				
Botswana	-22.59	-0.16	-490.29				
Rest of Eastern Africa	-330.77	1.02	-344.59				
Rest of South Africa Customs Union	6.55	0.09	-72.51				
Namibia	104.36	0.00	58.58				
<i>Source: Authors' results from a GTAP simulation</i>							

1.3.3. Trade Effects

In this sub-section, we analyze the trade effects from an offensive point of view. Table 1.3.3. Below describes the exports impact of the three scenarios under consideration.

It can be seen that significant gains are derived from tariffs reduction and US\$ 5.9 bn for Africa compared to US\$ 69.5 million in domestic support and US\$ 22.8 million under export subsidies. However, country level analysis reveals a different pattern. For instance, Egypt has much higher gains under export subsidies reduction compared to the other two scenarios.

Table 1.3.3. Trade Effects of removing agricultural distortions (US\$ million)

Net Importers				Net Exporters			
	Tariffs	Domestic Support	Export Subsidies		Tariffs	Domestic Support	Export Subsidies
Egypt	0.74	0.21	3.78	Ethiopia	19.75	-0.03	2.84
Morocco	14.39	-0.02	-1.66	Malawi	7.61	-0.01	1.21
Tunisia	43.44	-0.03	2.12	Tanzania	7.18	0.19	2.47
Rest of North Africa	19.00	-0.05	36.15	Uganda	3.20	0.05	1.12
Nigeria	6.72	0.07	9.51	Zambia	2.68	0.26	4.47
Senegal	4.08	0.08	1.40	South Africa	5.41	0.09	-0.52
Rest of Western Africa	41.18	0.73	-1.21	Cameroon	6.36	0.23	-9.48
Central Africa	8.92	1.36	6.64	Cote D'Ivoire	1.31	-0.01	-2.31
South Central Africa	11.25	0.02	13.02	Kenya	5.91	0.00	-3.30
Madagascar	6.87	-0.02	5.12				
Mauritius	9.44	-0.02	2.00				
Mozambique	12.74	-0.14	2.10				
Zimbabwe	5.44	0.33	-0.82				
Botswana	-2.46	-0.03	17.67				
Rest of Eastern Africa	25.53	0.78	5.78				
Rest of South Africa Customs Union	39.62	0.01	1.05				
Namibia	13.73	0.00	-0.07				

Source: Authors' results from a GTAP simulation

While domestic support is much less important than market access barriers in determining the overall costs of trade distortions, domestic distortions are particularly important in some sectors. For the politically-important case of cotton, for instance, export gains from domestic support are positive and significant.

In sum, the effects of potential outcome of the WTO Doha agricultural trade negotiations on welfare and trade have been analyzed. The focus has been on results for African regions. The analysis has been performed by applying a computable simulation model of the world economy (GTAP) that is commonly used internationally.

As any economic model, the one used in this study provides a simplified picture of the world economy (demand and supply relations). For this reason, the results should be interpreted with great care. One example on abstraction from reality is the assumption that no changes take place in demography or in the endowments of natural resources. Furthermore, countries and sectors are aggregated into a smaller number of regions and sectors. This may affect simulation outcomes by underestimating global gains and conceal diverging results for individual countries or sectors within an aggregate group. Finally, dynamic effects of trade liberalization that are related to capital accumulation and general productivity growth are not incorporated into the main model. National income gains are therefore likely to be considerably underestimated

Taking into account the various formulae, exceptions and flexibilities for goods, we examine the potential impact of a deal. Given the political economy of the negotiations, various exceptions and flexibilities limit the impact of the trade liberalization of the tiered formula on agriculture. Also, several countries are exempt from liberalization.

When looking at a more detailed level, the individual regions or countries show diverging results, as some win and others lose from industrial countries' liberalization. The effects on an individual country or region will be contingent on the trade patterns, as the end of some products may rise from industrial countries' liberalization and others fall. The impact of the price effects on national income, caused by the agricultural liberalization in industrial countries, will depend on if a country is net-exporter or net-

importer of a specific product. In addition, for developing countries as a group, the share of agriculture in trade in goods has dropped dramatically over the last three decades. Nevertheless, considering the importance of the agricultural sector for many developing countries and for development and poverty alleviation, these results underline the need for more far reaching agricultural commitments. This is necessary in order to realize the potential of agricultural liberalization to contribute substantially to the gains of developing countries.

Overall, the limited gains to be expected from the completion of the round help understanding the difficulties to conclude. They clearly result from the flexibilities introduced to amend the political impact of the initial formulae. But more importantly, the overall design of the deal finally considered, is particularly detrimental to certain big players, as compared to what had been on the table for long. Finally, negotiators reached a trade deal on a limited series of issues WTO Ministerial Conference in Bali and Nairobi, one of these being trade facilitation.

Negotiating meaningful reductions in domestic support is one of the more contentious issues in the current WTO agricultural negotiations. Yet our analyses showed that most of the global welfare gain from agricultural liberalization was due to lowering of trade barriers. To the extent that increased global welfare is a goal, reforming trade policy would appear to be much more important than reforming the developed world's domestic subsidy programmes. This study therefore supports the view that market access and removal of export subsidies are central to the current Round of trade negotiations.

When comparing the impact of the Swiss formula with the tiered formula on welfare, we can also conclude that the results as far as welfare impact are concerned are significantly higher compared to market access modalities being limited to the tiered formula.