Tackling Agriculture in the Post-Bali Context

A collection of short essays

Edited by
Ricardo Meléndez-Ortiz
Christophe Bellmann
and Jonathan Hepburn

October 2014
Tackling Agriculture in the Post-Bali Context

A collection of short essays

Edited by
Ricardo Meléndez-Ortiz
Christophe Bellmann
and Jonathan Hepburn

October 2014
Acknowledgments

This electronic publication, as is traditional with ICTSD undertakings, builds on many years and various forms of collaboration between ICTSD, policymakers, analysts, and stakeholders. Many thanks go to the authors for their prompt response to our invitation, and the very high quality and targeted nature of their contributions to this volume. ICTSD is equally grateful for the support of its core and thematic donors including the UK Department for International Development (DFID); the Swedish International Development Cooperation Agency (SIDA); the Netherlands Directorate-General of International Cooperation (DGIS); the Ministry of Foreign Affairs of Denmark, Danida; the Ministry for Foreign Affairs of Finland; and, the Ministry of Foreign Affairs of Norway; as well as the Swiss State Secretariat for Economic Affairs (SECO), for support of ICTSD’s related work through the World Economic Forum – ICTSD E15 Initiative: Strengthening the Global Trade System.

For further information on ICTSD and other work in this theme see www.ictsd.org

ICTSD welcomes comments and feedback on this publication. These can be sent to the volume editors at rmelendez@ictsd.ch; cbellmann@ictsd.ch; jhepburn@ictsd.ch or to ICTSD’s Managing Director for Communications and Strategy at acrosby@ictsd.ch.

Citation: Meléndez-Ortiz, Ricardo; Christophe Bellmann and Jonathan Hepburn; (ed.) (2014); Tackling Agriculture in the Post-Bali Context; International Centre for Trade and Sustainable Development, Geneva, Switzerland, www.ictsd.org

The views expressed in this publication are those of the authors and do not necessarily reflect the views of ICTSD or its funding institutions.

Copyright © ICTSD, 2014. Readers are encouraged to quote this material for educational and non-profit purposes, provided the source is acknowledged. This work is licensed under the Creative Commons Attribution-Non-commercial-No-Derivative Works 3.0 License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/3.0/ or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

ISSN 1817 356X
# TABLE OF CONTENTS

## Preface
5

## List of Abbreviations
7

## Overview
9

## PART ONE: Evolving Trends in Global Agricultural Markets
31

- **Has the Treadmill Changed Direction? WTO Negotiations in the Light of a Potential New Global Agricultural Market Environment**
  By Josef Schmidhuber and Seth Meyer
  33

- **Energy Markets: The Impact on Trade in Biofuels and Farm Goods**
  By Harry De Gorter
  47

- **International Trade Disciplines and Policy Measures to Address Climate Change Mitigation and Adaptation in Agriculture**
  By David Blandford
  55

- **Challenges Facing Poor Food-importing Countries: Can WTO Disciplines Help?**
  By Panos Konandreas
  61

- **Can We Have Regionalism and Multilateralism?**
  By Ken Ash and Iza Lejarraga
  75

## PART TWO: The 2008 Draft Modalities and Evolving Trends in Agricultural Trade Policies
85

### MARKET ACCESS

- **Implications of the Draft Market Access Modalities on Bound and Applied Tariffs**
  By David Laborde
  87

- **Import Surges and the Special Safeguard Mechanism in a Changing Global Market Context**
  By Jamie Morrison and George Mermigkas
  103

### EXPORT COMPETITION

- **Export Subsidies and Export Credits**
  By Eugenio Díaz-Bonilla and Jonathan Harris
  115

- **Trade Policy Options for Enhancing Food Aid Effectiveness: Revisiting the Draft Doha Deal**
  By Edward J. Clay
  123
## DOMESTIC SUPPORT

**Evolution of Trade-distorting Domestic Support**  
*By Lars Brink*

**Market Price Support in Large Developing Countries**  
*By Raul Montemayor*

**The 2014 US Farm Bill: Implications for the WTO Doha Round in a Post-Bali Context**  
*By Vincent H. Smith*

**The EU CAP Reform: Implications for Doha Negotiations**  
*By Stefan Tangermann*

**The Future of Green Box Measures**  
*By Jonathan Hepburn and Christophe Bellmann*

## EXPORT RESTRICTIONS

**Export Restrictions and Food Security**  
*By Giovanni Anania*

## COTTON

**How to Re-invigorate the Cotton Issue at the WTO:**  
*Gin Ideas, Spin Proposals, Weave Solutions and Avoid Stocks*  
*By Nicolas Imboden*

## PART THREE: Systemic and Institutional Issues

**WTO Agriculture Negotiations: The Way Ahead**  
*By Harsha Vardhana Singh*

**In Agriculture, it is Time to Act with Plurilaterals**  
*By Aluisio de Lima-Campos*

**Transparency and Monitoring in Agricultural Trade:**  
*Policy Options for the Post-Bali Agenda*  
*By Tim Josling*

**Strengthening the Deliberative Function of the Regular Committee on Agriculture**  
*By Manzoor Ahmad and Ammad Bahalim*

## ABOUT THE AUTHORS
PREFACE

At the ninth WTO Ministerial Conference in Bali, Indonesia, Ministers formally signed off on their first multilateral trade deal in nearly two decades by agreeing on a small package built around a new trade facilitation agreement, some elements of agriculture and select development-focused provisions. Building on the Bali success, members are now set to revisit the rest of the Doha trade talks. In addition to a rather narrowly defined work programme under the Committee on Agriculture to find a permanent solution to the controversy around public food stockholding, Members have agreed to design a “clearly defined” work programme on the remaining Doha Development Agenda (DDA) issues. Such a work programme should build on the decisions taken at the Ministerial, “particularly on agriculture, development and LDC issues, as well as all other issues under the Doha mandate that are central to concluding the Round.” In doing so, Ministers recalled the need expressed at the 2011 Ministerial to explore different negotiating approaches, while respecting the principles of transparency and inclusiveness, and to look at ways to overcome the most critical and fundamental stumbling blocks.

How WTO Members will define such a work programme remains unclear at this stage. While some insist on the need to take a piecemeal approach, carefully calibrating ambition and do-ability in a balanced package, others have privileged plurilateral or critical mass agreements as illustrated by negotiations already under way in a number of areas, including services with the Trade in Services Agreement (TISA) or on environmental goods, through the green goods initiative launched by a group of 14 WTO Members. Yet, regardless of the approach taken, it is clear that the work programme will have to tackle the so-called “DDA core issues”, which have been put on hold since 2008, starting with the highly controversial agriculture talks. In doing so, Members will need to assess the extent to which going back to the 2008 draft texts as a basis for further negotiations is both possible and desirable in the light of recent changes in the global agricultural landscape.

While the overall objectives defined in the Doha negotiating mandates may very well remain relevant, several WTO Members have argued that the draft modalities developed since then essentially reflect a reality prevailing in the late 1990s and early 2000s. At the global level, global value chains and the proliferation of regional trade agreements have changed the way in which global agricultural trade takes place. At the same time, production shortfalls, combined with high energy prices, declining growth rates of cereal yields and rising global demand for food and biofuels have resulted in a series of food price spikes. Trade-related policy responses such as export restrictions or biofuels subsidies and mandates have further exacerbated price increases on world markets. Responding to the new world environment, large agriculture producers and major trading nations are reforming their agricultural policy – with the impact on other countries often only considered as an afterthought. While market access has been characterized by a downward trend in applied tariffs, as a result of unilateral liberalization and regional trade agreements, several emerging countries have increased their subsidies to farmers very rapidly, as illustrated by the Bali controversy around the government purchase of food at administered prices for public stockholding. Meanwhile, OECD countries have introduced new forms of support measures ranging from environmental payments to crop and revenue insurance schemes.
This has prompted several WTO Members to call for new data and updated information on agricultural trade, a move interpreted with suspicion by other countries who fear that such a quest would be used as a rationale to extract more concessions from them. For these countries, starting WTO negotiations from scratch after so many years of hard work would probably result in 'throwing out the baby with the bath water'. Beyond this controversy, however, there is little doubt that any informed conversation ultimately needs to build on a sound understanding of this new global reality and its implications for future multilateral disciplines in agriculture.

As a contribution to this process, this volume builds on the most recent analysis of global trends and domestic policy reforms in agriculture to inform negotiations on a post-Bali agenda on agriculture in the WTO. It features a series of short papers and articles by leading experts and thinkers that systematically cover all the elements of the agricultural negotiations under the three pillars of market access, domestic support and export competition. The pieces presented here essentially draw on existing cutting edge research and analysis commissioned by the ICTSD through its regular work programme and the E-15 process, or generated by partner institutions and experts. By putting them together and making them widely available in a concise, non-technical and solution-oriented manner, it is our hope that this volume will constitute a timely and critical input in the definition of the work programme envisaged in Bali.

Ricardo Meléndez-Ortiz
Chief Executive
International Centre for Trade and Sustainable Development (ICTSD)
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACP</td>
<td>African, Caribbean and Pacific</td>
</tr>
<tr>
<td>ACRE</td>
<td>Average Crop Revenue Programme</td>
</tr>
<tr>
<td>AMA</td>
<td>Agricultural Market Access</td>
</tr>
<tr>
<td>AMIS</td>
<td>Agricultural Market Information System</td>
</tr>
<tr>
<td>AMS</td>
<td>Aggregate Measure of Support</td>
</tr>
<tr>
<td>AoA</td>
<td>Agreement on Agriculture</td>
</tr>
<tr>
<td>ARC</td>
<td>Agricultural Risk Coverage</td>
</tr>
<tr>
<td>ASCM</td>
<td>Agreement on Subsidies and Countervailing Measures</td>
</tr>
<tr>
<td>AVE</td>
<td>Ad Valorem Equivalent</td>
</tr>
<tr>
<td>CAP</td>
<td>Common Agricultural Policy</td>
</tr>
<tr>
<td>CARB</td>
<td>California Air Resources Board</td>
</tr>
<tr>
<td>CBO</td>
<td>Congressional Budget Office</td>
</tr>
<tr>
<td>CCP</td>
<td>Countercyclical Payments Programme</td>
</tr>
<tr>
<td>CFS</td>
<td>Committee on World Food Security</td>
</tr>
<tr>
<td>CoA</td>
<td>Committee on Agriculture</td>
</tr>
<tr>
<td>CSD</td>
<td>Committee on Surplus Disposal</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee</td>
</tr>
<tr>
<td>DDA</td>
<td>Doha Development Agenda</td>
</tr>
<tr>
<td>DDR</td>
<td>Doha Development Round</td>
</tr>
<tr>
<td>DMPP</td>
<td>Dairy Margin Protection Programme</td>
</tr>
<tr>
<td>DPP</td>
<td>Direct Payments programme</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>ECLAC</td>
<td>Economic Commission for Latin America and the Caribbean</td>
</tr>
<tr>
<td>FAC</td>
<td>Food Aid Convention</td>
</tr>
<tr>
<td>FAPRI</td>
<td>Food and Agricultural Policy Research Institute</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
</tr>
<tr>
<td>FFV</td>
<td>Flex Fuel Vehicle</td>
</tr>
<tr>
<td>FTA</td>
<td>Free trade agreement</td>
</tr>
<tr>
<td>FTA</td>
<td>Free trade area</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse gas</td>
</tr>
<tr>
<td>IATRC</td>
<td>International Agricultural Trade Research Consortium</td>
</tr>
<tr>
<td>ICTSD</td>
<td>International Centre for Trade and Sustainable Development</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
</tr>
<tr>
<td>ILUC</td>
<td>Indirect land-use change</td>
</tr>
<tr>
<td>IPCC</td>
<td>International Panel on Climate Change</td>
</tr>
<tr>
<td>LCFS</td>
<td>Low Carbon Fuel Standard</td>
</tr>
<tr>
<td>LDC</td>
<td>Least Developed Countries</td>
</tr>
<tr>
<td>LIFDC</td>
<td>Low-income food deficit countries</td>
</tr>
<tr>
<td>LS</td>
<td>Legislated standards</td>
</tr>
<tr>
<td>MFN</td>
<td>Most Favoured Nation</td>
</tr>
<tr>
<td>MPS</td>
<td>Market price support</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MTS</td>
<td>Multilateral trading system</td>
</tr>
<tr>
<td>NAMA</td>
<td>Non-Agricultural Market Access</td>
</tr>
<tr>
<td>NFIDC</td>
<td>Net Food Importing Developing Countries</td>
</tr>
<tr>
<td>NRA</td>
<td>Nominal Rate of Assistance</td>
</tr>
<tr>
<td>ODA</td>
<td>Official development assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OIE</td>
<td>Office of Epizootics</td>
</tr>
<tr>
<td>OTDS</td>
<td>Overall Trade-Distorting Support</td>
</tr>
<tr>
<td>PLC</td>
<td>Price Loss Coverage</td>
</tr>
<tr>
<td>PSE</td>
<td>Producer Support Estimate</td>
</tr>
<tr>
<td>PTA</td>
<td>Preferential Trade Agreement</td>
</tr>
<tr>
<td>PVSM</td>
<td>Private voluntary standards</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>RCEP</td>
<td>Regional Comprehensive Economic Partnership</td>
</tr>
<tr>
<td>RFS</td>
<td>Renewable Fuel Standard</td>
</tr>
<tr>
<td>RIN</td>
<td>Renewable Identification Numbers</td>
</tr>
<tr>
<td>RTA</td>
<td>Regional trade agreements</td>
</tr>
<tr>
<td>SCM</td>
<td>Subsidies and Countervailing Measures</td>
</tr>
<tr>
<td>SCO</td>
<td>Supplementary Coverage Option</td>
</tr>
<tr>
<td>SDT</td>
<td>Special and differentiated treatment</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and Phytosanitary</td>
</tr>
<tr>
<td>SSM</td>
<td>Special Safeguard Mechanism</td>
</tr>
<tr>
<td>SSR</td>
<td>Self-sufficiency ratios</td>
</tr>
<tr>
<td>STAX</td>
<td>Stacked Income Protection</td>
</tr>
<tr>
<td>STE</td>
<td>State trading enterprise</td>
</tr>
<tr>
<td>SVE</td>
<td>Small, vulnerable economy</td>
</tr>
<tr>
<td>TBT</td>
<td>Technical Barriers to Trade</td>
</tr>
<tr>
<td>TFA</td>
<td>Trade Facilitation Agreement</td>
</tr>
<tr>
<td>TISA</td>
<td>Trade in International Services Agreement</td>
</tr>
<tr>
<td>TPA</td>
<td>Trade Promotion Authority</td>
</tr>
<tr>
<td>TPP</td>
<td>Transpacific Partnership</td>
</tr>
<tr>
<td>TPRM</td>
<td>Trade Policy Review Mechanism</td>
</tr>
<tr>
<td>TRQ</td>
<td>Tariff Rate Quota</td>
</tr>
<tr>
<td>TTIP</td>
<td>Transatlantic Trade and Investment Partnership</td>
</tr>
<tr>
<td>UHLTF</td>
<td>United Nations High Level Taskforce</td>
</tr>
<tr>
<td>UMR</td>
<td>Usual Marketing Requirements</td>
</tr>
<tr>
<td>URAA</td>
<td>Uruguay Round Agreement on Agriculture</td>
</tr>
<tr>
<td>VRAM</td>
<td>Very Recently Acceded Member</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
Overview

By Christophe Bellmann, Jonathan Hepburn and Ricardo Meléndez-Ortiz

Introduction

At the ninth World Trade Organization (WTO) Ministerial Conference in Bali, in December 2013, Ministers formally signed off on their first multilateral trade deal in nearly two decades by agreeing on a small package built around a new trade facilitation agreement, some elements of agriculture and selected development-focused provisions. Members also gave themselves twelve months to design a “clearly defined” work programme on the remaining Doha Development Agenda (DDA). This mandate responds to the need to break the long-lasting stalemate in multilateral trade negotiations resulting from the failure of the July 2008 mini-ministerial. At that time, ministers from the WTO’s leading players met for a nine-day marathon negotiation in a last-ditch effort to save the Round. On that occasion, Members came closer than ever to concluding the talks, but ultimately failed to reach an agreement when the Indian and US ministers disagreed on an agricultural safeguard. After this third collapse in three successive summers, negotiations appeared to have completely stalled.

In early 2014, building on the Bali success, Members started to revisit the rest of the DDA under its three main pillars of agriculture, non-agricultural market access (NAMA) and services. The implementation of the Bali package itself, however, turned out to be more difficult than expected. In July, India signalled that it was unwilling to join the consensus on a proposed protocol of amendment integrating the new trade facilitation agreement into the WTO rule book, unless it saw evidence of progress on the concerns it had raised in Bali, starting with a permanent solution on public stockholding. This new impasse, only six months after Bali, not only affected mutual trust among countries but also significantly delayed discussions on the post-Bali work programme mandated by Ministers. Fortunately, after several months of deadlock, an agreement reached in mid-November between India and the United States, finally allowed Members to overcome the impasse, paving the way for the implementation of the Bali deal on trade facilitation, as well as progress on the broader negotiating agenda.¹

Members will now need to turn their attention to the arduous task of defining the contours and content of a possible post-Bali work programme. A first step in this process will consist in undertaking a reality check of the draft negotiating modalities. While existing texts cannot be dismissed, governments also cannot ignore the fact that the global agriculture landscape has evolved significantly since negotiations froze in 2008 – let alone the changes that have taken place since they were launched in 2001. As WTO Members start crafting the contours of a possible post-Bali agenda in agriculture, a sound understanding of this new global reality and its implications for future multilateral disciplines is a necessary point of departure. The following sections provide an overview of these rapid changes and their relation to future negotiations.

1. The new global context

1.1. A rapidly evolving trade landscape

Over the last 15 years or so, global agricultural trade, excluding intra-EU flows, has nearly tripled to reach USD 1 trillion. While trade remains relatively concentrated among six key players – the EU, the US, Japan, India, China and Brazil – their collective importance has decreased, not least as a result of booming import markets in Africa. Emerging economies have also become more prominent with surging Chinese imports, the consolidation of Brazil as a key exporter, and the increasing participation of India with a net agricultural trade surplus of USD 9 billion and a doubling of its share in global imports over the same period.2

Over the next decades, changes in demand – as a result of growing urban population and associated changes in diet – are likely further to affect the direction and geography of trade flows. Estimates suggest that an additional 1 billion people will join the “middle class” in 2020, a rise from about 1.8 billion in 2010.3 According to the OECD/FAO Agricultural Outlook, the Americas will strengthen their position as the dominant export region, both in terms of value and volume. This growth is mainly fuelled by increased exports of high-value commodities such as meat, ethanol, sugar, oilseeds and cotton in response to changing demand. Western Europe will display, on average, a negative trade balance with flat exports. The rapidly growing population in Africa will result in increasing food imports, but the largest demand will come from Asia, which is expected to exhibit a trade deficit for all commodities except rice, vegetable oils and fish in 2023. India will remain one of the leading exporters for cereals and rice and is also expected to be a major exporter of meat and cotton, keeping it in an overall trade surplus situation for agricultural products.

These trends might create new trade tensions and, overall, reinforce the need for a strong, predictable and equitable multilateral trade system. They also point to the fact that trade flows and particularly imports from emerging economies are likely to grow regardless of market access conditions. Indeed, regions that will experience a relatively large increase in the middle class are also those that will significantly increase their net imports for most commodities.

1.2. Towards a shift from a “demand–constrained” to a “supply–constrained” agricultural trading system?

Historically, agricultural markets have been characterized by a long-term trend towards declining real prices. The benefits of increased productivity and falling production costs were passed on to consumers, enhancing the per capita calorie consumption and reducing the percentage – or even the absolute number – of chronically hungry people.4 These abundant supplies exerted downward pressure on food prices and ultimately farm incomes. As a response, policy-makers, particularly in OECD countries, had recourse to various forms of price support, buffer stock programmes or acreage

---

2  See Laborde in this volume.
4  See Schmidhuber and Meyer in this volume.
set-aside schemes. While these measures achieved their stated objectives at the domestic level, the consistent use of trade-distorting domestic support coupled with high border protection exerted further downward pressure on international prices and made them more volatile. They also induced surpluses that had to be disposed of in international markets, often with the help of export subsidies whose effect contributed to further lowering world prices.

In developing countries, low and volatile prices provided disincentives to invest in agriculture, often resulting in lower domestic food production, while shifting consumption patterns towards less expensive, subsidized imported foods. These policies generally helped net food-importing countries with limited domestic supply capacity, low foreign exchange availability and large urban populations. However, they undermined the capacity of efficient agriculture exporters and countries with untapped food production potentials – notably in sub-Saharan Africa – to feed their own populations and, over the long run, stifled domestic productivity growth.\(^5\)

Over the last five years, however, several agricultural commodities have experienced significant price spikes and volatility. Arguably, markets for certain agricultural products have always exhibited high volatility.\(^6\) However, the magnitude and frequency of the price spikes experienced in 2007–08 and again in 2010–11 and 2012 were such that they drew significant political attention, up to the highest level of government. These spikes appear to reflect the immediate impact of weather-related production shortfalls in major producer regions, against a backdrop of high energy prices, steadily rising demand due to higher average incomes, and low rates of productivity growth in many world regions. While isolated extreme weather events cannot necessarily be seen as part of a long-term trend, it is also clear that climate change is likely to increase the prevalence of such events in the future – suggesting markets may continue to be characterized by relatively high and volatile prices. Furthermore, persistently high energy prices and policies to promote the use of agricultural products for biofuel production have created a direct link between energy prices and food prices, changing the dynamics of food production and trade.\(^7\)

In the short term, the impact of such spikes has hit low-income food-deficit countries particularly hard. In the past, the increased cost of food imports was largely due to increases in the quantities imported. In contrast, in recent years, price increases have had a much stronger effect on food import bills.\(^8\) As highlighted by Konandreas, the policy measures applied during these price spikes also point to possible loopholes in current disciplines. Overall, such policy responses can be classified as follows:

---

5  Ibid.

6  This tendency is even more pronounced for commodities where global markets tend to be “thin”, only accounting for a small percentage of global output.

7  See Schmidhuber and Meyer, or De Gorter, in this volume. If energy prices were to continue to rise, and as long as the price for biofuel feedstock remains below its parity price equivalent, the energy market would be large enough to siphon off any additional surplus of agricultural products. In this case, the energy price would function as a floor price for food and agricultural markets, and agricultural prices would follow energy prices, at least in the long run.

8  See Konandreas in this volume. For LDCs, while the aggregate volume of commercial cereal imports increased by less than three times from the early 1990s to the early 2010s, the cereal import bill increased by over six times during the same period. Similar sharp increases in the cereal import bill have been experienced by NFIDCs, as the volume increased by nearly 70 percent and the cereal import bill almost quadrupled.
• Trade policy responses focusing on border measures, such as lowering tariffs and restricting exports to reduce price transmission and increase domestic supply;

• Domestic market-based measures, including domestic food stockholding activities through administrative procurement and the release of supplies at subsidized prices;

• Producer-oriented policy responses intended to help farmers increase production, using measures such as input subsidies and producer price support;

• Consumer-oriented policy responses that provide direct support to consumers and vulnerable groups in the form of food subsidies, social safety nets, tax reductions and price controls, among others.

All these policies are highly relevant to the current negotiations maybe with the exception of consumer-oriented policies, which, if agriculture-specific, would fall under green box subsidies. Some of the challenges here can be organized under three broad categories:

• Issues related to the interpretation or adequacy of existing provisions: A prominent example is public stockholding for food security purposes. In the context of less reliable global markets, some developing countries saw the importance of building up domestic food stocks to address food security needs. Such operations have raised questions of whether countries should be allowed to provide market price support only up to their de minimis level of 10 per cent of the value of production of the respective food commodities procured, as illustrated by the Bali controversy;

• Issues related to the weakness of existing provisions: While existing disciplines on imports and domestic support provide a degree of comfort and predictability to exporting countries, similar disciplines on the export side, catering for the interests of poor net food-importing countries, have proven inadequate and underdeveloped. A telling example is the case of export prohibitions and taxes;

• Disciplines missing from the system altogether: A prominent example here is the trade impact of biofuel policies pursued by some countries. These measures encourage feedstock consumption in the energy markets. Not only can these measures introduce distortions that disincentivize the production of feedstocks by more efficient producers in other parts of the world, they can also leave food consumers exposed to higher food prices and higher food price volatility – especially when energy prices are high and feedstock yields fail.

In the longer term, if the trend towards a more supply-constrained world is confirmed, this could have deeper implications for global agricultural trade governance. By and large, the DDA negotiations still focus on protecting producers, while measures to protect consumers have not received the attention that the shift to the new market environment may warrant. Given this reality, a fundamental question is whether the agenda negotiated under the DDA should be revisited with a view to addressing not only trade distortions that put a downward pressure on international prices but also to introducing binding disciplines that help reduce international price hikes and excessive

---

9 See Schmidhuber and Meyer in this volume.
price volatility. In this respect, Schmidhuber and Meyer suggest the need for a twin-track approach to (a) ensure that trade policy measures help protect consumers from the negative impacts of higher and more volatile prices; and (b) at the same time, enable small producers in developing countries to harness the benefits of higher prices.

1.3. Agriculture and the imperative to address climate change

It is now widely recognized that the biophysical impacts of climate change – including long-term changes in temperatures and precipitation and the increased likelihood of extreme weather events – will alter crop and animal productivity and ultimately modify trade flows. These changes will affect individual countries differently depending on the effect of climate change on their agricultural productivity and their trade exposure. At the same time, agriculture is a significant source of global greenhouse gas (GHG) emissions, although it can also contribute to carbon sequestration. From a trade perspective, a key issue is whether policy measures that are emerging to promote mitigation or adaptation in the sector are consistent with GATT/WTO disciplines.\(^\text{10}\)

In this respect, Blandford argues that the pursuit of climate change policies for agriculture opens up the possibility of conflicts with existing international trade disciplines. The challenge will be to allow countries flexibility in reducing the environmental footprint of agriculture and promoting greater sectoral resilience, while at the same time letting the benefits of freer trade to be realized. There is a need for an international consensus on the domestic policy measures that are likely to be effective in tackling the effects of climate change in agriculture and are also the least trade distorting. There is also a need for enhanced monitoring and scrutiny of measures used in order to avoid trade disputes.

For Blandford, the immediate priority for the WTO is to conclude the current Doha Round of trade negotiations. In doing so, some important priorities relating to climate change measures could be addressed. These include:

- The clarification of criteria to be applied under the green box in Annex 2 of the Agreement on Agriculture (AoA) to ensure that these exempt policies with clear climate change objectives, combined with enhanced transparency and scrutiny of such policies to ensure that they are minimally production and trade distorting;

- The provision of special exemptions for the least developed countries for measures used to increase agricultural productivity and resilience in the face of climate change (e.g. certain types of input subsidies that would otherwise be disciplined under the AoA);

- Greater transparency in the use of explicit and implicit subsidies affecting trade in biofuels, through enhanced requirements for the notification of biofuels policies and scrutiny of such policies.

1.4. Changes in domestic policies

Responding to global changes in the global food system, domestic policies have also evolved. As described in Hepburn and Bellmann, environmentalist groups in the EU campaigned relentlessly for

\(^\text{10}\) See Blandford in this volume.
a reformed Common Agricultural Policy (CAP) that would provide “public money for public goods”. The new CAP will require farmers to respect additional environmental requirements as a condition for receiving support. Yet, despite the success of the bloc in shifting towards less trade-distorting farm support, the constituencies that sought to reverse the “decoupling” direction established by successive previous reforms have only been partially successful – not least because of fiscal pressures on EU Members in the aftermath of the 2008 economic slowdown and the crisis in the eurozone.11 Indeed, Tangermann argues that the 2013 CAP reform had essentially very little – if anything – to do with the ongoing negotiations in the multilateral trading system – in contrast to other reforms since 1992, all of which had some elements aimed at facilitating the EU’s constructive participation in the GATT/WTO negotiations. Market access was not improved at all. Export subsidization is still possible, though it is not currently used. And as far as domestic support is concerned, the past reforms of the CAP had created so much scope for the EU that no pressure is felt from that side.

In the US, the new 2014 Agriculture Act abolishes direct payments to producers – seen by many as impossible to justify politically when high prices have buoyed farm incomes to new levels. In their place, Washington has introduced subsidized insurance programmes for price and revenue that are largely built around the model of the former countercyclical payments and the Average Crop Revenue Programme revenue programme that was set up under the previous Farm Bill.12 As it is very likely that the new schemes will be classed as “amber”, and the direct payments were “green”, the government could be seen to be moving away from the logic of gradually decoupling support from production, enshrined at the end of the Uruguay Round in the WTO’s Agreement on Agriculture. Smith argues that, in this new context, it might be difficult for the US to keep certain crop-specific payments within its 2.5 per cent de minimis exemption limit. For example, for most crops, crop insurance premium subsidies are about 4 per cent of the crop’s total market value.

China’s fast-growing farm support schemes appear to be designed in part to rectify problems arising from historical under-investment in the agricultural sector – a legacy, as in many developing countries, of a tendency to tax rather than subsidize farming until quite recently. Support also appears to be geared towards reducing the large, growing disparities between rural and urban incomes. Although, in absolute terms, farm support in China is now around the level of EU farm subsidies, to date, China’s farm support is heavily focused on payment for “general services” such as infrastructure, with some support also provided in the form of decoupled support payments based on historical production levels. As the precise arrangements for providing this type of support vary across provinces, the actual degree of decoupling appears to vary, with support in different administrative regions linked to the production of one or more staple crops.

India’s agricultural domestic support has also grown dramatically in recent years with a particular emphasis on input and investment subsidies in developing countries – article 6.2 of the AoA – which shelters payments for fertilizers, irrigation, electricity and seeds. Food purchases at administered prices are also important in the country’s overall policy framework, with growing risks of breaching ceilings on trade-distorting de minimis support as discussed above.

11 See Tangermann in this volume.
12 See Smith in this volume.
Another striking feature of recent evolutions in global trade has been the emergence of the so-called "mega-regional" free trade negotiations. Regional trade agreements (RTAs) are not a new phenomenon, but the latest mega-regional initiatives are on an entirely new scale. The three largest "mega" initiatives – the Transatlantic Trade and Investment Partnership (TTIP), the Transpacific Partnership (TPP), and the Regional Co-operation in Asia and the Pacific (RCEP) – represent over three-quarters of global GDP and two-thirds of world trade. As such, they are effectively developing the road map for trade regulation regimes of the future, with results that involve deeper integration and WTO+ disciplines or liberalization.

While still unfinished, Singh argues that these negotiations – given their size and the possible increase in membership over time – have already changed the background for the Doha Round negotiations. In this respect, Tangermann notes that, in the medium term, a TTIP agreement could well affect the EU’s position in the multilateral negotiations. If the US’ access to EU markets for agricultural products and foods is significantly improved under the TTIP, it would be difficult to argue that the EU should not also open its markets more widely to other exporters, in particular those from developing countries. Equally, giving up on the possibility of export subsidization in trade with the US might well be a precursor to the elimination of export subsidies overall. Implications regarding domestic support, though, are less clear as it is unlikely that any disciplines in this area might be included in a TTIP. However, it is conceivable that in the context of a TTIP, the US and the EU could agree to make a determined joint push in the WTO for significantly more stringent commitments on domestic support. If that possibility were to materialize, then even the EU’s position on domestic support might be affected in a way that is helpful for the Doha negotiations on agriculture.

For Ash and Lejarraga, current RTAs are already on a path that moves beyond the existing multilateral rules in a wide range of areas. At the same time, regional arrangements are not a comprehensive response to today’s more interconnected markets, precisely because they are not global. The new mega-regionals have at least the potential to address today’s essential trade policy questions across a wider geographical scope that moves closer to a truly global reach.

From that perspective, regionalism may naturally evolve towards a comprehensive multilateral system. It may also be desirable to conduct a more explicit examination of options that could help transfer select emerging practices to a more genuinely global rule book. Indeed, promoting consistency and coherence across mega-regional negotiations and exploring how best to maximize synergies with the multilateral regime could contribute to reducing transaction costs for businesses, easing the maze of regimes for policy-makers and maximizing global welfare. Looking at lessons and emerging best practices at the regional level could therefore conceivably illuminate options for multilateral progress.

This is not to say that such a commitment should be simply replicated in the multilateral trading system. Such a process would necessarily have to take into account the interests and concerns of other WTO Members, starting with low-income countries who are not participating in these negotiations.

---

13 To some extent, this situation is responsible for the view that the existing Chair’s text can no longer be the starting point.

14 See Ash and Lejarraga in this volume.

15 Ibid.
Nevertheless, despite the political sensitivity of the agricultural sector, a number of RTAs have made important strides in liberalizing measures beyond the levels of the AoA that could be easily applied or replicated – at least from a purely technical point of view – at the multilateral level. Tariff-cutting exercises have been the centre-piece of WTO-plus efforts in agriculture, achieving significant progress in eliminating agricultural tariffs beyond existing multilateral concessions. Interestingly, South–South RTAs have been moving faster and further on tariff cuts than North–South RTAs. Another area that has yielded perhaps the most widespread WTO-plus measures relates to export measures. In due course, this may be an area where multilateral efforts can be taken up. Many RTAs have developed commitments on export taxes that go beyond those at the WTO. These instruments are often applied to raw materials and other agricultural products (notably basic grains, oil seeds, etc.). It is perhaps worth noting that the regional approach to discipline flexibilities has been to impose a set of conditions on the use of exceptions so that, when export measures are implemented, they do not adversely affect other Members or alter world prices. A large number of RTAs also contain provisions prohibiting the use of agricultural export subsidies in regional trade.\textsuperscript{16}

Finally, in the case of standards, in particular SPS and TBT measures, most WTO-plus requirements relate to improvements in transparency. RTAs can be credited for introducing new obligations that strengthen the ex-ante and ex-post transparency requirements related to the design and application of standards and for establishing improved web-based information systems and consultation processes that include interested foreign parties. Since transparency displays the characteristics of public goods – non-excludable and non-rivalrous – it would appear likely that, at least in purely technical terms, the multilateral extension of these commitments would come at no additional economic cost for countries that have already implemented them unilaterally or regionally.\textsuperscript{17}

2. The way ahead: elements of a post-Bali agenda

Keeping these fundamental changes in mind, several options can be envisaged for the crafting of a meaningful post-Bali agenda. As observed by Singh, to get a more meaningful result in agriculture negotiations, it is important to bear in mind that a significant package of issues will have to be addressed – including in other negotiating areas, starting with NAMA. Second, given the wide differences of views among WTO Members, overcoming the current impasse requires sharing ideas and exploring new options. Finally, any consideration of the way ahead has to combine the fact that there is a prevailing Chair’s text on the table that a number of Members want to use as a frame of reference, while certain Members wish to embark with flexibility in relation to this text. One possible way of doing this is to try and identify the key points that need to be addressed for the negotiations to get substantive re-engagement and momentum.\textsuperscript{18} Alternatively, interested WTO Members could envisage a plurilateral negotiation as suggested by Lima-Campos. Such an approach would probably require a waiver under Article IX:3 of the General Agreement on Tariffs and Trade (GATT) as concessions agreed under the plurilateral would not be extended on an MFN basis to third parties.\textsuperscript{19}

\textsuperscript{16} Ibid.

\textsuperscript{17} Ibid.

\textsuperscript{18} See Singh in this volume.

\textsuperscript{19} See Lima-Campos in this volume.
and progressively invite others to join. This would ensure a high level of ambition and in a worst case scenario would at least exert significant pressure for a speedier resolution in the Doha Round. Keeping these suggestions in mind, the following sections review possible options, systematically covering the various topics under negotiation in the three pillars of market access, domestic support and export competition. Table 1 in the Annex summarizes the main proposals on the various negotiating issues.

2.1. Market access

Since the launch of the Doha Round, market access conditions have been characterized by a downward trend in applied tariffs, as a result of unilateral liberalization as well as regional trade agreements. For the world as a whole, applied MFN duties were cut from an average of 24.6 per cent in 2001 to 18.7 per cent in 2010, and applied duties (including preferential tariffs) from 15.8 per cent to 13.8 per cent. The cut in MFN applied duties was especially steep for developing countries, from an average of 31.1 per cent to 23.2 per cent, with preferential applied tariffs going down to 19.8 per cent in 2010.

In spite of this, Laborde argues that 50 per cent of the global gains from the market access and domestic support reforms of the DDA will come from the agriculture sector. Within the agriculture reform process, 89 per cent of the gains will come from the exchange of market access concessions through reductions in tariffs.

The Doha Declaration adopted in 2001 has clearly stated an ambitious programme for addressing the major distortions of world trade and in particular agricultural markets. The formulas applied without exceptions would result in a cut of over 50 per cent in applied rates, from 15.4 per cent to 7.0 per cent in developed countries and from 13.7 per cent to 11.2 per cent in developing countries that are not classed as “least developed countries” (LDCs). Nevertheless, the same level of ambition has made the negotiations more difficult than initially expected. The need to find a politically acceptable deal for domestic stakeholders has led negotiators to soften the disciplines by introducing flexibilities that have eroded the appetite to conclude the Round quickly. These flexibilities – e.g. sensitive and special products – more than halve the worldwide cut in tariffs, with particular effect in industrial countries where the cuts would be reduced from 7.4 percentage points to 5 percentage points. In contrast, in low- and middle-income non-LDC countries, cuts would be reduced from 1.6 to 0.1 percentage points. In spite of that, average applied agricultural tariffs for the EU, US and Japan would still be cut by 26 per cent, a quite impressive figure considering that a large share of imports are made under preferential agreements. While Brazil and India would not have to undertake any effective reduction, China – with nearly no binding “overhang” – would still have to reduce applied rates, even after using all the flexibilities.

Overall, finding the balance between the political constraints and the initial ambition of the Round


21 See Laborde in this volume.

22 This is partly because of the key features of the formula itself — i.e. smaller cuts and higher tier boundaries — and the greater binding overhang in many developing countries (the gap between the maximum permitted “bound” tariff and the actual tariff rate applied).

23 Ibid.
remains difficult. Laborde argues that the political costs of an agreement to increase market access could be reduced substantially by using a proportional-cut approach rather than progressive tariff-cutting formulas. As highlighted by Singh, a similar approach was already contained in footnote 2 of the Chair's text of August 2007, suggesting an overall 36 per cent reduction with a minimum cut of 15 per cent on each line, following the Uruguay Round model. Alternatively, Singh argues that future progress made in mega-FTAs might facilitate further engagement, particularly in light of expected trends in imports resulting from the growth of the middle class in emerging economies. If WTO Members were to take this reality into consideration and use it to build on what appears to have been earlier consensus on issues such as India's market access concessions, they may be able to establish a basis for moving forward – for example, by exploring the possibility of introducing tariff rate quotas for certain sensitive products in China as part of a broader deal.

Another critical issue relates to the special safeguard mechanism (SSM). Here, Morrison and Mermigkas show that the incidence of "import surges" has changed significantly since the early 2000s, reflecting the change from a context of low and relatively stable prices to the new market context of higher and possibly more volatile prices. While, as might be expected, price depressions fell to zero in most commodity groups surveyed between 2004 and 2011, it is interesting to note that the incidence of volume surges has also fallen significantly. However, the reduced incidence of volume surges reflected significant import increases at a more constant rate – and did not result from lower levels of imports or lower import growth rates. This reality should nonetheless not imply that an SSM is not needed. As mentioned earlier, prices now tend to be more volatile, and are expected to remain so – lending weight to calls for keeping a simple, robust and effective instrument as part of an eventual Doha deal. Furthermore, prices might fall in the future: keeping such an "insurance mechanism" might therefore be important for many developing countries. The analysis suggests that import patterns – and hence the effectiveness of different trigger levels – can differ quite significantly depending on country groupings. Given their relatively high reliance on food imports as a proportion of total consumption, surges in some LDCs or “small, vulnerable economies” (SVEs) are unlikely to create significant deviations from the moving average. For such countries, a more sensitive (lower) volume trigger may therefore be appropriate.

2.2. Domestic support

Having trended downward, non-green-box domestic support payments in the EU, US and Japan are presently at levels between 5 and 8 per cent of the value of production, a level much lower than that seen in the Uruguay Round’s 1986–88 base period. According to Brink, the declines in non-green-box support are explained by policy changes, some involving administered prices, which reduced the measured support (e.g. Japan) or shifted it to the green box (e.g. the EU), while some payments shrank as market prices went up (e.g. the US). In contrast, Brazil, China, India and Indonesia show a pattern

24 The footnote stated: “Pending final agreement on this aspect of the modalities Members may wish to keep under advisement the approach alluded to in the Chair’s Challenges paper to the effect that a basic approach analogous to the Uruguay Round could be an overall cut for developing country Members of 36 per cent with a minimum cut of 15 per cent on each line. This could also be somewhat moderated both for the Members referred to in footnote 3 below and for RAMs ...”

25 See Morrison and Mermigkas in this volume.

26 Ibid.
of increasing long-term trends. In the last two years notified, however, Brazil, India and Indonesia show significant drops. All of Indonesia's non-green-box support, almost all of India's and about one-third of Brazil's consist of Article 6.2 subsidies. These are input subsidies (Indonesia), mainly input subsidies (India) or mainly investment subsidies (Brazil). China is not eligible for the Article 6.2 exemption. By 2008, Brazil, China and Indonesia had raised non-green-box support to some 2 to 4 per cent of the value of production in agriculture, and India had raised it to 16 per cent. Brazil's level then reached 5 per cent in 2010 before declining. As a result of these trends, Brink argues that the levels of non-green-box support expressed as a percentage of value of production now significantly overlap for large developed and large developing countries.27

As highlighted above, some of the main issues that arise in the present market and policy situation are that the US may risk providing a higher level of support than previously discussed in the negotiations.28 Some agricultural exporting countries are nonetheless reluctant to water down the draft disciplines proposed for the US – and would also like to see tighter requirements established for domestic support in China and India. At the same time, these and other developing countries oppose further changes that would reduce the domestic policy options available to them under the current draft text.29

Reconciling these views would require some innovative approaches. In this respect, Singh suggests certain avenues, including the possibility of changes in the reference period for overall trade-distorting support (OTDS). These changes could be combined with an OTDS amount that would be allowed to increase if the country providing the support were faced with an increase in imports (something like a safeguard mechanism). Other avenues could be inspired by the ideas (not the exact disciplines) underlying the flexibilities contained in Annex VII and Article 27.4 of the Agreement on Subsidies and Countervailing Measures. For example, negotiators could explore whether consensus could be found around a model that would retain the de minimis levels proposed in the latest draft text for the larger developing countries, so long as a threshold level, defined in absolute terms, is not breached. This could be combined with a long implementation period while trade-distorting support is gradually phased out, before then reaching a new lower agreed level. Such flexibilities for emerging economies could be linked with an increase in OTDS for the developed economies. For example, if the OTDS for developed economies is increased by 10 per cent in the draft text, there would be no change in the present conditions for de minimis support in large developing countries. However, if the OTDS for developed economies is not increased, a 10 per cent decrease could be envisaged in the de minimis level of support for developing countries, in the event that these Members surpass a threshold level of support defined in absolute terms.

With respect to the use of administered prices for the purchase of food for public stockholding purposes, Montemayor reviews possible options for a permanent solution that could address the concerns of countries at risk of breaching their de minimis ceilings, as well as the concerns of their trading partners. Based on a series of simulations covering a set of countries currently using such schemes, his analysis suggests that countries could set a limit to the scope of their price support

27 See Brink in this volume.
28 See Smith in this volume.
29 See Singh in this volume.
scheme, as suggested by the Appellate Body ruling on the Korean beef case.\textsuperscript{30} This could represent a practical approach to be adopted if countries were keen to maintain their price support programmes but did not plan to absorb large portions of their domestic production. By doing this, countries could legitimately only account for the quantity effectively purchased and therefore maintain their aggregate measure of support (AMS) under the 10 per cent \textit{de minimis} ceiling. This option would not require any change in existing rules and could even allow countries to increase their procurement levels.\textsuperscript{31}

If this option is not able to address the concerns of some countries, one of the least contentious alternatives would be to allow the use of US dollars in notifying prices and monetary values in AMS calculation and to equate “eligible” production only to the portion of local production actually marketed. A third option could consist in exempting certain developing countries from \textit{de minimis} caps if their actual procurement does not exceed a given percentage of local production. This could address the concerns of countries with small procurement programmes that arguably contribute little to market distortions. Other options could also be explored, such as redefining the external reference price (e.g. by using a three- or five-year moving average for international prices) or adjusting them for inflation through the use of producer price indices. These might nonetheless be difficult to pursue since they run counter to the “fixed” nature of reference prices. Alternatively, developing countries always have the option to convert their buying programmes to green box measures by removing administered prices altogether and just purchasing the food at market prices.\textsuperscript{32} Finally, WTO Members could try to reconcile the notion of price support with the imperative of generating no – or at most minimal – trade distortions. In the case of rice in India for example, while the administered price has been well above the 1986–88 external reference price, it has consistently been below the world market prices. This means that, in pure economic terms, there has been no trade-distortion generated by administered prices. WTO Members could recognise this fact and agree that if the level of an administered price is at or below market prices, it should not be considered as providing price support and therefore could be considered green box compatible.\textsuperscript{33}

\section*{2.3. “Green box” measures}

As highlighted above, since the end of the Uruguay Round, traditional providers of farm support have reduced their trade-distorting support – a move often accompanied by a proportionate increase in green box subsidies. At the same time, green box support has been steadily growing in a number of “emerging” economies, such as China or India. As a result, green box payments represent today by far the largest share of global agricultural support with, however, large differences in the composition of such payments among WTO Members.\textsuperscript{34} As an ever greater proportion of subsidies are notified

\begin{itemize}
  \item DS161. Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef.
  \item See Montemayor in this volume.
  \item Ibid.
  \item For example, the EU largely focuses its support on direct payments, essentially through decoupled income support, whereas the US privileges domestic food aid, notably through its food stamps programme. China, on the other hand, puts much more emphasis on infrastructural services, extension services, research or
\end{itemize}
as "green box", maintaining the non-trade-distorting nature of the category has gained importance. While the architects of the Agreement on Agriculture clearly intended to encourage governments to shift support away from more trade-distorting measures, research has shown that even the most apparently "decoupled" policies still tend to have some trade impact and, with the rapid increase in green box spending in some parts of the world, even a small trade impact per dollar may no longer be small if multiplied by a large number of dollars.

The draft 2008 "modalities" text contains a number of proposals aimed at strengthening or refining existing criteria based on the experience so far. These should be pursued and implemented as part of a possible Doha Package. Yet, the question of whether a given measure has more than a minimal effect on trade and production is an empirical issue that can hardly be assessed ex ante. In the longer term, it might therefore be sensible to envisage some alternative approaches. As highlighted by Hepburn and Bellmann, such an approach could consist in making a distinction between "payments for public goods" and "income support". Measures that aim at correcting persistent market failures or ensuring the delivery of public goods, such as biodiversity conservation, climate change mitigation, infrastructure development, or research and development might require long-term government intervention. Even if some limited production and trade impacts were to result from these policies, there would be no clear logic for constraining them as long as those market failures persist. On the other hand, measures primarily aiming at providing income support to farmers might need some form of limitation or cap. Although these may play a critical role in facilitating reforms by compensating negative income effects resulting from cuts in the more trade-distorting measures, they arguably ought not to be provided on a permanent basis and should therefore be time-limited. Limiting such payments would alleviate concerns around "box shifting" and provide greater parity between governments with high fiscal revenues and those without.35

2.4. Export competition

According to Diaz Bonilla and Harris, the overall trend for export subsidies is declining, even though almost USD 500 million of export subsidies were still in place in 2011–12, mainly in the EU, Canada and Switzerland. At the same time, 20 WTO Members reported the existence of 77 agricultural exporting State Trading Enterprises (STEs).36 While some of the important agricultural exporting STEs that were operated by developed countries have been reformed or are in the process of being reformed – such as the Canadian Wheat Board – the presence of STEs appears more important in developing countries.

The reduced use of export subsidies clearly offers the possibility of finally unifying the treatment of export subsidies, eliminating the special treatment of the AoA. The 2008 draft "modalities" text offers a template for this. Agricultural export subsidies should be banned and the system unified under the Agreement on Subsidies and Countervailing Measures (ASCM). The 2008 text also provides an appropriate template for export credits, export guarantees and insurance. For Diaz Bonilla and Harris, however, the treatment of STEs in the 2008 draft may require further thinking. First, STEs in developed countries are exempt from the obligation of ending monopoly powers if the exported pest and disease control, while India prioritises public stockholding for food security purposes.

35 See Hepburn and Bellmann in this volume.
36 The countries with more STEs were China (25), India (14), and Colombia (14).
product represented no more than 0.25 per cent of total world trade in agricultural products in the 2003–05 base period. The percentage seems small, but it can represent between 8–12 per cent of world trade in individual products such as wheat, maize or soybeans. Other adjustments might be required for developing country STEs,37 so as to enhance transparency and improve WTO notifications about those STEs not operating under commercial terms but still claiming “commercial confidentiality”. Finally the need to cover importing STEs should be explored further.38

With respect to food aid, Clay argues that a new policy environment for international food aid or food assistance is emerging as developed and developing countries continue to reformulate the post global crisis food security agenda. However, food aid appears increasingly unable to manage acute food insecurity risks, not least because of its declining levels. Under this scenario, Clay suggests that a simplified “safe box” may be appropriate to avoid impeding urgent humanitarian assistance. Second, a balance must be found between facilitating national food security – especially for LDCs – while avoiding export restrictions on humanitarian assistance. The WTO, along with other relevant forums such as the G-20, should persist with efforts to agree upon voluntary principles with regular peer review to avoid restriction on humanitarian aid. Finally, the DDA draft disciplines (Annex L) are still relevant as a key building block for the future governance of international food aid, insofar as they recognize the need to minimize the risk of food aid becoming a vehicle for transitory surplus management.

Overall, as Singh observes, the existing draft modalities in this area are not really questioned, though some fine-tuning may be required. Export competition should therefore be brought centre stage and efforts begun to address it. This will provide major impetus towards creating greater engagement, trust and confidence in a system where these are presently missing.39

### 2.5. Export restrictions and taxes

While often used in case of food shortages, export restrictions can significantly contribute to exacerbating the negative effects of price spikes on food security, by reducing the ability of poor consumers in food-importing countries to access adequate food at affordable prices. In the medium term, those restrictions also undermine confidence in international markets as a trustworthy source of food. They also lower the propensity to invest in agriculture in exporting countries, where a competitive advantage in production exists. Finally, in the absence of international cooperation, their competing effects partially offset each other, significantly lowering the effectiveness of these policy instruments in keeping domestic prices low.40

37 The 2008 draft modalities text allowed developing countries to maintain STEs with monopoly powers “to preserve domestic consumer price stability and to ensure food security.” If those were not the objectives, they could still maintain monopoly power if their share of the world’s exports of the agricultural product(s) involved was less than 5 percent for three consecutive years. This percentage, however, appears quite significant.


39 See Clay in this volume.

40 See Anania in this volume.
Agricultural export restrictions are a policy area that is “under-regulated” in the WTO. At the same time, this is an area where achieving political consensus remains particularly challenging. Bearing in mind this reality and assuming some traction in the post-Bali negotiations, Anania argues that changes could be introduced in the rules, even in a relatively low-ambition WTO agreement. Under this scenario, two options seem realistic, given the negotiating stands observed. As suggested by Clay, a first step could consist in ensuring that food is exempted from export restrictions or taxes in those cases where it is purchased by international organizations to be distributed on a non-commercial basis for humanitarian purposes. The impact on volumes traded and market prices would be marginal while benefits in terms of the amount of food such organizations would be able to distribute under their relatively rigid financial constraints would be sizeable. A second, relatively more ambitious, option would leave current disciplines unmodified, but would make them enforceable by clarifying some of the key terms used such as "temporarily", "prevent", "relieve", "critical shortage" or "essential", supported by stricter transparency and notification obligations.

In the longer term, more ambitious reforms could simply prohibit export restrictions and taxes and then define a set of exceptions limited to developing countries, circumscribed in terms of duration, product coverage, and based on transparent triggers (e.g. a significant increase in domestic price and one activated by a significant increase in exports). Finally a maximalist option would be to introduce full “symmetry” in WTO disciplines regulating import and export restrictions. This would include a “taxification” of existing restrictions other than taxes, i.e. their replacement with “equivalent” export taxes, combined with reduction commitments. A special safeguard clause would make it possible to introduce an export tax above the maximum level otherwise allowed, for a limited time and under special circumstances. To guarantee minimum export volumes, export quotas at reduced tax rates, defined as a share of domestic production in a reference period and administered on a MFN basis, could be introduced. Finally, special and differential treatment would apply to developing countries (longer implementation periods, the exemption from tax reduction commitments and the introduction of bound tax rates instead, and smaller tax rate quotas).

2.6. Cotton

Cotton remains a symbol of the development dimension of the DDA. Yet, for Imboden, after Bali, a new approach might be needed both to reinvigorate the talks, and to reflect major changes in the world cotton market while maintaining the objectives of the C-4\footnote{Cotton-4 countries: Benin, Burkina Faso, Chad and Mali. Initiative launched in 2003.} initiative. First, since the launch of the cotton initiative, prices have more than doubled and are expected to remain at relatively acceptable levels in the future. Second, actors on the international cotton market have dramatically changed: India, which was a net importer of raw cotton in 2002, is now the second larger exporter in the world; China has consolidated its position as the price-maker of the international cotton market and has become the biggest cotton producer in the world; the US is experiencing a long-term decline in cotton production and productivity, while remaining the biggest exporter of raw cotton;

\footnote{\textit{Ibid.}}

\footnote{Under certain circumstances, countries would be allowed not to replace an existing export restriction with an equivalent export tax; however, in this case, minimum export volumes would have to be larger than otherwise.}

\footnote{See Anania in this volume.}
and EU cotton production has become negligible, although it remains the biggest subsidizer per unit produced.\textsuperscript{45}

Cotton policies have also evolved. Recent EU policy changes provide more flexibility to its Member States to reintroduce production-related payments. On the other hand, the new US Farm Bill will probably reduce cotton subsidies. This, along with the high prices for some competing products (in particular biofuel feedstocks), suggests that it is likely that cotton production in the US will continue to decline. China, on the other hand, has become the biggest subsidizer of cotton in absolute terms. While it is unclear what share of those subsidies are “green box”, China’s cotton production remains largely isolated from international prices.\textsuperscript{46}

Reflecting those changes, Imboden suggests that possible options would consist in seeking to consolidate existing cuts in EU and US support, reducing this support further, and seeking commitment to refrain from introducing new export subsidies or marketing loans. China would limit its subsidies independent of their classification within the WTO to the average amount granted in the period 2000–05 (a period of relatively low prices). India would limit its cotton subsidies to the amount given to other competing crops and refrain from imposing export restrictions. Finally, all countries would grant duty-free and quota-free market access to LDC cotton producers.\textsuperscript{47}

\textbf{2.7. Transparency, monitoring and the role of the Committee on Agriculture}

The monitoring of obligations by the Committee on Agriculture has generated a considerable amount of information on agricultural policies. Yet, years of experience in implementing the AoA have revealed inconsistencies among Members in their notifications, a need to clarify certain norms, a lack of compliance, and important gaps in transparency requirements. To list just a few, among some of the problems identified so far, one can mention the categorization of crop insurance premium support and other subsidies as non-product-specific when to the individual farmer the support is product-specific; a lack of a clear definition of Article 6.2 subsidies; the measurement of market price support (MPS), including the use of administered prices, reference prices and eligible quantities; the fact that, under the green box, countries have to report spending under the 12 main headings of Annex 2 but are not required to explain or justify their classification decision; or the monitoring of export restrictions or biofuels subsidies.\textsuperscript{48}

For Josling, the most immediate improvement to transparency would follow from the adoption of the proposals in Annex M of the Doha Draft Modalities. Though negotiated as part of a package, there seems to be no reason why it should not stand alone. The proposal does not involve changes in national regulations and does not appear to favour any country over others. It would merely replace the somewhat vague obligations in Article 18 with more detailed requirements. More coordination within the WTO could also improve transparency and reduce overlapping activities. The notifications of subsidies made under the Subsidies and Countervailing Measures (SCM) Agreement have much

\textsuperscript{45} See Imboden in this volume.
\textsuperscript{46} Ibid.
\textsuperscript{47} Ibid.
\textsuperscript{48} See Josling in this volume.
in common with those under domestic support under the AoA. The SCM notifications are more descriptive and lack some of the structure of the AoA tables. There may be a case for combining the two notifications and allowing each committee to consider the combined report from their different viewpoints.

Beyond notifications, Ahmad and Bahalim insist on the need to strengthen the work of the regular Committee on Agriculture (CoA) and particularly its deliberative function. Beyond monitoring compliance with WTO disciplines, the CoA should be a place where WTO Members are able to consult with others on all facets of the AoA. As a place where they can consult, it may not have the ability to adjudicate, but it should help participants understand their respective challenges. The CoA already has a mandate as a consultative and implementation-oriented forum. The peace clause offered to developing countries in Bali that might be in breach of their AMS commitments was premised on transparency, accountability and the express authorization of the CoA. In simpler terms, if a Member would like to violate WTO rules to address food security needs, then it must consult with other Members, provide a large amount of information, give advance notice that it is likely to do so, and ensure that trade is not distorted or food security undermined. This rather straightforward set of conditions could allow countries to break the letter but not the spirit of WTO rules. Everything would be monitored and implemented through existing bodies and rules, which would likely encourage compliance with notification requirements. Extending this principle further, within the framework of the Agreement of Agriculture, could allow the WTO to move forward, strengthen the Committee on Agriculture and tackle trade and food security, while avoiding becoming mired in the political trade-offs that come with multilateral negotiations.49

3. Conclusion

The instructions that trade ministers gave to negotiators at Bali – to prepare “a clearly defined work programme on the remaining Doha Development Agenda issues” – is an important opportunity. It could allow WTO Members to take the first tentative steps towards updating global rules on trade so that these are fit to address the new challenges facing food and agriculture in the world today. It could also allow negotiators to make progress in addressing a number of long-standing problems that, over decades, have undermined investment in farming, especially in the world’s poorest countries, with all the consequences this has had for farm livelihoods and rural development.

Despite repeated dire warnings of the threats it faces, the WTO has proved to be relatively robust. The framework of rules and dispute settlement mechanisms of which the institution has been custodian has arguably weathered well the dramatic shifts in the economic landscape of the last two decades, while major players in food and farm markets such as China and Russia have joined a queue of often much smaller countries that have expressed their desire to seek membership.

Negotiators would be wrong, however, to become complacent about the strength of the institution and the set of rules it oversees. Like any global governance structure, its rules and decision-making processes will require constant investment and maintenance if they are to continue to be seen as credible and legitimate by domestic constituencies in the countries whose governments are its members. Indeed, recent tensions over issues such as public food stockholding can be seen as

49 See Ahmad and Bahalim in this volume.
symptomatic of the growing pressures building up within countries as governments continue to make only slow progress in updating global rules in such crucial areas as farm subsidies.

In recent years, the fallout from the 2008 financial crisis has dampened countries' appetites for engaging in serious discussion about how to develop meaningful new rules for the trading system, and for the agricultural sector as one part of this – even as it has also revealed the fragility of today's economic system to sudden shocks and the limitations of existing governance and coordination structures for addressing these. At the same time, leaders would do well to bear in mind the likelihood that agricultural markets are set to be placed under growing pressure in the years ahead, as a larger and increasingly wealthy global population requires more – and more varied – food and farm goods at a time when climate change is increasing the prevalence of extreme weather events affecting farming and directly altering the productive capacities of different ecological zones. In this context, post-Bali talks could allow governments to take the first much-needed step towards ensuring the global trading system is better equipped to deal with the challenges of tomorrow's world, by building a more efficient, equitable and sustainable framework of rules on agricultural trade.
# Annex 1

## Table 1. Summary of main proposals for tackling agriculture in the post-Bali context

<table>
<thead>
<tr>
<th>Topic</th>
<th>Proposals</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Proposals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High and volatile prices</td>
<td>Examine options to protect consumers in low-income food-deficit countries against high and volatile prices (e.g. public stockholding and other financing mechanisms, stronger disciplines on export restrictions, flexible biofuel mandates and subsidies), while at the same time enabling small producers in developing countries to harness the benefits of higher prices.</td>
<td>Schmidhuber and Meyer, Konandreas</td>
</tr>
<tr>
<td>RTAs and mega-regionals</td>
<td>Look at lessons and best practices at the regional level to illuminate options for multilateral progress, e.g. • Tariff reductions; • Export restrictions and taxes; • Improvements in transparency on standards including SPS and TBT.</td>
<td>Ash and Lejarraga</td>
</tr>
<tr>
<td>Plurilateral approaches</td>
<td>Initiate a plurilateral negotiation on agriculture whose results will not be extended on an MFN basis. To achieve this, seek a waiver under GATT Article XI:3 by consensus or through a three fourths majority vote</td>
<td>Lima-Campos</td>
</tr>
<tr>
<td><strong>Market Access</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariff cut formula</td>
<td>Use a proportional-cut approach rather than progressive tariff-cutting formulas. Overall 36 per cent reduction with a minimum cut of 15 per cent on each line following the Uruguay Round Model with lower coefficient for SVEs, RAMS.</td>
<td>Laborde</td>
</tr>
<tr>
<td>Other market access issues</td>
<td>Revive and consider for final conclusion what seems to have been an emerging consensus on market access with India. Consider tariff rate quotas for specific products that China will need to import in large volumes.</td>
<td>Singh</td>
</tr>
<tr>
<td>Special safeguard</td>
<td>Reassess the volume and price trigger in light of the new price environment. Envisage more sensitive (lower) volume trigger for LDCs and SVEs.</td>
<td>Morrison and Mermigkas</td>
</tr>
<tr>
<td><strong>Domestic Support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTDS cuts</td>
<td>Adjust OTDS reference period combined with an OTDS ceiling that could be temporarily increased in the event of an increase in imports (akin to safeguard mechanism). Emulate the flexibilities contained in Annex VII and Article 27.4 of the Agreement on Subsidies and Countervailing Measures, i.e. retain present limits on de minimis levels for new lower level.</td>
<td>Singh</td>
</tr>
<tr>
<td>Amber box</td>
<td>Provide special exemptions for the LDCs for measures to increase agricultural productivity and resilience in the face of climate change (e.g. input subsidies otherwise disciplined under AoA).</td>
<td>Blandford</td>
</tr>
<tr>
<td>Topic</td>
<td>Proposals</td>
<td>Authors</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Domestic Support</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Price support and public food stockholding | The government could account in AMS for the quantity it effectively purchases, by announcing a limit to the amount that will be purchased under domestic schemes.  
  - Allow all Members to use US dollars in notifying prices and monetary values in AMS calculation.  
  - Equate "eligible" production only to the portion of local production actually marketed (exclude subsistence production).  
  - Exempt certain developing countries from the de minimis cap if their actual procurement does not exceed a given percentage of local production.  
  - Redefine the external reference price (e.g. by using a three- or five-year moving average of international prices).  
  - Adjust the reference price for inflation through the use of producer price indices.  
  - Governments could convert their buying programmes to green box measures by removing administered prices altogether and just purchasing the food at market prices.  
  - Consider green box compatible with the existence of an administered price if such prices are lower or equal to international prices. | Montemayor       |
| Green Box                    | In the short term: adopt existing proposals aimed at strengthening green box criteria (e.g. adopt a "fixed and unchanging historical base period").  
  - In the longer term: make a distinction between "payments for public goods" and "income support". Keep the first one unrestricted under the green box but put a cap or limit on income support.  
  - Clarify the criteria to be applied under the green box to ensure that the exempt policies have clear climate change objectives, combined with enhanced transparency and scrutiny of such policies to ensure that they are minimally production and trade distorting. | Hepburn and Bellmann|
| Export competition           |                                                                                                                                                                                                         |                  |
| Export subsidies/credits     | 2008 Modalities provide an appropriate template for export credits, export guarantees and insurance. Should be brought centre stage to build greater engagement, trust and confidence. | Diaz Bonilla and Harris|
| State trading enterprises (STEs) | Review exemption to ending monopoly powers for STEs in developed countries if the exported product represented no more than 0.25% of total world trade in agricultural products.  
  - Review the possibility for STEs not designed to "preserve domestic consumer price stability and to ensure food security" to maintain monopoly power if their share of the world’s exports of the agricultural product(s) involved is less than 5%.  
  - Enhance transparency and notifications for STEs not operating under commercial terms but still claiming "commercial confidentiality".  
  - Further explore the need to cover importing STEs. | Diaz Bonilla and Harris|
| Food Aid                     | Adopt a simplified Safe Box to avoid impeding urgent humanitarian assistance.  
  - To avoid food aid becoming a vehicle for transitory surplus management, adopt DDA draft disciplines (Annex L) as a key building block for the future governance of international food aid. | Clay             |
<table>
<thead>
<tr>
<th><strong>Topic</strong></th>
<th><strong>Proposals</strong></th>
<th><strong>Authors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Export competition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Export restrictions</strong></td>
<td>Exempt food purchased by international organizations to be distributed on a non-commercial basis for humanitarian purposes from the imposition of export restrictions and export taxes. At least, agree upon voluntary principles with regular peer review to avoid restriction on humanitarian aid.</td>
<td>Clay, Anania</td>
</tr>
<tr>
<td></td>
<td>Clarify some of the key terms used in GATT art. XI: 2a such as &quot;temporarily&quot;, &quot;prevent&quot;, &quot;relieve&quot;, &quot;critical shortage&quot; or &quot;essential&quot;, supported by stricter transparency and notification obligations.</td>
<td>Anania</td>
</tr>
<tr>
<td></td>
<td>In the longer term: prohibit export restrictions and taxes and then define a set of exceptions limited to developing countries, circumscribed in terms of duration and product coverage, and based on transparent triggers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>As a maximalist option: introduce full &quot;symmetry&quot; in WTO disciplines regulating import and export restrictions. This would include a &quot;taxification&quot; of existing restrictions, reduction commitments, quotas, safeguard mechanisms and SDT provisions.</td>
<td></td>
</tr>
<tr>
<td><strong>Horizontal Issues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cotton</strong></td>
<td>US: Cap subsidies at a share of subsidies provided in the period 2000–05. Reduce overall support in the next Farm Bill (i.e. in five years) by 50%. Refrain from introducing and new export subsidies and subsidized marketing loans.</td>
<td>Imboden</td>
</tr>
<tr>
<td></td>
<td>EU: Cap green box support to a maximum amount of EUR x million and reduce that amount by half in the next revision of the CAP. Refrain from introducing new amber or blue box subsidies and export subsidies on cotton.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>China: Limit subsidies independent of their classification within the WTO to the average amount granted in the period 2000–05.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>India: Limit cotton subsidies to the amount given to other competing crops so as to ensure that cotton is not substituted for less economically competitive crops; set a maximum amount of cotton subsidies based on the last five years before the conclusion of the Doha Round. Refrain from imposing export restrictions on cotton.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All countries: Grant duty-free and quota-free market access for cotton produced in the LDCs.</td>
<td></td>
</tr>
<tr>
<td><strong>Transparency and monitoring</strong></td>
<td>Correct revealed inconsistencies among Members in their notifications, clarify notification norms, fill important gaps in transparency requirements and provide incentives (e.g. technical assistance) to enhance compliance with notification obligations.</td>
<td>Josling</td>
</tr>
<tr>
<td></td>
<td>Adopt the proposals in Annex M of the Doha Draft Modalities as a stand-alone agreement. Though negotiated as a part of a package, there seems to be no reason why it should not stand alone.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greater transparency in the use of explicit and implicit subsidies for the use of biofuels through enhanced requirements for the notification of biofuels policies and scrutiny of such policies. Combine biofuels notification under the AoA and the ASCM, allowing each committee to consider the combined report from their different viewpoints.</td>
<td>Josling, Blandford</td>
</tr>
<tr>
<td><strong>The Committee on Agriculture (CoA)</strong></td>
<td>Strengthen the work of the regular CoA and particularly its deliberative function. Beyond monitoring compliance with WTO disciplines, the CoA should be a place where WTO Members are able to consult with others on all facets of the AoA.</td>
<td>Ahmad and Bahalim</td>
</tr>
</tbody>
</table>
PART ONE

EVOLVING TRENDS IN GLOBAL AGRICULTURAL MARKETS
Has the Treadmill Changed Direction? WTO Negotiations in the Light of a Potential New Global Agricultural Market Environment

By Josef Schmidhuber and Seth Meyer

1. The traditional paradigm: agriculture in a demand-constrained environment

For decades, agricultural commodity markets have been characterized by Cochrane's treadmill in which, with each advancement in technology, supplies shift out, pressing against an inelastic demand (Cochrane 1958). Food demand for crops shifted outward with population and income growth around the world, but not at a sufficient pace to keep up with the productivity growth of several primary agricultural commodities.

The result was a trend of declining real crop prices for nearly a century. Under such circumstances, the benefits of technological progress—through increased productivity and falling production costs—were passed on to domestic consumers as well as to trading partners through lower prices and abundant supplies. As a result of these productivity gains, per capita calorie consumption rose in all countries, while the percentage—and often even the absolute number of chronically hungry people—declined. The FAO State of Food Insecurity 2013 reports that the share of undernourished people in developing countries fell from 23.6% in 1990–92 to 14.3% in 2011–13 (SOFI 2013). Over the longer-term, the results are even more impressive with a decline from 36% in 1969–71 (Alexandratos 2000), even if longer time series do not provide fully comparable points in time.

The FAO outlook to 2050 suggests an unabated continuation of these trends. Growth in food demand is expected to slow further with growth falling from 170 per cent over the last 45 years to 60 per cent in the next 45 years, rising population, accelerating urbanization and further income growth notwithstanding. Slower growth in food demand also means slower growth in resource pressure. Total arable land in use, for instance, expanded by 0.28% p.a. from 1961 to 2007; land expansion is expected to slow to 0.10% p.a. by 2050. At the same time, irrigation water withdrawals are expected to rise from 2,761 cubic km to 2,926 cubic km by 2050. The outlook suggests that future food needs could be met with roughly the same number of hectares and only marginally more water pumped for irrigation.¹

2. Agricultural policy response to the traditional paradigm

Abundant supplies resulted in falling real prices for agricultural commodities, which exerted downward pressure on farm incomes. Policy-makers in developed countries aimed to arrest this downward pressure on prices and incomes by enacting various forms of price support, buffer stock

¹ In some regions, even modest increases in withdrawals could put existing water resources under additional stress.
programmes, or acreage set-aside schemes. While these measures succeeded in accomplishing their objectives in domestic markets, they also induced surpluses that had to be disposed of in international markets, with the effect of further lowering world prices. Fear of a competing process of supporting, stocking and subsidized exports by a small number of developed countries eventually gave rise to the Uruguay Round Agreement on Agriculture and a continuation of these negotiations under the Doha Development Agenda (DDA). The main objective of these negotiations was to reduce export subsidies, enhance market access, and circumscribe domestic support. Naturally, little attention was paid to ensuring that export flows were given abundant supplies. With low prices and abundant world stocks, such contingencies seemed unwarranted.

3. A new paradigm? Lifting the demand constraints?

An inspection of actual demand growth over the past seven years, however, suggests that the analysis of food and feed demand alone is unlikely to capture the entire demand dynamics of future agricultural markets. Persistently high energy prices and policies to promote the use of agricultural products for biofuel production have established a new dynamic in the traditionally slow-growing food markets. These factors also pose the question as to whether a fundamental examination of the previous demand-constrained market paradigm is warranted.

3.1 The rise of biofuels: new, potentially high demand from the energy sector

Modern biofuel policies originated in the oil shocks of the 1970, followed by the return to a steady decline in real commodity prices. Brazil supported the development of a domestic sugarcane-based ethanol production industry and encouraged the creation of the needed consumer infrastructure. In subsequent years, the decline in oil prices weighed heavily on its profitability. During this same period, the US used its most readily convertible feedstock – maize – to embark on a similar strategy. Historically, policy support in both countries has been substantial, with a gradual move from subsidization to mandates or use requirements, shifting the burden from taxpayers to motor fuel consumers. The liberalization of Brazil’s ethanol market occurred towards the end of the 1990s, although some tax preferences remain along with the minimum blending requirement, currently 25% in all petrol. The US instituted direct subsidies to fuel blenders in the 1980s, which only expired at the end of 2011, leaving a system of mandates – established in 2005 and expanded in 2007 – as the most visible and "important" means of support (Thompson et al.).

3.2 From an energy user to an energy producer

Prior to the recent biofuel boom, the largest direct effect of energy markets on agriculture markets was through input costs, with the agricultural sector being a large energy user for both farm and supply chain operations, as well through the use of nitrogen fertilizers derived from natural gas. Demand from the energy market through the production of biofuels and biomass for electricity generation presents a fundamentally different potential market for agricultural commodities as the size of the energy market dwarfs the current renewable energy production from agriculture.

2 The biodiesel blenders’ credit of $1.00 per gallon expired at the end of 2013, although reinstatement has been proposed.
Of course, the use of agricultural commodities for energy production is not new. In various forms, crops and production residues have contributed to the energy sector from the simple direct burn of commodities and crop residues to their more recent large-scale conversion to liquid fuels for use in the transport sector.

The use of agricultural commodities in the production of biofuels, among other factors, has increased commodity prices in recent years (Abbott et al. 2008, 2009; Dewbre et al. 2008; EC 2008; ERS 2008; IFPRI 2007; Meyers and Meyer 2008; OECD-FAO 2008, 2010; World Bank 2008; Westhoff 2010), but the relative size of both markets and the extent to which current policy actually supports prices is key to understanding potential future demand. If demand were purely policy-driven, such policies could be managed in the same way as historic buffer stock programmes that maintain commodity price stability to support and smooth farm income at the expense of higher commodity prices to consumers (for more on potential policy options, see Box 1). The elasticity of demand would be reduced, but stability would be achieved. Indeed, biofuel policies originally envisioned that biofuels would play that exact role through market demand.

The current situation, however, might offer a different picture of future demand than that seen historically and envisioned in the FAO’s long-run outlook. With the expiration of the ethanol blender subsidy in the US and in the midst of the of one of the worst droughts in half a century, there were assertions that, at the time, a waiver of the mandate would have had little immediate effect on reducing demand for ethanol and therefore ethanol prices. To a point, biofuel production has grown and, given the size of the energy market, a long-run link has been established between the two markets, which potentially provides significant long-run demand elasticity to commodity markets (De Gorter and Just 2008, Balcombe and Rapsomanikis 2008).

In a scenario of large-scale market demand for energy production inputs from agriculture to produce liquid motor fuels, petroleum prices set a long-run floor under feedstock prices and bioenergy competes with stockholding as the regulating mechanism for prices, with notable differences. Depending on the underlying price of energy, biofuels can replace stockholding as the mechanism to establish a commodity floor price. In addition, depending on the long-run price of oil, they could also serve to keep agricultural commodity prices high. This would ensure the market was in a perpetual stock-out and exposed to short run supply crunches, relying on competitive bidding between food and energy markets to resolve the allocation of remaining stocks.

### 3.3 How could bioenergy change the traditional market outlook?

With the infrastructure in place, the improvements in processing technology and the high oil prices, biofuels now appear to be far more competitive, even in the absence of subsidies. Should current petroleum – or, more broadly, energy prices – be a harbinger for the future, the downward pressure on agricultural commodity prices could be a matter of the past. Such linkages could see an increased elasticity of demand which, over a range, would show an increased sensitivity to prices and thus potentially stabilize commodity prices. However, the agriculture sector would also inherit the volatility of the energy and petroleum markets, as the stabilized price range varies depending on the prevailing prices in the energy sector. This new setting poses a number of questions, such as:

---

3 See Irwin and Good 2012.
Box 1: Policy options to reduce the adverse impacts of biofuels on food security

Biofuel support illustrates the need to include consumer protection in the DDA negotiations

The emergence of biofuels reflects a multitude of different factors, not least higher fossil fuel prices, rising import bills, and a strong political will to become less exposed to the vagaries of international oil markets and less dependent on fossil fuels imports from geopolitically sensitive regions. Many countries have responded to these challenges by supporting the production of feedstock or by mandating its use; some have also invested in the infrastructure to produce biofuels and in R&D to make biofuels economically viable and to bring them to the consumer.

The effect of these policies on food consumers is fundamentally different from the traditional production-coupled subsidies of the past. These traditional subsidies lifted domestic producer prices, spurred production, and created supplies in excess of domestic demand with the need to dispose of surpluses onto world markets. This excess supply caused downward pressure on world prices, compromised the interests of exporting countries, and ultimately shaped much of the policy agenda of the Uruguay Round Agreement on Agriculture (URAA) and early DDA negotiations. By contrast, the subsidies and policies to promote biofuels are subsidizing feedstock consumption in the energy markets, i.e. a large non-agricultural market that can siphon off commodity supplies from agriculture without depressing agricultural prices. Instead of distorting producer interests on world markets, these subsidies buttress world prices and open new market opportunities. These effects also explain why the pressure to circumscribe these subsidies in the DDA has so far been small.

While the impacts on crop producers were overall positive, the effects of these policies leave food consumers exposed to higher food prices and higher food price volatility. This gives rise to the question of whether policy options exist to minimize unintended and undesired impacts on producers and consumers, from international commodity markets all the way to smallholder farmers and local food markets. Two principle set of options are presented here. The first suggests options to establish greater flexibility in the use and production of biofuels, the second set deals with options to harness the potential of bioenergy for food production in food-insecure settings. The DDA could stimulate a discussion in both areas.

Options for greater flexibility

A number of countries have already developed and implemented policies to enhance the flexibility of their national biofuel markets. In the US, for instance, the Renewable
Fuel Standard (RFS) requires blenders to submit "credits" to cover their annual biofuel supply obligations. These credits — Renewable Identification Numbers (RINs) — are just like commodities and can be traded as such. Currently, fuel blenders are limited to carrying forward a maximum of 20% of their obligations in reserve. Flexibility could be improved by allowing larger RIN stocks to be held and extending their tradability beyond one year. A similar system could make Brazil’s mandates more flexible and allow refiners to reduce the 25% blending obligation as food prices rise while still meeting the objectives of the policy in the long run. Similarly, EU mandates could be made more flexible by adjusting volumes based on underlying feedstock price movements. In addition, annual mandates could be turned into obligations to be met over five or even ten years.

California is already exploring such safety valve options. The California Air Resources Board’s (CARB) Low Carbon Fuel Standard (LCFS) includes a proposal for an extended or unlimited carry-over of credits. By selling an unlimited number of credits at a fixed price, it intends to lower biofuel use and to moderate feedstock prices in periods of tight obligation credit markets while maintaining incentives to meet the obligation in subsequent periods. Those credit receipts could then be used to expand the supply of E85 to invest in infrastructure, or to subsidize producers for the reduced volume of sales, thus transferring some risk from the underlying commodity markets to biofuel producers and ultimately to motor fuel consumers.

There is also room for greater flexibility at the "pump". Promoting Flex Fuel Vehicle (FFV) technology would allow fuel blenders and consumers to adjust their choice between fossil and biofuels in response to changes in relative prices. However, there are also risks associated with this option. For one, such investments entrench the market for biofuels, and for another, they reinforce the dependency of food prices on volatile fossil fuel markets. There is additional room for flexibility in the biofuel supply structure. Having more plants that can produce both food and fuel – such as sugar and ethanol in Brazil –, rather than just ethanol, would also bring more responsiveness to energy and food markets.

There is also space in harmonizing the basic principles of biofuel policies. The authors of this paper have demonstrated that uncoordinated biofuel policies in the US, the EU and Brazil can trigger large and largely unnecessary trade flows in ethanol. To avoid this "cross trade", it may be sufficient to harmonize the assumed/assessed greenhouse gas (GHG) emission scores, which can vary considerably between countries for the same feedstock. While the main problem of cross trade is an inefficient use of resources, a side effect of these uncoordinated policies is that they reduce the ability of local markets to respond to feedstock prices. It could amount to added (reduced) demand for maize when world maize prices are already high (low) and cause thus more price volatility than in a more coordinated system.
It may also be useful to examine policy options that introduce greater flexibility in other resource markets. Water trading – i.e. the process of buying and selling water rights – may be one such option. Drought-prone areas of the US (California’s agriculture-to-urban water transfer scheme), Chile, Australia and the Canary Islands already have water-trading schemes. The basic case for such schemes rests on their potential to reallocate water from less to more economically productive activities, within a set of prior appropriations. Applied to biofuel markets on the national level, this would ensure that prior allocation is given to food markets rather than to energy.

An extension of the water-trading scheme would be to put the burden of reducing the impacts on food consumers on biofuel users. A fee on biofuel production or on the registration of obligation credits such as RINs could be used to purchase call options on key food commodities. The call options could be exercised by low-income food deficit countries (LIFDCs) in times of price hikes. The World Food Programme or national development agencies could help implement such schemes, ensuring purchasing power for food in these countries when feedstock prices – e.g. for maize – rise. In effect, this policy would cause fuel consumers to pay slightly more for their fuels at home to provide greater price stability for poor food consumers in countries abroad.

Improving energy access for food security, jobs and rural development

In addition to creating more flexible feedstock markets, there are options to promote food security by harnessing the power of biofuels for energy security at the local level. In many developing countries, the lack of access to affordable and continuous energy supply is the single most important factor limiting agricultural productivity, sustainable food security, and ultimately economic development. Supporting the use of bioenergy in a way that enhances food production could help improve food security.

In addition to having potential for local food production, biofuels can be a vehicle to attract investment in agriculture, create jobs in rural areas, and improve energy access outside a local environment. Targeted investment in the sector would increase crop production by smallholders, boosting yields levels, which in turn would ensure that both food and energy market demands are met. The DDA process could help analyse the exact impact of these options and identify practical policy options to (a) promote biofuels for smallholders’ food security; and (b) protect the interests of food consumers in developing countries in general and LIFDCs in particular.

How elastic is the agricultural supply in the long run with respect to traditional commodity demand? With the potential addition of demand for renewable energy production, what are the prospects for agriculture to deliver additional output to return prices to a downward path? It has been suggested that the supply curve may become steeper and that shifts to the right (growth in area and yields) may be more constrained in the future while the size of the energy market and
a potentially highly elastic long-run demand to produce energy would significantly change the supply and demand paradigm, moving away from Cochran (1958) towards Jevons (1865) where energy and bio product uses (paints, starch, detergents) absorb any “excess” production, keeping markets tight and prices elevated.

The impact of the increased elasticity of demand also has significant implications for agricultural land and input use as well as associated greenhouse gas (GHG) emissions. On a global scale, the low historical elasticity of demand for agricultural outputs meant that technological advancements were considered “land-saving”. Hertel (2012) further explores the issue in the context of technological change and land use (instead comparing Jevons (op. cit) to Borlaug). The examination shows that regional differences in supply and demand elasticities, coupled with regional improvements in technology, lead to varying changes in agriculture land area. Coupled with local land emission efficiencies, technological improvements may not lead directly to reduced GHG emissions. While much effort has been made to examine technological improvements in supply, the implications both for land use and GHG emissions from an increase in demand elasticity through the coupling of energy and agricultural markets is apparent.

High energy and bio product prices may result in a general shift in the agricultural product paradigm (from Cochrane to Jevons). If energy prices were to continue to rise in the long run, the energy market would be large enough to create (perfectly) elastic demand for agricultural products and thus siphon off any additional surplus of agricultural products. This would happen as long as the price for biofuel feedstock remains below its parity price equivalent (break-even price) in the petroleum market. In this case, the energy price would function as a floor price for food and agricultural markets (Schmidhuber 2006). As a consequence, agricultural prices would follow energy prices, at least in the long run. When it comes to the use of natural resources, energy demand would exert additional pressure on the resources needed for food production. A potentially more problematic consequence is that technological progress would lose its resource-saving effect and become resource-destroying. With elastic demand, every reduction in production cost would lead more hectares of land to be eligible for biofuel production and add to cropland expansion. The expansion of cropland would also take an added toll on water, biodiversity and other natural resources.

4. Linking the new market environment to changes in trade negotiations

Any shift in the dynamics between demand-driven and supply-constrained markets, or even the exacerbation of regional differences that affects import dependency, will alter the motivations of partners in trade negotiations. While providing an overview of some of the principal shifts in the conditions of world food markets and subsequent trade orientation over the past 50 years in general, and the last decade in particular, further examination of the impact on trade of a shift towards increased energy production (or other shifts in demand) is warranted.

The basic question now is how this possible change in the basic market environment would affect the trade negotiations in the future and whether and how a shift from a Cochrane-type market environment towards a Jevons-type market environment could and should be reflected in current and perspective trade negotiations. Specifically, should the agenda negotiated under the DDA
be revisited with a view to addressing not only trade distortions that put a downward pressure on international prices but also to introducing binding disciplines that help reduce international price hikes and excessive price volatility? Questions also arise as to whether there is enough, appropriate policy space in the DDA to ensure that domestic food security measures (e.g. domestic food subsidy schemes that can trigger inelastic purchases on international food markets) are being implemented without causing or exacerbating price hikes on these markets.

4.1 The “Old Normal”: policies in a demand-constrained market environment

The policy environment during the negotiations and the implementation of the URAA was generally characterized by (a) high and production-coupled domestic support; (b) high and often prohibitively high border protection; and (c) export subsidies necessary to dispose of domestic surpluses onto international markets. Import protection and export subsidies exerted downward pressure on international prices and made them more volatile. Low and volatile prices, in turn, provided disincentives to farmers in developing countries, resulting in lower domestic food production; in tandem, they provided incentives for consumers to shift consumption patterns towards less expensive, subsidized imported foods.

These policies generally helped net food-importing countries with limited domestic supply capacity, low foreign exchange availability and large urban populations (among them most countries in the Near East and North African region); however, they undermined the capacity of many countries with untapped food production potentials – notably in sub-Saharan Africa – to feed their own populations and, over the long run, stifled domestic productivity growth.

The URAA aimed to address these distortions by proposing and implementing a three-pillar programme that introduced stricter disciplines on (a) domestic support; (b) import protection; and (c) export competition. It also tried to address, albeit much less prominently and much less effectively, the possible negative impact of rising prices for food consumers. The URAA also provided options to support farmers in developing countries whose livelihoods were undermined for decades by the trade policy measures of developed countries. Under the URAA’s so-called Marrakesh Decision, considerable policy space was accorded to (“low income/resource poor”) farmers in developing countries, particularly in the area of compensatory finance, food aid, stockholding, and support to investments in agricultural productivity (Art 6.2, AoA). More generally, almost all the disciplines of the URAA aimed at limiting, mitigating or coping with the impact of depressed international prices.

With the exception of the weak disciplines of Art 12 AoA (and GATT 11.1), virtually no URAA measure tried to discipline trade measures that could induce price increases on international markets, such as export restrictions, export taxes or import subsidies.

The negotiations of the DDA started in the same market environment that had determined the architecture and the negotiating strategies of the URAA. In broad terms, the DDA negotiations sought to continue, deepen and broaden the URAA efforts to circumscribe domestic support, export competition and import protection. The negotiations aimed to strengthen the sometimes non-binding nature of URAA disciplines (“squeeze remaining water out of the tariffs”), further reduce/eliminate export subsidies, and reduce farm support. The negotiating groups that represented a large number of developing countries focused their interests on extending the privileges granted to
developed countries in the URAA, thus reducing the real or perceived asymmetries in the existing URAA disciplines. The draft modalities reflect these efforts in various areas, notably in an evolution of an increasingly complicated set of proposals to reduce import protection, known as the “Banded approach”,\(^4\) the “Blended approach”\(^5\) or the “Tiered Approach”\(^6\) with additional exceptions for “Special Products”.\(^7\) It also resulted in proposals to grant them access to special protection options such as the Special Safeguard Mechanism (SSM), a flexible tariff scheme that allows developing countries to raise tariffs temporarily to deal with import surges or abrupt price slumps. Measures to ensure food security were also strengthened through less distortive food aid provisions (Art 10.4) with proposals to ensure that food aid remained needs-driven and that it was fully in grant form, not tied to commercial exports, and linked to development objectives. Finally, the DDA modalities included the introduction of tighter export credit provisions with strengthened rules on repayment periods, commodity space (basic foodstuffs) and interest rates (self-financing).

Although these proposals added considerable complexity to URAA's existing trade policy framework, they did not change the fundamental policy orientation focusing on the problem of low international prices and structural surpluses. Essentially the URAA and DDA trade disciplines focused on protecting producers, not consumers. A similar argument could be made when examining subsidies for biofuel production. These subsidies affect agricultural markets in a different manner than the traditional subsidies given to agricultural producers. Unlike subsidies for food production, biofuel subsidies do not result in lower international prices or in surpluses that need to be disposed of on international markets. Instead, excess production is siphoned off by the energy market and, rather than depressing international prices, these subsidies actually support them.

The lack of protection provided to consumers became increasingly evident when the overall market environment started to change in the mid-2000s. In 2007–08, crop failures in the Ukraine and Australia in conjunction with mandated demand for growing amounts of biofuel feedstock triggered the first in a series of price hikes and revealed that the international market environment had shifted from one of low international prices, high food reserves, and large structural surpluses to one of high and volatile prices, dwindling food reserves, and structural deficits.

Notwithstanding these changes in the market environment, the negotiations continued to focus on disciplines that help avert low prices and protect producers. They were only effectively halted in 2008 without having reached a consensus on such trade disciplines; in fact, these disciplines had already lost some of their importance due to the shift in the overall market environment.

---

4 Products categorized by the height of the starting tariff. Higher bands = steeper cuts. In the March 2003 draft modalities, the formulas in each band use the Uruguay Round (UR) approach (average cuts subject to minimums).

5 Used in the Cancún draft frameworks, the approach “blends” three formulas. The Uruguay Round approach applies to one category, the Swiss formula to another, and a third is duty-free.

6 Products categorized by the height of the starting tariff. Higher tiers (or bands) = steeper cuts. Type of formula and number of tiers? In the August 2004 agreed framework, this is still to be negotiated.

7 Products for which developing countries have sought extra market access flexibility for food and livelihood security and rural development.
4.2 The “new normal”: trade negotiations and food security

The shift from a demand-constrained market environment towards a supply-constrained one has also shifted the emphasis in the food security debate. While the low price environment focused on the need to ensure sustainable food production, the high price environment brought aspects of food access and affordability to the fore (Figure 7). As food expenditure accounts for high shares of total expenditures for the poor (sometimes in excess of 70%), there were growing concerns that high food prices would now become the driving force of hunger and malnutrition. The spikes in undernourishment reported in 2008 and 2010 corroborated these initial concerns, even if the impacts were smaller than initially feared.

In the area of trade negotiations, the same shift in policies has not yet taken place. By and large, the DDA negotiations still focus on protecting producers. Measures to protect consumers have not received the attention that the shift to the new market environment may warrant. If such a shift in the policy debate came to pass, this could instil a new sense of purpose into the negotiation process, help resume negotiations, and even help conclude the DDA. Preparing such discussions should be supported by a shift in the research agenda for trade. A twin-track approach could be pursued to (a) ensure that trade policy measures help protect consumers from the negative impacts of higher and more volatile prices; and (b) at the same time, enable small producers in developing countries to harness the benefits of higher prices. With respect to consumer protection, the research agenda would try to identify practical proposals to limit the options for, and mitigate the impact of, supply controls, export restrictions and taxes. On the producer side, the new research agenda should explore practical proposals that ensure that small-scale producers have access to better infrastructure and that they can improve access to inputs, protect their resource base, and manage their production risks more effectively.
Ensuring consumer protection and assuring importing countries of open food markets without export restrictions or import subsidies would also address some of the environmental problems that may arise from a potential shift in the overall market environment. Many developing countries, including large markets such as China and India, have been pursuing food self-sufficiency and import substitution policies as world markets were deemed unreliable, particularly in episodes of high prices where traditional exporters limited or shut down their supplies. While these import substitution policies were often instituted after episodes of high prices and international supply constraints, they sometimes remained in place for decades. A case in point is China's "Governors Grain Responsibility Policy". These policies not only result in high economic costs, they also lead to high environmental costs and further resource scarcity. In China, for instance, the need to ensure grain self-sufficiency by province led to shifts in rice cultivation to Northern provinces and aggravated existing water scarcity problems in this region. Assuring importing countries of functioning world markets, e.g. through strict disciplines on export restrictions, would provide them with an important signal to rely more on international supplies. It would also help ensure that global agricultural production is allocated in line with the comparative advantage, i.e. making sure that the additional agricultural output is produced where natural resource constraints are least binding.

**Conclusion**

Several agricultural commodity prices surged in the summer of 2012, the third run-up in the last five years, and agricultural commodity prices remain elevated compared to historical trends. It is unclear whether the recent price spikes are a result of transient factors, which would cause the long-run trend of declining prices to re-establish itself, or whether there has been a fundamental shift from a demand-constrained market to a supply-constrained one. A persistent shift to a supply-constrained market, perhaps one where energy markets provide a large and elastic source of demand for agricultural output, has important implications for the policy process. Trade negotiations that emphasize market access for exporters in the context of low prices may need to be supplemented by discussions on how to address the concerns of import-dependent developing countries and those affected by export constraints, should high and volatile prices persist. The implications of a shift in the dynamics of supply and demand in agricultural markets also extend to other policy arenas, including research and development policy as well as resource management policies and beyond. Under such conditions, a twin-track approach to further trade negotiations, one that ensures both producer and consumer protection, should be examined.
References


Fischer, Günther, Eva Hisznyik, Sylvia Prieler, and David Wiberg. 2010. “Scarcity and abundance of land resources: competing land uses and the shrinking resource base.” Thematic Report 2 prepared for SOLAW, FAO.


Energy Markets: The Impact on Trade in Biofuels and Farm Goods

By Harry de Gorter

Introduction

Since late 2006, biofuel policies have caused high grain/oilseed prices by creating a link between crop and biofuel policies. The value of agricultural trade has increased sharply, mostly because of high prices, not increased trade volume. Biofuel policies have little to do with the agenda of the Doha trade negotiations but have had indirect effects in that production subsidies and import barriers are lower due to higher prices, which thereby changes the politics of farm policy and trade negotiations in general.

1. Biofuel policies and farm prices: an overview

Over five months, beginning in October 2006, the US farm price of yellow corn rose by 88 per cent (107 per cent for white corn) as the market reacted to the doubling of the corn ethanol production capacity (Rausser and de Gorter 2013). Crude oil and ethanol prices had more than doubled in the previous 33 months when corn prices remained flat. However, two key events activated by high crude oil prices created the corn-ethanol price link: the blender's tax credit and the ban on methyl tertiary butyl ether, a lower cost fuel additive that competes with ethanol. This caused tortilla prices to double, thereby precipitating the Mexican Tortilla Crisis in January 2007. The ensuing political anxiety led to the February 2007 ban on wheat exports by India, the beginning of many developing countries' policy responses to come. Finally, in December 2007, the United States doubled its ethanol mandate, and so the high grain/oilseed price boom was in full swing (the EU consolidated its 2003 mandate in 2009). Meanwhile, soybean and rapeseed oil prices were tightly linked to biodiesel prices in the United States and the European Union, respectively. US exports of ethanol in 2010 linked world ethanol prices to such an extent that shocks in world sugar markets impacted corn prices.¹

Biofuel policies are a subset of energy, environmental and agricultural legislation designed to achieve the multiple goals of energy security, an improved environment, enhanced agricultural incomes, technological change, the overall economic benefits of ‘green’ jobs, and foreign exchange savings. Although biofuel production and consumption are mostly concentrated in the United States, Europe and Brazil, more than 60 countries have implemented biofuel policies. The most important policies are formal blending mandates, de facto mandates induced by various environmental regulations, subsidies aimed at supporting biofuel consumption and production, biofuel import barriers and export enhancements, subsidies on feedstock production, and binary sustainability standards where biofuels from different feed stocks have different greenhouse gas emission reductions relative to the fossil fuel they are expected to replace. It is important to recognize that the first two categories of biofuel policies (i.e. tax credits/exemptions and mandates) do not, by themselves, discriminate against international trade. However, the other policies listed above do.

¹ See de Gorter et al. (2013a, b, c).
Following three decades of a decline in real prices of cereal and oilseeds, Figure 1 shows how nominal prices have spiked three times in eight years. Figure 1 also illustrates the importance of the crop-biofuel price links and how the quantity of crops going into biofuels may not be the principal driving force in explaining food commodity price levels.

Biofuel energy prices are locked onto each other when the tax credit is binding; if there are 'mandate' premiums, then biofuel prices float up and away from energy prices. There are therefore two states of nature: corn and ethanol prices – now locked onto each other for the first time ever – are lowest when ethanol prices are locked onto gasoline prices, which are locked onto crude oil prices. Otherwise, ethanol – and hence corn prices – float up and away from energy prices, and so are even higher than otherwise.

These two states of nature are important because, if corn prices are locked onto crude oil prices through the tax credit (if any), then supply/demand shocks in corn markets or traditional farm subsidies have no impact on corn prices (except for the effect of the change in ethanol production on world crude oil prices, which will be modest at best). Only when biofuel prices float up and away from energy prices can crop supply/demand shocks affect corn prices (but only by the amount of the mandate premium). This has implications for future WTO trade disputes as the effect of farm policy depends on the biofuel policy regime that determines the grain/oilseed price.

The production of biofuels accelerated in the mid-2000s and has now levelled off. Many commentators use this, along with the fact that only 1.5 per cent of total cropland is allocated to biofuels, as proof that biofuels are not the leading cause of high, volatile foodgrain and oilseed prices. However, ironically, in the time periods when grain prices decline in Figure 1, the relative impact of biofuel policies is even higher because ethanol price premiums rise above the tax credit so mandate price premiums arise. Therefore, much of the impact of biofuel policies is summarized in price links.

There are now two counterfactuals: how much did biofuel policies increase food commodity prices compared to no biofuels (like the good old days) or compared to the lowest crop prices can go, given the crop-biofuel price link (the new reality)? For the former, Drabik (2011) estimates a 40 per cent increase due to biofuels;\(^2\) for the latter, de Gorter et al. (2014a) and de Gorter and Drabik (2014) estimate that 80 per cent of the foodgrain/oilseed prices increase would have occurred regardless (because prices can never go lower than when locked onto crude oil prices).\(^3\) De Gorter et al. (2014a) show that the price increasing effects of biofuels policies for the 2007–08 to 2011–12 time period resulted in an average USD1 billion per day transfer from crop consumers to crop producers (to complement the USD1 billion per day farm subsidy as calculated by the OECD “Producer Subsidy Equivalent” measure).

---

2 This estimate is a lower bound because it does not take into account stockholding behavior where the impact of supply/demand shocks are highly non-linear as the price change is higher when stocks have been depleted, perhaps even because of biofuel policies – see Wright (2014).

3 This assumes that all food grain and oilseed prices move together because of substitution in demand and competition for land. De Gorter et al. (2013a) show that relative prices have not changed since October 2006, while Wright (2014) and Roberts and Schlenker (2009) show that the price of calories is highly correlated among the grain and oilseeds.
2. The value and quantity of agricultural trade in this new biofuels era

The value of agricultural trade has skyrocketed since 2006 (see Figure 2). The cereal and oilseed value of trade has followed it quite closely, so the price increase has been for all crops; however, higher crop prices mean higher input costs for value-added agriculture and so the value of meat, poultry and dairy trade has also increased. However, one can notice that the quantity of cereal and oilseed trade has continued on trend but that the value of trade is far above trend as of 2006. This means there has been a price-induced increase in the value of trade for agriculture.

Figure 3 provides a summary of the main events since October 2006. The first thing to note is that crude oil prices led cereal prices early on (a hint that things were different this time in that the crude oil price affected crop prices on the demand side, not just through higher input costs). Second, the corn wakeup call on ethanol production capacity growth beginning in October 2006 is reflected not only through a higher grain price index but also through the fact that cereal prices go in the opposite direction to crude oil prices. However, after that, oil prices continued their steep rise, while cereal prices were fairly flat until August 2007. Third, corn and soybeans were locked onto crude oil prices all the way up and all the way down the 2008 price spike (with wheat and later rice prices overreacting – de Gorter et al. 2014a). Finally, the 2008 US financial crisis induced the biggest economic recession since the Great Depression (where the Illinois farm price of corn plummeted to a low of USD3.30 per bushel, nowhere near the USD1.62 per bushel low in 2005–06 when the world was enjoying its biggest economic boom in history).

By the last quarter of 2007, cereal and oil prices were rising in lockstep all the way to the peak of July 2008 and the bottom of December 2008, but crude oil prices plunged much more because of ethanol mandate price premiums, keeping food commodity prices higher and not following crude oil prices to their bottom. Crude oil prices went up from USD41 per barrel to USD75 per barrel from December 2008 to June 2010 (basically straight up). However, cereal prices held steady from December 2008 to June 2009 and then slowly fell, even though crude oil prices were rising the entire time period from December 2008 to June 2010. Why was there a negative relationship between crude oil and cereal prices? The answer is that mandate premiums over the tax credit were being built.

Nevertheless, after June 2010, cereal prices reversed their decline and marched straight up with no hesitation. This climb came alongside crude oil price increases, peaking at UAD123 per barrel. This time, however, cereal and crude oil prices were strongly positively related. The mandate premium was at a record high in 2012–13 because of the expired US blender’s tax credit and drought, thereby generating a large gap between the cereals price index and the oil price.

3. The new economics of impacts of subsidies and international trade distortions

If a biofuel consumption subsidy (the blender’s tax credit in the United States or excise tax exemption in the rest of the world) is binding, corn production subsidies have minimal (but negative) impacts on corn market prices as any impact has to go through crude oil prices; however, under a mandate, corn prices fall by 25 per cent more compared to a corn production subsidy in a situation with no biofuel
production (Drabik 2011). Therefore, the traditional effects of farm subsidies are now quite different and have implications for WTO trade disputes.

An ethanol production subsidy, on the other hand, reduces the ethanol market price and lowers the marginal cost to fuel blenders, while expanding ethanol production, because the producers receive the ethanol market price plus the subsidy. The corn price increases because it is linked to the price received by ethanol producers. However, a corn production subsidy reduces all market prices analyzed. This is because it lowers the marginal cost of corn production, thereby expanding ethanol production as the former becomes less costly. Therefore, the market distortions of biofuel policies increase the market prices of grains/oilseeds (something the WTO does not concern itself with) while traditional farm and trade policy impacts on world prices are now different (compared to the previous era of no biofuels) with world price distortions dependent on the biofuel policy regime (world prices distorted more/less with a mandate (tax exemption) determining the biofuel price compared to the era of no biofuels).

4. The new politics of the US farm bill

Biofuel policies and the resulting high, volatile grain and oilseed prices have created a new politics of the US Farm Bill. Moreover, the central role energy and environmental policy play in determining grain prices has also changed the political-economic landscape that directly affects grain prices, so that the US farm legislation now wields less impact than it did previously. The major stakeholder groups who have been engaged in the political process and the specialized interest-group landscape have changed since 2006. There is no longer an “iron triangle” that influences commodity prices; instead, we now have the “iron maze” of environmental, energy and agricultural legislation, interest groups and public agencies (Rausser and de Gorter 2013).

Because ethanol policies support feed-grain markets through higher prices, livestock, dairy and poultry producers are beginning to form organized opposition interest groups, as do those food processors that no longer enjoy the low market prices that traditional agricultural policies ensured. New interest groups include coalitions of livestock organizations such as various meat, livestock, poultry and dairy producer associations.

The higher commodity prices due to biofuel policies have resulted in a new politics of the Farm Bill where direct payments were considered embarrassing and thereby eliminated, along with the countercyclical programme. Most of the so-called reforms are largely cynical because, in this new era of high prices and record farm incomes, direct payments (where most of the “cuts” fall) were politically unviable and likely to end anyway, and countercyclical and loan deficiency payments (which are paid out when prices are low) were unlikely to be triggered. The new Farm Bill therefore introduced the “price loss coverage” (PLC) programme with a system of much higher target prices, generating production distortions with implications for crop production, commodity prices, federal outlays, the environment and US international trade commitments.

Meanwhile, in an era of high prices, subsidies associated with the crop insurance programmes have become very high, especially if one includes underwriting and administration costs. The new Farm Bill introduced “revenue insurance” programmes that cover “shallow losses” for crop insurance designed to complement crop insurance. The most important of these is the Supplemental Coverage Option
(SCO) shallow loss programme. Evidently, Farm Bill advocates believe it is more advantageous to their interests to redesign such policies as “revenue insurance” programmes that will kick in whenever prices vary (the loan rate serves as a minimum price guarantee).

## Conclusion

Biofuels have linked energy prices and food prices directly, changing the dynamics of food production and trade. The value of all agricultural trade has increased sharply as a result, mostly because of higher prices, not from increased trade volumes. Biofuels directly increased the price of crops, while the latter increased the costs of production for value-added agriculture. These developments have few direct implications for the multilateral trade talks. It is true that many OECD country production subsidies are price contingent and therefore expected to be lower and less trade distorting (e.g. in the United States) with high prices (likewise, the distorting effects of tariff rate quotas are now lower too). Meanwhile, import barriers in developing countries have fallen with policy changes induced by the international food price spike in 2007–08. Therefore, a decline in both subsidies and import barriers may reduce the urgency of a Doha negotiation outcome; however, at the same time, the political costs of such a deal are lower. It is therefore not clear how biofuels have changed the negotiating position of different countries and the dynamic of trade negotiations. However, the US Farm Bill politics towards revenue insurance programmes have changed, and the subsidy costs are very high, especially in an environment where prices begin to fall, as is now the case.
Figure 1: Grain prices vs. biofuel production

Figure 2: Value of agricultural trade vs. cereal + oilseeds
Figure 3: Cereal and crude oil price movements

- Corn/soybeans locked onto crude oil (but at a discount)
- Corn/wakeup call on biofuels
- Crude oil lead cereals
- Biofuel mandate
- Excess profits and high ethanol prices
- US tax credit expired and US drought
- 2008 US financial crisis including biggest economic recession since the Great Depression
- Dec-08 - May-10
- June-1 - April-11
- Premiums kick in

Source: World Bank Pink Sheets databank
References


International Trade Disciplines and Policy Measures to Address Climate Change Mitigation and Adaptation in Agriculture

By David Blandford

Introduction

It is now widely accepted that the world’s climate is changing and that we are in a period of global warming. Agriculture is a significant source of global greenhouse gas (GHG) emissions, although it can also contribute to carbon sequestration. The sector is particularly susceptible to the effects of climate change on crop and livestock production. A key issue is whether policy measures that are emerging to promote mitigation or adaptation in the sector are consistent with GATT/WTO disciplines. What modifications (if any) might be made to allow countries to achieve objectives in this area while at the same time preventing undue restrictions on trade? Climate change policies could easily become a guise for protecting domestic food and agricultural sectors from international competition.

1. Domestic climate change policy measures and international trade disciplines

The use of taxes to internalize the costs imposed by pollution (in this case GHGs) has been advocated by economists. Some countries already use explicit taxes on GHG-emitting inputs, such as energy or fertilizer, primarily to raise government revenue. These could be more broadly applied and targeted to reducing the use of such inputs in agriculture. Implicit taxes can also be imposed through cap-and-trade schemes for emissions or through process or product regulations affecting agricultural production. As such measures are likely to be reflected in higher production costs and to tend to reduce output, they would be unlikely to be challenged under GATT/WTO agreements. However, implicit subsidization through the exemption of agriculture from emission reduction measures or provisions that permit the sale of GHG-reduction credits by farmers under cap-and-trade schemes might be subject to challenge on the grounds that they could increase agricultural output.

There is often a marked preference among policy-makers for the use of subsidies to pursue environmental objectives in agriculture. Subsidies are covered by the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Agriculture (AoA). Under the SCM, a measure qualifies as a subsidy if it entails a financial contribution, is made by a government or public body, and confers a benefit. A subsidy is subject to the full disciplines of the SCM if it is specifically provided to an enterprise or industry, or a group of enterprises or industries. Subsidies may be challenged by a trading partner on the basis of injury to its domestic industry due to imports of subsidized products, serious prejudice (e.g. through displacement of its exports), or through nullification or impairment of benefits (e.g. improved market access under a negotiated reduction in bound tariffs being undercut by the effects of the subsidy).
A wide range of explicit or implicit subsidies could potentially be used in climate change policies for agriculture. Some of these might qualify under the green box (Annex 2) heading of the AoA as being minimally production or trade distorting. Prime examples would be expenditures on research and development (R&D) for new production methods or technologies relating to mitigation/adaptation and the diffusion of knowledge relating to these elements. It is unlikely that such expenditures would be challenged by other countries in the WTO, particularly since some of the resulting benefits may be transferable across borders.

Payments under environmental schemes linked to climate change objectives, e.g. the promotion of mitigation activities such as reduced tillage, idling of farmland, or its conversion to sequestration activities, such as the production of woody biomass, may also fall under the provisions of Annex 2. Agriculture can play a role in sequestering atmospheric carbon by avoiding deforestation or the use of environmentally sensitive lands (e.g. peat land) and through the use of certain production practices. The green box provisions for payments under agri-environmental schemes, if strictly applied, are quite limiting since they restrict payments to compensation for costs incurred or loss of income involved in complying with a programme, i.e. they exclude incentive payments. To the extent that payments under an agri-environmental scheme enhance production, they would be potentially subject to challenge under the SCM.

Payments with clearly defined agri-environmental objectives are likely to be superior to those whose primary purpose is to provide income support, even if the latter have environmental provisions attached (e.g. a requirement to keep land in good environmental condition). Viewed from the perspective of providing environmental goods, there is a strong likelihood of over-compensation and increased risk of production and trade distortions. Some recoupling of payments to production may be required in order to achieve environmental objectives, but there is a need for consensus on what is permissible. There is also a need for contestability (through notification and enhanced scrutiny with possibilities for challenge) to limit the possibility that environmental schemes will become a popular vehicle for protection.

Other forms of expenditure associated with climate change objectives may qualify for the green box, e.g. domestic subsidies for the adoption of new technologies, payments for crop or livestock losses associated with extreme climatic events, or insurance subsidies. Government financial participation in crop or income insurance and income safety net programmes and payments triggered by natural disasters are permitted under the green box, but only under strict conditions. The provisions seek to ensure that payments under these categories do not become a permanent subsidy and that they are minimally production distorting. When there is a continuing element of subsidy (e.g. through a government-supported insurance scheme) payments are likely to fall under the heading of amber box support – either product-specific or non-product-specific depending on the type of scheme employed.

Payments relating to structural adjustment (including investment subsidies) and for permanently disadvantaged regions are included under the green box category, providing that these satisfy certain conditions. Such payments could become more prevalent if climate change severely disadvantages certain producers or regions. Infrastructural and input subsidies (e.g. for irrigation) that are more broadly applied would generally qualify for inclusion under the amber box. Input subsidies can be counterproductive for climate change mitigation and have negative impacts on natural resources. Subsidies relating to the use of fertilizer, energy or water can be particularly damaging in this regard.
Agriculture is increasingly being called upon to provide biomass for non-food uses (e.g., biofuels). The role of biofuels in climate change and the broader environmental impact of biofuel feedstock production, as well as potential effects on food prices, are controversial. Subsidies for the production of agricultural products that are feedstocks for biofuel are required to be reported as product-specific support under the AoA. However, there is some ambiguity as to whether biomass produced exclusively for energy use would be covered by this requirement. Support for feedstocks can be provided by demand-enhancing measures, such as consumption or blending mandates for biofuels. The indirect support provided through such measures is not covered by the AoA or the SCM.

2. Border measures associated with climate change policies and international trade disciplines

Concern is often expressed that domestic environmental policies can be undermined by international trade. Climate change is likely to alter comparative advantage in many countries. The transfer of production to countries that employ low-emission technologies can result in a global reduction in emissions per unit of agricultural output. Attempting to cut emissions in each country individually is not necessarily the most efficient way to achieve a global reduction. However, if a domestic industry is being taxed in order to reduce its emissions, imports of products from untaxed industries in competing countries using similar technologies will not help achieve such a reduction. It will simply result in a cross-border relocation of production (carbon leakage). Consequently there may be pressure to offset the competitive effects of domestic taxes or environmental regulations through tariffs or other border measures.

Countries have a limited ability to adjust tariffs under existing WTO agreements. Applied tariffs can be increased if they are lower than bound tariffs, but increases cannot be discriminatory. Higher tariffs cannot be levied on imports of products from countries that generate high emissions per unit of output. Hence, while a general tariff increase could help reduce imports from high carbon emitters with relatively low production costs, it will disproportionately affect low carbon emitters with relatively high production costs.

Article XX of the GATT provides some exceptions for the use of border measures that are inconsistent with GATT principles (e.g., import bans). Exception (g) covers measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. The ruling in a dispute settlement case (Shrimp-Turtle) seems to open the possibility that non-discriminatory import restrictions could be imposed under this exception. However, the requirement for non-discrimination severely limits the practical usefulness of the exception. Despite the questionable status of environmental provisions under WTO agreements, a growing number of free trade agreements (FTAs) are incorporating such provisions.

3. Process or product regulations and environmental labelling

Environmental standards for food products and environmental labelling are being adopted in some countries. The most popular approach is labelling based on the carbon “footprint” of a product, which corresponds to the amount of carbon emissions generated by its production, processing and transportation. The majority of the labelling initiatives are associated with private voluntary standards
(PVS) created by retailers. PVS are likely to impose additional costs on suppliers. However, it is difficult to argue that PVS are an explicit discriminatory device against traded products, since they are generally also imposed on local suppliers. Local small-scale suppliers of food and agricultural products are often vocal in complaining about additional costs that PVS can create for them.

From an international perspective, a difficulty arises if PVS are transformed into legislated standards (LS) and if these are structured in such a way as to discriminate against imports. The treatment of product standards is covered by the Agreement on Technical Barriers to Trade (TBTs); several other WTO agreements, e.g. the Agreement on Sanitary and Phytosanitary Measures (SPS), may also be relevant. All these agreements indicate that no country should be prevented from taking measures necessary to ensure the protection of human, animal or plant life or health. The TBT Agreement extends this principle to the protection of the environment. All the agreements specify that measures used should not be discriminatory or constitute a disguised restriction on international trade.

The TBT Agreement focuses on ensuring equality of treatment in technical regulations for imported products and “like products” of national origin (Article 2:1). An important issue is whether the environmental provision in the Agreement would permit countries to impose technical regulations associated with the environmental characteristics of products, such as their carbon footprint. The TBT does not allow countries to impose their domestic production regulations or standards on other countries, nor does it allow prohibitions on imports produced using a lower standard. On the other hand, the ruling in the shrimp-turtle case seems to suggest that an exemption to this requirement might be possible under Article XX. If carbon labelling is required for both domestic and imported products, this would seem to be permitted under the TBT Agreement. However, since the Agreement requires equal treatment for imports of “like” products, imports alone could not be required to be labelled and the nature of the labelling should not result in discrimination. Again, there might be a case for an exemption under Article XX if it could be shown that the requirement was necessary for the protection of natural resources.

WTO agreements that relate to standards place particular emphasis on the development of international standards. The SPS Agreement, for example, provides an explicit link to the work of bodies such as the FAO’s Codex Alimentarius Commission and the International Office of Epizootics (OIE). The role of international standardization is also central to the TBT Agreement. This suggests that an international approach to identifying the environmental characteristics of goods, such as their carbon footprint, would reduce the likelihood of challenge through the WTO to the use of standards or labelling requirements, and could also help limit the tendency for the proliferation of private standards.

In many countries where product standards and labelling are an issue, governments are not necessarily in the vanguard of such initiatives. These are often led by private companies. Organizations such as GlobalGAP, which establishes voluntary standards for the certification of agricultural products as being “safe and sustainable” have emerged to provide certification for farmers wishing to prove to retailers that they meet certain production standards. The SCM Agreement makes reference to the activities of “private bodies” in the provision of subsidies, so that such activities are not entirely excluded from the ambit of WTO agreements. However, it remains to be seen to what extent specific activities undertaken by private entities that may provide a competitive advantage to domestic producers or disadvantage foreign suppliers could be subject to challenge under WTO agreements. The SCM specifies that this may be the case if “a government makes payments to a funding mechanism, or entrusts or directs a
private body to carry out functions (for which a subsidy shall be deemed to exist) which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments." (Article 1.1 (iv)).

4. Developing countries, climate change and international trade disciplines

It is generally accepted that the agricultural sectors in many developing countries will face major challenges in adapting to climate change. The GATT/WTO framework provides for special and differential treatment for developing countries; an important issue is how this would be applied to climate change policies for agriculture. The AoA currently provides for special treatment for investment subsidies in developing countries and for agricultural input subsidies to low-income or resource-poor producers. Rules that are premised on the notion that agricultural subsidies add to surpluses and retain inefficient productive capacity may not be suited to some developing countries, particularly the poorest. Some relaxation of rules for developing countries has been proposed during the Doha negotiations, for example, criteria to be applied to income insurance and disaster relief. Few would argue that developing countries that seek to modernize their agricultural sectors to improve productivity and resilience in the face of climate change should be prevented from doing so through international trade disciplines. However, the compatibility of some measures – particularly input subsidies for energy and aids for conversion of land to agricultural uses – with climate change objectives is questionable. In particular, the provision of subsidies for the use of energy or water in agriculture needs to be avoided if the environmental footprint of agriculture is to be reduced.

Investment in basic research and new technologies, for example the development of drought resistance in food crops and more efficient irrigation systems, will be needed to address the productivity challenges facing many developing countries. However, of equal importance is the need to address structural limitations in the adoption and use of available technology, by strengthening extension efforts, expanding access to credit and insurance, and achieving greater integration of input and output markets through improvements in local institutions and infrastructure for example. There is considerable scope for national aid programmes and for international financing mechanisms to be refocused to address environmental sustainability in developing countries, while at the same time promoting increased productivity. For example, existing technical assistance programmes such as Aid for Trade could be strengthened to enhance climate change resilience in the agricultural sectors of developing countries and to enable them to cope with the challenges and opportunities that will be created for the international trading system by climate change policy.

5. WTO priorities in the area of climate change

International trade can make a positive contribution to addressing the challenges posed by climate change for global food security. At the same time, the pursuit of climate change policies for agriculture opens up the possibility of conflicts with existing international trade disciplines. The challenge will be to allow countries flexibility in reducing the environmental footprint of agriculture and promoting greater sectoral resilience, while at the same time letting the benefits
of freer trade to be realized. There is a need for an international consensus on which domestic policy measures are likely to be effective in tackling the effects of climate change in agriculture and are also the least trade distorting. There is also a need for enhanced monitoring and scrutiny of measures used in order to avoid trade disputes.

The immediate priority for the WTO is to conclude the current Doha Round of trade negotiations. In doing so, some important priorities relating to climate change measures could be addressed. These include:

1. The clarification of criteria to be applied under Annex 2 of the AoA (green box criteria) to ensure that these exempt policies with clear climate change objectives, combined with enhanced transparency and scrutiny of such policies to ensure that they are minimally production and trade distorting;

2. The provision of special exemptions for the least developed countries in the use of measures to increase agricultural productivity and resilience in the face of climate change (e.g. certain types of input subsidies that would otherwise be disciplined under the AoA);

3. Greater transparency in the use of explicit and implicit subsidies for the use of biofuels through enhanced requirements for the notification of biofuels policies and scrutiny of such policies.

Over the medium to long-term, additional important issues to be addressed in the WTO could include:

1. The clarification of preferred domestic policy measures for climate change mitigation and adaptation in terms of effectiveness and minimally distorting effects on international trade, in the same way that measures for domestic support have been classified by colour codes (amber, blue and green) on the basis of the objective of reducing protection;

2. The clarification of the definition and use of environmental standards in WTO agreements (particularly the SPS and TBT agreements);

3. The clarification of the scope of Article XX and its application in ways that address climate change issues, such as carbon leakage, while minimizing the use of discriminatory trade measures.

The challenges that face agriculture and the world economy as a result of significant climate change cannot be dealt with solely through agreements that focus on international trade. However, it is eminently feasible to ensure that these agreements operate in support of global efforts to address climate change.
Challenges Facing Poor Food-importing Countries: Can WTO Disciplines Help?

By Panos Konandreas

Introduction

After decades of relatively low and often depressed prices of basic foodstuffs, the world entered a period of tight food supplies at the beginning of the new millennium, which was manifested by higher food prices and increased volatility. Several short-term policy developments and longer-term structural changes affecting world agriculture are responsible for this outcome (McCalla 2009, Timmer 2009). These developments adversely affected the capacity of food-import-dependent developing countries to access supplies. Poor households in countries that already spend much of their income on food and have limited coping mechanisms at their disposal suffered in the process.

The above developments coincided with the implementation of agricultural reforms under the Uruguay Round Agreement on Agriculture (AoA) that came into effect in 1995. The AoA sought to establish a fair and market-oriented agricultural trading system through negotiated commitments on domestic support and border protection and the establishment of related rules and disciplines. While food security problems in poor developing countries are deep-rooted and multidimensional, trade reforms – both bilateral and multilateral – have an important effect on food security, especially for countries which depend on the world market for a considerable part of their consumption.

Beyond anticipated effects related to AoA reforms,1 a host of several corroborating factors and policy responses have aggravated world food markets in recent years. In particular, the world food market has been dramatically affected by factors external to agriculture, above all energy prices, which drew large quantities of food commodities into biofuel production, speculative activity in food commodities from the financial sector, and unilateral export restrictions put in place by several exporting countries. In a span of a few years, global food markets have entered a period of constrained supply, after a very long period of ample supplies characterized by demand-constrained global markets.

As this transition from constrained demand to constrained supply was unfolding, some provisions of the AoA were put at a test as to their continuing relevance and adequacy, since they had been negotiated at a period of relative glut in world food markets. While existing AoA disciplines on the imports and domestic support provide a degree of comfort and predictability to exporting countries, similar disciplines on the export side, catering for the interests of net food-importing countries, have proven inadequate.

1 In particular, there was an expectation that food prices might rise somewhat as a result of a reduction of domestic support in formerly food-producing and -exporting developed countries. Similarly, it was expected that the levels of subsidized exports and food assistance would fall as a result of reduced surpluses and binding export competition commitments at the WTO.
The negotiations under the Doha Round have stalled for some time following the difficulties to reach an agreement in July 2008. Draft texts negotiated up to that time included some improvements in specific provisions of the AoA; however, its architecture and overall thrust remained that of an agreement dealing with periods of oversupply. No systematic attempt has been made since then to assess the changes that would have been necessary to address problems faced by consumers and importing countries, which are especially prominent in situations of global food shortages.

This paper starts by briefly reviewing trends in the food situation of food-insecure countries and the growing challenges these countries face in securing their food needs. This is followed by an overview of policy measures employed by countries during the recent episodes of higher food prices and some brief comments on the effectiveness of such measures. In the third part, specific areas of inadequacy in the existing AoA for which improvements could strengthen food security in import-dependent vulnerable countries are pointed out.

1. Food insecurity in poor developing countries and growing challenges

The food security of poor developing countries has been challenged in recent years on account of high world market prices and price volatility. Two categories of import-dependent countries are considered here: the Least Developed Countries (LDCs), as defined by the United Nations, and the Net Food-Importing Developing Countries (NFIDCs), as established under the WTO. Both groups of countries were specifically mentioned in the context of the Marrakesh Decision regarding the possible negative effects that could be experienced during the reform programme leading to greater liberalization of trade in agriculture.

The average supply of calories and protein in LDCs and NFIDCs is well below and much more variable than the aggregate for developing countries. Gains over the past half century have been modest. Considering the fact that available supplies are often also distributed very unequally within countries, such trends are indicative of their food security vulnerability. One manifestation of the precariousness of the food security situation in these countries is their frequent need for external assistance in response to food emergencies, with some of them permanently in that state.

---


3 There has been a turning point in the long-term trend of world prices of basic food commodities. This situation is expected to continue at least in the medium term, which underscores the uncertainty faced by these import-dependent vulnerable countries. For a more thorough analysis, see Konandreas (2012).

4 See WTO 1994.
Their growing demand for food continues to require ever increasing imports. In the case of cereals, self-sufficiency ratios (SSRs) hover around 90% and 70% for LDCs and NFIDCs, respectively. LDCs' relatively higher SSRs come at the expense of lower consumption levels. In addition, while NFIDCs have generally kept the pace of other developing countries in increasing productivity, LDCs have only achieved modest gains. Cereal yields in LDCs are only half of those attained by developing countries and one third of those achieved by developed countries. Much of the increase in output has not come from productivity increases (largely due to the limited use of productivity-increasing inputs, such as fertilizers and irrigation) but from the expansion in cultivated area.

Cereals comprise the largest item in the food-import basket, accounting for some 42% and 40% of the value of food imports of LDCs and NFIDCs, respectively, followed by oils and fats and sugar. Together, these three commodity groups account for over three quarters of the value of food items imported by LDCs and over two thirds for NFIDCs. The share of food aid in their total cereal imports has declined sharply, from nearly 30% at the beginning of the 1990s for LDCs (8% for NFIDCs) to about 8% at the beginning of the 2010s (less than 0.5% for NFIDCs).

**Figure 3: Cereal yields (mt/Ha)**

![Figure 3: Cereal yields (mt/Ha)](source: FAOSTAT)
In the past, the increased cost of food imports was largely due to increases in the quantity imported. By contrast, in recent years, price increases have had a much stronger effect on the additional cost of food imports than volumes imported have. Thus, for LDCs, while the aggregate volume of commercial cereal imports increased by less than three times from the early 1990s to the early 2010s, the cereal import bill increased by over six times during the same period. Similar sharp increases in the cereal import bill have been experienced by NFIDCs, as volume increased by nearly 70% and the cereal import bill almost quadrupled. For both LDCs and NFIDCs, there is considerable variation between countries. For some countries, all the increase for the cereal import bill was due to price.
The escalating burden of food imports – necessary to meet immediate consumption – represents a serious threat for the economies of most LDCs and NFIDCs. The share of food imports to total merchandise exports is very high even under normal years, especially for LDCs, and it skyrocketed during price spikes for some countries. The imperative of importing food often comes at the
expense of other imports, including capital goods necessary for long-term development. Indeed, the deterioration of their balance-of-payments position places pressure on foreign reserves with adverse implications for growth and development (World Bank 2008, IMF 2008). In certain countries, poor households, which spend much of their income on food, have been especially hard hit (WFP 2009, Zezza et al. 2009). They were forced to reduce not only food consumption but also other basic necessities such as health and education (World Bank 2008).

Figure 7: LDCs share (%) of food and animal products in total merchandize exports (1990-2009)

Figure 8: NFIDCs share (%) of food and animal products in total merchandize exports (1990-2009) - logarithmic scale

Source: FAOSTAT
2. Policy responses to recent episodes of world market volatility

Food prices in world markets have spiked three times in the past five to six years (in mid-2008, early 2011 and again in mid-2012). This period of global market volatility in food commodities has been characterized by considerable activity in trade and domestic policy on the part of several countries. A relevant question to ask in this respect is to what extent such policy interventions have affected food security in the countries taking such measures and in third countries. It is also relevant to question to which extent the existing trade rules under the WTO have provided countries with the needed flexibility and whether they succeeded in restraining countries from adopting policies that could potentially harm others.

Monitoring policy responses during the recent period of price volatility has been largely ad hoc;\(^5\) however, several efforts have been made to classify policies and to try to assess their impact, especially their effectiveness in meeting policy objectives stated by governments. A common classification of policies has been along the following lines:\(^6\)

- Trade-based policy responses that use border measures, such as reducing tariffs and restricting exports aiming at reducing price transmission and/or increasing domestic supply;
- Domestic market-based measures, including domestic food stockholding activities through administrative procurement and the release of supplies at subsidized prices;
- Consumer-oriented policy responses that provide direct support to consumers and vulnerable groups in the form of food subsidies, social safety nets, tax reductions and price controls, among others;
- Producer-oriented policy responses intended to help farmers increase production, using measures such as input subsidies and producer price support.

Trade-based policies were among the easiest to implement from an administrative point of view. In importing countries, the reduction of tariffs has been the most widely adopted measure. Clearly, the effectiveness of this measure depends on the initial tariff setting and the extent of the reduction. The higher the pre-existing tariff and the greater the reduction, the more likely it will have an impact on prices. However, this option is severely limited when applied tariffs are already low, as is generally the case in many poor countries, and even their elimination is a small relief when import prices shoot up by several multiples of prevailing tariff levels.

In the case of exporting countries, a common trade policy instrument has been export taxes and export restrictions and prohibitions. While the imperative of containing an increase in domestic prices is often very strong, especially in the short-term, the overall and longer-term impact on the composition of domestic consumers as net buyers and net sellers of food – with the former being the beneficiaries at the expense of the latter – is often not considered in such a policy choice. The adverse effects on net sellers may have wider short and long-term implications, especially for the rural poor in developing countries. Indeed, although some of the food insecure are net buyers of food, they are

---

5  Broad surveys of policy initiatives in a large number of developing countries have been reported (Demeke et al. 2008; FAO 2009a; Viatte et al. 2009; FAO et al. 2009).

6  See for example Demeke et al. (2008).
likely to be employed on farms and are potentially being harmed on the earnings side as sellers of unskilled agricultural labour to farms with reduced earnings (Anderson and Nelgen 2012).

The release of public stocks was among the most common domestic market-based measures applied by countries during 2007–08 to contain the effects of rising food prices. These were associated with providing targeted and untargeted subsidies for staple food. Clearly, the degree to which market prices are influenced depends on the amount of food stock released and the degree of targeting involved. In a small open economy, changes in domestic supply and demand, such as those resulting from public stockholding activities, are not likely to have a significant impact on prices. However, for large countries with dominant public procurement and distribution systems, this type of intervention is directly accountable for domestic price formation and also has indirect effects on world market prices.

Consumer-oriented policy responses that provide direct support to consumers (safety nets) have been relatively less common than market and trade interventions in developing countries, as mobilizing the necessary cash or food is expensive and beyond the means of the poorest among them. Specific consumer support policies reported include cash transfers, direct food assistance and measures aimed at increasing disposable income. While such policy interventions are administratively more demanding, they are nonetheless among the best food security approaches to reach populations in need and to provide them with a substantial transfer value in relation to the cost of the policy. At the same time, market distorting effects are minimal. By contrast, trade restrictions, such as the import duties and export taxes/restrictions discussed above, that lower overall market price benefit both those in need and those who are better off, which makes them rather inefficient transfer instruments.

Trade measures that aim to insulate domestic markets from world price changes not only fail to help the food insecure but also impose greater adjustment on other countries, which in turn respond with similar measures, so that each successive intervention undermines the efforts of others to stabilize domestic markets. Anderson and Nelgen (2012) estimate that changes in restrictions on global grain trade during 2006–08 were responsible for estimated increases of around two fifths, one fifth and one tenth in world prices of rice, maize and wheat, respectively. Both export taxes/restrictions by exporting countries and changes in import tariffs by importing countries were responsible for this effect, although the former to a greater extent. Furthermore, their results suggest that the combined responses by governments of all countries were sufficiently offsetting as to do very little to insulate domestic markets in the intervening countries from the world market spike.

Production-oriented measures include actions directed at supporting producers through non-market and market mechanisms. Most measures taken concerned non-market-based production support, including production subsidies, untargeted input subsidies and improved access to credit. Rarer market intervention measures included support to value chain management, support of producer prices and market information. By and large, developing countries – especially the poorest among them – have considerable scope for providing non-product and product-specific support to their farmers, especially under the special and differentiated treatment (SDT) provisions of the AoA. The limited use made of these flexibilities has been due to a lack of resources.

7 Besides stockholding, concurrent or additional interventions in the domestic market included the suspension or reduction of VAT and other taxes as well as administrative price control or restrictions of private trade.
3. Some implications for WTO disciplines

No systematic analysis has been undertaken to assess the WTO compatibility of policy responses pursued by either exporting or importing countries during the recent period of world market volatility. However, as a general rule, considering that the period of concern was a period of high world market prices, conformity with WTO disciplines would not be expected to be a major issue, as the latter are generally intended to discipline policies during periods of depressed prices. Nevertheless, this experience was instrumental in revealing some weak points of the multilateral trading system (MTS) as well as the elements that need to be fixed for the system to be of value to all participants.

Three categories of concerns may be identified: (a) issues related to the interpretation of existing provisions; (b) issues related to the weakness of existing provisions in balancing out the interests of exporting and importing countries (and the absence of disciplines to restrain countries taking policies potentially harmful to others); (c) disciplines missing from the system altogether (especially in helping food-insecure countries improve their food security). Finally, some elements of the Uruguay Round Agreement that could be of importance to food-insecure countries have not been implemented at all.

A prominent example of a measure in the first category is public stockholding for food security purposes, an instrument that has proven to be of great importance to several countries in the recent period of price hikes. In the context of less reliable global markets, net food-importing countries saw the importance of building up domestic food stocks to address specific food security needs. Such stockholding operations entail the procurement by the public sector of food supplies at administered prices (i.e. through market price support) and the subsequent distribution of these supplies to vulnerable parts of the population and/or their release into the market at subsidized prices. Such operations have raised questions about the compliance of some developing countries with domestic support commitments, considering that most of them can provide market price support only up to their de minimis level of 10% of the value of production of the respective food commodities procured.\(^8\) The way such market price support is calculated remains a contentious issue and resulted in the "peace clause" decision under the ninth WTO Conference in Bali, which will remain in place until a permanent solution is found.

A telling example of weak existing disciplines is the export prohibitions and restrictions provisions of the AoA. Export taxation is not disallowed, and this tax could be prohibitively high because, unlike import tariffs, it is not bound.\(^9\) Essentially, current WTO rules allow the use of export prohibitions and restrictions in the face of domestic shortage; however, due consideration must be given to the effects on the food security of importing members. It is not clear to what extent the numerous WTO Members that resorted to export prohibitions and restrictions during the recent past have given due consideration to others’ food security needs. One would have hoped that this situation would have provoked extensive formal consultations in the WTO Committee on Agriculture (CoA) regarding the scope and duration of the measures put in place or the possible adverse effects for other Members who may have had a substantial interest as importers of food commodities subject to such export prohibitions or restrictions.

---

8  See Konandreas and Mermigkas (2014).

9  See Sharma (2011).
The asymmetry of WTO disciplines as regards importers and exporters of food commodities was pointed out during the Doha Round negotiations on agriculture, and several countries have proposed stronger rules in this area. However, there is resistance on these issues from other WTO Members, and it is questionable whether stronger disciplines on export prohibitions, restrictions and export taxation will materialize anytime soon.

A prominent example for the third category related to missing disciplines of importance to food security is the biofuel policies pursued by some countries. Biofuels do not fall under the purview of the AoA, although related policies represent an indirect means of circumvention of commitments made under the AoA. The rise in energy prices during the past ten to fifteen years, coupled with policy decisions on the grounds of environmental benefits, have had an unprecedented effect on the demand for crops traditionally used almost exclusively to feed people. As a result, huge quantities of food commodities were diverted to energy production. Recent reductions in distorting policies and the improved rationalization of biofuel use targets in some major grain-based biofuel producers are welcome developments. This would need to be supplemented by more flexibility in biofuel mandates, making the latter conditional on the price of food, as well as other innovative approaches which could capitalize on the available feedstocks being diverted to food consumption in times of need (Wright 2011).

Finally, among the provisions agreed under the Uruguay Round but not implemented is the Marrakesh Decision. Against the possible outcome of increasing food prices, Ministers signing the Uruguay Round Agreements had also agreed in 1994 to the need for assistance for LDCs and NFIDCs that could face short-term difficulties in financing normal levels of commercial imports of basic foodstuffs. In addition to financial assistance to import food, the Decision called for differential treatment on export credits as well as technical and financial assistance to improve agricultural productivity and food production. Developing rules on export credits under the Doha Round should aim at targeting LDCs and NFIDCs that face liquidity constraints for the timely scheduling of their food imports, thus avoiding high prices and additional financial charges. In addition, the Decision’s objective to boost productivity is laudable considering the low levels of yields in these countries.

**Conclusion**

The multilateral negotiations under the WTO have been the dominant force shaping the international policy environment for the agricultural commodity trade during the past three decades. The process of integration of agriculture into the multilateral trading system is not yet complete, and the stalled Doha Round negotiations add doubts as to when some of the issues raised above may be adequately addressed.

The existing AoA contains numerous provisions specifically applicable to poor food-insecure developing countries on a SDT basis, aiming at providing more policy space and more flexibility in the implementation of the Agreement. Within this framework, developing countries undertook smaller reduction commitments during a longer implementation period than developed countries. LDCs were exonerated altogether from any reduction commitments.

Nevertheless, while these SDTs offer considerable policy space to food-insecure developing countries, certain provisions still need to be fixed, especially for specific policies (public stockholding for food
security purposes) favoured by food-insecure import-dependent developing countries threatened by uncertainties in the world market. However, although doing "more good" by interpreting and/or amending existing rules is important, it is equally essential to do "less harm" by strengthening provisions that could be detrimental to the food security of many countries – especially for export prohibitions and restrictions – and by developing disciplines and guidelines on the production of biofuels and relaxing related national biofuel mandates.

Some of the problems that developing countries encountered with the AoA relate to its architecture, the way it was constructed when the Uruguay Round was being negotiated. At the time, agriculture was in disarray as a result of the prevalence of production and trade-distorting policies in a number of OECD countries, which had led to the excess supply of a number of commodities in the world market, to the detriment of efficient exporters. By and large, developing countries had the opposite problem. They produced well below their needs, often as a result of their own disincentive policies in addition to unfair competition from subsidized imported commodities. Most of them actually taxed their farmers instead of subsidizing them.

This is the legacy of the AoA, an agreement meant to discipline overproduction and the related distorting policies responsible for it. Meanwhile, the world did not remain still. Agricultural and food markets have evolved, but trade rules have not. The oversupply in the world market disappeared and periods of scarcity, high prices and price volatility ensued. The provisions of the AoA have proven to be rather weak in safeguarding the interests of importing countries under these new market conditions. There is a clear asymmetry in the current disciplines for agriculture, which is most obvious between the disciplines on export restrictions (unbound) and import restrictions (bound). Existing disciplines can deal primarily with the challenges of structural oversupply but not with the prospect of scarcity, rising and volatile food markets, which are expected to continue in the future. Exporters can rely on well-defined rules to address distortions in the import side, but not vice versa.

Creating symmetry as regards the needs and aspirations of both exporting and importing countries is a prerequisite for maintaining trust in the multilateral trading system and world food markets. In turn, this is an essential ingredient in making progress towards concluding the reform process initiated in 2001 under the Doha Round.
References


FAO. 2008a. "Soaring Food Prices: Facts, Perspectives, Impacts and Actions Required."


Can We Have Regionalism and Multilateralism?

By Ken Ash and Iza Lejarraga

1. The rise of mega-regionalism and the deepening of integration

Regional trade agreements (RTAs) are not a new phenomenon, but the latest mega-regional initiatives are on an entirely new scale. The three largest “mega” initiatives – the Transatlantic Trade and Investment Partnership (TTIP), the Transpacific Partnership (TPP), and the Regional Cooperation in Asia and the Pacific (RCEP) – represent over three quarters of global GDP and two thirds of world trade. Of course, negotiations have not yet concluded and the final outcomes have yet to be determined. Nevertheless, the initial ambitions are certainly high, pushing the boundaries of what has become known as “deep integration”.

Figure 1: Mega-regionals share of world trade and output

This note does not speculate on the possible outcomes of these mega-initiatives, but is confined to surveying elements of existing RTAs. Current RTAs are already on a path that moves beyond the existing multilateral rules on investment, the movement of capital and persons, competition and state-owned enterprises, e-commerce and anti-corruption. At the same time, regional arrangements are not a comprehensive response to today’s more interconnected markets, precisely because they are not global. The new mega-regionals have at least the potential to address today’s essential trade policy questions across a wider geographical scope that moves closer to a truly global reach.

If this view is correct, regionalism may naturally evolve towards a comprehensive multilateral system. It may also be desirable to conduct a more explicit examination of options that could help transfer selected emerging practices to a more genuinely global rule-book. This note draws on recent work that has been undertaken at the OECD and explores the extent to which selected WTO-plus
measures in existing RTAs might be “multilateralizable”. It should be stressed that the perspective
taken is purely a technical one; the reality, of course, is that “multilateralizing regionalism” is an
intensely political question.

The underlying considerations are straightforward: the desirability of promoting as much consistency
and coherence across mega-negotiations as possible and exploring how best to maximize synergies
with the multilateral regime, with a view to reducing transaction costs for businesses, easing the
maze of regimes for policy-makers, and maximizing global welfare. It is widely recognized that
experimentation and competition across RTAs has yielded progress and innovation in trade policy-
making: some lessons and emerging best practices at the regional level could conceivably illuminate
options for multilateral progress.

This note offers initial reflections on these issues. The next section identifies elements that appear
to be most promising as regards potential synergies across the regional and multilateral approaches
before addressing areas for which WTO-plus measures in RTAs focus more specifically on agriculture.

2. Enhancing the multilateralization potential of RTA-plus
measures

Apart from the requirement for RTAs to be consistent with multilateral rules, policy-makers are also
mindful of the more general issue of coherence across regional arrangements as well as between
regional and multilateral systems. Some countries even negotiate RTAs with the explicit intent of
setting precedents for the future multilateral system. Other countries view deeper measures in
regional partnerships as a way of complementing the multilateral system, at the very least. In either
case, there has been a growing interest in the question of “multilateral-friendly” practices that can help
promote convergence, be it through bottom-up (RTA-driven) or top-down (WTO-driven) channels.
A starting-point for these discussions is to suggest a conceptual framework that could help organize
the analysis of attributes that might render WTO-plus measures more systematically favourable to
multilateral reinforcement. These elements can be grouped into five broad considerations:

• **Representativeness**: Is a particular WTO-plus measure incorporated in a significant number of
RTAs? To what extent is it applied by a broad sample of WTO Members, including developing
countries?

• **Homogeneity**: Is there a high degree of similarity among particular WTO-plus measures
within and across different agreements? Are these essentially coherent with WTO rules and
international standards?

• **Discrimination**: Do given WTO-plus measures create *de facto* discriminatory effects, between
RTA parties and non-parties, and between domestic and foreign providers?

• **Predictability**: Do WTO-plus measures create binding obligations that are enforceable via
dispute settlement procedures? Do they generate greater transparency on measures affecting
trade?

• **Gains**: Do WTO-plus measures yield high economic returns, and what is the marginal gain from
multilateralization? Are political economy factors constraining the realization of these gains?
A grid reflecting the broad profile of various WTO-plus policy areas along these axes is contained in Table 1. It should not be construed as a predictor of multilateralization, but rather as an analytical tool that can organize discussions on the potential amenability of WTO-plus efforts for multilateralization. Policy areas that score well may be, in technical terms, candidates for multilateralization. Trade facilitation, for example, is an area where WTO-plus measures clearly display multilateral-friendly characteristics. Agriculture presents a mixed picture: rules of origin, despite their complexity and restrictiveness, generally only have a high impact on less processed agricultural goods. Sanitary and phytosanitary (SPS) measures also appear to be multilateral-friendly; many SPS-plus measures found in RTAs are already enshrined in the voluntary guidelines of the WTO SPS Committee on how to implement the WTO SPS Agreement.

Overall, there are several areas of convergence to note. Most WTO-plus measures have seen a marked upward trend in the uptake of deeper commitments by a more representative profile of WTO Members. There is a clear propagation of WTO-plus measures in North–South and South–South RTAs, suggesting that there may be growing receptivity and preparedness on the part of developing countries – at least middle-income economies – to endorse a deeper level of commitments. There is also a considerable degree of similarity across WTO-plus measures, which has been becoming stronger over time. Some of the benefits conferred regionally in terms of enhancing transparency, pro-competitive practices, and environment protection – as well as stronger anti-corruption and copyright enforcement – generate benefits for all operators in those markets, including exporters and importers from third-party countries.

In some areas (services, export restrictions), there appear to be instances of WTO-minus commitments. Another aspect that could warrant attention in future negotiations relates to the alternative architectures and scheduling practices that have been developed, notably in investment, competition and services. Addressing these differences should not constitute an insurmountable barrier; on the contrary, it calls for creative efforts and flexible approaches in order to be able to translate regionalism into multilateralism. Finally, it is noteworthy that, with the exceptions of environment and labour, there has also been a marked tendency to make RTA WTO-plus obligations stronger, migrating from provisions couched in best-effort language to firmer commitments creating obligations that are liable to dispute settlement. While this is a positive development in terms of signalling the degree of importance that countries attach to these obligations, and their preparedness to implement them, there are open questions as to whether regional mechanisms are strong enough to ensure compliance.
Table 1: Multilateralisation potential of WTO-plus measures in RTAs

<table>
<thead>
<tr>
<th>Factors facilitating multilateralisation</th>
<th>Agriculture</th>
<th>SPS</th>
<th>TBTs</th>
<th>Export Restrictions</th>
<th>Trade Facilitations</th>
<th>Services</th>
<th>Labour Mobility</th>
<th>E-commerce</th>
<th>Investment</th>
<th>Competition</th>
<th>Intellectual Prop. Rights</th>
<th>Government Procurement</th>
<th>Transparency</th>
<th>Anti-corruption</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical mass, incl. developing countries</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coherence with WTO agreements</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td></td>
</tr>
<tr>
<td>International standards</td>
<td>●</td>
<td>●</td>
<td>--</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>--</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High degree of homogeneity</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>--</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-discriminatory (non-excludable)</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal ROO or lack of ROO</td>
<td>○</td>
<td>●</td>
<td>N/A</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third-party MFN or extension benefits</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>N/A</td>
<td>N/A</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm commitments (not best-endeavour)</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enforceable via dispute settlement</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-operation on implementation</td>
<td>--</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>--</td>
<td>○</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significant trade creation effect</td>
<td>●</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>●</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Favourable political economy</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>●</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>●</td>
<td>--</td>
<td>--</td>
<td>○</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ● High, ○ good and ◼ limited potential for multilateralization. “NA” denotes not applicable, and “–” not assessed in OECD studies.

Source: OECD 2014a.
3. The search for “building blocks” for global agricultural trade reform

Based on the above framework, this section reviews certain WTO-plus areas established in regional cooperation on agriculture that could potentially be relatively more multilateralizable, at least in technical terms. Despite the political sensitivity of the agricultural sector, a number of RTAs have made important strides in liberalizing measures beyond the levels of the WTO Agreement on Agriculture (AoA). Figure 2 shows the share of RTAs containing WTO-plus (deeper commitments than those existing in the WTO) and WTO-beyond (qualitatively new commitments that do not exist in the WTO) in areas relevant to agriculture. When it comes to market access, the vast majority of RTAs have liberalized tariffs beyond the undertakings of the AoA. About a third of RTAs incorporate obligations that go beyond those included in the AoA; these are mostly related to provisions for technical assistance and are largely couched as best-endavour provisions. A considerable number of RTAs have also crafted a WTO-plus framework for SPS measures and for technical barriers to trade (TBTs), although in some cases these do not constitute enforceable obligations. Finally, over half of RTAs strengthen disciplines for export restrictions and subsidies, although these provisions are not exclusively geared towards agricultural products.

Figure 2: The share of the deepening commitments of RTAs

Tariff-cutting exercises have been the centre-piece of WTO-plus efforts in agriculture, achieving significant progress in eliminating agricultural tariffs beyond existing multilateral concessions. Moreover, it has also been in the WTO-plus areas that developing countries have taken the initiative to make the most arduous efforts: in effect, South–South RTAs have been moving faster and further on tariff cuts than North–South RTAs (Figure 3). While resulting preference margins in agriculture can create disincentives to multilateralize, some evidence also suggests that, as countries adopt RTAs, they may tend to reduce product-specific MFN tariffs (Estevaderodal et al. 2008).

A common concern about preferential tariff liberalization relates to trade diversion effects, particularly in agriculture where the margins are higher than for general goods. The theoretical and empirical literature on RTAs tends to suggest that trade creation is the rule and trade diversion the exception (Ornealas and Freund 2010). A recent OECD study covering 78 RTAs found that intraregional exports
increased on average by 18% for products benefiting from the typical preferential margin between 5 and 10% and by 48% for products where the margin exceeded 10% (OECD 2012b). However, trade-diverting effects for particular agricultural products and countries should not be discounted. The magnitude of these effects in each RTA will depend on multiple factors, including the initial level of the tariff peak, the size of the preference margin, the volume of exports, and the extent of competition between excluded and RTA countries in a given agricultural product market. Of course, this assumes a relatively high utilization of preferential tariffs, which is often not the case.

Figure 3: The share of duty-free tariff lines on agricultural products in RTAs

Another area that has yielded perhaps the most widespread WTO-plus measures creating binding obligations relates to export measures. In due course, this may be an area where multilateral efforts can be taken up. Many RTAs have developed WTO-beyond commitments on export taxes, which are not comprehensively disciplined under the existing rules of the WTO. These instruments are often applied to raw materials and other agricultural products (notably basic grains, oil seeds, etc.). It is perhaps worth noting that the regional approach to discipline flexibilities has been to impose a set of conditions on the use of exceptions, so that when export measures are implemented they do not adversely affect other Members or alter world prices. Finally, a large number of RTAs contain provisions prohibiting the use of agricultural export subsidies in regional trade. Although information on how different countries apply export measures is not systematically available, disciplines on export restrictions or subsidies can arguably be difficult to strictly apply on a preferential basis. Contrary to imports, where there are well-defined and monitored rules of origin, equivalent measures to monitor the final destination of exports are relatively less developed; in practice, these regional commitments can de facto be rendered MFN through market arbitrage. Hence, such preferential treatment may not, in purely technical terms, create strong economic disincentives to multilateralization at some future point in time.

In the case of standards, in particular SPS and TBTs measures, most WTO-plus measures relate to improvements in transparency. RTAs can be credited for introducing new obligations that strengthen the ex-ante and ex-post transparency requirements related to the design and application of standards and establishing improved web-based information systems and consultation processes that include interested foreign parties. Recent evidence shows that better information on standards, both ex-ante
and *ex-post*, attenuates the trade-distorting effects of nontariff measures. In effect, it can even have equivalent or higher trade creation gains than some tariff liberalization in agriculture (OECD 2013). Moreover, agricultural trade flows are shown to have a higher degree of sensitivity to transparency than non-agricultural goods (Lejarraga et al. 2013). This can be explained by the fact that delays or rejections due to the failure to provide timely, accurate and clear information on agricultural perishable goods entail particularly high costs for exporters as well as risks for human and animal health. Since transparency displays the characteristics of public goods – non-excludable and non-exhaustible – it would appear likely that, at least in purely technical terms, the multilateral extension of these commitments would come at no additional economic cost for countries that have already implemented them unilaterally or regionally.

**Conclusion**

This article has briefly discussed certain elements that may, in due course, contribute to a more systematic consideration of how regional and multilateral market opening might more actively cross-fertilize and improve the overall functioning of the world trading system. In the case of agriculture, it has identified several areas where, from a technical and purely analytical perspective, there would appear to be fewer impediments to “multilateralizing regionalism”. Of course, the real issue is not technical in nature; whether, when, and how to multilateralize WTO-plus and WTO-beyond provisions in RTAs is primarily a political question for governments to address.
References


———. 2012b. The Impact of Regional Trade Agreements on Trade in Agriculture.

———. 2012c. The Impact of Regional Trade Agreements on Chilean Fruit Trade.


PART TWO:

THE 2008 DRAFT MODALITIES AND EVOLVING TRENDS IN AGRICULTURAL TRADE POLICIES
MARKET ACCESS
Implications of the Draft Market Access Modalities on Bound and Applied Tariffs

By David Laborde

“We commit ourselves to comprehensive negotiations aimed at: substantial improvements in market access; reductions of, with a view to phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support. We agree that special and differential treatment for developing countries shall be an integral part of all elements of the negotiations ....”


Introduction

The Doha Declaration adopted in 2001 has clearly stated an ambitious programme for addressing the major distortions of world trade and, in particular, agricultural markets. Nevertheless, the same level of ambition has made the negotiations more difficult than initially accepted. The need to find a deal that is politically acceptable for domestic stakeholders has softened the disciplines by introducing flexibilities that have eroded the potential gains and therefore, the appetite to conclude the Round quickly. However, the world may need a successful Doha Round more than it did 14 years ago, and the conditions to find an agreement on the agricultural issues are more favourable than ever. Indeed, after two decades of falling agricultural prices, the trend has reversed, and high prices have reduced the need for generous farm support programmes and strong border protection. At the same time, the 2007–08 price surges have shown that the world will need efficient, well-integrated agricultural markets to feed seven billion people and more in the future.

In the short run, agriculture being the most distorted sector at a global level but also the main source of employment and income for the poor of the planet, concluding the Doha Development Agenda (DDA) will deliver important gains for both developed and developing countries. The role of agriculture in multilateral negotiations has been raised since the beginning of the Round by many authors and is illustrated by Table 1. Overall, 50 per cent of the global gains from the market access and domestic support reforms of the DDA will come from the agricultural sector. Within the agricultural reform process, 89 per cent of the gains will come from the exchange of market-access concessions through reductions in tariffs. Therefore, a systematic and detailed analysis of the tariff reduction modalities of the Round is critical to properly assess the gains from this reform.

Since the stalemate in Cancun, the negotiations have progressed and the Draft modalities of December 2008 represent an impressive effort to cover all the aspects of the negotiations while addressing the particularities and sensibilities of most countries. However, this delicate exercise has led to complex modalities where the desire of an ambitious round has been undermined by the political sensitivity of both developed and developing countries (Jean, Laborde and Martin 2011). The quantification of the Doha talks has been addressed in many works (see Laborde and Martin...
2011 for an exhaustive discussion), but recent evolutions in the global markets deserve an updated analysis. Indeed, global and regional agricultural markets have changed significantly in the last 15 years. Agricultural prices went up, changing the macroeconomics of agricultural trade, affecting the mercantilist interests of market-access concessions, and eroding the role of existing protectionist measures. In addition, the role of emerging economies have changed the landscape in terms of key exporters and importers, and new demands for biomass have emerged (demand for vegetable oils, sugar crops and cereals for biofuels, demand for feedstuff for booming fish farming activities, etc.).

Table 1: The global consequences of the Doha Round, percentage of variation of the global real income compared to the baseline, %

<table>
<thead>
<tr>
<th></th>
<th>Non-agriculture modalities</th>
<th>Agriculture-domestic support</th>
<th>Agriculture market access (AMA) developed</th>
<th>Agriculture market access developing</th>
<th>Total AMA</th>
<th>AMA+ NAMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Real Income</td>
<td>0.08</td>
<td>0.010</td>
<td>0.067</td>
<td>0.002</td>
<td>0.078</td>
<td>0.158</td>
</tr>
<tr>
<td>as a share of AMA and NAMA gains</td>
<td>50.6%</td>
<td>5.7%</td>
<td>42.4%</td>
<td>1.3%</td>
<td>49.4%</td>
<td>100%</td>
</tr>
<tr>
<td>as a share of AMA gains</td>
<td>11.5%</td>
<td>85.9%</td>
<td>2.6%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MIRAGE CGE model simulations using the AMA and NAMA modalities, Author’s computations

Table 2: Global agricultural trade: evolution in the last ten years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SHARE IN GLOBAL EXPORTS</td>
<td>Share in Global Exports</td>
<td>Share in Global Imports</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>6.9%</td>
<td>9.0%</td>
</tr>
<tr>
<td>CHINA</td>
<td>4.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>EU28</td>
<td>16.3%</td>
<td>15.1%</td>
</tr>
<tr>
<td>INDIA</td>
<td>1.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>JAPAN</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>UNITED STATES</td>
<td>18.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td>49.0%</td>
<td>47.5%</td>
</tr>
</tbody>
</table>

Source: Author’s computations, based on COMTRADE (UN)
Such changes are illustrated in Table 2. Global agricultural trade, excluding intra-EU flows, has nearly tripled and reached USD 1 trillion. Trade remains relatively concentrated since six key players – the European Union (EU28), the USA, Japan, India, China and Brazil – represent half of global trade (both in terms of exports and imports). However, their cumulative shares have eroded in terms of exports from 49% to 47.5% and even more in terms of global imports (from 58% to 49.9%), due to booming import markets in Africa. Within these six regions, the growth of emerging economies has led to reallocation in terms of supply and demand with the surging of China’s needs for imported agricultural products (11.1% of global imports), the reinforcement of Brazil as a key exporter (close to 10% of global agricultural exports), and the increasing participation of India that has managed to reinforce its net agricultural trade surplus (around USD 9 billion) while doubling its share in global imports over the period. This evolution leads to two important conclusions: the value of market-access concessions have increased with the size of agricultural markets fuelling the appetite for concluding the Round, and the special and differentiated treatment (SDT) offered to developing countries, including the large emerging countries, designed ten years ago appears to be more generous today in the new global configuration.

This paper will start by outlining the nature of the tariff-cutting rules and the exceptions under consideration in the Round in section 2. We will then summarize the global consequences of these modalities on bound and applied tariffs, devoting more attention to the six key players identified above using updated tariff and trade information for the period 2011–13 (Section 3). The last section will conclude this topic.

1. Agricultural market-access modalities

The modalities on AMA (WTO 2008a,b) reflect both the need to tackle the complexity of agricultural border policies and the enormous amount of negotiating effort that has been made since the launch of this negotiating round in 2001 to identify the interests and sensitivities of the over 150 WTO members. The draft texts build on the negotiating framework of 2004 (WTO 2004) but are much more specific and detailed. While some key parameters remain undecided, the potential range of choices is much narrower than it was in the framework or in earlier draft versions of the modalities. Despite, or perhaps because of, their detailed nature, it remains very difficult to assess the implications of these modalities for developing countries. While the negotiations involve line-by-line tariff-cutting formulas, there is an enormous range of exceptions and flexibilities. While countries can work out the implications of these flexibilities upon what they need to do themselves, working out the ‘gain’ side of the deal, in terms of their market access, is much more difficult. This information asymmetry has, we fear, contributed to a situation where members have focused on minimizing the ‘pain’ associated with their own liberalization, rather than paying equal attention to both the ‘pain’ and the ‘gain’ sides of the ledger.

A central feature of the proposed agreement is a tiered formula for cutting agricultural tariffs, which provides for larger proportional cuts on higher tariff rates. An approach of this type, with larger cuts in the higher tariffs – which typically generate the largest economic costs – is economically desirable but may result in considerable political resistance and pressure for exceptions (Jean et al. 2011). Key features of the tiered formula, such as the depth of cut in each band, that were undetermined in the WTO’s 2004 framework (WTO 2004) and have been considered by Jean et al. (2006) and Anderson and Martin (2006) have now been resolved. The draft modalities propose four bands in each case, with
the boundaries for developed and developing countries, together with the proportional cuts to be made in bound agricultural tariffs in each band.

Unlike the Swiss formula used for non-agricultural market-access negotiations, this formula does not provide a smooth mapping from initial to final tariffs. The larger cuts applying to tariffs in the higher bands mean that tariffs just above the boundaries between the bands end up somewhat lower than some tariffs in the lower bands. This results in the saw-tooth relationship between tariffs before and after the implementation of the cuts depicted in Figure 1.

![Figure 1: Tariff reduction formulas](image)

Overall, the tariff-cutting formula is very aggressive, particularly when it comes to the approach used in the Uruguay Round negotiations, where industrial countries were expected to cut their agricultural tariffs by an average of 36%, and developing countries by an average of 24%. The difference is even greater than it might appear because the average-cut procedure encouraged members to make larger cuts in their smaller tariffs, and hence to make the resulting average-cut measures larger than the more economically meaningful cuts in the average.

Processed products subject to tariffs higher than their raw or intermediate product counterparts are moved into the next highest band. If they are in the highest band, the cut imposed is six percentage points higher than the formula cut for the highest band. If the gap between the processed and unprocessed product is less than five percentage points, then the tariff-escalation procedure is not used, reducing the risk that the tariff-cutting process will bring the tariff on the processed product below the tariff on intermediates the cuts depicted in figure 1.
A list of "tropical" and diversification products will be subjected to deeper-than-formula cuts to provide greater opportunities to the many developing countries that export these products. Several groups of developing-country members are allowed smaller tariff reductions. Least developed countries are not required to make any reductions. Small and vulnerable economies can make reductions 10% smaller in each band than other developing members, or may make an average cut of 24%. Recently acceded members are permitted to: make cuts reduced by eight percentage points, make zero cuts in tariffs below 10%, delay their reduction commitments until one year after completion of their accession commitments, and have one-tenth more special products with cuts two percentage points lower. A group of very recently acceded members (VRAMs) and transition economies is not required to make any cuts. All countries are permitted to make smaller cuts on "sensitive" products. In industrial countries, 4% of tariff lines can be classified as sensitive. Developing countries have the right to one-third more sensitive products than developed countries. Developing countries would also be able to self-designate a set of special products intended to promote food security, livelihood security and rural development. Up to 12% of agricultural tariff lines can be designated in this category, of which up to 5% would be subject to no cuts, with an average cut in tariffs of 11%. Recently acceded members are entitled to declare 13% of tariff lines as special products with an average cut of 10%. Special products are self-designated and guided by a set of indicators. These indicators cover a range of issues such as their importance as a staple food, the proportion of demand met from domestic production, their importance in employment, the share of output processed, and the productivity levels. It seems likely that these indicators will allow countries considerable freedom to self-designate products.

An average-cut principle is to be used as an auxiliary constraint on the tariff-cutting rule. If the application of the formula to bound tariffs in an industrial country results in less than a 54% average cut in tariffs, after allowing for sensitive products, then the cuts in each band are to be increased until this target is reached. In developing countries, the average cut appears as a maximum constraint. If the formula and the choice of sensitive products result in an average cut of more than 36%, then the Member may make proportionate reductions across the tariff bands. As described above, the draft modalities are quite rich, and we have summarized our interpretation and the parameters used to implement them in Table 3.
Agricultural protection is the result of a combination of different tariff or para-tariff measures that can be particularly efficient for restraining trade. Among themselves, we can quote: ad valorem tariffs (percentage of the value of the imports), specific tariffs (duty by physical unit of imports), compound and mixed tariffs (a linear or non-linear combination of ad valorem or specific tariffs), tariff rate quotas (a system of two tariffs based on imported quantities), and entry prices (imports entering below the entry price will trigger additional duties). To be able to compare the level of protection across sectors and countries, we computed an aggregated measure of tariff protection: the Ad Valorem Equivalent (AVE) at the HS6 level. In addition, we will present aggregated figures using a trade-weighted average. As shown by Anderson and Neary (2007), this approach underestimates the economic gains of trade liberalization but remains a widely used and transparent method (see Laborde, Martin and van der Mensbrugge 2013 for an updated discussion on this topic), and it provides an initial indication and a widely understood general indication of the direct effects.
In the following paragraphs, we will study and compare the baseline tariffs (tariffs that would apply in the absence of a DDA agreement in 2025, assuming there is no change in trade policies compared to the 2012 situation), the post DDA formula without flexibilities tariffs, and the tariffs after the tariff-cutting formulas with flexibilities for agricultural products (sensitive and special).

### 3.1 A global picture

Let’s start by summarizing the results from Laborde and Martin (2011) in Figure 2, which provide a complete snapshot of the DDA agricultural market access for all WTO members.

**Figure 2: Consequences of the DDA modalities on WTO agricultural tariffs**

Because the formula cuts and exceptions apply to members’ tariffs as bound at the WTO, it is useful to first consider the direct impacts of these formulas on the bound rates. This is a necessary precursor for determining their impact on applied rates. A striking feature of the current agricultural trade regime is that the global average bound tariff, at 40.3%, is almost three times as high as the average applied tariff rate. In industrial countries, the average bound rate, at 31%, is almost exactly twice the applied rate. In developing countries, the average applied rate of 13.3% is lower than in industrial countries, but the average bound rate of 53% is substantially higher and four times the applied rate.

One clear finding from the Figure is that the agricultural tariff-cutting formulas being applied in this study would bring about very substantial reductions in bound tariffs. On average, agricultural bound tariffs would almost halve under the effects of the formula, falling from 40.3% to 20.7%. The cut in average tariffs in the industrial countries would be even larger, at 61%. Even in developing (low- and middle-income) countries, the cut would be a very substantial 38%. The exceptions for countries and products substantially reduce the average extent of tariff reduction, but still leave a worthwhile overall reduction of 26% in world average bound tariffs. In industrial countries, the reduction in agricultural bound rates is still over 40%, from 30.9% to 18.4%. In developing countries, the cuts in agricultural bound tariffs are typically smaller as a percentage of the original tariff than in industrial...
countries. This reflects two key design features of SDT: that the cuts in each band are smaller and that the bands are wider for developing countries, to ensure that the resulting tariff cuts are smaller than for industrial countries, even though developing-country tariffs are higher. The provisions for sensitive and special products frequently allow bound tariffs to end up substantially above the outcome of the formula. The “round for free” provisions ensure that there are no reductions in bound tariffs in LDCs.

We can see that the formulas applied without exceptions would result in a decline from 14.6% to 9% in average applied agricultural tariffs worldwide. In the WTO’s developed countries, the result is a cut of over 50% in applied rates, from 15.4% to 7.0%. In the WTO’s developing countries other than the LDCs, the reduction is from 13.7% to 11.2%, a smaller cut than in industrial countries, partly because of key features of the formula – the smaller cuts and higher tier boundaries laid out and the greater binding overhang in many developing countries.

The flexibilities for commodities (sensitive and special products) included in the modalities more than halve the worldwide cut in tariffs, from 5.4% with country flexibilities to 2.7% with country and commodity flexibilities. Interestingly, it is in industrial countries that the cut in applied tariffs is reduced the most, with the tariff after flexibilities declining from 7.4 percentage points to 5 percentage points. In low- and middle-income non-LDC countries, these flexibilities reduce the cut from 1.6 to 0.1 percentage points: a larger proportional reduction in the cut than for high-income countries, but a smaller one in percentage-point terms.

### 3.2 Looking at the six key players

In this section, we focus on the six regions identified in the introduction, three developed and three emerging economies: the EU, the USA and Japan on one hand, and Brazil, China and India on the other hand. This analysis updates the work done in Laborde and Martin (2011) and Laborde et al. (2008) for the EU, US and India. 2012 tariff information is used (TRAIMS as primary source) and 2010–12 trade data is used for the tariff rate quota filling rate and unit value computations when assessing the protectionist effect of specific tariffs.

Figure 3 illustrates the magnitude of the changes in unit values that have occurred in the last ten years. The median increase over all HS6 agricultural products reaches 64%, leading to a strong decrease for the AVE of most specific tariffs. This effect will come on top of discretionary tariff reduction implemented by countries to mitigate the domestic impact of world prices increase. However, a part of this mechanism will be mitigated by for regions that have known real appreciation vis-à-vis of the USD over the period (since specific tariffs are expressed in the domestic currency) and by the use of mixed tariffs that allow for choosing either the specific or the ad valorem component of a tariff to ensure minimal protection.
Starting with the impact on bound tariffs shown in Figure 4, in which the AVE is computed using the reference unit values of 2001, we can see that, for developed countries, the cut in the average tariff will be similar and quite strong for Japan (baseline tariff of 51.4%) and the EU (baseline tariff of 19.7%), reaching 68%, while being slightly lower for the US (61%) as it starts from much smaller initial tariffs (7.6%). The flexibilities allowed in the modalities, e.g. sensitive products, strongly mitigate this effort (1/3 in average), but the final impact still leads to a cut by half of the average bound tariffs. For the three emerging economies, the picture is more contrasted since India starts with very high bound tariffs (180%), that will be cut by one-39% if no flexibilities were allowed. The effort is halved when the full set of flexibilities are implemented (special products and sensitive products). Brazil has a similar rate of reduction while starting from much smaller initial tariffs (40%). For China, the efforts of bound rates appear to be less important (only 10% reduction after flexibilities), since the country benefits from the weakened formula for recently acceded members.

It is important to emphasize that, for the six countries considered, after implementation of the formula, and even allowing for flexibilities, we obtained a cut in the average of 36% that is practically much stronger and ambitious than the Uruguay Round Agreement on Agriculture (URAA) average.

---

1 The informed reader will notice that the modalities indicate a maximal average cut of 36% for developing countries in the modalities. This element has been properly taken into account and is not inconsistent with the 39% cut in the average trade weighted tariff discussed here. Indeed, the 36% criterion is applied to the simple average of the tariff line reduction rate.
cut of 36%. Indeed, a cut in the average is an ex post measure on the average level of tariffs while the
URAA criteria was applied on the simple average of reduction rate, leading to many manipulations
aimed at reducing the effectiveness of the cuts.

Figure 4: Consequences on average bound rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Baseline</th>
<th>Formulas without exceptions</th>
<th>Formulas with exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>39.8%</td>
<td>25.0%</td>
<td>32.8%</td>
</tr>
<tr>
<td>China</td>
<td>15.5%</td>
<td>11.8%</td>
<td>14.1%</td>
</tr>
<tr>
<td>India</td>
<td>180.7%</td>
<td>109.5%</td>
<td>144.8%</td>
</tr>
<tr>
<td>Japan</td>
<td>51.4%</td>
<td>16.3%</td>
<td>27.1%</td>
</tr>
<tr>
<td>USA</td>
<td>7.6%</td>
<td>3.0%</td>
<td>4.4%</td>
</tr>
<tr>
<td>EU28</td>
<td>19.7%</td>
<td>6.3%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Selected</td>
<td>27.2%</td>
<td>12.4%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

Source: Author’s computations. Trade-weighted average of tariffs. Only intra-WTO trade relations considered.

Figure 5 shows the results on the final average agricultural applied tariff rates, including preferential
regimes not affected by the WTO agreement, applied by these economies. The first striking result
is the role played by the initial high binding overhang for the two long-standing WTO members of
the emerging world: even without the flexibilities, nearly no cuts would take place (only 1% cut in
the average for Brazil, and 5% for India). With flexibilities, no effective tariff reduction would occur
(Brazil’s average tariff staying at 7.4% and India’s tariffs at 49.9% on average). The issue at stake
for them is the degree of freedom they may desire to increase their tariffs in the future, especially
for some sensitive products. For China, with nearly no binding overhang, a legacy from the recent
accession process, some effective cuts will occur, even while using flexibilities. However, these cuts
will remain limited (4%, reducing the average tariff from 7% to 6.7%).

For developed economies, the reduction in the average tariffs will be similar for Japan and the US,
respectively 45 and 43% before flexibilities, and 24 and 21% after flexibilities, while for the EU the
cut is larger before flexibilities (65% from 13.9% to 4.9%) and remains quite high, 51%, even when
sensitive products are used (final average tariff of 6.9%). Indeed, due to a larger number of high
tariffs in the EU, the limits on the number of sensitive tariff lines prevents it from protecting all
its tariff structure, while for the US and the Japan, the very high concentration of tariff peaks on
a limited number of products allows them to implement a better defensive strategy. Finally, the
average applied agricultural tariffs for these economies is cut by 26%, a quite impressive figure
considering that a large share of imports are done under preferential agreements and will not be
impacted by the Doha agreement.

2 For Japan, this is allowed by the provisions in the modalities that allow additional sensitive products since
this country has notified its tariff schedule at the six-digit level.

3 Compare to previous assessments, as in Laborde and Martin (2011), the reader may notice that some baseline
tariffs are significantly different: Brazil’s average tariff is 7.4% here versus 4.8% in the past, the EU28’s is
13.9% versus 15.9%, India’s is 49.9% vs. 59.2%, etc. This is the result of different drivers (e.g. the shifting
Another interesting metric for assessing the efforts made by the different countries and the market-access gains for both consumers and exporters is to measure the amount – expressed here in dollars – of tariff revenue forfeit by the agreement, i.e. the variation of tariffs multiplied by current trade flows. In reality, the ex post effects will be different since import volumes will also react to the change in tariffs. However, it helps value the agreement without using a model. Figure 6 shows that the formulas will cut the amount of duties collected by these six economies by nearly 25 billion of dollars annually, a considerable amount. Even after implementing the flexibilities, the reduction is still worth 15 billion with the bulk of the efforts made by the EU (two-third) and Japan. Among emerging countries, only China will make some effective concessions (about USD 300 million).
Before concluding, it is useful to look at which products and commodities will generate the largest opportunities. Figure 7 displays the consolidated reduction in tariff revenue by HS2 chapters for the six economies. Results are shown before and after the use of flexibilities, indicating which sectors will be shielded from the formula effects or not. Indeed, the use of discretionary flexibility measures will have heterogeneous effects across sectors. For instance, the sugar sector (HS2:17) still highly protected in most of the six countries discussed here (average tariff of 31%) and will have been strongly liberalized by the formulas, reducing duties by 1.5bn. However, because this sector is politically sensitive and has a limited number of products, it will be heavily protected using available flexibilities (90% of the liberalization is washed away and duties are expected to be reduced by only 150 million). Cocoa products (18) will have a similar fate. At the opposite, chapter 20 – preparation of fruits and vegetables – is an important market (12 billion for imports) with an average protection of 10% and the formulas, including the tariff-escalation provision that affects this specific sector, will reduce duties by USD 700 million while no flexibilities will be used to protect it. Overall, we can see that the bulk of the market liberalization will be concentrated on the meat (04), fruit (08), cereal (10) and beverage sectors.

Figure 7: Consequences on collected duties by HS chapter. USD mio.

Note: Only chapters where tariff revenue reductions exceed USD 100 million are displayed.

List of chapters: 2- Meat And Edible Meat Offal; 4- Dairy Produce, Birds’ Eggs, Natural Honey, Edible Products Of Animal Origin, Not Elsewhere Specified Or Included; 7- Edible Vegetables And Certain Roots And Tubers; 8- Edible Fruit And Nuts, Peel Of Citrus Fruit Or Melons; 9- Coffee, Tea, Maté And Spices; 10- Cereals; 11- Malt, Starches, Inulin, Wheat Gluten; 12- Oil Seeds And Oleaginous Fruits, Miscellaneous Grains, Seeds And Fruit, Industrial Or Medicinal Plants, Straw And Fodder; 15- Animal Or Vegetable Fats And Oils And Their Cleavage Products, Prepared Edible Fats, Animal Or Vegetable Waxes; 16- Preparations Of Meat, Of Fish Or Of Crustaceans, Molluscs Or Other Aquatic Invertebrates; 17- Sugars And Sugar Confectionery; 18- Cocoa And Cocoa Preparations; 19- Preparations Of Cereals, Flour, Starch Or Milk, Pastrycooks’ Products; 20- Preparations Of Vegetables, Fruit, Nuts Or Other Parts Of Plants; 21- Miscellaneous Edible Preparations; 22- Beverages, Spirits And Vinegar; 23- Residues And Waste From The Food Industries, Prepared Animal Fodder; 24- Tobacco And Manufactured Tobacco Substitutes; 51- Wool, Fine Or Coarse Animal Hair, Horsehair Yarn And Woven Fabric.

Source: Author’s computations. Only intra-WTO trade relations considered.
Conclusion

The Doha proposals involve tariff formulas that cut high tariffs much more sharply than lower tariffs. From an economic point of view, this is highly desirable, and this approach to international negotiations has potential to yield Pareto improvements. However, it is far from being clear whether this approach is politically achievable. As observed by one of the key negotiators (Falconer 2008), as soon as it was adopted, the pressure for flexibilities and exceptions became intense.

Another key feature of the tariff-cutting formulas used in the negotiations is a wide range of exceptions. Many of these are extremely poorly designed as they allow countries excessive flexibility to impose very small tariffs on products that are collectively important to exporters. In the agricultural agreement in particular, these flexibilities are constrained only by the number of products that can be included – a criterion that provides insufficient discipline since only a very small share of tariff lines account for most of the imports and trade restrictiveness (Jean et al. 2011).

Finding the balance between the political constraints and the initial ambition of the Round, and fulfilling its development promises, remains difficult. As discussed in Laborde and Martin (2014), a detailed examination of the formulas proposed under the Doha agenda shows that the political costs of an agreement to increase market access could have been reduced substantially by using a proportional-cut approach rather than progressive tariff-cutting formulas. Returning to a proportional-cut approach with the same level of market-access concessions would generally raise the welfare gains per unit of political costs incurred. However, this approach is likely to be difficult because the exceptions and flexibilities tend to lower the political costs associated with the level of market access provided, trapping the system in a second-best outcome from a welfare point of view.

However, if we can still hope to fix the market-access modalities to tackle these limits, we should keep in mind that, for the six leading economies considered here, the 2008 draft modalities – with all their limitations – will still lead to: a 36% reduction in average agricultural bound tariffs, a 26% reduction in average applied level of protection, and USD 15 billion of border taxes removed, more than any other WTO, or non WTO, agreement discussed until now.
References


## Appendix I: Sectoral results

<table>
<thead>
<tr>
<th>HS2 Chapter</th>
<th>Baseline</th>
<th>Formulas without exceptions</th>
<th>Formulas with exceptions</th>
<th>Cut in the average without exceptions</th>
<th>Cut in the average with exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>1.0%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>-26%</td>
<td>-26%</td>
</tr>
<tr>
<td>02</td>
<td>53.6%</td>
<td>14.5%</td>
<td>22.1%</td>
<td>-73%</td>
<td>-59%</td>
</tr>
<tr>
<td>04</td>
<td>18.7%</td>
<td>12.3%</td>
<td>14.8%</td>
<td>-34%</td>
<td>-21%</td>
</tr>
<tr>
<td>05</td>
<td>2.9%</td>
<td>2.5%</td>
<td>2.9%</td>
<td>-16%</td>
<td>-2%</td>
</tr>
<tr>
<td>06</td>
<td>1.2%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>-65%</td>
<td>-57%</td>
</tr>
<tr>
<td>07</td>
<td>8.2%</td>
<td>5.5%</td>
<td>6.8%</td>
<td>-33%</td>
<td>-18%</td>
</tr>
<tr>
<td>08</td>
<td>10.1%</td>
<td>5.0%</td>
<td>7.6%</td>
<td>-51%</td>
<td>-24%</td>
</tr>
<tr>
<td>09</td>
<td>1.5%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>-47%</td>
<td>-37%</td>
</tr>
<tr>
<td>10</td>
<td>29.0%</td>
<td>18.1%</td>
<td>25.0%</td>
<td>-37%</td>
<td>-14%</td>
</tr>
<tr>
<td>11</td>
<td>12.2%</td>
<td>9.1%</td>
<td>10.8%</td>
<td>-25%</td>
<td>-11%</td>
</tr>
<tr>
<td>12</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>-4%</td>
<td>-3%</td>
</tr>
<tr>
<td>13</td>
<td>2.2%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>-26%</td>
<td>-23%</td>
</tr>
<tr>
<td>14</td>
<td>2.6%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>-5%</td>
<td>-5%</td>
</tr>
<tr>
<td>15</td>
<td>16.4%</td>
<td>15.4%</td>
<td>15.5%</td>
<td>-6%</td>
<td>-5%</td>
</tr>
<tr>
<td>16</td>
<td>18.9%</td>
<td>9.7%</td>
<td>12.8%</td>
<td>-49%</td>
<td>-32%</td>
</tr>
<tr>
<td>17</td>
<td>31.6%</td>
<td>19.7%</td>
<td>30.4%</td>
<td>-38%</td>
<td>-4%</td>
</tr>
<tr>
<td>18</td>
<td>4.3%</td>
<td>2.2%</td>
<td>3.5%</td>
<td>-48%</td>
<td>-19%</td>
</tr>
<tr>
<td>19</td>
<td>10.1%</td>
<td>7.1%</td>
<td>8.4%</td>
<td>-29%</td>
<td>-17%</td>
</tr>
<tr>
<td>20</td>
<td>9.9%</td>
<td>6.1%</td>
<td>6.3%</td>
<td>-38%</td>
<td>-36%</td>
</tr>
<tr>
<td>21</td>
<td>10.1%</td>
<td>7.3%</td>
<td>8.9%</td>
<td>-27%</td>
<td>-12%</td>
</tr>
<tr>
<td>22</td>
<td>6.9%</td>
<td>5.1%</td>
<td>6.0%</td>
<td>-26%</td>
<td>-14%</td>
</tr>
<tr>
<td>23</td>
<td>4.1%</td>
<td>2.9%</td>
<td>3.9%</td>
<td>-30%</td>
<td>-5%</td>
</tr>
<tr>
<td>24</td>
<td>11.8%</td>
<td>8.4%</td>
<td>9.7%</td>
<td>-29%</td>
<td>-18%</td>
</tr>
<tr>
<td>29</td>
<td>7.0%</td>
<td>5.2%</td>
<td>5.8%</td>
<td>-25%</td>
<td>-17%</td>
</tr>
<tr>
<td>33</td>
<td>2.8%</td>
<td>2.2%</td>
<td>2.3%</td>
<td>-22%</td>
<td>-16%</td>
</tr>
<tr>
<td>35</td>
<td>5.9%</td>
<td>4.0%</td>
<td>4.2%</td>
<td>-32%</td>
<td>-29%</td>
</tr>
<tr>
<td>38</td>
<td>5.8%</td>
<td>4.6%</td>
<td>5.3%</td>
<td>-21%</td>
<td>-8%</td>
</tr>
<tr>
<td>41</td>
<td>5.7%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>-1%</td>
<td>0%</td>
</tr>
<tr>
<td>43</td>
<td>12.8%</td>
<td>9.5%</td>
<td>12.5%</td>
<td>-25%</td>
<td>-2%</td>
</tr>
<tr>
<td>50</td>
<td>25.3%</td>
<td>24.3%</td>
<td>25.2%</td>
<td>-4%</td>
<td>0%</td>
</tr>
<tr>
<td>51</td>
<td>25.4%</td>
<td>18.0%</td>
<td>25.4%</td>
<td>-29%</td>
<td>0%</td>
</tr>
<tr>
<td>52</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>-7%</td>
<td>-7%</td>
</tr>
<tr>
<td>53</td>
<td>5.6%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: 1- Live Animals; 2- Meat And Edible Meat Offal; 4- Dairy Produce, Birds’ Eggs, Natural Honey, Edible Products Of Animal Origin, Not Elsewhere Specified Or Included; 6- Live Trees And Other Plants, Bulbs, Roots And The Like, Cut Flowers And Ornamental Foliage; 7- Edible Vegetables And Certain Roots And Tubers; 8- Edible Fruit And Nuts, Peel Of Citrus Fruit Or Melons; 9- Coffee, Tea, Maté And Spices; 10- Cereals; 11- Products Of The Milling Industry; Malt; Starches, Inulin, Wheat Gluten; 12- Oil Seeds And Oleaginous Fruits, Miscellaneous Grains, Seeds And Fruit, Industrial Or Medicinal Plants, Straw And Fodder; 13- Lac, Gums, Resins And Other Vegetable Saps And Extracts; 14- Vegetable Plaiting Materials, Vegetable Products Not Elsewhere Specified Or Included; 15- Animal Or Vegetable Fats And Oils And Their Cleavage Products, Prepared Edible Fats, Animal Or Vegetable Waxes; 16- Preparations Of Meat, Of Fish Or Of Crustaceans, Molluscs Or Other Aquatic Invertebrates; 17- Sugars And Sugar Confectionery; 18- Cocoa And Cocoa Preparations; 19- Preparations Of Cereals, Flour, Starch Or Milk, Pastrycooks’ Products; 20- Preparations Of Vegetables, Fruit, Nuts Or Other Parts Of Plants; 21- Miscellaneous Edible Preparations; 22- Beverages, Spirits And Vinegar; 23- Residues And Waste From The Food Industries, Prepared Animal Fodder; 24- Tobacco And Manufactured Tobacco Substitutes; 33- Essential Oils; 35- Albimimidual substances, Modified Starches, Enzymes; 41- Raw Hides And Skins (Other Than Furskins) And Leather; 43- Furskins And Artificial Fur, Manufactures Thereof; 50- Silk; 51- Wool, Fine Or Coarse Animal Hair, Horsehair Yarn And Woven Fabric; 52- Cotton, 53- Other Vegetable Textile Fibres, Paper Yarn And Woven Fabrics Of Paper Yarn.

Source: Author’s computations. Trade-weighted average of tariffs. Only intra-WTO trade relations considered.
Import Surges and the Special Safeguard Mechanism in a Changing Global Market Context

By Jamie Morrison and George Mermigkas

Introduction

Greater openness to trade can expose agricultural sectors in developing countries to market instability, which can, in turn, depress incentives for investment in domestic market development by private sector actors with limited recourse to risk management instruments. Recognizing this, the Hong Kong Ministerial Declaration (WTO 2005) called for the establishment of a new Special Safeguard Mechanism (SSM) to be used by developing countries. Negotiations on the modalities for the SSM have been particularly difficult, with some countries arguing for the mechanism to be effective and easy to use, while others are concerned that, without significant constraints, the SSM could be used in ways that unnecessarily disrupt trade.

These negotiations took place during a period of historically low agricultural market prices where further price depressions associated with significant increases in import volumes ("import surges") were deemed to be particularly harmful. However, since the release of the draft modalities texts in 2008 (WTO 2008 and 2008a), the global market context has changed significantly. Following an extended period of relatively low and stable global market prices until the early 2000s, prices started to increase. They rose sharply in 2007–08, then fell back somewhat during the next two years before peaking again in 2011. Since 2011, prices have followed a downward trend but remain well above the levels of the 1980s and 1990s (FAO 2014). Less well known, but perhaps more interesting in the context of this chapter, is that, while global food prices have risen significantly since the 1990s, import volumes to an aggregate of 103 food-importing developing countries have also risen rapidly (FAO 2014a and Konandreas in this volume).

The changing global market context therefore creates a very different scenario with respect to expectations regarding the incidence of surges: both prices and aggregate import volumes have been increasing significantly. This raises questions about how the relevance of – and potential recourse to – an SSM may have changed during this period. In addressing such questions, this chapter summarizes the new FAO analysis (FAO 2014a), which revisits and updates the FAO’s previous analyses (FAO 2005) on import surges and the design of the SSM, highlighting elements that could influence future negotiations.

1 The views expressed in this chapter are those of the authors and do not necessarily reflect the views of the Food and Agriculture Organization of the United Nations (FAO).

2 The developing countries included in this aggregate were selected for analysis by the FAO (2005) on the basis of their inclusion in the 2004 listings of NFIDCs and/or LIFDCs and/or LDCs. The analysis was conducted for 15 commodities across each of the countries.
1. Identifying import surges

The term "import surge" has been used to highlight two types of potential shocks to domestic agriculture sectors that may arise from increased openness to trade: (a) significant increases in volumes of imports from one year to the next; and (b) depressions to domestic market prices that may result from increased connectivity to global market prices. As previous FAO work has demonstrated (FAO 2006, 2006a), import surges can be the result of factors internal to the domestic economy, such as domestic production shortfalls due to climatic events – that do not necessarily imply negative impacts – or they can be the result of external, global market factors that can be potentially disruptive to domestic agriculture. The analysis presented in this chapter reflects the incidence of surges but should not be taken as implying that all surges will necessarily have negative impacts, nor that a safeguard remedy should necessarily be applied – or indeed is likely to be – in all identified cases. There is no agreed definition of an import surge or of a methodology for assessing and measuring import surges. The definitions tend to be based inter alia on differing thresholds, with an import surge said to have occurred when the actual imports surpass that threshold (FAO 2005). The selection of the threshold can have a significant effect on the determination of the existence of an import surge.

1.1 Volume surges

A comparison of the moving average of the previous three years' imports plus 30% (MA3+30) and the moving average of the previous three years' imports plus one standard deviation (MA3+1sd) demonstrates the importance of defining an appropriate threshold level.  

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Ten Year Periods</th>
<th>Five Year Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>504</td>
<td>196</td>
<td>189</td>
</tr>
<tr>
<td>Rice</td>
<td>470</td>
<td>186</td>
<td>192</td>
</tr>
<tr>
<td>Wheat</td>
<td>271</td>
<td>108</td>
<td>87</td>
</tr>
<tr>
<td>Bovine meat</td>
<td>663</td>
<td>208</td>
<td>238</td>
</tr>
<tr>
<td>Ovine meat</td>
<td>553</td>
<td>152</td>
<td>201</td>
</tr>
<tr>
<td>Pigmeat</td>
<td>741</td>
<td>217</td>
<td>306</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>732</td>
<td>228</td>
<td>291</td>
</tr>
<tr>
<td>Butter</td>
<td>548</td>
<td>178</td>
<td>182</td>
</tr>
<tr>
<td>Cheese</td>
<td>536</td>
<td>140</td>
<td>210</td>
</tr>
<tr>
<td>SMP</td>
<td>594</td>
<td>130</td>
<td>223</td>
</tr>
<tr>
<td>WMP</td>
<td>487</td>
<td>105</td>
<td>199</td>
</tr>
<tr>
<td>Palm oil</td>
<td>409</td>
<td>190</td>
<td>176</td>
</tr>
<tr>
<td>Rapeseed oil</td>
<td>303</td>
<td>148</td>
<td>128</td>
</tr>
<tr>
<td>Soybean oil</td>
<td>352</td>
<td>177</td>
<td>152</td>
</tr>
<tr>
<td>Sunflower oil</td>
<td>275</td>
<td>76</td>
<td>147</td>
</tr>
<tr>
<td>Total</td>
<td>7438</td>
<td>2438</td>
<td>2921</td>
</tr>
</tbody>
</table>

Note: calculation for 103 countries. Number of identified surges = cases where actual volume exceeds threshold

3 The MA3+30 has been widely used in previous analyses, and there is an apparent preference for this type of threshold in the negotiations to date. The MA3+1sd is considered to be more accurate with regard to the level of variability in imports.
Table 2: Identified surges MA3+1sd

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>568</td>
<td>181</td>
<td>202</td>
<td>185</td>
<td>106</td>
<td>79</td>
</tr>
<tr>
<td>Rice</td>
<td>779</td>
<td>249</td>
<td>287</td>
<td>243</td>
<td>123</td>
<td>120</td>
</tr>
<tr>
<td>Wheat</td>
<td>649</td>
<td>205</td>
<td>218</td>
<td>226</td>
<td>138</td>
<td>88</td>
</tr>
<tr>
<td>Bovine meat</td>
<td>900</td>
<td>266</td>
<td>297</td>
<td>337</td>
<td>187</td>
<td>150</td>
</tr>
<tr>
<td>Ovine meat</td>
<td>618</td>
<td>168</td>
<td>209</td>
<td>241</td>
<td>151</td>
<td>90</td>
</tr>
<tr>
<td>Pigmeat</td>
<td>963</td>
<td>237</td>
<td>355</td>
<td>371</td>
<td>201</td>
<td>170</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>1066</td>
<td>270</td>
<td>371</td>
<td>425</td>
<td>200</td>
<td>225</td>
</tr>
<tr>
<td>Butter</td>
<td>635</td>
<td>191</td>
<td>206</td>
<td>238</td>
<td>136</td>
<td>102</td>
</tr>
<tr>
<td>Cheese</td>
<td>806</td>
<td>191</td>
<td>285</td>
<td>330</td>
<td>172</td>
<td>158</td>
</tr>
<tr>
<td>SMP</td>
<td>586</td>
<td>141</td>
<td>208</td>
<td>237</td>
<td>113</td>
<td>124</td>
</tr>
<tr>
<td>WMP</td>
<td>545</td>
<td>126</td>
<td>210</td>
<td>209</td>
<td>119</td>
<td>90</td>
</tr>
<tr>
<td>Palm oil</td>
<td>525</td>
<td>173</td>
<td>210</td>
<td>142</td>
<td>78</td>
<td>64</td>
</tr>
<tr>
<td>Rapeseed oil</td>
<td>220</td>
<td>121</td>
<td>77</td>
<td>22</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Soybean oil</td>
<td>394</td>
<td>162</td>
<td>174</td>
<td>58</td>
<td>33</td>
<td>25</td>
</tr>
<tr>
<td>Sunflower oil</td>
<td>246</td>
<td>65</td>
<td>121</td>
<td>60</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>9500</td>
<td>2746</td>
<td>3430</td>
<td>3324</td>
<td>1795</td>
<td>1529</td>
</tr>
</tbody>
</table>

Note: calculation for 103 countries. Number of identified surges = cases where actual volume exceeds threshold

On the basis of MA3+30, the highest incidence of surges occurs for meat (bovine, pig and poultry all with incidences of greater than 20% of possible cases), to a slightly lesser extent in dairy products (all greater than 15%), 10% or lower in most oilseeds, and with a mixed pattern in cereals. Across time periods, a higher incidence of import surges was observed in 1994–2003 than in 1984–93 (mainly meat and dairy), while there was a reduction in the remaining groups (mainly cereals and oilseeds).

By contrast, all but two of the commodity groups (butter and SMP) saw a falling incidence, often significant, from the period 1994–2003 to 2004–13. Looking at the last decade (2004–13), it is observed that the incidence of surges in all commodities (except rapeseed, which was already low) fell significantly in 2009–13 when compared to 2004–08, with total surges in 2009–13 at approximately two thirds of the 2004–08 level.

Comparing the two different thresholds, the number of surges identified with MA3+1sd is higher and, while the patterns across commodity groups and periods are similar to those observed with MA3+30, the extent to which the number of surges falls off in the most recent five-year period is much less significant. Some interesting differences include the higher incidence of surges in wheat (21% (MA3+sd) versus 9% (MA3+30) of possible cases), the lower incidence in rapeseed and sunflower oil, and poultry and SMP having a higher incidence in 2009–13 than in 2004–08.

In understanding the differing incidences across the two threshold “definitions”, it is necessary to investigate the relationship between the actual levels of imports and the thresholds by examining specific country/commodity cases. Two examples highlight the differences. Typical of many of the analysed country/commodity cases, imports of palm oil to Pakistan have risen relatively constantly...
since the early 1990s, with very limited variation. As a result, the MA3+30 remains significantly above the actual level of imports and no surges have been “identified”. By contrast, the MA3+1sd reflects the low level of variability, maintaining a course similar to the import curve. However, in “smoothing” the trend, it picks up a number of surges.

Imports of rice to Indonesia have been more volatile with an increasing, albeit variable, upward trend until 2000 followed a declining trend with significant inter-year variability during the 2000s. As a result, the MA3+1sd, reflecting the variability, sits above the MA3+30. However, in this case the MA3+30 only picks up one additional surge because of the year-to-year variation.

**Figure 1: Palm oil imports – Pakistan (000 tons)**

![Figure 1: Palm oil imports – Pakistan (000 tons)](image1)

**Figure 2: Rice imports – Indonesia (000 tons)**

![Figure 2: Rice imports – Indonesia (000 tons)](image2)
The analysis using two different thresholds helps demonstrate that the pattern of imports is a key variable in determining the incidence of surges under different threshold choices. Where imports rise relatively constantly, the MA3+1sd is more sensitive to identifying surges; whereas, for imports that follow a more variable trend, the MA3+30 identifies a greater number of surges.

The level at which the threshold is set also differentially affects the identification of surges across commodities and countries. WTO (2008) and WTO (2008a) refer to thresholds of 110%, 120% and 140%, in addition to the 130% applied in the analysis above.

Table 3 confirms the fall in incidence as the threshold is increased, but also reveals that the distribution of surges across countries becomes more concentrated with this increase, with 16.2% of surges observed in the top 10 countries (by incidence of surge) at the 140% threshold compared to 13.6% falling in the top 10 countries at the 110% threshold.

Table 3: Incidence of surges under different thresholds

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Top 10%</th>
<th>Total surges</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>1,371</td>
<td>10,086</td>
<td>13.6</td>
</tr>
<tr>
<td>120</td>
<td>1,107</td>
<td>7,416</td>
<td>14.9</td>
</tr>
<tr>
<td>130</td>
<td>935</td>
<td>5,884</td>
<td>15.9</td>
</tr>
<tr>
<td>140</td>
<td>791</td>
<td>4,873</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Table 4: Incidence of surges in countries falling into different country groupings

<table>
<thead>
<tr>
<th>Group Region</th>
<th>Top 10%</th>
<th>Total surges</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>G33</td>
<td>76</td>
<td>96</td>
<td>79</td>
</tr>
<tr>
<td>SVEs</td>
<td>56</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>LDCs</td>
<td>77</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>RAMs</td>
<td>74</td>
<td>74</td>
<td>74</td>
</tr>
<tr>
<td>NFIDCs</td>
<td>66</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

Table 4 depicts the average incidence of surges in countries falling into different country groupings and geographical areas. It is notable that Small, vulnerable economies (SVEs) observe significantly fewer surges on average, with the Caribbean as a geographical grouping also reflecting that lower average number. The relative sensitivity of the SVE group to the increasing threshold level (see FAO 2014a) also indicates that, although the incidence of surges identified is at a comparable level to the group as a whole at low-level thresholds, the proportion of surges drops off more rapidly when the threshold level increases. This suggests that the depth of the surges maybe lower on average in this country group and therefore less likely to be defined as surges at the higher threshold levels.

---

4 Given the sample of countries selected for analysis (NFIDCs, LIFDCs and LDCs listed in 2004), the countries included in the groupings may not be fully representative of all the countries in these negotiating groups.
1.2 Price depressions

Previous analyses explored the use of both historical reference prices and different forms of moving averages. Given the significant upward shift in price levels over the past decade, the use of historical reference prices (such as 1984–86 averages) is now largely irrelevant. The incidence of price depressions over the thirty-year period was therefore investigated first by comparing a three-year and a five-year moving average and then by applying different threshold levels to the MA3 (MA3x90% and MA3x85%). In the absence of comprehensive data sets on domestic Cost Insurance and Freight prices, it is not possible to undertake the analysis at the country level. Following the approach adopted by Sharma (2006,) key international market prices were used as a proxy. This information was updated to 2011 using FAOSTAT data.

<table>
<thead>
<tr>
<th>Products</th>
<th>100%</th>
<th>90%</th>
<th>85%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MA-3</td>
<td>MA-5</td>
<td>MA-3</td>
</tr>
<tr>
<td>Wheat</td>
<td>17</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Wheat flour</td>
<td>15</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Maiz</td>
<td>12</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Rice, milled eq.</td>
<td>14</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Sugar, raw</td>
<td>13</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Sugar, refined</td>
<td>12</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Bovine Meat</td>
<td>13</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Ovine Meat</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Pig Meat</td>
<td>10</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Poultry Meat</td>
<td>12</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Butter</td>
<td>14</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Cheese</td>
<td>13</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>SMP</td>
<td>13</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>WMP</td>
<td>12</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Palm Oil</td>
<td>11</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Rapeseed Oil</td>
<td>10</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Soybean Oil</td>
<td>9</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Sunflower Oil</td>
<td>10</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>210</td>
<td>106</td>
</tr>
</tbody>
</table>

The total number of depressions identified in the MA3 case falls by more than half from 217 at the 100% threshold to 106 at the 90% threshold and then by almost half again to 62 at the 85% threshold. The declines for the MA5 are more gradual. These patterns are observed for most products represented in the Table. With regard to the incidence of price depressions across time, there is a significant reduction in the number of identified depressions between 1983–2003 and 2004–11. In comparison to the 102 incidences recorded in the 21 years to 2003, only four cases (wheat, butter, SMP and WMP) are recorded in the 8 years between 2004 and 2011.
Table 6: Incidence of price depressions 2004–11 compared to 1983–2003 (MA3*90% threshold)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>9</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Wheat flour</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Maiz</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Rice, milled eq.</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Sugar, raw</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Sugar, refined</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Bovine Meat</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Ovine Meat</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Pig Meat</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Poultry Meat</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Butter</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Cheese</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>SMP</td>
<td>7</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>WMP</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Palm Oil</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Rapeseed Oil</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Soybean Oil</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Sunflower Oil</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>102</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Implications for the SSM

The incidence of “import surges” has changed significantly since the early 2000s, reflecting the change from a context of low and relatively stable prices to the new market context of higher and possibly more volatile prices. The incidence of volume surges has fallen significantly in all commodity groups and on average across the 103 developing countries on which the analysis was based. Furthermore, the incidence of price depressions fell to zero in most commodity groups between 2004 and 2011. While the sharp fall in the incidence of price depressions is unsurprising during a period in which prices rose significantly, the fall in the incidence of volume surges does not reflect a reduction in import volumes. Indeed, far from being the result of lower levels of imports (or lower rates of increases in imports), the reduced incidence of volume surges was identified for a period in which imports of many commodities by many food-importing developing countries had increased significantly, but at a more constant rate. Under such conditions, the relative importance of a volume trigger vis-à-vis a price trigger in providing the justification for the application of a remedy increases, as well as the rationale for cross-checks between increases in import volumes and price depressions, become weaker.

The analysis also demonstrates the sensitivity of the incidence of surges both for the type of threshold and for the level of that threshold. A threshold based on a moving average plus a certain percentage is likely to be relatively insensitive to volume surges where imports grow relatively constantly, whereas one reflecting limited variability, such as the MA3+1sd, may be more effective. Where there is greater
volatility in import levels, the MA3+30 is, however, likely to be more effective. Such conclusions carry through to the design of the SSM in that the choice of the trigger level will significantly affect the effectiveness of the mechanism. Confirming previous analyses, the number of incidences of price depressions appears to be more sensitive to the level of the threshold than the incidence of volume surges is. This suggests that particularly careful consideration is required in setting of a price trigger within the mechanism.

While introducing differentiation into the mechanism may be problematic, consideration could be given to the use of different trigger levels for each country group. The analysis suggests that import patterns, and hence the effectiveness of different trigger levels, can differ quite significantly depending on the country group. Given their relatively high reliance on food imports as a proportion of total consumption, surges in some LDCs or SVEs are unlikely to create significant deviations from the moving average; however, the potential for negative ramifications still exists. For such countries, a more sensitive (lower) volume trigger may therefore be appropriate.
References


———. 2006a “Import surges: What is their frequency and which are the countries and commodities most affected?” FAO Briefs on Import Surges. No.1. Rome: FAO.


EXPORT COMPETITION
Export Subsidies and Export Credit

Eugenio Díaz-Bonilla and Jonathan Harris

Introduction

The treatment of exports in the WTO includes five different areas: (a) export subsidies; (b) export credits, guarantees and insurance; (c) food aid; (d) exporting State trading enterprises; and (e) export restrictions and taxes. Food aid and export restrictions are discussed in other chapters. Here, we concentrate on the other three topics.

1. Background

The world trade legal framework presents the peculiar situation that export subsidies for industrial products are prohibited under the WTO (and before the GATT) agreements, while export subsidies for agricultural products (several of which are also industrial, and not primary, products) were allowed under the GATT and then only partially disciplined under the Agreement on Agriculture of the WTO. \(^1\)

The potentially trade-distorting effects of State trading enterprises (STEs) were also recognized in the GATT: Article XVII accepted their existence under the trade regime, provided they acted in accordance with the general principles of non-discrimination, and based their decisions on commercial considerations. In addition, STEs could not diminish or nullify the commercial value of negotiated tariff concessions, and could not be operated in a way that creates quantitative restrictions on imports, export subsidies, and other WTO-inconsistent measures. Governments also had to notify the GATT about the operations of their STEs on a regular basis.

During the Uruguay Round, export subsidies in general were considered in greater detail in the Agreement on Subsidies and Countervailing Measures (ASCM), and their prohibition was reaffirmed. Export subsidies for agriculture, however, were allowed by the Agreement on Agriculture (AoA) for countries that were using them, although they had to be capped and then cut in both value and volume. \(^2\)

The AoA also included Article 10 on anti-circumvention measures, which expanded the consideration of export competition to food aid (with a definition and certain criteria that must be followed to avoid violating the anti-circumvention provisions) and export credits, guarantees and insurance programmes (with WTO members committing to developing internationally agreed disciplines on these topics and then operating in conformity with them).

---

\(^1\) From 1986–97, European and US export subsidies amounted to about USD 135 billion, or the equivalent of almost 13 per cent of the value of all agricultural exports by the developing countries of Africa, Latin American and the Caribbean and Asia (minus China) combined during the period (Díaz-Bonilla and Reca 2000).

\(^2\) While countries were allowed to apply countervailing duties to industrial goods, agricultural subsidies were given a different treatment, which somewhat limited the possibility of imposing those duties until 2003 if the exporting country operated within the quantity limits agreed in the Uruguay Round.
Regarding STEs, the Uruguay Round agreements included an "Understanding on the Interpretation of Article XVII" that tried to clarify the original definition of the GATT 1947 and made an important change: while an STE used to be a "state enterprise" or one receiving exclusive rights or privileges, the new definition made notifications compulsory for "Governmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges..." (emphasis added). The "or" of the original article was therefore replaced by "which", excluding government-owned companies that are not granted those special privileges.

In summary, the WTO Agreements maintained the more permissive treatment for export subsidies of agricultural and agro-industrial products, introduced the topics of food aid, export credits and related programmes as part of export competition, and changed the definition of STEs.

After the creation of the WTO, agricultural negotiations continued on several topics (as agreed in Article 20 of the AoA), including placing agricultural export subsidies on the same level as non-agricultural subsidies (i.e. as prohibited practices under the WTO legal framework). The "Revised Draft Modalities for Agriculture" (WTO 2008) was the last attempt to reach an agreement on agriculture before the general Doha Round talks collapsed in 2008. The 2008 Modalities determined that developed countries would halve their budgetary outlays for export subsidies by 2010 and then completely eliminate them by 2013. It also indicated that no new markets or products could receive subsidies. Developing countries would have until 2016 to comply.

It defined different categories of export credits, outlined which entities were obliged under the potential Agreement, and set a maximum repayment term of 180 days (360 days for developing countries) to be reached four years after implementation. However, LDCs and net food-importing countries could receive longer repayment periods. It also indicated that all export financing support programmes should be self-financing (the premium rates charged must be sufficient to cover operating costs for a four-year rolling period; eight years for developing countries).

The Understanding's definition of agricultural exporting STEs was maintained (it should be noted that the 2008 Modalities did not cover import STEs). The disciplines included the prohibition to use export subsidies. In addition, exporting STEs could not receive government financing or capital below market rates and governments could not underwrite losses. Agricultural export monopoly powers for STEs would end by 2013 (unless the exported product represented no more than 0.25% of the total world trade in agricultural products in the 2003–05 base period, the STE has been notified, and it was not used to effectively circumvent obligations). Special and differentiated treatment for developing countries included the possibility to continue to use monopoly powers "to preserve domestic consumer price stability and to ensure food security;" if those were not the objectives, then the share of the world's exports of the agricultural product(s) should be less than 5% for three

---

3 Although there are several developing countries among the WTO Members that notified export subsidies (14 out of the 25 WTO Members with such notifications) and can thereby use export subsidies for agricultural products, industrialized countries represent 84% of the values still allowed under the current AoA (only the European Union amounts to 62% of the total value of allowed agricultural export subsidies) (FAO 2000). Considering that most of the export subsidies have been utilized by industrial countries, this fact, along with other advantages in domestic support and market access instruments, has been referred to, with irony, as "special and differential treatment" (SDT) for the agriculture of industrialized countries.
consecutive years. Agricultural export STEs from LDCs and “small and vulnerable economies” (a new category defined by the 2008 Modalities) were permitted.

During the process leading to the 2013 Bali Ministerial, several developing countries that are agricultural exporters asked for specific steps to comply with the 2005 Hong Kong Ministerial Declaration, which defined 2013 as the deadline for eliminating exports. This option was mainly opposed by developed countries who argued that they were not ready to make firm commitments in the absence of a more comprehensive reform of all agricultural issues in a finished Doha Round. In the end, the Bali Ministerial adopted a Ministerial Decision on Export Competition (WTO 2013), which only committed WTO members to apply “utmost restraint” when using export subsidies to maintain them at the lower levels of the early 2010s (when they were less utilized due to high world prices) and to improve information about their use. Therefore, the exceptional treatment of agricultural export subsidies under the WTO legal framework has continued.

2. Recent developments

As part of the Bali commitments to improve transparency in export competition, the Committee on Agriculture asked the Secretariat to send a questionnaire on all aspects of export competition and to tabulate answers for a June 2014 meeting. The results of that exercise (WTO 2014) show the following:

a. The overall trend for export subsidies is declining: several products that were the main recipients of subsidies such as grains and oilseeds have not received export subsidies in the last years and many, although not all, of the countries using subsidies are doing so in a small proportion of their allowed levels. At the same time, the information collected still shows almost USD 500 million of export subsidies in 2011–12 (the EU being the largest user with almost USD 190 million, followed by Canada and Switzerland-Liechtenstein with USD 85–90 millions). The main product categories receiving subsidies were: Incorporated Products and Poultry Meat (with USD 120-150 million each) and Skim Milk Powder, Cheese and Bovine meat (with close to USD 50 million each). The data compiled, however, is incomplete.

b. Regarding export credits and similar measures, 12 WTO members notified export credits, although whether they would be complying with the criteria of the 2008 Modalities (in terms of repayment period and to be self-financed) was difficult to assess from the notifications. While, as noted before, grains and oilseeds were not receiving export subsidies, they were the main products under export credits and related measures.

4 Small, vulnerable economies are countries that, in the period 1999–2004, had an average share of (a) world merchandise trade of no more than 0.16 per cent or less; (b) world trade in non-agricultural products of no more than 0.1 per cent; and (c) world trade in agricultural products of no more than 0.4 per cent. Those countries were listed in the 2008 Modalities.

5 During the 2005 Hong Kong WTO Ministerial meeting, the Ministerial Declaration (WTO 2005) stipulated in paragraph 6 that Ministers “agree to ensure the parallel elimination of all forms of export subsidies and disciplines on all export measures with equivalent effect to be completed by the end of 2013.” However, it immediately added that “this will be achieved in a progressive and parallel manner, to be specified in the modalities, so that a substantial part is realized by the end of the first half of the implementation period.” Therefore, while the first part appeared to define a clear deadline for exports subsidies in agriculture, the second part, referring to the “implementation period”, seemed to link that end date to the completion of the trade round.
c. Twenty members reported 77 agricultural exporting STEs. The countries with more STEs were China (25), India (14), and Colombia (14). Tobacco (21 STEs), Other products (20), and Fruits/Vegetables (14) were the main items involved. With some exceptions, the reporting did not include enough information to assess the impact on global markets and whether the STEs had exporting monopoly power. Some of the important agricultural exporting STEs that were operated by developed countries have been reformed and or are in the process of being reformed (such as the Canadian Wheat Board), while the presence of STEs appears more important in developing countries (although the latter may still be, considering the very limited information available, within the limits by products suggested by the 2008 Modalities).

Among other developments, in newly acceded countries, the tendency seems to have been not to allow export subsidies, even though the countries may have used them before the accession (Brink 2014).

An important legal development on STEs was the ruling of the WTO Appellate Body in the case brought by the United States against the Canadian Wheat Board, which defined that the primary discipline of the WTO regarding STEs was non-discrimination; operating under "commercial considerations" was not an independent obligation, but the potentially non-commercial nature of some operations could be used as a test of discrimination (Hoekman and Trachtman 2007).

More generally, it is important to note the general advances made by developing countries in agricultural production, trade and policies. Agricultural products exported and imported by developing countries have increased as a percentage of world agricultural trade (26.9% for exports and 16.9% for imports in the 1970s to 36.9% and 32.3%, respectively, in the early 2010s). While, in the 1990s, only one developing country (Argentina) was in the top five net agricultural exporters by value and only two more (Brazil and Thailand) were in the top ten, by 2010–11, Brazil and Argentina had displaced the US and the Netherlands in the top two positions and, in addition to Thailand, there were now three developing countries in the top five exporters. Among the largest developing countries, China was a net exporter in the 1990s but became the largest net trade importer after Japan in the 2010s, and India has been climbing the ranks as a significant net agricultural exporter. In fact, in recent years, India has become the main global exporter of rice and the second for both beef and cotton. On the other hand, India's agricultural sector includes a large number of very small farmers affected by poverty and vulnerability. In recent trade negotiations, India has emphasized the latter aspect, but its trading partners have taken note of the country's increasing presence in global food and agricultural exports (Díaz-Bonilla 2014).

Not only have developing countries as a whole been advancing globally in production and trade, they have also increased their agricultural support, judging from the Nominal Rate of Assistance (NRA) (as calculated by a World Bank project), the Producer Support Estimate (PSE) (computed by the OECD), and the categories of domestic support that must be notified to the WTO as defined in the AoA. All these developments have modified the landscape of the political economy of global trade negotiations (Díaz-Bonilla 2014).
3. Implications for the WTO negotiations

The reduced use of export subsidies for agricultural and agro-industrial products offers the possibility of finally unifying the treatment of export subsidies, eliminating the special treatment of the AoA. The 2008 Modalities offer a template for this. Agricultural export subsidies should be banned and the system unified under the ASCM. The 2008 Modalities also provide an appropriate template for export credits, export guarantees and insurance.

The case of agricultural STEs is different. Their treatment in the 2008 Modalities may require further thinking. First, STEs in developed countries are exempt from the obligation of ending monopoly powers if the exported product represented no more than 0.25% of total world trade in agricultural products in the 2003–05 base period. The percentage seems small, but it translates to a value of about USD 1,500 million (which represents between 8-12% of the world trade in individual products such as wheat, maize and soybeans).

Second, the exemptions for developing countries may also need adjusting. As noted, the 2008 Modalities allowed developing countries to maintain STEs with monopoly powers “to preserve domestic consumer price stability and to ensure food security.” If those were not the objectives, they could still maintain monopoly power if their share of the world’s exports of the agricultural product(s) involved was less than 5% for three consecutive years (of course that SDT always comes with the not necessarily very operational proviso “not be otherwise inconsistent with other provisions of this Agreement and other WTO Agreements.”) The percentage allowed for a specific product is significant. Furthermore, it is unclear how exporting the product “ensures food security” in a specific country; it rather seems to detract from it to the extent that food that could have been given to presumably food insecure domestic consumers is reoriented towards world markets.

Third, there appear to be different standards for the notion of “commercial” that may need to be reconciled: a country may engage in certain practices that are not in “commercial terms” and still be in agreement with Article XVII – as interpreted in the case against the Canadian Wheat Board – while still claiming “commercial confidentiality” to avoid providing adequate information for surveillance. The quid pro quo of having the legal right to operate an STE (which may pursue a variety of legitimate public interest objectives) should be full transparency. Otherwise, it would be impossible to determine whether an STE is violating other WTO commitments. If countries do not comply with those notifications, then the lack of information may be taken as a presumption of violations of other WTO commitments, and the countries affected by the operation of the STEs may invoke trade sanctions.

Fourth, although the 2008 Modalities only refer to exporting STEs, importing STEs should also be included. As shown by McCorriston and MacLaren (2006) in the case of rice in Korea, the operations of the STE implied an ad valorem tariff equivalent of 178 per cent and a producer subsidy of 25 per cent.
Conclusion

The 2008 Modalities serve as an appropriate template for the long overdue elimination of the SDT for agricultural export subsidies. They should be banned, as is the case for industrial export subsidies. Developed countries still clinging to that practice should have been more forthcoming in Bali. An agreement beyond “best efforts” to include export subsidies as a banned practice should be an early harvest result. The 2008 Modalities also provide an appropriate template for export credits, export guarantees and insurance.

However, with the advance of developing countries in export and import markets, the treatment of STEs requires stricter disciplines than those envisaged in the 2008 Modalities, including the consideration of importing STEs. At the very minimum, stricter requirements of transparency and timely communication will be necessary.
References


Trade Policy Options for Enhancing Food Aid Effectiveness: Revisiting the Draft Doha Deal

By Edward Clay

Introduction

The Bali Agreement of December 2013 (WTO 2013), the first substantive international trade policy deal since the Doha Development Round (DDR) became deadlocked in 2008, envisages a full review of the DDR text during 2014. Therefore, the present moment provides an opportunity to re-examine the draft text on international food aid (WTO 2008) that was apparently close to being accepted in December 2008. The text also reflects an exceptionally wide and intense debate with the repeated redrafting to reflect the priorities and concerns of WTO Members, not just donors and major food exporters but also least developed and African countries.

This paper extends the analysis of the previous study Clay (2012), first to review evidence of more recent trends in food aid since the food price spike of 2007–8, including both established and emerging donors and possible implications. Second, it considers institutional developments, in particular the Food Assistance Convention of 2012 (FAC 2012) and early evidence on how it operates. As the US continues to be the major food aid donor, accounting for more than half of reported expenditure and volumes delivered, the 2014 US Agriculture Act or Farm Bill (United States 2014) is also likely to provide a key part of the framework for international food aid for the remainder of the decade. The food security policies of developed and developing country are also evolving quite rapidly subsequent to the 2007–08 price spike. There are also attempts to find ways of making commitments to avoid export restrictions that hamper the delivery of humanitarian aid. The paper concludes with some suggested policy implications of recent food insecurity episodes and developments in food aid. The paper is set in the context that the DDR draft text of December 2008 may become the basis for furthering negotiations and, as such, attempts to relate developments to the text, its wording and the issues it seeks to address.

In revisiting the DDR draft, it is useful to begin by clarifying definitions and clearly restating principles before looking forward to what might be agreed, keeping in mind the issues of the proportionality and the practicalities of proposed disciplines in relation to the risks of unfair export competition and ensuring the effectiveness of food aid.

1 The helpful comments and suggestions of Panos Konandreas and George Simon, as well as those of participants in an ICTSD “Dialogue on food aid in the post-Bali context” held in Geneva on 4 June 2014, are gratefully acknowledged, but responsibility is solely that of the author.

2 Chapter 6, “Food aid at the WTO” of Jennifer Clapp’s Hunger in the Balance (2012) provides a considered account of the lengthy and negotiation process that led to the proposed food aid disciplines included as Annex L of the 2008 Draft AoA. See also Clay 2006.
1. Changing ideas of what food aid is

The issue of definitions is critical to understanding the changing focus in current international policy discussions and the implications for drafting future international trade and aid agreements. Food aid is widely used in a quite a flexible way to include domestic food-based interventions by governments and civil society, as well as support for such interventions by international agencies, aid donors and non-governmental organizations. The Agreement on Agriculture (AoA) of 1994 (Box 1) and the draft Doha text both refer specifically to:

*International food aid* "both in-kind and cash-based food aid donations" that involve the importation of food or aid-funded acquisition on the local market (draft AoA).

In contrast, the World Food Programme (WFP) and some donors, notably the USA, as well as the Food Assistance Convention of 2012 (FAC 2012) which replaces the 1999 Food Aid Convention, have recently begun to employ a wider definition:

"(International) Food Assistance: interventions (that are aid-funded) to improve food security or nutritional status involving the direct distribution of food or transfers in cash, tokens, inputs, tools, etc."

The WFP Food Aid Information System (INTERFAIS\(^3\)), which has primary responsibility for the collection, the statistical collation and the dissemination of information on food aid actions, continues to employ working definitions approximately equivalent to the forms of food aid in the WTO texts, with implications for trade and markets (Box 2). The analyses in this paper employ these definitions. However, as some donors are no longer reporting international food aid separately, but as part of food assistance, for example as FAC 2012 Commitments or as humanitarian assistance within their official

---

\(^3\) See [http://www.wfp.org/fais](http://www.wfp.org/fais).
development assistance (ODA) commitments reported to the OECD, it is becoming more difficult to isolate food aid from broader categories of aid.

**Box 2: Forms of food aid: WFP definitions and equivalent WTO definitions**

*Categories of use*

*Emergency food aid (WTO and WFP)*: freely distributed, grants.

*Non-emergency food aid (WTO)* includes:

- *Project food aid (WFP)*: distributed or sold (monetized); channelled multilaterally, bilaterally or through NGOs, grants.
- *Programme food aid (WFP)*: bilateral, sold (monetized), grant or loan.

*Delivery modes*

*Cash-based Aid (WTO)* includes:

- *Local purchases* procured in the aid-recipient country.
- *Triangular purchases* including Regional Purchases procured on the international market or by restricted purchase in another developing country.

Export competition is a core DDR issue, and the December 2008 draft text\(^4\) includes fully elaborated disciplines for international food aid based on two principles: (a) minimizing trade displacement risks; and (b) ensuring that disciplines do not hamper adequate and timely levels of humanitarian assistance as emergency aid. Taking the 1994 AoA as a starting point, the proposed disciplines include the following key elements. International food aid is to be on a fully grant basis and thereby clearly distinguished from any forms of loan or agricultural export credit. A Safe Box for Emergency Food Aid is to include all case-based (untied) aid and *bone fide* in-kind emergency aid with a detailed set of procedures for determining the genuineness of an emergency action. Disciplines are envisaged for non-emergency aid in-kind to minimize risks of trade displacement, especially where monetization is involved.

Although the draft text is "bracket free", there are possible grey areas. For example, restricted purchase in another developing country is *partially untied aid* according to the Development Assistance Committee (DAC) definitions, which an excluded exporter could argue to be a form of competition. If, as discussed below, international food aid is now a relatively modest part of ODA, non-emergency aid a small proportion of the total and a marginal share of imports by Net Food Importing Developing Countries (NFIDCs), one could argue that the disciplines are disproportionate to the potential risks

---

\(^4\) See WTO 2008.
of trade displacement and too complex to be practical. These important questions regarding the continuing relevance of the draft text are reconsidered in the light of more recent developments.

2. Food aid since the 2007–08 food price spike: trends

Presently, food aid is a marginal aid resource, representing approximately 3 per cent of DAC donor official development assistance, but 18 per cent of humanitarian assistance. Food aid has declined in absolute scale and seems likely to either fluctuate around current levels of around 5 million tons, perhaps 80 to 90 per cent as cereals, or even decline further. Global food security implications are also modest: under 8 per cent of LDC cereal imports and under 0.5 per cent of NFIDC imports. However, food aid can be highly significant for very food-insecure countries and regions in crisis, as is currently the case for the Ethiopian and the Syria-related humanitarian crises. This relative unimportance is reflected in the often quite modest administrative arrangements of most DAC donors for managing food aid, typically as part of humanitarian assistance.⁵

Food aid has always been procyclical – least available when most needed – with rising global prices (Clay 2012: Figure 2). This unsatisfactory reality reflects a combination of factors: the common budgetary practice of making forward allocations in financial terms so that rising prices erode the value of aid; and also because in some cases additional resources become available, for example to manage overhanging stocks in a weak market. The Food Aid Conventions from 1967 onwards were intended to provide some stability as the donors committed themselves to minimum levels in commodity terms, but they only met with partial success. Some donors programmed aid at well above minimum commitment levels when markets were soft and voluntary commitments were either temporarily set aside or permanently reduced in tight market conditions (Clay 2010; Hoddinott et al. 2007). Commitments to WFP, now overwhelming for humanitarian assistance, are made partially on an ad hoc basis in response to crisis appeals.⁶

Unsurprisingly, actual levels fell away as cereal prices rose, reaching a peak in 2007–08. However, since 2008, somewhat lower international food prices have not been associated with a bounce back in food aid levels. Instead, total aid measured in terms of physical deliveries has a downward trend from the recent peak of 14.6 million tons in 1999 to only 4.8 million tons in 2011, the lowest level since the 1973 global crisis, recovering to 5.0 million tons in 2012.

⁵ The US is exceptional as both US Department of Agriculture (USDA) and US Agency for International Development (USAID) are involved budgetarily and organisationally.

⁶ Government Donor Commitments for 2013 were almost USD 4.1 billion, but, as of 13 April 2014, they only amounted to just under USD 1.8 billion for 2014 and USD 208 million for 2015.
The failure of food aid volumes to bounce back cannot be explained purely in terms of sensitivity to international food prices (Figure 1). Informal soundings suggest a combination of factors. First, almost all donors have abandoned bilateral food aid for budgetary or balance-of-payments support. 7 Second, some donors (e.g. the EU, Netherlands, Norway and the UK) explicitly prefer increasingly to fund other forms of humanitarian aid and support for food security: cash-based transfers, non-food assistance to recovery and finance for food security projects, instead of supporting food for direct distribution. 8 The untying of aid more broadly associated with the OECD DAC 2001 Recommendation on Untying Aid has facilitated the untying of funding to allow cash-based food aid as well as the more flexible use of budget lines previously earmarked for food aid (OECD 2009). Third, the combination of fiscal austerity as reflected in the overall aid levels, more generally for DAC Members, and of food having to be provided as a full cost resource, in the absence of surpluses for disposal, has depressed food aid levels. Fourth, the commodity composition of food aid is changing, with a reduced share of wheat and dairy products sourced from temperate zone countries and a growing share of coarse grains locally and regionally sourced in Africa, as well as foods processed for nutritional goals.

Non-traditional donors are collectively increasing their food aid; however, individually, they are unpredictable. Middle Eastern oil exporters – Saudi Arabia, Oman, Qatar and UEA – are typically making discrete and sharply fluctuating annual contributions through WFP. Other emerging economies are to date most likely to provide tied aid in-kind, as discussed below.

7 Presently, Japan is the main exception, providing rice as programme food aid, as discussed below (Table 2).
8 The WFP’s annual report for 2013 suggest that about a quarter of its expenditure, which has averaged some USD 4 billion during 2009–13, is now in forms of food assistance other than food aid; a broadly consistent estimate is provided by Cash Atlas (https://www.cash-atlas.org), established to monitor food assistance in the form of cash, which states that some USD 1.1 billion is directly provided globally in the form of vouchers or as cash in 2013. There is an urgent need to strengthen the monitoring of food assistance broadly defined.
These developments have been reflected in the modes of use and sourcing of food aid since the beginning of the DDR negotiations in 2001. Aid in-kind (direct transfers) has declined in absolute and relative terms, and programme aid is reduced to negligible levels (Figure 1). In contrast, emergency aid levels have fluctuated in response to crises but have followed a less sharp declining trend than non-emergency food aid. Cash-based aid (local purchases and triangular transactions) has increased in absolute and relative importance (Figure 2) and is associated with the progressive and, in some cases, complete untying of aid by most DAC donors (Clay 2012). However, there was an apparent reversal of these trends in 2011 and 2012, with aid in-kind levels rising and cash-based aid falling, which sharply underscores the uncertainty that continues to surround food aid.

![Figure 2: Global food aid: total deliveries, local and triangular purchases (cash-based aid) and emergency uses 2000–10 (tons)](source: WFP INTERFAIS)

3. Food aid governance is fragmented and changing

The text on trade issues and food aid will have to take into account the fragmented, complex and changing governance. Key elements are now as follows. The WTO Committee on Agriculture supervises the 1994 AoA, the text of which explicitly refers to responsibility for defining when loans qualify as aid and issues determining if there is trade displacement to other places (Box 1). However, an examination of this text indicates that these linkages require reframing or replacing. The last Food Aid Convention of 1999, which lapsed in June 2012, was replaced by the Food Assistance Convention 2012 and the Committee of Signatories. Presently, the OECD DAC provides the only widely accepted definition of whether loans qualify as ODA. However food aid is excluded from the DAC 2001 Recommendation on Untying of Aid to LDCs and other OECD voluntary agreements on export credits.

The Principles and Rules on Surplus Disposal are administered by the Sub-Committee on Surplus Disposal (CSD) of the FAO Committee on Commodity Problems, which has not reported since
However, food aid is presently effectively excluded from the remit of the Committee on Global Food Security located in the FAO. The WFP Executive Board with 30 representative countries is supervising the agency’s budget and activities of USD 4 billion and more than half of international food aid. The draft text will have to be re-examined in the light of this changing wider governance structure and to see if scope exists for simplification of the modalities, especially regarding emergency aid.

After several years of difficult negotiation a new Food Assistance Convention was unanimously agreed by signatories in 2012 to replace the lapsed 1999 Food Aid Convention, the last of a sequence of treaties making commitments of international food aid since 1967. The FAC 2012 widens member commitments from “food aid” tonnages (1967–99) to include: food to distribute or sell, cash-for-food, tokens, seeds, inputs and tools. Minimum Commitments are to be made in cash or physical terms on an annual basis instead of for the duration of the agreement. In removing a fixed floor on commitments, the FAC 2012 no longer explicitly attempts to counteract the procyclical potential of food aid. The Convention allows up to 20% of commitments as loans, apparently backtracking from the DDR draft, although the text explicitly states that the treaty in no way pre-empts decisions by the WTO.

Table 1: Food assistance convention 2012: Donor commitments for 2014

<table>
<thead>
<tr>
<th></th>
<th>Commitment in National Currency:</th>
<th>USD Equivalent (mn)*</th>
<th>Estimated Grain Equivalent 000 tons*</th>
<th>Per cent of Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>€1.495mn</td>
<td>2</td>
<td>3</td>
<td>0.1%</td>
</tr>
<tr>
<td>Canada</td>
<td>CD250mn</td>
<td>230</td>
<td>328</td>
<td>9.4%</td>
</tr>
<tr>
<td>Denmark</td>
<td>DKK185mn</td>
<td>34</td>
<td>48</td>
<td>1.4%</td>
</tr>
<tr>
<td>EU</td>
<td>€300mn</td>
<td>408</td>
<td>583</td>
<td>16.8%</td>
</tr>
<tr>
<td>Finland</td>
<td>€6mn</td>
<td>82</td>
<td>12</td>
<td>0.3%</td>
</tr>
<tr>
<td>Japan</td>
<td>JPY10bn</td>
<td>982</td>
<td>140</td>
<td>4.0%</td>
</tr>
<tr>
<td>Russia</td>
<td>USD15mn</td>
<td>15</td>
<td>21</td>
<td>0.6%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>CHF34mn</td>
<td>38</td>
<td>54</td>
<td>1.6%</td>
</tr>
<tr>
<td>USA</td>
<td>USD1.6bn</td>
<td>1600</td>
<td>2286</td>
<td>65.8%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,430</td>
<td>3475</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Food Assistance Convention (IGC) on National Currency commitments

* Author’s estimates based on FAC reported commitments in national currencies.

The Sub-Committee on Surplus Disposal was established by the Committee on Commodity Problems (CCP) at its Twenty-third Session (1954) to monitor international shipments of surplus agricultural commodities used as food aid in order to minimize the harmful effects of these shipments on commercial trade and agricultural production. The CSD meets in Washington, D.C. (see Konandreas, forthcoming.)

The Board is, within the framework of these General Regulations, responsible for providing intergovernmental support and specific policy direction to and supervision of the activities of WFP in accordance with the overall policy guidance of the General Assembly of the United Nations, the FAO Conference, the Economic and Social Council and the Council of FAO, and for ensuring that WFP is responsive to the needs and priorities of recipient countries.
The actions of actual and the many potential members suggest that the usefulness of the new FAC is still to be demonstrated (Clay 2012a). Only nine governments have made annual commitments for 2014, including Russia, which also joined the original eight in 2014 (Table 1). Total commitments, all in national currencies, are equivalent to some USD 2.4 billion, which compares with annual commitments to WFP of around USD 4 billion since 2009. Comparisons are difficult, but if all assistance were to be in the form of procuring and shipping commodity aid, then commitments for 2014 are equivalent to less than 64 per cent of quantitative commitments under the 1999 Convention. The major commitment by the US, standing at almost two thirds of the total, is also equivalent to the 2014 USAID budget for emergency and project food aid, which will be more than 90 per cent in-kind aid. Some signatories, notably the EU, are committed to funding a wider basket of assistance through their committed funding. So far, the majority of DAC donors and other G20 Members have failed to ratify or make commitments under the new FAC, including, for example, Australia, France, Germany, Netherlands, Norway, Sweden and the UK, which were responsible for 26% of commitments to WFP in 2013.11

4. Trade distortion: is the tide turning?

The sharp decline in food aid levels, the increasing use of untied cash and the multilateral channelling for emergencies would imply reduced trade distortion risks. However, the short term reversal of these trends in 2011–12 to untied aid and emergency uses (Figures 1 and 2), along with some other developments, raises, as Jennifer Clapp suggests (Clapp 2014), the possibility that the tide is turning. Since 2006, US administrations have sought to untie at least part of the food assistance budget. However, such proposals were narrowly defeated and the US Farm Bill 2014 retains tying requirements, monetization and surplus disposal instruments, even if the latter are presently unused (Clay 2014). The FAC 2012 allows monetization and permits up to 20 per cent of commitments to be loans. Finally, the BRICs and other emerging donors – oil exporters excepted – are typically providing tied aid-in-kind. The character of the potential trade displacement issue is suggested in considering actual food aid flows at a commodity level for rice, which is currently one of the three most important forms along with wheat and maize.

11 There is currently a lack of clarity regarding which countries have ratified and are active as signatories of the 2012 FAC. The FAC website (http://foodassistanceconvention.org/en/about_fac/parties.aspx) states that the Food Assistance Convention was adopted on 25 April 2012 in London and that, in accordance with article 12, the Convention was open for signature at United Nations Headquarters in New York until 31 December 2012, by 35 countries, including all EU member states, the EU and other signatories to the previous 1999 Convention. However, many of these countries appear not to have signed and formally ratified the Convention, and so far only eight of these parties made commitments under the Convention in 2013, with the addition of one new party, Russia, in 2014 (Table 1).
5. Non-emergency aid: are disciplines still appropriate?

The DDR draft envisions disciplines on non-emergency food aid, particularly monetization, because of potential trade displacement risks. Those who oppose disciplines, commonly use the argument of proportionality, that the volumes of aid in-kind or for monetization are additional aid and typically marginal in relation to the overall levels of imports. A limit of 10 per cent of the imports in to a recipient country is sometimes suggested; below this, such effects are supposedly unimportant when set against the potential benefits of additional well-designed NGO projects supporting food security and poverty reduction (Informa 2012).

There is a \textit{disaggregation fallacy} inherent in these arguments and also in current approaches to assessing the potential trade displacement effects of in-kind food. The approach adopted in the Principles and Rules on Surplus Disposal administered by the CSD involves a marginal analysis of individual bilateral programme aid transactions – the amount of food in-kind to be shipped from donor exporters to a single recipient country in relation to the UMRs or the average import levels of that country over several years. Similarly, the approach followed for example by USAID for assessing the disruption effects of monetization on the local market involves a marginal analysis by the operational agency of individual transactions, examining the market disruption potential of monetization by looking at evidence from local markets (Informa 2012). Even if such marginal effects were in practice quantifiable, this approach is fundamentally flawed, because there is no provision for a parallel assessment of the macro or aggregated global trade implications of donor monetization practices.

The problem is highlighted when looking at rice food aid in 2012, a year in which markets were overhung by expanding stock levels in countries such as Indonesia, India and Thailand. Some 800,000 tons of rice food aid were funded, including some 555,000 tons (70 per cent) as in-kind

\begin{table}
\centering
\caption{Rice food aid by donor and mode of delivery 2012 (tons)}
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Donor} & \textbf{In-kind Aid} & \textbf{Cash-based Aid} & \textbf{Total} \\
 & \textbf{Direct Transfer} & \textbf{Local Purchase Triangular Transfer} & \\
\hline
Brazil & 191,653 & 133 & 0 & 191,788 \\
China & 20,000 & 0 & 0 & 20,000 \\
India & 2,447 & 0 & 0 & 2,447 \\
Russia & 386 & 0 & 0 & 386 \\
Japan & 173,022 & 15,442 & 7,804 & 196,268 \\
USA & 139,460 & 9,544 & 2,464 & 151,468 \\
\textbf{Sub-total} & 526,968 & 25,119 & 10,268 & 562,355 \\
% Sub-total & 94\% & 5\% & 2\% & 100\% \\
\textbf{All Others (28 countries)} & 28,940 & 132,221 & 76,867 & 238,029 \\
% Sub-total & 12\% & 56\% & 32\% & 100.0\% \\
\textbf{Total (All)} & 555,909 & 157,340 & 87,135 & 800,383 \\
% Total & 70\% & 20\% & 21\% & 100\% \\
\hline
\end{tabular}
\end{table}

Source: www.wfp.org/fais
food aid (Table 2). Total rice aid rose by 39 per cent and in-kind aid by 79 per cent from 2011 levels. The three largest in-kind donors, Brazil, Japan and the USA, each made many mostly small in-kind donations, respectively to 31, 12 and 24 countries, but together amounting in total to over half a million tons. Almost all rice food aid is of a lower grade, potentially competing with the commercial exports of countries such as Thailand and Vietnam to NFIDCs. The CSD is "dormant", having not reported food aid transactions since 2009–10; however, most of the above noted transactions for rice would not have been reported under the existing rules as they are too small and/or provided as emergency or development project support (Konandreas 2014). What is missing from the current arrangements and the draft DDR text is a proposal for institutionalizing a global market-wide analysis of the trade-displacing risks of in-kind aid.

Conclusion

A new policy environment for international food aid or food assistance is emerging as developed and developing countries continue to reformulate the post global crisis food security agenda. Uncertainty about markets and prices has replaced a complacency associated with the secular downward trend in agricultural commodity prices and the liberalization of global markets. Is the global food economy now in an era of extreme volatility and higher prices? The lack of consensus on these questions underscores uncertainties about fundamentals and how governments will react to volatility. If there are large transitory surpluses and weak markets, will food aid once again become a vent for surpluses for some countries that are actively managing domestic production? If there are high, rising prices on tight markets, the well-documented 2007–08 spike suggests that many governments will restrict exports in order to protect domestic consumption. Unanticipated, isolated events or covariate regional shocks could trigger such measures, hampering humanitarian assistance, which increasingly relies upon the local and regional sourcing of food.

More recent trends and institutional developments add increasing support to the provisional conclusions of the 2012 report and Konandreas (2011) that food aid is unable to manage acute food insecurity risks. First, current levels of food aid, around 5 million tonnes of commodities, and the new FAC commitments in cash and kind, which are equivalent to less than two thirds of that volume of commodity aid (Table 1), scarcely assure responses to idiosyncratic risks – e.g. the Haiti quake, the conflict in Syria and the chronic food insecurity in Ethiopia. Second, an El Niño of uncertain intensity and duration is forecast for late 2014–15, so the international community and potentially vulnerable countries should be considering the implications for responding to covariate risks, such as a Southern African Drought, should adequate food-based resources no longer being assured. Thirdly, likely resource levels preclude, just as in 2007–08, food aid being a major part of the response to systemic risk.

This paper, in updating and broadly confirming the conclusions of the earlier 2012 study, leads to some tentative recommendations for the trade-related governance of food aid and other related actions by the international community.
A. Strengthen risk transfer arrangements to ensure minimum levels of humanitarian assistance.

- A simplified DDR Safe Box may be appropriate to avoid impeding urgent humanitarian assistance. The disciplines should also at least implicitly accept the reality that donor-export and recipient-importing country can together circumnavigate almost any set of rules;

- If the 2012 FAC proves not to be fit for purpose, then is a broader based agreement needed to assure humanitarian resources, including cash and non-food items, to WFP and other international agencies, including the ICRC and NGOs?;

- Enhanced international financial arrangements for providing sovereign risk assurance may be more appropriate than specifically food-related support for national crisis responses.

B. Proportionality and practicality are required in disciplines for minimizing trade distortion risks

- A balance between facilitating national food security, especially for LDCs, while avoiding export restrictions on humanitarian assistance must be found. The WTO, along with overlapping bodies such as the G20, should persist with efforts to agree upon voluntary principles with regular peer review to avoid restriction on humanitarian aid.

- Recognizing the need to minimize the risks of food aid becoming a vehicle for transitory surplus management implies that the DDR draft disciplines (Annex L)\(^\text{12}\) are still relevant as a key building block for the future governance of international food aid. The ways in which monitoring and reporting, combined with peer reviewing, are institutionalized could foster good practice and offer ways to reduce the fragmented governance.

\(^\text{12}\) See WTO 2008.
References


DOMESTIC SUPPORT
The Evolution of Trade-distorting Domestic Support

By Lars Brink

Introduction

In addition to addressing border measures, the WTO's Agreement on Agriculture ("Agreement") sets rules to govern the provision of support to agricultural producers through domestic measures. It classifies domestic support measures according to given criteria and measures support in prescribed ways. Upper limits apply to support under measures that are not exempted under the criteria. An upper limit on certain supports is bound in the WTO Schedules of 32 countries. The 2008 draft modalities would tighten the limits for developed countries – especially the EU, the US and Japan – and to a lesser extent for some developing countries, while introducing additional limits on several categories of support.

Together, the ten largest agricultural producing countries account for 74 per cent of the world's value of production in agriculture. This paper focuses on support provided in these countries through measures that do not meet the requirements and criteria in the green box. Non-green box support comprises de minimis AMS, Current Total AMS, blue box support and Article 6.2 support. Blue box and Article 6.2 support is included since it is provided through measures that do not meet the green box requirements and criteria and thus tends to have more than minimal effects on production or trade.

The paper highlights the opposing long-term trends from 1995 in non-green box support provided by the EU, the US, and Japan – a generally declining trend – and by Brazil, China, India, and Indonesia – a generally increasing trend, albeit from nil or very low levels. It also identifies some related issues for the Doha negotiations.

1  2009-2011 average gross production value in US dollars. Source: FAOSTAT.
2  The requirements and the criteria of the green box (Annex 2 of the Agreement) were designed to identify measures that only minimally distort production and trade or do not distort them at all. Green box support is exempt from limits.
3  An AMS (Aggregate Measurement of Support) aggregates support of different types, such as payments, market price support and input subsidies. An AMS is de minimis if it does not exceed a given percentage of the product's value of production or the value of production in agriculture. For developing countries, China and developed countries, the percentage is 10, 8.5 and 5 per cent, respectively. All non-de minimis AMSs are added to form the Current Total AMS, a partial measurement of AMS support. Blue box support (exempt from limits) consists of payments under production-limiting programmes that meet certain criteria. Article 6.2 of the Agreement provides for support under measures that are part of development programmes in developing countries and that meet certain criteria, allowing them to be exempt from limits. It comprises certain investment and input subsidies as well as support to encourage diversification from growing illicit narcotic crops.
1. Relevant developments

Figure 1 shows the evolution of non-green box support from 1995 to the year of the latest WTO notification for the EU, the US, Japan and Russia, and Figure 2 shows that evolution for Brazil, China, India and Indonesia. Non-green box support is expressed as a percentage of the country’s value of production in agriculture at domestic prices, which normalizes the level of support relative to the size of the country’s agriculture sector.

1.1 EU, US, Japan and Russia

Having trended downward, non-green box support in the EU, US and Japan is presently much below the levels seen not only in the 1986–88 base period of the Uruguay Round but also at the 1995 start of the implementation of the Agreement (Figure 1). The reduction of the measured support of the EU and Japan is particularly marked. A drop in US support is also clear from the high-support years around 1999. The series without trend for Russia in Figure 1 is based on accession data and its 2012 notification.

The rapid decline in EU non-green box support resulted from policy changes that shifted much of the payment support into forms claimed as green box exempt. The EU also reduced or eliminated a number of administered prices, allowing it to calculate less market price support. The US support fell mainly because payments fell as crop prices rose, a 2008 policy change replaced the administered price for milk with administered prices for dairy products, which made the calculated market price support smaller, and the reporting practice for crop insurance was changed to report less non-green box support. In Japan, the abolition of the administered price for rice in 2008 led to rice market price support no longer being reported, which explains the sudden large decline in non-green box support. Blue box payments were, however, increased.

Figure 1: Non-green box support in the EU, Japan, Russia and the US
(percentage of value of production in agriculture)

Note: Non-green box support includes all AMS support (de minimis AMSs and Current Total AMS) and all blue box support.

Source: Calculated from notifications.
The declines in non-green box support in the EU, the US and Japan are thus explained by policy changes. Some involved administered prices, which reduced the measured support or shifted it to support claimed as green box compliant, and some payments shrunk as market prices went up. The flat series for Russia derives from the fact that AMS support and the value of production increased at similar rates. Altogether, by 2008, non-green box support in these four countries had declined to between 5 and 8 per cent of the value of production in agriculture. In the few later years that have been notified, non-green box support levels deviated little from that range: the EU, the US and Russia remained between 3 and 6 per cent and Japan rose to about 11 per cent.

The EU saw new farm legislation in 2013, the US in 2014, and Japan over the course of several years after 2010. Certain elements of these recent initiatives could reduce the measured non-green box support, such as the elimination of administered prices for US dairy products. Other parts could increase said support, such as the additional but limited flexibility in the new EU agricultural policy for payments that do not meet the green box criteria and US crop payments that increase when market prices or revenues decline.

1.2 Brazil, China, India, Indonesia, Nigeria and Turkey

In contrast, Brazil, China and Indonesia show a pattern of increasing long-term trends (Figure 2). In the two latest years notified, however, Brazil, India and Indonesia show significant drops. All of Indonesia’s non-green box support, almost all of India’s and about one third of Brazil’s consist of Article 6.2 subsidies. These are input subsidies (Indonesia), mainly input subsidies (India) or mainly investment subsidies (Brazil). China is not eligible for the Article 6.2 exemption.

Figure 2: Non-green box support in Brazil, China, India and Indonesia (percentage of value of production in agriculture)

Note: Non-greenboxsupport includes all AMS support (de minimis AMS and Brazil’s Current Total AMS) and all Article 6.2 support (no blue box support provided).

Source: Calculated from notifications. Values of production: Indonesia from OECD PSE database; India from TN/AG/S/21/Rev.5 (extrapolated from 2007 using data in Brink (2014)).
Turkey and Nigeria are two additional large production countries that make up the set of the ten largest agricultural producers. Turkey, which uses the provisions for developing countries in domestic support, has notified only up to 2001. Economic measurements of support relative to the size of Turkey's agriculture sector have varied since 2001 but remained in 2013 at a level exceeding the average level of OECD countries (OECD, 2014). It is difficult, however, to extend such economic data to what would be shown in a WTO notification. All of Nigeria's notifications up through 2011 report that no domestic support was provided. In the overall picture, therefore, one large production country using the developing country provisions (Turkey) offers more economic support to producers than the OECD average, while another such country (Nigeria) provides no domestic support.

1.3 Assessment

The EU, the US, Japan and Russia provided non-green box support at levels between 5 and 8 per cent of value of production in 2008. Unless the long-term declining trend is reversed, they may continue to provide non-green box support at these levels. By 2008, Brazil, China and Indonesia had raised non-green box support to some 2 to 4 per cent of value of production in agriculture, and India had raised it to 16 percent. In 2010, Brazil's level reached 5 per cent before declining. As economic support to producers in China has increased rapidly since 2008 (OECD 2013), non-green box support may also have increased to some extent. While India's 2008 level was unusually high compared to trend, non-green-box support as percent of value of production has for some time been much higher than in Brazil, China and Indonesia (Figure 2) and also higher than in the EU, Japan, Russia and the US (Figure 1).

Non-green box support in some large producer countries entitled to all or some of the Agreement’s developing country provisions has thus risen from levels not seen before to levels that rival or even exceed those of the largest developed producer countries. The contrasting trends for large developed and large developing countries may make this new pattern increasingly clear over time. The levels of non-green-box support as a percentage of value of production now significantly overlap for large developed and large developing countries. The last reported levels of four developed countries were about 3, 4, 6 and 11 percent of value of production (Figure 1). The corresponding levels for four developing countries were 1, 2, 4 and 12 (Figure 2). These observations help nuance the picture of how much non-green box support different countries currently provide.

The picture is of course different with regard to the allowed levels of certain types of support under WTO rules. Article 6.2 support is not subject to limits, so Brazil, India, Indonesia, Nigeria and Turkey can provide unlimited amounts of certain investment and input subsidies, within the practical limit of affordability. Blue box support is also without limit; however, among the ten countries, only the EU and Japan now provide such support. When it comes to AMS support, India, Indonesia, Nigeria and Turkey face de minimis limits on individual AMSs at 10 per cent of the values of production (China at 8.5 per cent). These limits increase as nominal prices increase or the values of production increase for other reasons. The 5 per cent for the EU, the US, Japan and Russia define de minimis thresholds.

---

4 Figure 2 accounts only for India's notified data and does not incorporate the still much higher levels suggested in, e.g., Brink (2014).

5 Farm input subsidization and the sustainability of development are important topics for research and debate.
not limits, and Brazil faces 10 per cent thresholds. Each of these countries has a Bound Total AMS, fixed in nominal terms, which limits the Current Total AMS.

The large size of some countries’ Bound Total AMS (as high as some USD 100 billion for the EU) and the long-term reductions in non-green box support have generated a large difference between the Bound Total AMS and the Current Total AMS for the EU, the US, and Japan. This “overhang” for Brazil is smaller in nominal terms. While Brazil, China, India and Indonesia have increased their non-green box support over time, not all or even none of this is AMS support, and any earlier AMS support was very low or nonexistent. China reports AMSs below the *de minimis* limits, India and Indonesia report no AMSs, and Brazil reports some AMSs below the *de minimis* thresholds and some above.

In sum, a number of policy changes in some countries have significantly reduced the reported levels of AMS support, and increases in AMS support in other countries have not yet resulted in reported violations of WTO limits.

2. Implications for the WTO negotiations

2.1 Domestic support provisions in draft modalities

The draft modalities of December 2008 would introduce numerous changes in the rules. AMS support would be more limited and blue box support would become limited (see e.g. Brink 2011 for a discussion). The changes would apply differently to countries identified in particular ways, including recently acceded Members. It is unclear how some of the draft modalities would apply to Russia, which only became a WTO Member in 2012.

The draft modalities would reduce the Bound Total AMS for the EU, the US and Japan, as well as for other developed countries and, to some extent, for Brazil and some other developing countries. If countries continue to provide AMS support as in recent years, the large Total AMS “overhang” means that reductions in Bound Total AMS could be feasible without much, if any, policy change. Some countries may not want to reduce their flexibility to increase AMS support in the future in case of a major price drop, for example. Also, for a given distribution of AMSs across products, for some countries, the cut in the *de minimis* percentage means that more AMSs would be counted in Current Total AMS. A larger Current Total AMS would thus need to fit within a smaller Bound Total AMS.

The introduction of limits on the individual product-specific AMSs would prevent a large increase in AMS support for any given product, at least in developed countries. Since many developing countries have historically provided little or no AMS support, they would be provided with considerable flexibility in setting the limits. While the blue box criteria would be changed to accommodate some additional measures, the total amount of a country’s blue box support would be subject to a limit. Limits on blue box payments for individual products would also apply. Some rules-based flexibility would be provided, especially for developing countries.

---

6 An AMS may exceed 5 (or 10) percent of value of production but must then be counted in the Current Total AMS. This applies to the 15 developed countries and the 17 developing countries with a Bound Total AMS.

7 Notifying support to the WTO involves an element of good faith. With large margins between applied support and the limits, whether *de minimis* limits or Bound Total AMS, dilution of the good faith element is unlikely. Small or no margins may inspire a dilution.
The sum of all applied trade-distorting support (de minimis AMSs, Current Total AMS, and blue box support and apparently also Article 6.2 support – the draft modalities do not exclude applied Article 6.2 support) would become subject to a limit, which for some developed and most developing countries stays fixed and for other countries declines over time to a fixed level. This measurement of applied support, labelled OTDS (Overall Trade-Distorting Support), would face limits that correspond to about 9, 7, 14, 17, 25, and 25 per cent, respectively, for the EU, the US, Japan, Brazil, China and India when expressed as a percentage of each country’s value of production in 1995–2000 or 1995–2004 (Orden et al. 2011). This distribution of entitlements to non-green box support would thus be in clear contrast to the existing distribution of Bound Total AMS, which are large for the EU, the US, and Japan and nil for China and India.

2.2 Implications of the evolution of non-green box support

The evolution of support in eight of the ten largest agriculture producing countries illustrates how much the world has changed from the 2001 start of the Doha Round and perhaps even from the 2008 year of draft modalities. The “traditional” high-support countries of the EU, the US and Japan still provide large amounts of non-green box support but much less so than in earlier years: both policies and markets have changed.

At the same time, some large agricultural producers among the emerging countries seem to be raising their non-green box support to levels approaching or matching those of the EU, the US and Japan. These emerging countries are entitled only to provide relatively low levels of AMS support but face no constraint on certain investment subsidies and input subsidies that meet the criteria of Article 6.2. That said, Nigeria, one of the ten largest agricultural producers, provides no domestic support of any kind to its producers.

There is thus a growing need to recognize a differentiation among developing countries. First, some provide relatively large and increasing non-green box support within the developing country provisions on domestic support in the Agreement (Article 6.2 and high de minimis percentage), which may continue within the flexibility and allowances envisaged for developing countries in the draft modalities. Second, some will not be in a position to provide generous domestic support of any kind for some time, be it green box compliant or not, e.g. those in a situation similar to Nigeria’s but including many small agricultural producing countries. Third, some now seem to be in a position to offer large non-green box support but choose not to do so (e.g. Chile and South Africa). Increasing non-green box support in countries in the first group would increasingly distort agricultural trade and disadvantage producers in the latter two country groups.

The interests of the many, often small, countries that do not provide much, if any, non-green box support could thus diverge from the interests of those who are looking for enough future latitude to continue increasing such support (AMS, blue box, Article 6.2). In technical terms, this concerns issues such as supporting producers through administered prices and input subsidies, both of which fail to meet the green box criteria for minimally distorting policy measures. It could also concern the measurement of applied levels of trade-distorting support in OTDS with regard to Article 6.2 subsidies.

---

8 Expenditures under certain developing country programmes that meet specific criteria, including expenditures under programmes using administered prices to acquire and release stocks, are considered eligible for green box treatment on the condition that a price gap is accounted for in the AMS.
Recognizing the increasing divergence of interests between high-support and low-support developing countries does not lessen the importance of reducing the very large entitlements to AMS support that some other countries now enjoy and of capping blue box support for all. Cutting the limits and introducing new limits on all categories of non-green box support would have little immediate effect on the applied support in countries that have already reduced it to levels far below the potential future limits. They would, however, be unable to raise their non-green box support back to the earlier high levels.

The extent to which the label “high-support developing country” is justified by the size and nature of a country’s support in the future will depend on the presence and size of curbs on non-green box support in a future Doha Agreement and the kind of support the country chooses to provide. With an increasing share of agricultural production taking place in developing countries, producers in developing countries have an increasing stake in a trading system where they are not disadvantaged by more highly supported producers in other countries, be they developed or developing.

**Conclusion**

The pattern of non-green box support to producers is now different from 1995, 2001, and even 2008. The support of some large developed countries is or has been on a downward trend. Some emerging economies are increasing support from earlier non-existent or low levels. Some countries, including many developing countries, are not using the exemptions and allowances to which they are entitled. Increasing use of non-green box support measures, e.g. administered prices, investment subsidies or input subsidies, in countries that did not previously provide such support can work to the future detriment of producers in low-support countries, such as many developing countries. The continued negotiations may need to reconcile the diverging interests of the future high-support and low-support factions of today’s developing country WTO Members.
References


Market Price Support in Large Developing Countries

By Raul Montemayor

In the run-up to the Bali Ministerial Meeting in December 2013, various proposals were presented to resolve the predicament of some developing countries that were at risk of violating WTO rules on domestic support because of their public stockholding programmes, which provide market price support to domestic producers. In Bali, WTO Ministers decided to temporarily shield such programmes from challenges until a “permanent” solution could be found. This paper summarizes the findings of a larger study conducted to provide policy-makers, negotiators and other stakeholders with an impartial, evidence-based analysis of policy options for such a “permanent solution” (Montemayor 2014).

Under the WTO Agreement on Agriculture (AoA), the distortive effect of market price support programmes can be quantified into a product-specific Aggregate Measurement of Support (AMS). This is equal to the difference between a fixed external reference price and an applied administered price multiplied by the quantity of the product that is eligible to receive the administered price. The resultant AMS figure must not exceed the de minimis for such product, which is a monetary value equivalent to a prescribed percentage of the value of annual production of the said product. In other words, the AMS as a percentage of the total annual production value must not exceed the prescribed de minimis percentage.

Figure 1: Formula for computing AMS as a percentage of production value

Because the external reference prices were based on import prices during a distant base period (usually 1986–88), the gap between these prices and the current administered or buying prices increased over time. When the variance was multiplied by the “eligible” production, some countries found themselves at risk of breaching their de minimis limits. Several proposals have been raised to address this problem. The following sections assess the effect of some of these proposals on the behaviour of AMS and the capacity of countries to comply with the AoA rules on domestic support.

The simulations cover five developing countries with existing public stockholding programmes that provide price support to producers. Only food staples, particularly wheat and rice, were included in
the analysis. Relevant data on import prices, administered prices, production volumes and values, foreign exchange rates and other information was culled from the FAO Statistical Database and submissions of countries to the WTO.

Table 1 provides a profile of the countries (coded from A to D) and commodities covered by the study. Notably, the public stockholding programmes of Countries A, C and D for rice covered a relatively small proportion of total domestic production (ranging from one to five per cent). In turn, procurement of rice in Country B and wheat in Countries B, C and E ranged from one fifth to one third of local production.

### Table 1: Profile of the countries and commodities covered by the study

<table>
<thead>
<tr>
<th>Country/Product/Crop Year</th>
<th>% Procurement</th>
<th>Administered/Reference Price</th>
<th>Administered/Import Price</th>
<th>Administered/Producer Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A – Rice, 2011</td>
<td>5%</td>
<td>26.53</td>
<td>1.33</td>
<td>1.21</td>
</tr>
<tr>
<td>Country B – Rice, 2010-11</td>
<td>22%</td>
<td>4.58</td>
<td>0.32</td>
<td>0.55</td>
</tr>
<tr>
<td>Country C – Rice, 2008</td>
<td>1%</td>
<td>0.87</td>
<td>0.48</td>
<td>0.79</td>
</tr>
<tr>
<td>Country D – Rice, 2011</td>
<td>2%</td>
<td>5.87</td>
<td>1.14</td>
<td>1.15</td>
</tr>
<tr>
<td>Country B – Wheat, 2010-11</td>
<td>26%</td>
<td>3.11</td>
<td>0.84</td>
<td>0.92</td>
</tr>
<tr>
<td>Country C – Wheat, 2008</td>
<td>37%</td>
<td>0.88</td>
<td>0.45</td>
<td>0.90</td>
</tr>
<tr>
<td>Country E – Wheat, 2010-11</td>
<td>25%</td>
<td>7.55</td>
<td>0.59</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Except in Country C, administered prices were significantly higher than the corresponding reference prices. Country A registered the highest ratio with a derived administered price of almost 26 times the reference price in 2011. In turn, administered prices were generally lower than the equivalent prices of imports, except for rice in Countries A and D. A similar result was found when administered prices were compared to producer prices.

**Figure 2: Base scenario results**

AMS as a percentage of production value de minimis
The simulations confirm apprehensions that a literal and strict application of the AMS formula for market support price programmes could lead most of the developing countries covered by the study to breach their de minimis allowances for product-specific AMS. In this base scenario, no adjustments were made for reference and administered prices, and "eligible" production was set to total production on the assumption that price-support programmes were open-ended and available to all producers. As shown in Figure 2, only one country was able to comply consistently with the de minimis rule despite agreeing to a lower threshold (8.5% of total production value versus 10% for the others), mainly because its administered prices were significantly lower than its reference prices. The other countries ended up with de minimis percentages of 40% and above.

Adjusting reference prices alone had mixed results. The use of three-year rolling averages for import prices produced the most positive outcome, although one country remained in breach of its de minimis cap primarily because of the unusually large gap between its reference and administered prices for rice. Adjusting reference prices for inflation, whether by using producer price indices or converting prices and monetary values to US dollars, also had generally positive effects but this was not sufficient to allow two of the five countries to comply with the de minimis rule for their rice products.

Setting "eligible" production to actual procurement volume worked in favour of countries whose public stockholding programmes covered only a small proportion of local output. Three of the five countries that absorbed less than 5% of local production fared best in this scenario. In turn, the two other countries that purchased about one fourth of local wheat produce exceeded their AMS caps.
The only scenarios where all countries and commodities registered AMS within their de minimis was when the “eligible” production was equated to the actual procurement volume and reference prices were adjusted simultaneously, either by applying producer price indices, converting prices to US dollars, or using three-year or five-year rolling average prices of imports. Figure 3, for example, shows that, if reference prices were set to the average prices of imports in the preceding three years and the “eligible” production was pegged to the actual volume procured, all countries would be able to comply with the de minimis rule. In fact, only Country A ended up with a positive AMS equivalent to 2% of its annual value of rice production, which was nevertheless significantly below its 10% de minimis percentage cap.

In terms of crafting a “permanent solution”, an Appellate Body ruling in a dispute involving Korean beef opened the possibility for countries to officially set a limit to the scope of their price-support programmes. On this basis, they could legally declare their “eligible” production to be a certain portion or percentage of local production. By setting the “eligible” production to a suitably low level, the gap between the administered and reference prices could be effectively overcome so as to arrive at an AMS falling within the de minimis. In fact, the simulations show that this option, which would require any change in AoA rules, could even allow countries to increase their procurement over current levels and still comply with AMS rules. This option appears to be the most practical and feasible approach for countries that want to maintain their price-support programmes but do not plan to absorb large portions of domestic production.

If this option is not able to adequately address the concerns of some countries, the least contentious alternative would be to allow the use of US dollars in notifying prices and monetary values in AMS calculations and to equate “eligible” production only to the proportion of local output that is actually marketed by producers. These two adjustments would not be sufficient to resolve the problems of three countries, but they would at least bring one country’s support programme, which was in breach in the base scenario, in compliance with de minimis rules.

Another possible area of compromise would be to exempt developing countries from de minimis caps if their actual procurement does not exceed a given percentage of local production. This would address the concerns of countries whose procurement programmes are small and arguably contribute little to market distortions. However, since this option requires a change in AoA rules, the previous suggestion for countries to simply set a limit to their “eligible” production appears to be preferable as it would largely achieve the same result.

Rebasing reference prices to a more recent period, adjusting them for inflation through the use of producer price indices, or replacing them with three-year or five-year Olympic averages for historical import prices may be difficult to pursue since this runs counter to the “fixed” nature of reference prices. In turn, increasing de minimis levels has minimal effects and would conceivably provide only temporary relief from breaches.

Aside from adjusting the AMS formula, developing countries have the option to convert their buying programmes to green box measures by removing administered prices altogether. This will address fears that the price-support programmes of developing countries could lead to significant market distortions and even harm other developing countries if they involve large volumes that would eventually get dumped in export markets. Developing countries have the option to replace these
trade-distorting measures with practically unlimited amounts of input subsidies as long as these are extended to low-income or resource-poor farmers. Using budgetary outlays as proxies for the AMS through the "equivalent method of support" modality could be another option that could resolve the dilemma.

The study concludes that the public stockholding issue is solvable and that developing countries have many options, both within and outside the AMS formula, to continue providing support to their farmers. At the same time, the pursuit of a "permanent" solution to the public stockholding issue should be viewed in the light of calls from several developing countries to rectify existing imbalances in the domestic support allowances accorded to developed vis-à-vis most developing countries. Care should nevertheless be exercised so that such programmes do not end up unduly distorting markets and even harming other developing countries.
References

The 2014 US Farm Bill:
Implications for the WTO Doha Round
in a Post-Bali Context

By Vincent H. Smith

Introduction

The 2014 Agricultural Act, signed into law by President Obama on 7 February 2014, terminates several farm subsidy programmes, replacing them with several new subsidy initiatives. These initiatives have potentially important implications for the extent to which the US is likely to support reforms to the World Trade Organization (WTO) Agreement on Agriculture that are similar to the changes to Aggregate Measures of Support (AMS) caps and de minimis provisions described in the December 2008 Revised Draft Modalities.

One concern is that, if prices for major grain and some other commodities retreat from their recent record and near record levels towards long-run trend levels, then the new US Farm Bill programmes may well involve larger subsidies for farmers than those they received from the discontinued programmes. For example, if prices for crops like wheat and corn fall to the levels forecasted by the United States Department of Agriculture in February 2014, then subsidies paid out under the new programmes could be more than double the average amounts paid out annually under the original programmes.

A second closely related issue is that, in the context of the WTO Agreement on Agriculture, all of the major new subsidy programmes are unambiguously amber box programmes. In contrast, the now abandoned Direct Payments programme that was a major source of crop subsidies for US farmers between 2008 and 2013 (4.9 billion dollars a year) was essentially a decoupled green/blue box programme. Therefore, in contrast to some other WTO Member countries, through the 2014 Farm Bill, the US has shifted its subsidy programmes for agricultural commodities away from green and blue box policies and into amber box programmes, with the potential for substantially increased total outlays on those programmes.

The current de minimis limit, which allows a country to exclude some amber box subsidies counting against its AMS cap, is 5 per cent of the value of output. In addition, the current AMS cap for the United States is 19.1 billion dollars. Given these provisions, it is very unlikely that the United States would exceed its AMS cap, even though expenditures on farm subsidies in any given year could be more than double their maximum levels over the period covered by the previous Farm Bill (2008–2013). However, if the de minimis limit is reduced to 2.5 per cent and the US AMS cap is lowered by 60 per cent to 7.64 billion dollars (as implied by the 2008 draft modalities), given the provisions of the new Farm Bill, the US would be quite likely to exceed such an AMS cap, at least for some years.

A third WTO issue derives from the potential that the new Farm Bill's provisions could result in WTO trade dispute fillings based on claims of price suppression under the Subsidies and Countervailing
Measures (SCM) Agreement. The new Farm Bill programmes are designed to give US farmers larger subsidies when prices for the commodities they produce fall. These programmes cover at least 17 different internationally-traded crops, including large area crops like corn and soybeans, crops that have been the subject of previous trade disputes such as cotton and wheat, as well as small area crops like chickpeas and minor oilseeds. They are also designed to increase subsidies when world market prices for those crops decline.

1. The new farm bill subsidy programmes

The major new subsidy programmes are as follows:

- The Price Loss Coverage (PLC) programme, in which payments are triggered by relatively low crop prices;
- The Agricultural Risk Coverage (ARC) programmes, in which payments are triggered by relatively modest shortfalls in expected revenues on a per hectare basis;
- The Supplementary Coverage Option (SCO), which provides subsidized insurance (the government pays 60 per cent of the actuarially fair premium and all administrative costs) to cover relatively small decreases (shallow losses) in per hectare revenues from their expected levels and which is paid on every insured acre planted in the current year;
- The Stacked Income Protection (STAX), a more heavily subsidized version of the SCO insurance programme that is only for cotton (the government pays 80 per cent of the actuarially fair premium and all administrative costs);
- A new dairy programme called the Dairy Margin Protection Programme (DMPP).

The STAX and SCO programmes provide subsidies tied to the current crop planting and production decisions of US farmers as well as to the market prices for the current year. The PLC and ARC programmes make subsidy payments based on the farm's historical production of the crops covered (for most farms, almost certainly their production of the covered crop over the period 2008 to 2012). However, under the PLC, subsidies are triggered by current market prices and, under the ARC, subsidies are triggered by current prices and current yields.

Farmers are required to make a one-time choice about whether any given eligible crop will be covered by the PLC or the ARC programme. If the PLC programme is selected, the farmer can also obtain SCO insurance coverage for relatively small reductions in yields and revenues. If the ARC programme is selected for a crop, then the SCO option is not available for that crop. In addition, there are two versions of the ARC programme, one based on expected per hectare revenue in the county in which the farm is located and one based on expected farm-specific yields. If the farm-specific ARC option is chosen, than all crops eligible for a PLC or ARC subsidy must be enrolled in the farm-specific yield ARC programme.

The DMPP is a heavily subsidized quasi-insurance programme in which, while payments are based on recent historical milk production levels, the amount of the subsidies is determined by current milk prices and animal feed prices. As a result, all of these new subsidy programmes will generate amber box payments.
2. The shift from decoupled to amber box programmes

These new amber box programmes have been established as a response by the Congressional House and Senate to intensive lobbying on the part of farm groups. Those groups recognized that a major source of government subsidies to crop producers, the Direct Payments programme (DPP), was no longer politically viable. The DPP provided producers of 16 crops – including corn, wheat, soybeans, rice and cotton – with an essentially guaranteed 4.9 billion dollars a year in subsidies on the basis of the production of the land farmed between fifteen and thirty years ago. Effectively, the DPP subsidies were decoupled from current production decisions for most farms and, as a result, had increasingly become viewed as welfare payments flowing, for the most part, to relatively wealthy households.

As such, the DPP could no longer be justified from any policy perspective (Goodwin 2012) and the 2014 Farm Bill terminated the programme (or in the case of cotton phased it out), along with two other related programmes. These were the Countercyclical Payments Programme (CCP) and the Average Crop Revenue Programme (ACRE), which were both amber box programmes, but ones that had generally provided very small amounts of subsidies over the previous five years. However, the basic structure of the CCP was almost identical to the structure of the new Price Loss Coverage Programme that replaced it. Under the PLC, as under the now defunct CCP, farmers will receive a subsidy payment when the annual average market price for their crop falls below the trigger price, and payments are made on the basis of historical production.

There are two important differences between the CCP and the PLC. The first is that trigger prices are much higher under the new PLC than under the old CCP programme, as illustrated in Table 1. For example, under the PLC, the wheat trigger price is 53% higher, the corn trigger price is 75% higher and the rice trigger price is 72% higher. The implication is that annual average subsidy payments under the PLC programme are likely to be much higher and more frequent than they would have been under the CCP.

In addition, farmers will be allowed to update the amount of historical production on which PLC payments will be made. At their own discretion, they can either keep their current historical production bases or update them using their production of the crops covered by the PLC between 2008 and 2012, a period in which yields for most crops were much higher. In contrast, under the ARC programme, farms receive a subsidy payment if per hectare crop revenues fall below 86 per cent of their expected levels. The payment is capped at 10 per cent of the per hectare expected revenue (at the county or farm level), which is calculated using Olympic averages for prices and yields over the previous five years.

3. Potential farm bill subsidy expenditures and the current and potential future AMS caps

Several estimates of the subsidy costs of the new Farm Bill are available. Some, like the recent March 2014 Congressional Budget Office (CBO) estimates, suggest that the average annual outlays for the new programmes will be less than or close to the approximately five billion dollars in annual subsidy outlays of the discontinued Direct Payments, ACRE and CCP Programmes. Those estimates assume that prices for major crops like wheat and corn will remain at, or close to, their recent record and near record levels.
Other estimates indicate that government spending on just the PLC and ARC programmes for two or three major crops (such as corn and wheat) could be in excess of $7 billion for some years if prices moderate towards their long-run trend levels (Smith 2014). Furthermore, when all US farm programmes – including the federal agricultural insurance programmes – are considered, US government spending on amber box programme subsidies could easily exceed $15 billion for some years.

However, almost all analyses indicate that, between 2014 and 2018 (the period covered by the new Farm Bill), the US is unlikely to exceed its current $19.1 billion cap under the provisions of the new Farm Bill. That is not the case with respect to the AMS and de minimis provisions in the 2008 proposed draft modalities. First, it is difficult to envisage the United States regularly being able to stay below a Total Bound AMS cap of $7.64 billion, given the provisions of the 2014 Farm Bill, without the extensive use of AMS de minimis exemptions. However, if the PLC, ARC, SCO and crop insurance are viewed as crop specific (as they should generally be viewed), they would not be excluded from the reported US AMS expenditures under a 2.5 per cent de minimis exemption limit. For example, for most crops, crop insurance premium subsidies are about 4 per cent of the crop’s total market value.

4. The 2014 farm bill and the WTO Subsidies and Countervailing Measures Agreement

Finally, another important WTO issue concerns the potential for WTO trade disputes to be filed because of price suppression under the SCM Agreement. The PLC, ARC, and DMPP programmes, as well as the SCO and STAX programmes, are designed to give US farmers larger subsidies when prices for the commodities they produce fall. As mentioned above, the PLC and ARC programmes cover a range of different crops, including large area crops like corn and soybeans, crops that have been the subject of previous trade disputes such as cotton and wheat, as well as small area crops like chickpeas and minor oilseeds. All of these crops are traded internationally and, in several cases (for example, both corn and chick peas), the US has a relatively large share of global production. Hence, it could reasonably be argued that the 2014 Farm Bill has also substantially increased the potential scope for trade disputes with respect to both “large acre” and “small acre” crops.

Table 1. CCP and PLC payment trigger prices

<table>
<thead>
<tr>
<th>Commodity</th>
<th>CCC Payment Trigger Price (USD)</th>
<th>PLC Reference (Payment Trigger) Price (USD)</th>
<th>Per cent Increase in Payment Trigger Price Under PLC (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$2.35/bushel</td>
<td>$3.70/bushel</td>
<td>57%</td>
</tr>
<tr>
<td>Wheat</td>
<td>$3.65/bushel</td>
<td>$5.50/bushel</td>
<td>53%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$5.56/bushel</td>
<td>$8.40/bushel</td>
<td>66%</td>
</tr>
<tr>
<td>Peanuts</td>
<td>$459/ton</td>
<td>$535/ton</td>
<td>17%</td>
</tr>
<tr>
<td>Rice</td>
<td>$8.15/cwt</td>
<td>$14/cwt</td>
<td>72%</td>
</tr>
<tr>
<td>Barley</td>
<td>$2.39/bushel</td>
<td>$4.95/bushel</td>
<td>107%</td>
</tr>
</tbody>
</table>
References


US Congressional Budget Office. 2013. Updated cost estimates of the farm bills that were considered in the Senate and the House during the 112th Congress. 1 March 2013.

The EU CAP Reform:
Implications for Doha Negotiations

By Stefan Tangermann

Introduction

In the context of establishing its Multiannual Financial Framework for the period 2014–20, the EU also had to plan its Common Agricultural Policy (CAP) for that period. Accordingly the European Commission tabled a first document in 2010, outlining its thoughts on where the CAP should go. The Commission followed up with detailed legal proposals in 2011. After lengthy debates and negotiations between the Commission, the Council of Ministers and the European Parliament, the latter endowed with new powers by the Lisbon Treaty of 2009 and hence much more influential in shaping decisions on the CAP, a political agreement among the three parties was reached in September 2013. The framework for the CAP in the 2014–20 period is thus set.\(^1\)

Given the size of the agricultural sector in the EU, and the volume of agricultural trade conducted by the EU, the decisions on the CAP for 2014–20 could well have important implications for world markets, but also for the agricultural negotiations under the Doha Round. What is the nature of the decisions on the future of the CAP taken in 2013? Are they likely to have implications for the WTO negotiations on agriculture in the post-Bali context? Will they affect the position adopted in these negotiations by the EU? The present note will attempt to respond to these questions.

1. The CAP for 2014–20: background and outcome

To understand the nature of the decisions taken in 2013, shaping the CAP for the 2014–20 period, it is best to view them from the perspective of the evolution the CAP has taken since the early 1990s. In 1992, at a time when the Uruguay Round negotiations on agriculture were close to collapse over disagreement, in particular between the US and the EU, regarding the extent to which domestic support and export subsidies should be reduced, EU Commissioner for Agriculture Ray MacSharry managed to push successfully for the first CAP reform in EU history worthy of the name. Price support for a number of commodities was cut significantly, and direct payments were introduced as compensation for farm incomes. These new direct payments were coupled to production as they were based on the area actively farmed. Though internally in the EU the political argument at the time was that the MacSharry reform was initiated for domestic reasons, there is little doubt that it was strongly motivated by the ongoing negotiations of the Uruguay Round – and it did indeed open the door towards a successful conclusion of the multilateral trade talks (Swinbank and Tanner 1997, Daugbjerg and Swinbank 2009).

The successor to MacSharry, Commissioner Franz Fischler, took the next step in reforming the CAP, by de-linking the direct payments from production: farmers could receive (most of) the payments irrespective of what and, indeed, whether they produced any commodity. The Fischler Reform of

\(^1\) A number of decisions on implementation are still pending, both at the EU level and in the individual member countries.
2003, variously described as “the most radical reforms of the CAP” ever (Swinnen 2008, p. 135), was motivated by a number of considerations. However, Fischler certainly wanted to avoid a repeat of the experience MacSharry had made in the Uruguay Round. There was little doubt that the Doha negotiations, if successful, would result in further reduction commitments for tariffs, domestic support and export subsidies. By switching to decoupled payments, the EU was in a position to place the largest part of its domestic support in the green box, sheltering it from reduction requirements and hence creating the possibility for the EU to agree, in the Doha negotiations, to further cuts in trade-distorting domestic support. Thus, Fischler’s strategy for CAP reform was also linked to the multilateral trade negotiations (Swinnen 2008).

The following Commissioner for Agriculture, Mariann Fischer Boel, also pushed for a determined continuation of CAP reform. She initiated a fundamental reform of the EU’s sugar regime (in response to a WTO dispute), with a significant cut of price support, and in her “Health Check” reform achieved the decision to end milk quotas (in 2015). Fischer Boel also continued the process of decoupling support from production and moving the CAP in the direction of more market orientation, thus making it more WTO-proof (Daugbjerg and Swinnen 2011).

When Dacian Cioloş took over as Commissioner for Agriculture in 2010, having to prepare the CAP for the 2014–20 period, the strategy changed fundamentally. Rather than continuing along the path towards fundamental CAP reform, for example by embarking on a gradual decline of direct payments and shifting expenditure to more targeted and territorially differentiated measures, the focus was on safeguarding the direct payments into the future (Tangermann 2014). From the first proposals tabled by Cioloş, and throughout the debate about the CAP for 2014–20, emphasis was not on whether direct payments, originally introduced as compensation for the 1992 price cuts, were still needed, but how the payments should be distributed across recipients. The decision eventually was indeed to redistribute payments to some degree, towards farmers in the EU’s new member countries in Central Europe, towards a more regionally even distribution within member countries, and towards smaller farms.

The Commissioner also proposed a new conditionality for receiving 30% of the payments, in the form of requiring farmers to engage in certain farming practices that are supposed to be environmentally friendly. This so-called “greening” of the direct payments was (and continues to be) much debated among the EU’s agricultural policy-makers and farmers, but was in the end reluctantly accepted. There are good reasons to doubt the environmental effectiveness of the new “greening” conditionality applied across the whole EU, in particular if compared to well targeted measures that take account of specific regional conditions and requirements and engage individual farmers in a contractual relationship (Tangermann 2014). Thus it is difficult to avoid the impression that “greening” the direct payments was primarily a strategy to make them immune against political criticism.

There will also be some reduction in the level of direct payments. However, this was not a deliberate decision on the side of agricultural policy-makers in the EU, and certainly not aimed by them at embarking on a gradual elimination of the payments. The reduction was rather a result of the general decision to scale the overall EU budget for the 2014–20 period down somewhat.

---

2 The budget for the ‘First Pillar’, consisting mainly of the direct payments, will be reduced by 1.8% in real terms relative to the previous budget period (European Commission 2013).
As far as market measures are concerned, a remarkable outcome of the decisions in 2013 was resolve to end sugar quotas by 2017. In this regard the Cioloş package continues to reform the EU’s sugar policy and to eliminate supply management from the CAP, both initiated originally by Commissioner Fischer Boel through cutting price support for sugar and proposing an end of milk quotas. Other elements of the EU’s market and trade policies for agriculture were changed only marginally through the 2013 decisions. A limited number of largely technical amendments were made to some elements of the common market organization under the CAP, none of which changes the operation and implications of the regime significantly. However, the EU’s Member States are now given more scope for coupling part of the direct payments again with production, undoing elements of earlier CAP reforms and reducing the degree of market orientation.

Several changes were also made to the nature and implementation of rural development measures (the “Second Pillar” of the CAP), pursued by the individual member countries within a given EU framework and co-financed between member countries and the EU budget. Among others, member countries can make use of a “risk management toolkit” that now provides for the possibility of introducing income stabilization schemes, with parameters apparently designed with a view to the respective provisions under the green box in the WTO Agreement on Agriculture.

Though necessarily affecting developments on agricultural markets and the economic situation in agriculture, support for the production and use of biofuels in the EU is not part of the CAP in a formal sense, but comes under the heading of energy policy. Moreover, at the level of the EU only targets and general conditions are set, while implementation of biofuel support policies is the responsibility of the individual member countries. In designing its strategy for biofuels, the EU has for some time grappled with the issue of indirect land-use change (ILUC), as expansion of agricultural commodity production for use in biofuels might well push “traditional” agricultural products into areas (such as rainforests) that are sensitive regarding impacts on climate change and the environment, reducing (if not negating) the savings of greenhouse gas emissions that might otherwise result from biofuels. Most recently, in June 2014, the Council of Energy Ministers has agreed to scale back the target for use of conventional biofuels (produced on the basis of agricultural commodities, as opposed to “advanced” biofuels) from 10% to 7% of energy consumption for transport in 2020. If confirmed by the European Parliament this change in the EU’s biofuel policy could reduce the burden placed on international food markets by biofuel support provided in the EU.

2. Implications for the WTO negotiations

While the CAP reforms initiated by the three predecessors of the EU’s current Commissioner for Agriculture were at least partly aimed at shaping the EU’s position in the respective ongoing trade negotiations under the GATT/WTO, there is little if anything in the 2013 CAP package which might suggest that considerations regarding the Doha Round negotiations played a notable role this time round. At the same time it is also hard to detect much in the way of any direct implications that the CAP decisions taken in 2013 might have for the ongoing negotiations in the post-Bali framework.

In line with the tradition of past CAP reforms, the 2013 CAP package did not make any changes to the EU’s border protection for agricultural products. No tariffs were modified, nor were any Tariff

---

3 With approval of the Commission, member countries can spend up to 13% of their direct payment volume on payments coupled to the production of a large number of crops and livestock products.
Rate Quotas (TRQs) adjusted or changes made to the administration of TRQs. Like in the past, the EU considers changes of its market access regime in agriculture to be a matter of international trade negotiations, rather than a subject of unilateral amendments of the CAP. Moreover, there are no specific reasons to assume that the decisions taken on the CAP for 2014–20 might in any way have changed the EU’s position regarding the Doha negotiations on market access in agriculture.

Quite independent from the decisions taken domestically in the EU one could potentially argue that the high level of international market prices for agricultural commodities that has materialized over the last few years, and that most analysts project will continue to prevail for quite some time, might allow the EU to show more flexibility than in the past in negotiations on tariff cuts for agricultural products. However, while this is not completely impossible it may also not be very likely. The whole “philosophy” behind the CAP decisions taken in 2013, and apparent in the debate that preceded them, is not reform-oriented, but rather focused on maintaining benefits to the farming community. Thus the nature of the 2013 CAP decisions would not appear to speak for a willingness on the side of the EU to show a wholly new flexibility in the Doha Round negotiations on market access in agriculture.

The 2013 CAP package also did not make any changes to the EU’s regime for export subsidies in agriculture. To be sure, in recent years the EU has made less and less use of export subsidization and, for the time being, it does not grant any export subsidies at all. Yet, this is not the result of deliberately abandoning the respective elements in the EU’s market regimes for agricultural products. The EU still has the instrumentation in place that allows it to subsidize exports, and in case of doubt it could begin to grant export subsidies again any day. The decline, and current disappearance, of export subsidies is a combined result of past cuts in EU support prices and the decoupling of direct payments on the one hand and of recent increases in world market prices for agricultural commodities on the other hand. It comes handy as it allows the EU, for the time being, to escape criticism for using this internationally much condemned instrument.4 It also is likely to allow the EU more flexibility in the Doha Round talks on eliminating export subsidies altogether, as already reflected, to some extent, in the EU’s acceptance of the Bali Ministerial Declaration on export subsidies, and in particular its undertaking that “the level of export subsidies will remain significantly below the Members’ export subsidy commitments”.

Quite some attention has been paid to a statement by Commissioner Cioloş made at the Berlin Green Week in January 2014, where, in the context of promoting the decisions on the CAP for 2014–20, he also said:

“I would like to tell you this evening, in the framework of preferential partnership agreements with African countries: I am prepared to go one step further. I am ready to propose to stop, once and for all, the use of export refunds to those developing country destinations – even in times of crisis when this instrument can still be used.”5

While this suggestion can well be interpreted as an indication that the EU is moving more and more in the direction of accepting a final elimination of export subsidies (and measures with equivalent

---

4 The EU will not have been unhappy about the following sentence in the Bali Ministerial Declaration on export competition: “We recognize that the reforms undertaken by some Members have contributed to this positive trend.”

As the 2013 CAP decisions have primarily focused on direct payments, any implications they may have for the Doha Round negotiations on agriculture could potentially come mainly in the area of domestic support. However, even there it is not really obvious that any significant changes of the EU position might directly flow from the decisions taken domestically in the EU. One could possibly discuss whether some elements of the "greening" approach to direct payments could affect the legal status of these payments under the WTO's green box as currently defined (see e.g. Häberli 2013). However, even if it were to turn out that (some part of) the "green" element of the EU’s direct payments could no longer be brought safely under the green box, this might not pose a major problem for the EU as there is sufficient scope under the Aggregate Measures of Support (AMS) commitments of the EU, both in their current form and after a potential agreement along the lines of the 2008 Draft Modalities. Thus even with regard to the WTO disciplines for domestic support it appears unlikely that the CAP decisions taken in 2013 will, by themselves, have any significant implications for the Doha Round negotiations on agriculture in the post-Bali context.

Conclusion

A sober assessment of the decisions taken in 2013 regarding the CAP for the 2014–20 period suggests two conclusions. First, compared to the reform trend established in the EU since 1992 by three successive Commissioners for Agriculture, the package of decisions taken in 2013 under the guidance of Commissioner Cioloş cannot really be called a reform. Instead, this was a holding operation, aimed at safeguarding a political future for the direct payments by making them immune to the most prominent criticism regarding their uneven distribution across farmers and their dwindling justification.

Second, contrary to the CAP reforms since 1992, all of which had some elements aimed at facilitating the EU’s constructive participation in the GATT/WTO negotiations, the decisions taken in 2013 had essentially very little, if anything, to do with the ongoing negotiations of the Doha Round. Market access was not improved at all. Export subsidization is still possible, though it is not currently used. And as far as domestic support is concerned, the past reforms of the CAP had created so much scope for the EU that no pressure is felt from that side. As a consequence it would also be difficult to argue that the recent decisions on the CAP for 2014–20 will by themselves have noticeable implications for the Doha Round negotiations in the post-Bali context.

At the time of writing it appears that attention of the EU’s agricultural policy-makers and the wider public is focused more on the Transatlantic Trade and Investment Partnership (TTIP) negotiations with the US than on the WTO’s Doha Round. If successful, a TTIP agreement could well affect the EU’s position in the multilateral negotiations. If access of the US to EU markets for agricultural products and foods is significantly improved under TTIP it would be difficult to argue that the EU should not also open its markets more widely to other exporters, in particular those from developing
countries. Equally, giving up on the possibility of export subsidization in trade with the US might well be a precursor to elimination of export subsidies overall. Implications regarding domestic support, though, are less clear as it is unlikely that any disciplines in this area might be included in a TTIP. However, it is conceivable that in the context of TTIP the US and the EU could agree to make a determined joint push in the WTO for significantly more stringent commitments on domestic support. If that possibility were to materialize, then even the EU’s position on domestic support might be affected in a way that is helpful for the Doha negotiations on agriculture.

The potential change in direction of the EU’s biofuel support policy, foreshadowed by a recent decision of Energy Ministers to scale back the target for biofuel use to 7% of energy consumption in transport, might reduce the burden biofuel support policies place on international food markets.
References


The Future of Green Box Measures

By Jonathan Hepburn and Christophe Bellmann

Introduction

Should all farm subsidies be subject to a ceiling under international rules? Two decades ago, at the end of the Uruguay Round, trade ministers decided that they should not be, by shielding a class of farm support from any cuts or upper limits. These payments — dubbed “green box” support by trade negotiators — are required under WTO rules to cause no more than minimal trade-distortion. They typically include support ranging from general services — such as farm research, pest control, or advisory services — through to domestic food aid, decoupled income support, disaster relief, investment aid, and environmental programmes. In contrast, “amber box” payments are recognized as trade-distorting and were capped and reduced as part of the Uruguay Round deal.

The idea of exempting production and trade-neutral subsidies from reduction commitments was first proposed by the US in September 1987, shortly after the Punta del Este Ministerial Conference, and was echoed one month later by the EU. At that time, developed country farm groups that had benefited from past protectionist policies strongly opposed any specific compromise on agriculture. In this politically charged environment, the proposal had the merit of providing an adjustment mechanism that could offset the potential losses that farmers might incur. In doing so, it also played a significant role in neutralizing opposition to the Round. In exchange for bringing agriculture within the disciplines of the WTO and committing to future reduction of trade-distorting support, subsidizing countries would be allowed to retain support measures that caused no more than minimal trade-distortion to pursue various public policy objectives. In a field so heavily riddled with controversy, this one fragile point of consensus has been the hinge upon which the whole WTO reform process has depended.

Since the end of the Uruguay Round, traditional providers of farm support have indeed reduced their trade-distorting support — albeit not as much as their trading partners had hoped. However, this move has often been accompanied by a proportionate increase in green box subsidies, prompting some analysts to talk about a “box shifting” phenomenon. While the architects of the WTO Agreement on Agriculture clearly intended to encourage governments to shift support away from more trade-distorting measures and towards those that are “decoupled” from trade and production, some analysts have queried to what extent certain green box measures are in fact less trade-distorting.

At the same time, green box support has been steadily growing in a number of “emerging” economies such as China or India — most of which only have limited possibilities to use other types of measures. As a result, green box payments represent today by far the largest share of global agricultural support. As an ever greater proportion of subsidies are notified as “green box”, maintaining the fragile balance

1 Defined in Annex 2 of the WTO Agreement on Agriculture.
2 Stancanelli (2009).
3 Bellmann and Hepburn (2009).
4 Galperín and Doporto Miguez (2009).
achieved in the Uruguay Round increasingly depends on WTO Members’ ability to preserve the integrity of the green box category, by ensuring that such measures do not cause more than minimal trade-distortion. From a sustainable development perspective, understanding the impact of those measures also requires enhanced attention.

The present article reviews the current status of negotiations on green box subsidies. It then looks at recent national agriculture reforms with a particular focus on the EU, the US, China and India, identifying the various instruments used by those WTO Members and their underlying policy objectives. Finally, section 3 suggests possible ways forward to reform green box disciplines both in the short and longer term.

1. The negotiating process

The immediate negotiating mandate for work on the green box in the Doha Round was provided by paragraph 16 of the July 2004 Framework, WT/L/579. This specified that:

“Green Box criteria will be reviewed and clarified with a view to ensuring that Green Box measures have no, or at most minimal, trade-distorting effects or effects on production […]”

At the Hong Kong Ministerial in December 2005, Ministers then added that this review should ensure that developing country programmes were also effectively covered by the criteria:⁵

“... Green Box criteria will be reviewed in line with paragraph 16 of the Framework, inter alia, to ensure that programmes of developing country Members that cause not more than minimal trade-distortion are effectively covered.”

Efforts to “review” green box criteria in the first years of the Doha negotiations led to negotiating texts in this area being widely seen as having “stabilized” by the time of the July 2008 mini-ministerial – when the trade talks came closest to agreement before subsequently breaking down. While the EU and G-10 group of countries with heavily-protected farm markets had initially sought to expand the scope of measures in this area, agricultural exporters in the Cairns Group pushed for more rigorous disciplines and tighter measures. Meanwhile, the African Group and other developing countries sought to expand flexibilities for developing countries. With the first two sets of demands effectively cancelling each other out, the draft text largely reflected developing country calls for more flexibility for their own less trade-distorting farm support schemes.⁶ Exporting countries also took a conscious decision to focus their efforts on reducing ceilings for support that is recognized as trade-distorting under WTO rules.

Since 2007–08, however, very little active discussion had taken place on the mandated review until the Bali Ministerial Conference, which saw Members agree to a handful of developing country proposals that had emerged from this process.⁷ In the run-up to the ministerial, the G-33 coalition, spearheaded by India, singled out two specific green box proposals from the 2008 draft text, for inclusion in the “Bali package”. The first, which was relatively uncontroversial, consisted in listing a range of support

---

⁵ Mandated in paragraph 16 of the 2004 July Framework (WTO 2004), and in paragraph 5 of the Hong Kong Ministerial Conference declaration in 2005 (WTO 2005). See also Hepburn and Bellmann (2009).

⁶ Hepburn and Bellmann (2009).

⁷ WTO (2013).
policies used predominantly in developing countries (e.g. land rehabilitation, drought management, and rural employment and farmer settlement programmes) as general government services under the WTO "green box". The second – which was much more controversial – proposed that current WTO farm subsidy rules be relaxed to allow governments more flexibility to buy food from low-income and resource-poor producers at administered prices as part of their food-stockholding programmes. Under existing WTO rules, government expenditure incurred while building stocks and reserves for food security are considered as green box measures as long as certain conditions are met, including that the food purchase takes place at market prices. If the stocks are acquired and released at an administered price set by the government, the difference between this administered price and a fixed external reference price – established at the end of the Uruguay Round – must be accounted for as a trade-distorting subsidy or "amber box" payment, and is therefore subject to WTO limitations.\(^8\)

Over recent years, however, administered prices have increased significantly compared to the fixed reference price, with several countries believed to be at risk of breaching their amber box ceiling. India in particular fears being in such a situation after implementing the adoption of its National Food Security Act in a way that is widely expected to extend the provision of subsidized food grains under the Public Distribution System. To address this concern, India has proposed removing the obligation to account for the difference between the administered price and the fixed reference price as an amber box subsidy. Instead, it has proposed that such price support schemes be considered compatible with the "green box" and not be subject to any limitations.

Although the proposal was already reflected in the 2008 draft negotiating text\(^9\) and considered as "stabilized" as part of a broader package of subsidy and market access reforms, it became highly controversial the moment it was taken out of this context. In fact, disagreement over the G-33 proposal brought the whole Bali negotiations to the brink of collapse, before eventually culminating in agreement on a "peace clause". This committed countries to exercise "due restraint" in challenging developing country food-stockholding programmes, on the condition that countries wishing to take advantage of this flexibility share additional information about the nature and scale of the support provided under these schemes. The peace clause itself was described as an "interim" mechanism that would apply while countries negotiated a permanent solution for adoption by the WTO’s eleventh ministerial conference – due to be held in 2017.

Six months after Bali, however, India signalled that it was unwilling to support progress on other issues – such as the trade facilitation agreement protocol of amendment – unless it saw evidence of progress towards a permanent solution to the concerns it had raised in Bali.\(^10\) As other WTO Members were reluctant to accept New Delhi’s proposals for a revised timeline for agreement on such a solution, India withheld its support for the adoption of the new trade facilitation deal on 31 July 2014, leading negotiators from other countries to caution that confidence and mutual trust among countries negotiating a post-Bali agenda could suffer as a result. The fate of future rules on green box support is therefore likely to be conditioned on the extent to which progress can be made on these related discussions in talks at the WTO.

---

\(^8\) For the majority of developing countries, this amber box limit is set at a \textit{de minimis} of 10 per cent of the value of production (8.5 per cent in the case of China).


\(^10\) ICTSD (2014e).
2. What are countries doing with their green box payments?

In the aftermath of Bali, establishing a new basis for consensus requires trade negotiators and policymakers to understand not just the evolving policy tools being used by other WTO Members, but also the underlying objectives that these instruments are intended to help achieve as well as their potential effects. Yet, in the absence of a new global consensus on farm subsidy rules, policies at the national level have evolved significantly since the Doha Round was launched, in 2001 – and have also moved in different directions.

Figures 1 and 2 provide an overview of the evolution of domestic support spending in the EU, the US, China and India, both in absolute terms and as a share of the value of agricultural production. Overall, the EU and the US account for the largest green box spending: support by both Members has increased steadily since the early 2000’s. While such a trend has been accompanied with a continuous reduction in trade-distorting support in the EU, this does not seem to be the case in the US. China’s green box spending has been going up rapidly since 2003, reaching nearly USD 86 billion in 2008, an amount comparable to the USD 86 billion spent in the US or the USD 89 billion spent in the EU in the same year. Contrary to India which shows a large and growing use of input and investment subsidies under Article 6.2, most of China’s support is in the green box. When calculated as a share of total agricultural production, both India’s and China’s green box spending seems to follow a rather flat trend at roughly 5 and 10 per cent of the value of production respectively, compared to a much higher 20 per cent in the EU, 35 per cent in the US.

Figure 1: Domestic support spending in USD million

Source: WTO notifications and communication from the Cairns Group sourced from the Members’ Transparency Toolkit and DS:1 notifications and other sources (RD/AG/29/Rev.1, 28 May 2014)
The composition of "green box" spending also varies considerably among WTO Members and, with it, the trade-distorting potential of their respective programmes. While some programmes have remained relatively uncontroversial, others have attracted more criticism: these include decoupled income support payments or regularly-awarded disaster assistance – which may encourage continued production on marginal lands. A closer look at the EU, the US, China and India illustrates perfectly how different WTO Members have privileged different approaches and policy instruments.

Overall, as shown in figure 3, the EU largely focuses its support on direct payments, essentially through decoupled income support, whereas the US privileges domestic food aid, notably through its food stamps programme (which accounts for the bulk of US green box spending). China, on the other hand, puts much more emphasis on infrastructural services, extension services, research and pest and disease control, while India prioritizes public stockholding for food security purposes. These differences in the use of the various "green box" policy tools largely reflect different conceptions of agricultural support and often larger societal preferences or imperatives that cannot easily be ignored in any reform process. The following sections briefly describe the situation prevailing in those four countries.
In the EU, environmentalist groups campaigned relentlessly for a reformed Common Agricultural Policy (CAP) that would provide “public money for public goods”. The new CAP will require farmers to respect additional environmental requirements as a condition for receiving support – although environmentalists have decried some aspects of the final outcome as “greenwash”. Despite the success of the bloc in shifting towards less trade-distorting farm support, the legislation arguably still raises several questions about how farm policy design relates to broader public policy goals. Is the funding built around the environmental objectives, or is it the other way round? Is support for “public goods” proportional to the costs incurred by producers? And are direct payments set to become a permanent feature of the European landscape, or instead a temporary adjustment tool? Despite the scope for expanding coupled support under the new CAP, the constituencies that sought to reverse the “decoupling” direction established by successive previous reforms have only been partially successful – not least because of fiscal pressures on EU Members in the aftermath of the 2008 economic slowdown and the crisis in the eurozone.

---

13 Brunner and Huyton (2009).
14 Tangermann (2011).
15 ICTSD (2013).
16 For further details, see Tangermann, this volume, and Tangermann (2011).
In the US, the new 2014 Agriculture Act abolishes direct payments to producers – seen by many as impossible to justify politically when high prices have buoyed farm incomes to new levels. In their place, Washington has introduced subsidized insurance programmes for price and revenue that are largely built around the model of the former countercyclical payments and the ACRE revenue programme that was set up under the previous Farm Bill. As it is very likely that the new schemes will be classed as “amber”, and the direct payments were “green”, the government could be seen to be moving away from the logic of gradually decoupling support from production, enshrined at the end of the Uruguay Round in the WTO’s Agreement on Agriculture. At the same time, the increase in the number of US citizens who need help to buy food has precipitated a steady rise in “food stamp” spending, which is notified as domestic food aid in the green box. The overall share of farm support classified as green has therefore grown in recent years. The sizeable gulf between current outlays on trade-distorting support and WTO ceilings means that there is plenty of scope for spending in this category to increase – a likelihood if prices fall and also a probable outcome of the increase in commodity-specific “trigger prices” under the new legislation.

China’s fast-growing farm support schemes appear to be designed in part to rectify problems arising from historical under-investment in the agricultural sector – a legacy, as in many developing countries, of a tendency to tax rather than subsidize farming until quite recently. Support also appears to be geared towards reducing the large, growing disparities between rural and urban incomes: although average revenues are rising both in cities and the countryside, urban dwellers have consistently seen their incomes rise much faster than their rural counterparts. Although in absolute terms farm support in China is now around the level of EU farm subsidies, it is almost all classified as “green”, with a small amount of support in the trade-distorting de minimis category – allowed to be up to 8.5% of the value of production in China’s case, but in practice believed to be much lower. Chinese officials are also at pains to point out that the country’s per capita support levels are far below equivalent levels in other parts of the world. To date, China’s farm support is heavily focused on payment for “general services” such as infrastructure, with some support also provided in the form of decoupled support payments based on historical production levels. As the precise arrangements for providing this type of support vary across provinces, the actual degree of decoupling appears to vary, with support in different administrative regions linked to the production of one or more staple crops.

India’s agricultural domestic support has also grown dramatically in recent years with a particular emphasis on input and investment subsidies in developing countries – article 6.2 of the Agreement on Agriculture – which shelters payments for fertilizers, irrigation, electricity and seeds. Although input subsidies of this type would otherwise be seen as trade-distorting, WTO rules exempt these payments from any limits, on condition that they are provided to “low-income or resource-poor

---

17 See Smith, this volume, and Smith (2014).
18 ICTSD (2014).
20 Ni (2013).
21 Xie (2009).
22 ICTSD (2011a).
23 ICTSD (2011) and (2014f).
producers”. Food purchases at administered prices are also important in the country’s overall policy framework: as mentioned above, fearing that these risk breaching ceilings on trade-distorting de minimis support, New Delhi has called for developing countries to be granted more flexibility when these purchases contribute to public stockholding initiatives for food security purposes,24 a sub-category of green box support under current rules. According to India, such flexibilities are needed for developing countries to support low-income and resource-poor producers, while providing food aid to poor consumers and WTO rules should not get in the way of its Members’ ability to achieve food security. On the other side of the spectrum, developed countries, as well as a number of developing countries, have expressed concern that such a proposal would affect the fundamental requirement of the green box — to cause no more than minimal trade-distortion. Others fear that surplus stocks built through such schemes could eventually be dumped on world markets, affecting producers in other countries and undermining food security elsewhere.25

3. The way forward

The creation of the green box has arguably been a major factor providing incentives to reform agricultural policies and promoting a shift towards more decoupled payments to farmers. Yet, as green box measures have become the main form of agricultural support, maintaining the integrity of the category is essential. The draft 2008 “modalities” text contains a number of proposals aiming at strengthening or refining existing criteria based on the experience so far. One of these suggests, for example, that the basis of certain payments should be a “fixed and unchanging historical base period”. Another G-20 proposal from 2005 proposes to ensure that green box payments are targeted at farms with low levels of income, landholding and production.26

Yet, the question of whether a given measure has more than a minimal effect on trade and production is an empirical issue that can hardly be assessed ex ante. Research has shown that even the most apparently “decoupled” policies still tend to have some trade impact and, with the rapid increase in green box spending in some parts of the world, even a small trade impact per dollar may no longer be small if multiplied by a large number of dollars.

In the longer term, it might therefore be sensible to envisage some alternative approaches. As suggested by Tangermann (2013), a first step could consist in making a distinction between two rather different broad categories of policies covered by the green box. On the one hand, certain measures aim at correcting market imperfections and ensuring the delivery of public goods, such as biodiversity conservation, watershed management, or climate change mitigation. Measures such as infrastructure development, market information, agricultural research and development, extension services and other investments in “human capital” would also fall in this category. These measures essentially refer to areas where persistent market failures provide a solid rational for government intervention. Even though some limited production and trade impacts could still result from these policies, there would be no clear logic for constraining them under the green box as long as those market failures persist and the measures fulfil the existing criteria.

26 See Hepburn and Bellmann (2009).
On the other hand, measures primarily aiming at providing income support to farmers might need some form of limitation. Although these may play a critical role in facilitating reforms by compensating negative income effects resulting from cuts in the more trade-distorting measures, they arguably ought not to be provided on a permanent basis and should therefore be time-limited. As such, they should therefore also be differentiated from general social protection regimes. While income support could still provide farmers with the necessary breathing space to adjust to changes in the policy environment, limiting such payments would alleviate concerns around “box shifting” and provide greater parity between governments with high fiscal revenues and those without.

In the short term, however, negotiators might prefer to conclude quickly the unfinished business of Doha – perhaps at a reduced level of “ambition” – before moving on to address the growing number of new issues that the trading system will need to cope with in today’s fast-changing market and policy environment.27 Under this scenario, a more considered reform of green box criteria is likely to be an issue for a subsequent set of trade talks at the multilateral level. That said, the controversy around public stockholding suggests that, even under such a scenario, discussions on the green box are likely to be part of any eventual Doha deal.

As discussed by Montemayor in this volume, several options have been suggested to find a permanent solution on public stockholding. Most of these focus on adjusting the way in which price support is being calculated. However, if the green box category were to be modified to allow purchases of food at administered prices, Members would have to reconcile the notion of price support with the imperative of generating no – or at most minimal – trade distortions. One option to achieve this has been suggested by Diaz-Bonilla (2013). It starts from the realization that in the case of rice in India, while the administered price has been well above the 1986–88 external reference price, it has consistently been below the world market price (see figure 4).

27 Tangermann (2013).
This means that, in pure economic terms, there has been no trade-distortion created by the administered price even if — from a WTO legal perspective — the administered price is considered a trade-distorting subsidy. Diaz-Bonilla therefore suggests that, if the administered price is at or below the market price, it should not be considered as providing price support and therefore could be considered green box compatible. A similar argument is made by Matthews (2014).

Finally, and regardless of what happens on the Doha front, it would appear sensible to improve transparency and help monitor policy development by requiring that notifications provide more detail on the implementation of the measures to be covered by the green box, so that their potential trade impact can be more effectively assessed and their green box status can be challenged, if necessary.\textsuperscript{28}

\textbf{Conclusion}

There is a risk that, without progress on farm subsidies in the multilateral trading system, the issue of reform will once again be left on the side-lines. Regional and preferential trade agreements, including the "mega-regional" talks aimed at developing trans-Atlantic and trans-Pacific trade agreements, have tended to focus more on market access issues and, increasingly, on regulatory convergence, rather than on farm subsidies. Failure to establish updated rules in this area will continue to leave small producers in those countries with limited financial resources at the risk of unfair competition from producers in other countries.

\textsuperscript{28} See also Josling in this volume.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure4.png}
\caption{India’s minimum support price for rice, and international prices 2000–12}
\end{figure}

\textsuperscript{Source: Author’s calculations based on Hoda and Gulati (2013).}
Arguably, the failure to update global trade rules – including through establishing a new consensus on support that should be exempt from cuts or ceilings at the international level – also has real costs in the long term. India’s call for more flexibility to be granted to developing countries that purchase food at administered prices is ostensibly about the circumstances under which such support should be classified as “green box”. Yet, at a deeper level the proposal is also an expression of the growing difficulty in convincing domestic constituencies that rules established two decades ago are still a viable basis for governing today’s fast-changing markets for food and agriculture.

Negotiators could once again usefully revisit the question that delegates in the Uruguay Round initially asked themselves: should all farm subsidies be subject to a ceiling under international rules? If not, what sort of payments should be exempt? While WTO Members have traditionally taken a narrow approach to answer this question, looking essentially at the extent to which payments affect third countries, a more considered response might also seek to place farm policy and its effects on trade within the broader context of sustainable development, and the set of policy goals that the international community has developed in this area. While purists might argue that all government interventions “distort trade” in agricultural markets in some respects, a case can clearly be made that governments need to be able to provide at least some types of market-correcting support to the farming sector in order to provide for certain public goods.

Building a new consensus around the role of public goods in food and farming could be a first step towards ensuring this broader coherence between regulatory systems and global policy objectives. At the same time, with the rules at the WTO essentially reflecting the concerns of developed country policy-makers over two decades ago, any new set of disciplines would need to respond effectively to the need to ensure that both poor producers and consumers are not adversely affected by farm support policies in markets and jurisdictions elsewhere.

29 ICTSD/FAO (2013).
References


EXPORT RESTRICTIONS
Export Restrictions and Food Security

By Giovanni Anania

Introduction

There are many, quite different, goals a country may try to achieve by restricting its exports. In this chapter, the focus of the analysis is limited to multilaterally agreed disciplines of export restrictions for agricultural goods, used on a temporary basis and justified by short-term food security concerns. Countries may decide to restrict exports to prevent domestic food prices from rising by limiting, or eliminating altogether, the transmission to domestic prices of an out-of-the-ordinary inflationary pressure in international markets. If the country deciding to restrict its exports is a “large country” on the world market – i.e. its exports constitute a significant share of the volume of that product traded internationally –, then its policy intervention is a beggar-thy-neighbour type of policy. While it limits the transmission to the domestic market of soaring international prices, it tends to push international prices further up, increasing food insecurity for the poor in other countries.

WTO law on export restrictions is considered an area of evident “under-regulation” or “regulatory deficiency”, as it neither properly defines the circumstances under which quantitative restrictions can be used, nor regulates export taxes (Karapinar 2011 and 2012). Article XI of GATT 1994 states that imports and exports can be restricted or inhibited, but only by the means of duties and taxes, while the use of other export-reducing policy instruments, such as quotas or export licences, is forbidden (XI:1). The prohibition on using quantitative restrictions is lifted in the case of “export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party”(XI: 2a). Article 12 of the Agreement on Agriculture (AoA) on the other hand refers to consultation and notification obligations. These disciplines are unanimously considered ineffective in limiting export restrictions. First, a country can always decide to restrict its exports by the means of an export tax. These being unbound, a country can always ban exports, if it so wishes, by imposing a tax large enough to make them economically unviable. Second, the text used in Article XI of GATT is so vague as to make its enforcement practically impossible.

When the Uruguay Round was launched in 1986, prices of many commodities were at record lows and stocks were at a record high. Developed countries were routinely using export subsidies as a way to dispose of products in excess of what markets demanded; these surpluses were often generated by the generous support provided by their own policies. Hence, one explanation for the current under-regulation of export restrictions in the WTO is simply that countries did not feel at the time that there were good reasons to be concerned about the possibility of countries finding it convenient to restrict their exports. When the downward trend halted and prices started to rise slowly, some importers pointed to the need to introduce more stringent WTO rules for export restrictions, but it was not until the severe food price spike of 2007–08 that the issue gained visibility in the arena of multilateral negotiations. As countries responded to rapidly soaring

1 This chapter is partially based on Anania (2013).
international prices by reducing their exports to limit the transmission of high international prices to the domestic market, such restrictions further exacerbated the upward dynamic of prices in international markets. This in turn aggravated the already severe food security consequences of high prices for the poor in the developing world. In addition, a domino effect developed, with most countries subsequently intervening to avoid further increases in domestic prices, exporters by restricting exports and importers by lowering border protection to facilitate imports. These interventions partially offset each other, making it impossible for countries to reach the expected protection of domestic consumers they were trying to achieve. At this point, many realized that collectively coordinated action was perhaps a better solution for all.

From a historical perspective, price spikes similar to those observed in the past decade are not that frequent, yet they tend to occur with a certain regularity (Gilbert and Morgan 2010, Huchet-Bourdon 2011, Timmer 2010). As pointed out by Konandreas (2011), in the past 40 years or so, only six episodes of high food prices occurred – in 1974–76, 1980–82, 1988–90, 1995–97, 2007–08 and 2010–11 – each lasting for about two years, for a total of 12 years, which means that higher than usual prices were observed in about one out of three years. Hence, prices suddenly and rapidly moving upward away from their trends and then reverting to their "normal" levels or trends is something we should expect to happen again in the future. Things are further aggravated by changes in the climate, as they are expected to increase volatility in production and, as a result, in prices and to make the realization of extreme market events much more frequent.

A large literature exists on the causes of recent price crises. Overall export restrictions are not considered to be a "key driver" of the price spikes, but rather a factor that exacerbated the extent of the crisis by putting significant additional upward pressure on international prices, whose rise had been initially fuelled by other factors. These conclusions, however, do not extend to the rice market, where export restrictions imposed by many of the major exporters and large precautionary imports from some large importers have been indicated by many as a major factor in the severe price rise which occurred in 2007–08.

Many studies empirically assessed the market effects of the export restrictions countries introduced in 2007–08 and 2010–11, using a variety of simulation models, and all concluded that these effects were substantial (Anderson 2012, Anderson et al. 2013, Boüet and Laborde 2010, Headey 2011, Laborde et al. 2013, Martin and Anderson 2012, Rutten et al. 2013, Tanaka and Hosoe 2011, Thompson and Tallard 2010). Since export restrictions were effective in significantly reducing domestic upward price variability in the countries that applied them, symmetrically, they also made prices increase significantly in other countries, with a major additional negative effect on the food insecurity of their poor.

The recent food crises, the policy reactions by some of the main exporters, the implications of their decisions on the food insecurity of the poor in several net food-importing developing countries, and the negative effects of what happened on the reputation of international markets as a reliable source of food in national food security strategies, make for a different framework with respect to the one in place at the time of Uruguay Round negotiations. Equally different is the scenario of the distribution of negotiating power among developing and developed, net food-importing and exporting countries, which gives food security issues a more important place in multilateral negotiations and a chance to reform existing disciplines on export restrictions and reduce the
current asymmetry in WTO regulations between policy interventions aimed at reducing imports and exports.

### 1. Implications for the WTO negotiations

The December 2008 version of the agricultural "modalities"\(^2\) describes the status of the Doha Round negotiations on agriculture when they were de facto suspended. Export "prohibitions and restrictions" are dealt with at the very end of the document, under "Other Issues". The text does not include square brackets, which means that, in the opinion of the Chair of the Negotiating Committee, there was a broad agreement on it. As a matter of fact, the provisions do not appear very ambitious. The text refers to export prohibitions and restrictions only, while export taxes are not mentioned. Essentially, it calls for modifying Article 12 of the AoA by restricting the export prohibitions and restrictions allowed under Article XI of GATT 1994 to being only temporary measures. "Existing export prohibitions and restrictions in foodstuffs and feeds under Article XI.2 (a) of GATT 1994 shall be eliminated by the end of the first year of implementation" and "any new export prohibitions or restrictions under Article XI.2 (a) of GATT 1994 should not normally be longer than 12 months, and shall only be longer than 18 months with the agreement of the affected importing Members". The text also slightly strengthens the consultation and notification procedures, for example by having countries notify export restrictions within 90 days of their introduction. The December 2008 "modalities" includes provisions that are meant to prevent exporting State trading enterprises from acting in such a way as to circumvent export subsidy commitments, but no reference is made to disciplines to prevent them from acting to restrict imports. Finally, the document includes a proposal to reduce tariff escalation, but no parallel proposal to introduce a similar discipline on exporting countries using export taxes to pursue the analogous goal of protecting the domestic industry processing a domestically produced raw product.\(^3\)

While a low-ambition attempt to prohibit export restrictions and export taxes on humanitarian purchases by the World Food Programme (WFP) seemed possible approaching the Ministerial Conference in 2011, no significant decision was finally taken, and Members could not avoid acknowledging the fact that Doha Development Agenda negotiations were at an impasse. The Chairman's Concluding Statement mentions export restrictions in Part II, which provides a summary, prepared under his sole responsibility, of key issues raised in the discussion on which no consensus had emerged. Under the heading of "Food security", the text reads: "Many Ministers urged WTO Members to commit to remove and not to impose in the future, food export restrictions or extraordinary taxes for food purchased for non-commercial humanitarian purposes by the WFP. Other Ministers stressed the importance of addressing the root causes of food insecurity and underlined the importance of allowing Members to use their rights under WTO agreements. Some Ministers signalled their support for a proposal to establish a work programme on trade-related responses to mitigate the impact of food market prices and volatility, especially on LDCs and NFIDCs, for action by the Ninth Ministerial Conference. Several Ministers noted that the issue


\(^3\) "Differential export taxes" (i.e. taxes that decrease with the degree of processing of a specific raw material contained in the product) are mentioned as an issue on which no convergence existed, with no further comments.
of food security was multifaceted and needed to be looked at in its entirety, including the impact of export restrictions on international prices."

In this context, the prospects for post-Bali WTO negotiations remain unclear (Evenett and Jara 2013, Matthews 2014). The decision taken in Bali to ask the Trade Negotiations Committee to prepare a “clearly defined work programme on the remaining Doha Development Agenda issues” by December 2014 should mean, in principle at least, that the negotiations agenda is confirmed and that countries are committed to identifying a road map to try to reach an agreement. However, the extent to which stronger disciplines on export restrictions might be included as a priority area in such a work programme remains highly uncertain. Assuming some traction in the post-Bali negotiations, changes could nevertheless be introduced in the rules regarding export restrictions, even in a relatively low-ambition WTO agreement. In this scenario, two options seem realistic given the negotiating stands observed: forbidding the imposition of export restrictions on food purchases by international organizations to be distributed as food aid, and making existing disciplines enforceable.

A reform of current disciplines with a low level of ambition could consist in exempting food purchased by international organizations to be distributed on a non-commercial basis for humanitarian purposes from the imposition of export restrictions and export taxes. To define which transactions should be exempted from the imposition of export restrictions as well as under which circumstances and by which international organizations they should be handled, Annex L of the December 2008 draft modalities can be used, \textit{mutatis mutandis}, as a basis. It is important to realize that the volume of food involved in purchases by humanitarian international organizations is very limited with respect to the size of the international market of the same commodities. In 2008, 852,000 t of rice were distributed as food aid, including rice purchased and distributed locally, an amount which equals 3.1 per cent of the rice traded internationally in the same year; food aid in wheat and wheat flour was equal to 1,444,000 t, 1.1 per cent of the quantity of the same commodities traded internationally. As a result, should this option be implemented, its impact on volumes traded and market prices would be marginal (and, as a result, so should concerns by exporting countries). However, benefits in terms of the amount of food international organizations would be able to distribute under their relatively rigid financial constraints would be sizeable, as such an agreement would prevent the imposition of an additional cost on the purchase and distribution of food for humanitarian purposes when this is needed the most and is the hardest to access. The volume of wheat and wheat flour distributed as food aid in 2008 was only 53 per cent of that distributed in 2005; for rice it was 64 per cent. Restraints on imposing export restrictions and extraordinary export taxes on food to be distributed on a non-commercial basis for humanitarian purposes were agreed both at the November 2009 FAO World Summit on Food Security and at the June 2011 G20 meeting. However, not all countries subsequently acted in accordance with the commitment they had agreed to, and no consensus materialized to introduce a similar commitment within the legally binding framework of the WTO.

A second, relatively more ambitious, option would leave current disciplines unmodified, but would make them enforceable by clarifying some of the terms used and adopting a transparent, unambiguous language.\footnote{The options discussed are not mutually exclusive. On the contrary, each of them should include the pertinent provisions of the less ambitious ones.} Export taxes would remain a policy instrument that countries could use.
Only the conditions to allow the use of export restrictions other than taxes would be clarified and the procedures to be followed to implement an export restriction would be strengthened. Under current rules, export prohibitions and restrictions can only be introduced if they are “temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party” (Article XI:2a of GATT 1994). The meaning of terms such as “temporarily”, “prevent”, “relieve”, “critical shortage” or “essential” remains open to a wide spectrum of equally legitimate, legally sound interpretations. In fact, the current text does not define legally binding conditions, making it practically impossible to challenge any potentially illegal use of an export restriction in agriculture at the time of a price spike under the WTO. The agreement under this option would spell out the meaning of Article XI:2a in such a way as to make it legally possible to identify agricultural export restrictions other than export taxes that are contrary to WTO disciplines and, subsequently, challenge such restrictions within the dispute settlement framework.

Article 12 of the AoA refers to specific consultation and notification obligations for the introduction of export restrictions in the case of agricultural products. Countries (other than net food-importing developing countries) introducing an export restriction based on Article XI:2a of GATT must give “due consideration to the effects of such prohibition or restriction on importing Members’ food security”. Before introducing the restriction, the country “shall give notice in writing, as far in advance as practicable, to the Committee on Agriculture comprising such information as the nature and the duration of such measure” and “shall consult, upon request, with any other Member having a substantial interest as an importer”, providing, upon request, all the necessary information. Current notification requirements, although very bland, remain largely ignored. They could be made more stringent and effective through the introduction of a notification and implementation procedure similar to that jointly proposed by Japan and Switzerland in April 2008. Countries should be required to notify the Committee on Agriculture in advance of their intention to introduce an export restriction on a foodstuff (the use of export taxes would remain unrestricted), providing adequate information on the legal base for introducing the restriction, the expected impact on other Members’ food security and specifying the date by which it will be removed. The actual introduction of the restriction could not occur before the successful conclusion of a time-constrained consultation with other Members affected by the restriction or, if this consultation has not come to an end by the given deadline, before a green-light decision by an arbitration panel whose decision would be binding, a process that also has to be completed within a severe time constraint. To address the legitimate concern of countries fearing that the process leading to the implementation would be too long and would prevent the temporary restriction from generating its expected and much needed effects, countries could be allowed to implement the export restriction after a very short period of time after the notification of the declaration of intent; however, they would be forced to immediately remove the policy and to compensate Members that were negatively affected if the arbitration panel were to rule that it did not satisfy the requirements of Article XI:2a of GATT.

This option would be a small but significant step forward with respect to the existing discipline, as it would improve the transparency and predictability of the use of export restrictions and, hence, reduce information asymmetries and transaction costs for traders and investors and the uncertainty about world markets as a source of food when this is most needed. The higher
institutional cost of introducing export restrictions may deter some countries from doing so and reduce the probability of "panic" policy reactions, such as the sudden introduction of an export ban.

If countries can conclude the DDA Round or reach an agreement in a new Round of negotiations that includes agriculture (and it would be difficult to imagine a new Round which does not), more stringent disciplines on export restrictions in agriculture would very likely be considered. Also, under such a scenario, with respect to the overall negotiations, two options are presented for the introduction of new disciplines for export restrictions with different levels of ambition.

The relatively less ambitious one would introduce stricter disciplines for export restrictions as well as export taxes. Export restrictions and taxes would now be treated equally. Export restrictions and export taxes would be declared illegal and then exceptions under which this prohibition would not apply would be defined. These exceptions need to be defined in a simple and transparent way, resulting in "automatic", easy to verify and legally enforceable rules. The exceptions could relate to the countries that would be allowed to intervene to restrict their exports, the staple food products that could be subject to export restrictions, and the trigger mechanism that would allow a country to restrict its exports. Only developing countries, or a subgroup of them, acting on food security concerns would be allowed to use export-reducing policies, on a temporary basis. The lifting of the prohibition could be further restricted to countries where a significant share of the population is food insecure. The identification of countries allowed to use export-restricting policies could be based either on transparent criteria or on self-selection. Products for which export restrictions can be imposed would be limited to staple foods. The most sensitive element of the provisions under this option is the mechanism which would make it possible for a country that can, in principle, use export-limiting policies for a specific product to be actually allowed to do so. The trigger mechanism needs to be as transparent and "automatic" as possible and to include both a trigger activated by a significant increase in domestic price and one activated by a significant increase in exports. It should also parallel mechanisms already in use in WTO regulations, such as those used for the Special Safeguard Provisions (Article 5 of the AoA) or, if an agreement were to be found in the negotiations, those that would likely be in place for the Special Safeguard Mechanism (SSM).\(^5\)

One possibly efficient way to design the new provisions would be to stay with relatively ample, uncomplicated and easy to apply rules with respect to the countries that can make use of export-limiting policies, to define a set of staple foods on which such policies could be applied and which is relatively ample and the same for all countries, and to devote more energy to the negotiation on the trigger mechanism, which should be transparent as well as effective in identifying circumstances that justify the use of export restrictions through the legitimate food security concerns of exporting countries.

A more ambitious option, which could be part of a comprehensive multilateral agreement, would be to introduce full "symmetry" in WTO disciplines regulating import and export restrictions. The agreement would extend to export restrictions, mutatis mutandis, the provisions for import restrictions contained in the agreement reached. In tandem with the discipline on market access introduced with the AoA, the new disciplines would include the "taxification" of all existing export restrictions other than export taxes, i.e. their replacement with "equivalent" export taxes, and

\(^5\) WTO 2008.
the reduction of export taxes, both the existing ones and those resulting from the taxification. For products for which there exist export restrictions other than taxes, a Special Safeguard Clause would make it possible to introduce an export tax above the maximum level otherwise allowed, for a limited time and under special circumstances. To guarantee minimum export volumes, export quotas at reduced tax rates, whose volumes will be defined in terms of a certain percentage of domestic production in a reference period, could be introduced for all countries restricting their exports; quotas would have to be administered on a MFN basis. Under certain circumstances, countries would be allowed not to replace an existing export restriction with an equivalent export tax; however, in this case, minimum export volumes would have to be larger than otherwise. Finally, special and differential treatment would apply to developing countries (longer implementation periods, the exemption from tax reduction commitments and the introduction of bound tax rates instead, and smaller tax rate quotas). Bindings for export taxes and the prohibition of introducing new ones are included in the accession protocols of countries that became members of the WTO after the Uruguay Round, including China, Mongolia, Russia and Ukraine (Karapinar 2012, Anania 2013), as well as in many Regional Trade Agreements (Korinek and Bartos 2012).

Conclusion

Export restrictions significantly contribute to exacerbating the negative effects on food security when an unexpected, rapid increase of food prices occur and a food crisis develops. Export restrictions also have important negative effects on food security in a medium run. By undermining the confidence in international markets as a trustworthy source of food in the event of a food shortage, they induce a shift in net food importers’ food security strategies from relying on international markets towards higher self-sufficiency and larger food reserves. They also lower the propensity to invest in agriculture in exporting countries, where a competitive advantage in production exists. In addition, because the non-cooperative policy reactions by importers and exporters to soaring international prices partially offset each other, significantly lowering the capacity of the policy instruments used to limit the increase of domestic prices, the need emerges for all countries, importers and exporters alike, to look into multilaterally agreed improved disciplines of export restrictions.

Agricultural export restrictions are a policy area that is “under-regulated” in the WTO. Current provisions are weak and remain largely ignored. Doha Round negotiations do not seem to have internalized the fact that the state of agricultural markets has changed since the conclusion of the Uruguay Round and, as a result, considering disciplines of trade interventions in the event of high food prices has never come “on the collective radar of WTO Members” (De Schutter 2011). Nevertheless, the main reason why an agreement on export restrictions has not been given a high priority on the agenda of the negotiations is the lack of the necessary consensus on it. The truth is that it is difficult to foresee large developing country exporters – and some of them are certainly among the most politically powerful actors at the table of the negotiations today – giving up the possibility of restricting staple food exports without obtaining significant gains in other areas (Gilbert 2012, Headey 2011). It is against this simple fact that all potential scenarios have to be assessed.

If a WTO agreement on export restrictions does not materialize, countries may decide to agree on a “code of conduct” for export restrictions outside this institution, in the framework of FAO,
of the G20 group, within RTAs or on the basis of voluntary agreements signed by a significant group of exporters, for example as part of an International Commodity Agreement. Would this be a feasible option? Would it be an effective option? My answer to the first question is "yes", that to the second question is "no". It would certainly be a feasible option, as countries have already shown that they are ready to assume stricter commitments on export restrictions outside the WTO framework than those they are subject to within it. However, this would not be an effective option. In fact, any agreement without legally enforceable provisions that would make it not in the interest of countries to ignore the commitments they had agreed to would be of little use. Among the existing international institutions, only the WTO has proved to have an effective mechanism to enforce compliance with its rules (when these are defined in a legally binding way). This is not the case for the other institutions mentioned above. For example, not all countries honoured the commitments on export restrictions they had assumed at the 2009 FAO World Summit on Food Security.

Price spikes and food crises can be expected to occur even more frequently in the future than in the past. Not having multilaterally agreed, effective disciplines of policy intervention in place to restrict exports –similar to those in place for policies limiting imports and analogous to those that Members acceding to the WTO after the conclusion of the Uruguay Round had to accept – significantly increases the costs of extreme market events for the poor in importing countries. WTO Members have the responsibility of removing this inconsistency in the trade rules system where costs are borne by the most food insecure.
References


Rutten, Martine, Lindsay Chant, and Gerdien Meijerink. 2013. "Sit down at the ball game: How trade barriers make the world less food secure." Food Policy 38: 1–10.


COTTON
How to Re-invigorate the Cotton Issue at the WTO: Gin Ideas, Spin Proposals, Weave Solutions and Avoid Stocks

By Nicolas Imboden

1. The Bali Ministerial Decisions and the cotton issue

The Bali Ministerial Conference has largely been hailed as the revival of the Doha Round and multilateralism. The fact that the international community was able to agree unanimously on new commitments was supposed to revitalize the Doha negotiations. The results of Bali1 are, however, small compared to the task ahead for the Doha Round and can be summarized in the following way:

• The Trade Facilitation Agreement (TFA) is clearly the cornerstone of the decisions taken by the Ministers. The TFA is not only important as it benefits all Members of the WTO, especially the least developed countries (LDCs), but also because it is an example of how different situations should be dealt with in a globalized world: everybody has to subscribe to global best practices, but developing countries, in particular LDCs, are allowed to implement those obligations according to their development priorities and institutional capacity and – if needed – are entitled to technical assistance and financial support to help implement their commitments;

• An interim solution was found in the field of public stockholding for food security purposes, with a commitment to setting up a permanent solution to these issues within a fixed time frame;

• A decision was also taken with regards to the administration of tariff-rate quotas and the establishment of a Monitoring Mechanism for special and differential treatment provisions;

• A number of best-endeavour decisions concerning export subsidies, development issues and special measures for LDCs were also taken (on cotton, duty-free quota-free market access, preferential rules of origin and the operationalization of the services waiver).

Finally, a mandate was given by the Ministers to their representatives in Geneva to create a work programme on the remaining Doha issues for the end of 2014 in order to conclude the Round in a reasonable amount of time. The Bali Ministerial Conference has not allowed progress to be made on the issue of cotton, despite the commitment taken in Hong Kong to treat cotton "ambitiously, expeditiously and specifically". The Bali Ministerial Decision essentially repeats previous decisions and requests to enhance the transparency and monitoring of the trade-related aspects of cotton.

1 WTO 2013
2. Back in Geneva

The euphoria about the success of Bali quickly gave room to the customary “bickering” and posturing among the negotiating groups. The fact that the major powers are fully engaged in so-called mega-deals (TPP, TTIP) and in plurilaterals (TISA, ITA, etc.) has not helped create a positive and inclusive environment for in the WTO.

Since Bali, strong emphasis has been placed on ensuring the speedy and credible implementation of the TFA. Best-endavour-based Decisions on LDC issues have been somewhat sidetracked. The concerns of poorer countries that the Doha Round’s development content is being changed seem justified. This frustration, however, should not lead to a negative attitude towards the Doha Round. Poorer countries would be better advised to make proactive proposals to force WTO Members to address their issues and to re-invigorate the multilateral negotiations. Maintaining or reviving the inclusive multilateral system as represented by the WTO is the best defence these countries can use against discrimination caused by regional and global integration schemes or exclusive plurilaterals.

Cotton is an ideal topic for embracing proactive and positive approach to the negotiations. Indeed, all WTO Members recognize the real economic interest of this topic for many poorer countries and the fact that the international framework conditions do not support the development of their cotton sector – one of the only means available (at least in the short-term) to allow poor farmers in developing countries to escape abject poverty. Both moral and economic arguments favour a solution to this problem. However, any attempt to bring cotton back to the forefront of the negotiations will have to take into account the new realities, both in the international cotton market and in the negotiation process. Going back to the old ways will simply not yield any substantial results.

3. Changes in the international environment that call for a new approach

While the Bali Ministerial Decision on cotton3 reaffirms that the “Decision adopted by the General Council on 1 August 2004 and the Hong Kong Ministerial Declaration remain a useful basis for our future work”, it has to be acknowledged that, since then, no progress has been made at all (except for aid). On the contrary, while it was clear for a long time that there would be no Doha deal without a solution to the cotton case, today cotton has been relegated to one of the numerous unresolved difficult issues.

To re-invigorate the issue, a new approach is needed. Indeed, the tremendous evolutions in the world cotton market4 are objective reasons to change the approach while maintaining the objectives of the C-45 initiative:

- The international cotton market has changed since the initiative was launched. Cotton prices have more than doubled and are expected to remain at relatively acceptable levels in the future;

---

2 This article was written before the recent US-Brazil agreement on cotton (see Bridges Weekly, vol. 18, no. 32, 2 October 2014)
3 WTO 2013a
4 For a Global analysis, see for instance ICTSD 2013.
• Actors on the international cotton market have dramatically changed: India, which was a net importer of raw cotton in 2002, is now the second larger exporter in the world; China has consolidated its position as the price-maker of the international cotton market and has become the biggest cotton producer in the world while remaining the biggest importer of raw cotton; the USA is experiencing a long-term decline in cotton production, while remaining the biggest exporter of raw cotton; and EU cotton production has become negligible, although it remains the biggest subsidizer per unit produced.

Moreover, the policies towards cotton have changed:

The EU has put the large majority of its support into green box support (65%). Its cotton production in Greece has diminished substantially and Spain is hardly producing cotton any more. Nevertheless, recent EU policy changes provide more flexibility to its Member States to reintroduce production-related support “which would potentially undermine the efforts made at the WTO (…) by the C-4 (…) to obtain more rigorous disciplines in the case of subsidies.”

Moreover, the EU remains the biggest subsidizer of cotton on a unit basis and 78% of total Greek production – which accounts for 80% of EU production – is now exported, 90% of it outside Europe. The EU should therefore remain a target of the African cotton-producing countries.

The USA has passed a new Farm Bill, which substantially changes its support policy towards cotton and other products. It is difficult to evaluate the effects of this new policy and its compliance with the decisions of the WTO Dispute Settlement Body in the case between the US and Brazil (the latter has not yet decided whether it wants to invoke the case in front of the WTO to take countermeasures). However, some facts seem to speak in favour of a more market-oriented approach to cotton:

• For the first time cotton is treated differently than other commodities. This is politically significant;

• Direct payments (which are WTO-consistent) have been abandoned along with countercyclical payments, which are very trade-distorting. Marketing loans have been made more market-oriented – although changes are marginal and probably insufficient (length of period and some increase in the reference price);

• The main support now takes the form of a heavily subsidized insurance scheme, which allows farmers to insure up to 90% of their revenue (STAX®) based on their expectations during the planting season. The insured amount is, however, based on price predictions at the beginning of the planting season and there is no longer a minimum price.

While the effects of these changes are difficult to predict, the following arguments lead us to expect a reduction in the trade-distorting effects of US cotton policies:

• The estimates of budgetary expenditures for support during the upcoming years are much lower than past expenditures for subsidizing cotton production;

---

6 Agritrade 2013c.
7 Agritrade 2013a.
• Cotton will receive much lower support than its competing commodities, while in the past the support for cotton was higher. This, along with the high prices for some competing products (in particular in relation to biofuels), speaks in favour of a continuous reduction of cotton production in the US;

• Last but not least, should the prices of cotton return to the levels of the beginning of this century, there is no minimum price that would allow farmers to continue to flood the international market with their cotton produced at a fixed minimum price.

This does not mean that the pressure towards the US should be diminished. However, it does mean that the USA should be able to commit itself to supporting cotton much less than in the past.

Since 2009–10, China has become the biggest subsidizer of cotton in total amounts. “Total government support (…) was estimated at around USD 3 billion in 2011/12. In comparison, total support provided by the US was around USD 820 million.”9 While it is unclear how much of those subsidies are WTO-compliant and how much are WTO-inconsistent, the fact remains that China’s cotton production is largely protected from the prices on the international market and therefore potentially distorts the global cotton prices.10 This is particularly true as China has important market access restrictions (through a TRQ). In addition, China’s current cotton stocks account for around 60% of world cotton stocks.12 Should China’s cotton reserve policy change (which is envisaged), this could dramatically impact world cotton prices. While it is expected that China will use this price-fixing power responsibly, as it has substantial interests both in maintaining remunerable prices for its cotton growers as well as acceptable prices for its fibre industry, it is nevertheless disturbing that it possesses the ability to manipulate world market prices at will. This means that any solution to the cotton issue will have to include China as a major player and will have to address both market access and subsidy issues.

Other major cotton producers or exporters (such as India, Turkey and Pakistan) have also established major support programmes for their cotton producers. They will have to be included into new disciplines to ensure a fair international market for poorer cotton-producing countries.

All these developments (changes in international prices, changes in the distribution of cotton production throughout the world, and changes in national cotton policies) speak for a new approach from African cotton-producing countries in the Doha Round negotiations.

9 ICTSD 2013, p.4.
10 Agritrade 2013b, 2013.
11 TRQ: Tariff Rate Quota. The tariff-rate quota resulted from the Uruguay Round Agreement on Agriculture. Certain countries agreed to provide minimum import opportunities for products previously protected by non-tariff barriers. This import system established a quota and a two-tier tariff regime for affected commodities. Imports within the quota enter at a lower (in-quota) tariff rate while a higher (out-of-quota) tariff rate is used for imports above the concessionary access level (OECD 2003).
12 ICAC 2014.
4. Changes in the dynamics of the negotiation process of the Doha Development Round

Bali has been an important milestone in the Doha negotiations. While it has been a great stimulus for the WTO in general and the Doha Round in particular, Bali has also changed the approach to the negotiations. Although there is still no agreement on how to proceed, the following principles seem to emerge:

- The work programme has to be manageable within a reasonable amount of time. According to DG Azevêdo, there is a window of opportunity of about 18 months to finish the Doha Round;

- The next package will have to close the Doha negotiations: no low-hanging fruits or small package. The next decision will have to cover the hard issues and address agriculture, NAMA and services;

- The red lines of the various members have to be respected. This is, indeed, unavoidable if member countries want to come to a result within a reasonable amount of time. What and where those red lines are is a question of appreciation;

- The future package has to address the issues of today, and the negotiations have to be based on current data. A major effort will have to be made to update notifications;

- The package has to be balanced. Everybody has to give and take to be able to come to a consensus. Again what constitutes an acceptable balance is – like beauty – in the eyes of the beholder;

- The development content of the Doha Round remains a priority, especially as far as LDCs are concerned.

This means, in our opinion, the following for a proactive cotton strategy:

- A major effort has to be made to ensure that cotton remains the “litmus test” of the development content of any final deal. It is essential to ensure that DG Azevêdo takes up the phrase often used by former DG Lamy: “There is no Doha deal without cotton and there is no deal in cotton without Doha.” While this was accepted a few years ago, it does not seem obvious anymore;

- The proponents of the Cotton Initiative must step forward and adapt their proposal to the new situation on the international market and the evolution of the negotiations. Maintaining the objectives while changing the strategy seems to be the way forward;

- To make sure cotton is once again a priority for the Doha Round, the poorer cotton-producing countries need to come up with a new and creative proposal that contains elements that cannot be refused by WTO Members;

- Developing countries are frustrated by the focus on the TFA and the benign neglect that some WTO Members have given to development issues. African Ministers have expressed this frustration by requesting that the TFA be applied “provisionally” until the final result of the Doha Round and its development content is known. While this concern is legitimate and while
the fear among African countries that some members are attempting to cherry-pick is justified, the approach to take the TFA hostage might be misguided. A better approach to ensure that member countries advance in parallel on all fronts might be to make offensive proposals on what specific concessions poorer countries need to obtain in order to be able to agree to a final result for the Doha Development Round. A credible and realistically achievable proposal concerning cotton would go a long way in this direction.

5. A possible way ahead

First of all, African cotton-producing countries should insist that the so-called quadrilateral meets urgently and regularly in a new composition that includes all the major cotton growers that subsidize cotton or restrict access to their markets. It is indeed unacceptable that the “quadrilateral” has had only one short meeting, which was more procedural than substantive, while there have been a very large number of meetings on TFA implementation.

Secondly, the C-4 and/or the LDC group should submit an updated proposal that takes into account the changes mentioned above, i.e.:

• Addressing the issues of the policies of all the major cotton-producing countries;

• Proposing solutions that take into account the so-called red lines of various WTO Members;

• Putting forward creative solutions that cannot be refused and that are negotiable given the time frame;

• Also including commitments on the part of the LDCs to respond to the issue of balance for the Doha result.

This proposal should be drafted in such a way that it cannot be refused as a basis for the negotiations. It could contain the following elements:

• An introduction that:
  o Shows the importance of the cotton sector for the development of the poorest countries and the efforts they have undertaken to develop the rural sector;
  o Underlines the need to establish an international framework that is conducive to their development. Thus, the long-term goal of having a fair playing field without subsidies for cotton can be reaffirmed and maintained;
  o Recognizes that this ambitious goal cannot be obtained within the time left to come to an agreement within the Doha negotiations.

• Given the importance to come to a consensus in the Doha negotiations within a reasonable time frame for an inclusive multilateral system, such a proposal should signal a willingness to compromise under the following conditions:
  o The long-term goal of abolishing the cotton subsidies is maintained and reaffirmed;
Each WTO Member that produces, exports or imports cotton must make some economically relevant steps to adjust its cotton-support regime to the requirements of the long-term goal;

All countries have to take commitments that are of real economic interest for the LDCs. However, each country will be allowed to define its contribution to the long-term goal of establishing a fair play global cotton market that takes into account the individual internal constraints.

On this basis, the LDC group may propose the following approach:

- The USA would commit itself to:
  - A maximum amount of subsidies for cotton not to exceed x% of the subsidies provided in the period 2000–05. This should be possible within the dispositions adopted in the Farm Bill;
  - Reducing its overall support to its cotton growers in the next Farm Bill (i.e. in five years) by 50% of the budgetary allocation made during the present Farm Bill;
  - Refraining from any export subsidies and subsidized marketing loans;
  - Granting DFQF market access for cotton produced in the LDCs.

- The EU would commit itself to:
  - Limiting its green box support to a maximum amount of x million €;
  - Reducing that amount by half in the next revision of the CAP;
  - Not reintroducing new amber or blue box subsidies for cotton;
  - Refraining from any export subsidies on cotton.

- The People’s Republic of China would commit itself to:
  - Granting DFQF market access to cotton from the LDCs, which should be achievable given the fact that China imports much higher quantities than the LDCs can deliver. Currently “China, the largest destination for African cotton, imposes import duties from 5% up to 40% on cotton imported outside of the annual 894,000 ton import quota related to WTO obligations”;
  - Limiting its subsidies independent of their classification within the WTO to the average amount granted in the period 2000–05. Given the fact that the reference period had much lower cotton prices than the prices that are projected in the future, this should be doable within the Chinese red lines.
India would commit itself to:

- Limiting its cotton subsidies to the amount given to other competing crops so as to ensure that cotton is not substituted for less economically competitive crops;
- A maximum amount of cotton subsidies based on the last five years before the conclusion of the Doha Round;
- Refraining from imposing export restrictions for its cotton that might disrupt the international cotton market.

All other countries would commit themselves to:

- Granting DFQF market access for cotton produced in the LDCs;
- Limiting their internal subsidies to the average amount given in the last five years before the conclusion of the Doha Round.

Since the submission of the C-4 cotton initiative, all LDC proposals have simply been ignored. To force WTO Members (especially the most concerned ones) to enter into a real negotiation, the proposal should (a) take into account the requirement to have a balanced result in the Doha Round; and (b) show that LDCs are willing to make their contribution to a positive outcome for the Doha Round.

LDCs may explore the possibility of providing tangible proof of their seriousness to establish an internationally competitive cotton sector and of their attachment to the multilateral trading system, whereby they might be willing – contrary to their right to get the Round for free – to take commitments on the basis of a global value chain approach to the development of its cotton and fibre sector. Such commitments could concern any topic related to the development of their cotton and fibre sectors, whether it be NAMA (e.g. machinery and inputs), services (e.g. marketing, credit, research and extension), investments (marketing, quality control, input supplies) or IPR (seeds, innovations, patents).

It is presumed that such a commitment would not be costly for LDC countries as most of those sectors are already, in reality, rather liberalized. The fact that LDCs are willing to unilaterally take bound commitments on that would, however, be an extremely powerful sign of the group’s attachment to finding a multilateral solution to the cotton issues by not only requesting actions from the other members, but also positively contributing themselves to a solution. Moreover, such a proposal would leave enough negotiating space for commitments to be adapted based on the efforts made by negotiating partners.

It is difficult to imagine that the other members could not enter into serious negotiations on such a basis, thereby ensuring that cotton is again a major negotiating topic in the final phase of the Doha Round.
References


ICAC. 2014. “At the end of 2013/14, China is expected to hold 58% of world stocks with an expected ending stock of 11.5 million tons.” Cotton This Month, February 2014.


PART THREE

SYSTEMIC AND INSTITUTIONAL ISSUES
WTO Agriculture Negotiations: The Way Ahead

By Harsha Vardhana Singh

Introduction

Given the present impasse in Doha Round negotiations, the general perception would be that the way ahead is difficult at best, and unpredictable as well, given the prevailing gaps for several negotiating positions. The present situation can only be overcome by sharing ideas which may provide some basis for moving ahead, in a complex negotiation where solutions to issues in one area are linked to those in another and where WTO Members have different views, even regarding the point of departure for further negotiations in agriculture.

Any consideration of the way ahead has to combine the fact that there is a prevailing Chair’s text on the table, which a number of Members want to be the frame of reference, while certain Members wish to embark with flexibility in relation to this text. One possible way of doing this is to try and identify the key points that need to be addressed for the negotiations to get substantive re-engagement and momentum. This short paper focuses on this aspect and provides some suggestions, with the objective of adding to the available ideas and perspectives, to promote effective negotiations in the Doha Round agriculture negotiations.

Section 1 discusses the oft-repeated point that the multilateral trading system is very important, but does so by emphasizing some important developments that show that, without an inclusive and vibrant multilateral trading system, it will be very difficult to sustain trade and investment relations and reduce conflicts. At present, new impetus in negotiations has been given through free trade area (FTA) negotiations, in some cases through mega-FTAs which cover large shares of global trade and investment. Three such negotiations are the Transpacific Partnership (TPP), the Transatlantic Trade and Investment Partnership (TTIP), and the Regional Comprehensive Economic Partnership (RCEP). Section 2 discusses some features of these negotiations, which could be considered as background for exploring ideas for the way ahead in Doha Round agriculture negotiations. Section 3 provides some suggestions for the way ahead for agriculture negotiations.

1. Some important developments to keep in mind

The global trading system is likely to evolve in important ways due to several factors. Here we mention only a few, i.e. the broad trends for agriculture trade, and the growth of the middle class.

The OECD-FAO Agriculture Outlook 2014–2023 states:

“Historic trade patterns are expected to continue; the leading export regions will maintain their positions and only a few newcomers are expected to enter the trade arena during the next decade. The Americas will strengthen their position as the dominant export regions, both in value and volume terms. … Net trade in value terms in Latin America and the Caribbean and in
North America will grow more than 2% p.a. between 2011-13 and 2023. This growth is mainly fuelled by increased exports of high-value commodities such as meat, ethanol, sugar, oilseeds and cotton. ... Western Europe will display on average a negative trade balance with flat exports ... The rapidly growing population and shift in diets in Africa result in increasing food imports. The largest demand for imports is generated in Asia, which is expected to exhibit a trade deficit in 2023 for all commodities except rice, vegetable oils and fish. India will remain one of the leading exporters for cereals and rice and is also expected to be a major exporter of meat and cotton keeping it in an overall trade surplus situation for agricultural products.”

The existing exporters are thus likely to consolidate their position and Asian net imports would increase significantly. The forecast for net exports of certain products in 2023 is shown in Table 1. For most of these products, North America will be a net exporter. In contrast, Asia & Pacific and Africa will be significant net importers for these products.

Table 1. Estimated volume of net exports in 2023 (‘000 tons)

<table>
<thead>
<tr>
<th>Product</th>
<th>Wheat</th>
<th>Rice</th>
<th>Coarse Grains</th>
<th>Oilseeds</th>
<th>Protein Meals</th>
<th>Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>46,206</td>
<td>2,419</td>
<td>53,574</td>
<td>58,323</td>
<td>8,963</td>
<td>42</td>
</tr>
<tr>
<td>Asia &amp; Pacific</td>
<td>-49,963</td>
<td>21,083</td>
<td>-63,999</td>
<td>-98,449</td>
<td>-27,206</td>
<td>-2,105</td>
</tr>
<tr>
<td>Africa</td>
<td>-44,987</td>
<td>-18,052</td>
<td>-22,851</td>
<td>-3,494</td>
<td>-4,461</td>
<td>-877</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protein Meals</th>
<th>Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pork</td>
<td>3,621</td>
</tr>
<tr>
<td>Poultry</td>
<td>4,710</td>
</tr>
<tr>
<td>Fish</td>
<td>-3,406</td>
</tr>
<tr>
<td>Skimmed Milk Powder</td>
<td>826</td>
</tr>
<tr>
<td>Sugar</td>
<td>-4,511</td>
</tr>
<tr>
<td>Cotton</td>
<td>2,562</td>
</tr>
</tbody>
</table>


To a significant extent, this will be caused by the huge increase in the middle class. Estimates suggest that, during this decade, an additional 1 billion people will join the middle class, a rise from about 1.8 billion in 2010 to over 3 billion people in 2020.²

---

1 OECD/FAO (2014), pages 44 and 45.
2 See Ernst & Young (2013).
Table 2. The middle class: size and distribution

<table>
<thead>
<tr>
<th></th>
<th>2009 (Million)</th>
<th>2009 (Global Share)</th>
<th>2020 (Million)</th>
<th>2020 (Global Share %)</th>
<th>2030 (Million)</th>
<th>2030 (Global Share %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>338</td>
<td>18 %</td>
<td>333</td>
<td>10 %</td>
<td>322</td>
<td>7 %</td>
</tr>
<tr>
<td>Europe</td>
<td>664</td>
<td>36 %</td>
<td>703</td>
<td>22 %</td>
<td>680</td>
<td>14 %</td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>181</td>
<td>10 %</td>
<td>251</td>
<td>8 %</td>
<td>313</td>
<td>6 %</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>525</td>
<td>28 %</td>
<td>1,740</td>
<td>54 %</td>
<td>3,228</td>
<td>66 %</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>32</td>
<td>2 %</td>
<td>57</td>
<td>2 %</td>
<td>107</td>
<td>2 %</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>105</td>
<td>6 %</td>
<td>165</td>
<td>5 %</td>
<td>234</td>
<td>5 %</td>
</tr>
<tr>
<td>World</td>
<td>1,845</td>
<td>100 %</td>
<td>3,249</td>
<td>100 %</td>
<td>4,884</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Source: Ernst and Young (2013), Table 1

Table 2 shows that, by the end of this decade, the size of North America's middle class will remain about the same as last decade, but Asia Pacific's middle class will more than triple compared to 2009. For the Middle East and Africa, there is a 62% expected increase of the middle class during this decade.

The large increase in the middle class in these regions has important implications for food imports and other trade and investment opportunities. In this context, it is noteworthy that the same regions that have a relatively large rise in the middle class are also those that will have significant net imports of most commodities. With these developments over the coming years, it is essential to maintain stable and growing trade and investment links among these regions and others, in order to maximize opportunities and reduce conflicts.

In such a situation with much higher economic interdependence among different regions, we need an inclusive system for trade regulation, and not a fragmented one limited to a relatively small number of nations. If we consider the three mega-regional negotiations (the TPP, the TTIP and the RCEP), there are only 49 countries in these three negotiations, out of a total of 160 WTO Members.

The only inclusive system is the multilateral trading system, i.e. the WTO, and it is essential to make progress and conclude the WTO negotiations to develop this inclusive system. Without such progress, the trade regulation system likely to come into place through mega-FTAs could lead to tensions with those excluded from these agreements.

The mega-FTA negotiations are, nonetheless, a reality that is moving forward. Therefore, it is important to consider what they may give rise to and whether they have some relevant features that could help bring about a greater possibility of positive movement in the Doha negotiations themselves. This is crucial for the way ahead in the case of agriculture negotiations in the Doha Round.

2. Some relevant features of mega-FTAs

The mega-FTAs cover a large part of global trade and investment. Thus, they are effectively developing the roadmap for the trade regulation regimes of the future, with results that involve
deeper integration and WTO-plus disciplines or liberalization. It is worthwhile to consider some of these developments with an objective of learning lessons for a possible way ahead for agriculture negotiations.

The first lesson, which is also evident in discussions with negotiators, is that these negotiations have changed the background for the Doha Round negotiations. Since they are large FTAs, and since some of them expect other nations to also join over time, they have an impact on the WTO negotiations. To some extent, this situation is responsible for the view that the existing Chair’s text cannot be the starting point at this time.

Another implication is that, since some of the key *demandeurs* in the negotiations are aiming at much more ambitious results in these FTAs, they would tend to seek more, rather than less, for a satisfactory solution in the WTO negotiations. Therefore, everyone would be expected to do more than for the previous understanding.

### 2.1 Membership of the mega-FTAs

Table 3 shows the membership of these mega-FTA negotiations. Economies with a membership of more than one FTA are shown in the upper part of the Table, and the lower part shows those with only one mega-FTA membership. The United States is a member of the TPP and the TTIP, which implies that there will be a link with the TPP and TTIP negotiations through the common membership of the US. Though the EU is only in TTIP, it has links through its FTAs with countries in the TPP and the RCEP (indicated in Table 3). The only country that is a member of only one mega-FTA and presently has no FTA negotiation with the EU is China. However, China is negotiating Bilateral Investment Agreements with the EU and the United States. Therefore, for each of these countries, the starting point of disciplines is higher than the present situation in the WTO.

<table>
<thead>
<tr>
<th>TPP</th>
<th>RCEP</th>
<th>TTIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia, Brunei Darussalam#</td>
<td>Australia, Brunei Darussalam#</td>
<td>United States</td>
</tr>
<tr>
<td>Japan, Malaysia#, New Zealand</td>
<td>Japan, Malaysia#, New Zealand</td>
<td></td>
</tr>
<tr>
<td>Singapore, South Korea*#,</td>
<td>Singapore#, South Korea*#,</td>
<td></td>
</tr>
<tr>
<td>United States, Vietnam#</td>
<td>Vietnam#</td>
<td></td>
</tr>
<tr>
<td>Peru, Canada#, Chile#, Mexico#</td>
<td>Myanmar#, Cambodia#, China</td>
<td>EU</td>
</tr>
<tr>
<td></td>
<td>India#, Indonesia#, Laos#</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philippines#, Thailand#</td>
<td></td>
</tr>
</tbody>
</table>

*= Keen to join the TPP, and process for membership has begun
#=FTA with the EU, negotiated or under negotiation

Three other points are relevant for considering the future evolution of these FTAs and the economies that would move towards adopting their trade and investment disciplines.

- A key feature of ASEAN is to have a common economic space within the group. At present, four ASEAN Members are negotiating the TPP; a total of eight RCEP Members are involved with the
TPP. It is likely to be a matter of time before the others in ASEAN also move towards the TPP to maintain the common economic space.

• Some economies in Latin America have close economic links with the United States. In view of the changing landscape of trade policy regulation and market access conditions, they would have some incentive to move towards the system adopted by the US-centric large FTAs.

• There is some evidence to show that China has an interest in joining large FTA negotiations that are likely to determine global trade and investment disciplines. China has applied for membership in the Trade in International Services Agreement (TISA). It is possible that together with the TTIP, the TPP will become an agreement of such scope, and thus be of interest for China.

2.2 Implications and features of these FTAs: Market access

It is noteworthy that the market access negotiations in mega-FTAs are taking place in agriculture, industry and services. This has important implications for providing a basis for a package of results that may be required to move the process within agriculture, and even outside agriculture.

For market access, the results in these mega-FTAs are likely to be more ambitious than for the WTO negotiations. If the countries in these mega-FTAs are willing to open their markets to large economies and competitive exporters within the FTA context, there should be a basis to consider a similar possibility within the WTO negotiations. This idea would gain further credence from two points made in the previous section.

One, that some of these countries will be major agricultural importers over time. Two, we need to give strength and momentum to the multilateral trading system if we have to avoid difficulties and conflicts in trade and investment over time. An important way of doing so would be for the system to move ahead, as much as possible, in the direction of the mega-FTAs. Otherwise, we will have fragmented and exclusionary market regulatory mechanisms, one FTA-oriented and the other one multilateral.\(^3\) In this regard, another important point is that the FTAs would not be able to deal with two of the three important issues in agriculture negotiations: they would not be able to deal with domestic support and export competition, both areas of concern that need to be addressed to provide a level playing field for the global economy.

2.3 Implications and features of these FTAs: Flexibilities

The FTAs are not only oriented towards greater market opening or higher levels of disciplines, but also include certain flexibilities that would help achieve results with relatively higher ambition. One is to provide for some flexibilities for sensitive items, say in the form of tariff rate quotas in agriculture. Another is to have longer transition periods to ease the burden of implementing the results of the negotiations. Yet another is a new concept of safeguards, such as that proposed for auto industry. For instance, World Trade Online reports that, in meetings parallel to the Hanoi TPP meeting:

---

\(^3\) The most significant part of mega-FTAs is their focus on non-tariff measures or standards. However, to the extent that market access negotiations in WTO are in terms of tariffs, we could consider that the conditions arising from FTA negotiations may make it easier for tariff results to be achieved in the WTO.
"under discussion is a “tariff delay mechanism” proposed by the United States as one way to deal with non-tariff barriers to U.S. auto exports that may pop up in Japan, sources said. Such a mechanism would allow the U.S. to delay the phase-out of U.S. auto tariffs if a dispute settlement panel found that Japan had imposed new non-tariff barriers on U.S. auto exports, although the details of how it would work are unclear. The Ford Motor Company has pushed for this tariff delay mechanism to be included in a U.S.-Japan auto deal."

Yet another safeguard being discussed is:

"negotiations on autos cover Japanese non-tariff measures in the auto sector as well as a special safeguard under which the U.S. auto tariff, slated to be phased out for Japan in TPP, would snap back to its previous level if auto imports from Japan surge after implementation." (Emphasis added)

Such a safeguard could be combined with concepts of tariff rate quotas (being discussed in the Japan-US agriculture negotiations in the TPP), or some other mechanism that provides comfort to both sides in the negotiations. In this context, mechanisms within the WTO itself could be used, i.e. those that combine transition periods, flexibilities, and greater obligations based on some objective criteria. Examples include provisions from the Agreement on Subsidies and Countervailing Measures, such as Articles 27.4, 27.5, and 27.6.8

3. The way ahead for WTO agriculture negotiations

There are three possible options for the way ahead for WTO agriculture negotiations: one is to have a high ambition result, another is to have a low ambition result, and a third is to have no result.

The third option would leave the international trading system fragmented and non-inclusive, causing a high potential for difficulties along the way as well as a divisive global trading system. The second option could be a slippery slope where low ambition could unravel a number of previously achieved

---

4 World Trade Online (2014).
5 World Trade Online (2014a).
6 27.4 states, *inter alia:* “Any developing country Member referred to in paragraph 2(b) shall phase out its export subsidies within the eight-year period, preferably in a progressive manner. However, a developing country Member shall not increase the level of its export subsidies, and shall eliminate them within a period shorter than that provided for in this paragraph when the use of such export subsidies is inconsistent with its development needs. If a developing country Member deems it necessary to apply such subsidies beyond the 8-year period, it shall not later than one year before the expiry of this period enter into consultation with the Committee, which will determine whether an extension of this period is justified, after examining all the relevant economic, financial and development needs of the developing country Member in question. If the Committee determines that the extension is justified, the developing country Member concerned shall hold annual consultations with the Committee to determine the necessity of maintaining the subsidies. If no such determination is made by the Committee, the developing country Member shall phase out the remaining export subsidies within two years from the end of the last authorized period.” (WTO 1994).
7 27.5 states, *inter alia:* “A developing country Member which has reached export competitiveness in any given product shall phase out its export subsidies for such product(s) over a period of two years.” (WTO 1994).
8 27.6 states, *inter alia:* “Export competitiveness in a product exists if a developing country Member’s exports of that product have reached a share of at least 3.25 per cent in world trade of that product for two consecutive calendar years.” (WTO 1994).
results, even though they were agreed without any formality of sealing them as final conclusions. As low ambition becomes the goal, each WTO Member may begin revising its negotiating position and seek more flexibility. Furthermore, at a time when the mega-FTAs are heading towards new frontiers of trade regulation, a “low ambition result” would in effect not be much different from “no result”.

However, low ambition is a relative term, and anything lower than a high ambition could be termed as low ambition. We believe that a “somewhat more than a low ambition” result would be of substantive interest for WTO Members and the system as a whole. The idea is to have a result that can provide a basis for a more ambitious and wider framework of rules and disciplines that better reflect the present day concerns, such as those included in the FTAs. Of course, this would require political will and engagement. Hopefully, some ideas in the post-Bali package could generate a momentum for greater engagement. We propose more than one option in this context, for the way ahead.

To get a more meaningful result in agriculture negotiations, it is important to bear in mind that a significant package of issues will have to be addressed. Many perceive that, in the previous serious effort at seeking a solution, the main obstacles included the inability of nations to agree on non-agricultural market access (NAMA) – particularly sectorals –, domestic support, and some aspects of market access in agriculture (special safeguard mechanism, market access provided by some emerging economies).  

Let us consider these issues within the background of mega-FTAs and the negotiating issues in agriculture.

The three mega-FTAs (the RCEP, the TPP, and the TTIP) will result in changes in market access. A common focus of the three mega-FTAs and the EU FTAs is that there is a large extent of market opening for industrial tariffs. If we consider these FTAs, it becomes apparent that they provide a basis for providing considerable progress in the NAMA negotiations, including in areas covered by some of the sectoral initiatives for NAMA. To that extent, a basis for positive engagement could be envisaged for NAMA by those participating in the mega-FTAs.

Against this background, NAMA negotiations could focus mainly on sectorals, i.e. for selected product areas tariff reductions over and above what is reflected in the previous formula and flexibilities. To begin with, this may only be offered by those Members who are part of the three mega-FTAs. An added provision would be a long transition period for implementing these additional changes, both because they require additional structural adjustment for the countries concerned and because the mega-FTA negotiations will take time to be implemented. One option for the transition period could be that provided for in the safeguards agreement, i.e. eight years for developing countries. It could also be ten years, as in the case of the Multifiber Arrangement’s adjustment into the multilateral trading system.

---

9 There were of course many other issues as well, but these are mentioned as significant examples of the main stumbling blocks.

10 Here, we only consider market access in NAMA and agriculture, and not services. Much of the negotiating focus for services is taking place in TISA. However, some progress could still be made within the WTO. Further success in agriculture and NAMA negotiations could also contribute to progress in services, and vice versa.

11 Article 7.3 of the Agreement on Safeguards (WTO 1994).
Another option is to simplify the modalities and have an average reduction of bound tariffs, with some accompanying conditions for negotiations through request and offer, flexibilities and some results that better reflect the movements in mega-FTAs for a limited categories of products (akin to sectorals).

Since a package of results is important for achieving the overall conclusion, any result for NAMA would have to be accompanied by progress in agriculture negotiations. Among the three pillars in agriculture, export competition could be considered as being different from domestic support and market access.

Export competition is an issue for which the solution is technically contained in the Chair’s text (Rev. 4). The modality is accepted or is not really questioned, though some fine-tuning may be required to reach the solution. Further, this issue is essentially between the EU and the United States, i.e. it resembles issues that were previously handled in the multilateral trading system. Thus, export competition should be brought centre stage and efforts begun to address it. This will provide a major input towards creating greater engagement, trust and confidence in a system where these are presently missing.

Of course, since the system involves all participants, credibility required for progress in the negotiations will also involve the effective participation of Members other than the EU and the United States. This means some contribution will be needed, especially in the areas of market access and domestic support. Particularly for these two areas, with the ongoing FTAs, the US' recent Farm Bill and the global concerns about food security issues, we can see that consensus on existing provisions in the Chair’s text may not be possible without some additional movement for market access and domestic support.

On agriculture market access, the progress made in mega-FTAs, similar to the case for NAMA, would provide a base for further engagement. There would be two additional factors that could add to the vitality of these negotiations. One, sources suggest that there was an agreement with respect to the market access provided by India. This could be revived and considered for final conclusion. In the case of China, one possibility is to consider tariff rate quotas for specific products that would be high import items for it over time. Similar to the sensitivity addressed by Japan in the TPP, this could also be a solution for China. Table 1 above suggests, for example, that these products could be selected from coarse grains and oilseeds. Even for other commodities, there is a possibility to consider a similar tariff rate quota applied with greater market access than at present.

Combining these three ideas, i.e. mega-FTA results, additional possibilities based on earlier agreement, and likely future import demand, could provide a basis to move forward with market access negotiations in agriculture. As in the case for NAMA, these results too could be implemented over a transition period of eight to ten years.

An alternative approach could be an average reduction in bound tariffs, combining two different ideas. One is the idea contained in Footnote 2 of the Chair’s text of August 2007. The footnote stated:

“Pending final agreement on this aspect of the modalities Members may wish to keep under advisement the approach alluded to in the Chair's Challenges paper to the effect that a basic approach analogous to the Uruguay Round could be an overall cut for developing country

12 See also, pages 269 and 277 of OECD/FAO (2014) for figures of expected imports by China in 2013.
Members of 36 per cent with a minimum cut of 15 per cent on each line. This could also be somewhat moderated both for the Members referred to in footnote 3 below and for RAMs.13

The other is to combine the above with some additional flexibilities that capture those present in the most recent text of the Chair.

This brings us to domestic support, an area for which similar to export competition, disciplines are not likely to arise within FTAs. This important issue has to be addressed within the multilateral trading system. Here, we focus on the issue of Overall Trade-Distorting Support (OTDS).

Some of the main issues that arise in the present market and policy situation14 are that the United States may tend towards a higher level of support than previously discussed in the negotiations, and India and China would not like any reduction in their de minimis support. A contrasting view among some Members is that the amount of subsidies allowed for the large developing economies is high and should be reduced through additional disciplines. Therein lies a trilemma that will need to be addressed to move forward.

For the EU and the United States, the present situation and the disciplines in the Chair’s text are as follows:

<table>
<thead>
<tr>
<th>Table 4. OTDS levels before and after reduction for the EU and the US</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OTDS Starting Level</strong></td>
</tr>
<tr>
<td>EU ( € millions )</td>
</tr>
<tr>
<td>US ( US$ millions )</td>
</tr>
</tbody>
</table>

The OTDS reduction does not apply to economies such as China and India.15 The upper limit on their domestic support is given by their de minimis levels of support: 8.5% for China and 10% for India. The de minimis amounts for India and China would keep increasing with a rise in value of production levels. An illustrative comparison of the de minimis levels and the current levels of support is provided in Table 5:16

---

14 Though this is a limited list of main issues, we feel that, if there is movement on these matters then the negotiations could get positive momentum.
15 The analysis is conducted in terms of China and India, but the conceptual principles would apply equally to others.
16 The amounts reflect the support items that are subject to reduction or not covered by flexibilities.
We can see that the amount presently spent on support is considerably less than the *de minimis* levels. In this background, there are three possible ways of looking at the domestic support situation.

One, that to the extent that there is a solution to the food security issue, either as a waiver or a permanent solution, this could also pave the way for considering some additional discipline being adopted in view of the likely gap between the allowed level of domestic support and the actual level of domestic support. However, this move would not be consistent with China and India's red line about no change in *de minimis*. Also, this situation would not provide any respite to the United States if it wants an increase in its OTDS level compared to that mentioned in the Chair's text.

Two, the trade-offs may be considered more in terms of what is given in market access, rather than within domestic support itself. In this case, China and India's red lines would be maintained, but the respite for United States would not be there.

Three, the OTDS for the United States may be increased by a small percentage. However, this would not meet the concerns of those who want some reduction in the *de minimis*.

To address the trilemma we mentioned above, elements from all these three may need to be considered. Which solution could bridge these three?

Would a change in the reference period provide a basis to give a result addressing these concerns? Could this be combined with an OTDS amount that would be allowed to increase if the country providing the support were faced with an increase in imports (something like a safeguard mechanism)? Could there be a flexibility that combines the ideas (not the exact disciplines) underlying the flexibilities contained in Annex VII and Article 27.4 of the Agreement on Subsidies and Countervailing Measures, i.e retain the *de minimis* levels proposed in the latest draft text for the larger developing countries, so long as a threshold level, defined in absolute terms, is not breached. This could be combined with a long implementation period while trade-distorting support is gradually phased out, to reach a new lower agreed threshold level. Flexibilities for emerging economies could be linked with an increase in OTDS for the developed economies, for example as follows.

- if the OTDS for developed economies is increased by 10 per cent in the draft text, there would be no change in the present conditions for *de minimis* support in large developing countries;
- if the OTDS for developed economies is not increased, a 10 per cent decrease could be envisaged in the *de minimis* level of support for developing countries, in the event that these Members surpass a threshold level of support defined in absolute terms;
- Possible adjustment within this range of 0 to 10 percent;

<table>
<thead>
<tr>
<th></th>
<th>De Minimis Level (USD billion)</th>
<th>Actual Support Level (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>63.75</td>
<td>15.6 (2008) (converted using the current exchange rate)</td>
</tr>
<tr>
<td>India</td>
<td>31</td>
<td>2.3 (2010)</td>
</tr>
</tbody>
</table>

Table 5. *De minimis* and actual support levels for China and India
• A transition period of ten years could be provided to those developing countries covered in the provision requiring reduced support;

• The domestic support to cotton must be reduced in each situation and be implemented earlier than the other results.

In the section on Domestic Support in the Chair’s text, paragraph 7 shows that developing economies that have to reduce their OTDS would have to implement a reduction of about 36.7 per cent over an eight year period, i.e. two-thirds of 55 per cent. A 10 per cent reduction for certain developing economies mentioned above, would imply one-third of the change in comparison to the two-thirds mentioned in paragraph 7. This estimate could be adjusted, say one-sixth or any such ratio, to help bring about a possibility of convergence.

Thus, different possible configurations of solutions could be tested, focusing on the key objectives to be addressed in the context of domestic support. With a positive movement on food security issues, bringing export competition centre stage, and reaping the likely developments for market access as progress takes place within mega-FTAs, we may see a greater willingness to seek conclusion within domestic support as well.

**Conclusion**

The global situation is significantly changing and, within the next five or so years, the increased economic inter-linkages will create a greater need for the multilateral trading system. Otherwise, there may be trade-related conflicts that could expand to cover other areas as well. With the ongoing negotiations in mega-FTAs and identifying certain issues on which relatively less effort may be required, it may be possible to move forward with the negotiations within the WTO. The way ahead for agriculture negotiation is linked to a package of issues that can be addressed through options that may emerge as the FTA negotiations provide greater possibility of movement in market access. In addition, export competition needs to be addressed with greater focus because of a possibility of progress and since prices are likely to decline over the years for a number of agricultural products.\(^{17}\) There is an opportunity and a need to get disciplines on export competition now, and it should not be missed. No FTA can address this issue. With the momentum gained in these areas, there is also the possibility of greater engagement in domestic support, another issue that cannot be addressed by FTAs. For maintaining the strength and vitality of a system that is necessary to allow growth and opportunities to continue to progress more peacefully, it is essential to focus on these possibilities now to move agriculture negotiations towards their conclusion.

\(^{17}\) See OECD/FAO (2014), pages 254 and 255.
References


Falconer, Crawford. 2007. "Chairperson’s text." Committee on Agriculture, Special Session, WTO.


In Agriculture, it is Time to Act with Plurilaterals

By Aluisio de Lima-Campos

The Doha Development Round of negotiations was launched in 2001 and was supposed to be concluded by 2005, but here we are in 2014 still thinking of ways to get it going. As the Bali agreement situation made clear, even when there is consensus and agreements are signed, one can no longer expect that they will be implemented. In the Bali package case, India is pressing for changes after signing it. A few other countries may follow.

Although unlikely, a similar fate may come from a situation in which the United States, for example, signs an agreement without specific authorisation from its Congress (Trade Promotion Authority – TPA). In those circumstances, the US Congress can reject or amend the original text, which would result in no ratification of the original agreement.

Today the crude reality is that the Doha Round has not delivered on its objectives and negotiations so far have not produced enough to give us a visible time horizon for its conclusion. In the meantime, critical issues for some developing countries such as agricultural subsidies and agricultural market access remain unresolved, while inroads in non-agricultural market access, intellectual property, investments, all of utmost importance for developed countries, go forward through an increasing number of bilateral and regional preferential trade agreements.

At the same time, as agricultural subsidies grow unchecked in developed countries, their negotiating positions at the multilateral level become more resistant to change and less conducive to a multilateral agreement in the Doha Round. The latest Farm Bill in the US, for example, has increased the level of benefits to farmers over the previous one and it is in effect until 2018. As this trend continues, some developing countries have increased support to their farmers, even though at insignificant levels when compared to developed country levels, to help them face increased unfair competition at home and in third markets. But this is putting additional pressure on their tight budgets, which cannot match the resources of developed countries' treasuries.

While this pernicious cycle favours those who would prefer the status quo on agricultural subsidies, it is prejudicial and unsustainable for those seeking free and fair trade in agricultural products. To these latter countries I would suggest that they rethink their strategies to achieve their goal. It is simply unrealistic and unproductive at this juncture to wait for an agreement in the Doha Round that may or may not happen, and that, if it does, can only be, under the present circumstances, a roughly digestible compromise at best, which will not solve the problem once and for all.

If allowed by Article XXIV of the General Agreement on Tariffs and Trade (GATT) 1994, the best strategy for those countries would be to negotiate a preferential trade agreement (PTA) on agricultural products with their like-minded partners, removing substantially all barriers to trade in that sector.

---

and reducing agricultural support to a bare minimum, with rights and obligations accruing only to the signatories. Those excluded from this PTA would be pressured to join, reducing their barriers and subsidies, as agricultural trade among participants would increase and products of non-participants become less competitive in the PTA markets. But, Article XXIV requires that "substantially all the trade" be involved in a PTA, which rules out this option.

The same desirable effect, however, could be achieved with a plurilateral agreement, if a waiver of the most favoured nation (MFN) clause can be obtained under Article IX:3 of the GATT 1994. Such a waiver would require that certain conditions be met: (a) if a decision by consensus by the Ministerial Conference is not reached within ninety days, the decision to grant it must be taken by at least three fourths of the Members; (b) it must be shown that "exceptional circumstances" are present; (c) the waiver must be temporary; and (d) any waiver lasting more than one year shall be reviewed annually by the Ministerial Conference until it expires.

It is doubtful that a consensus decision at the Ministerial can be reached, especially in light of the much higher level of ambition in terms of reductions in both agricultural subsidies and trade barriers this plurilateral would envisage. The most likely scenario, therefore, is for a decision to be made by a three fourths majority. This would mean convincing at least 120 out of 160 Members to go along. This is not an easy task. It would be close to impossible if the strongest resistance to a deal in agriculture were coming from more than 40 Members, which would leave us short of the 120 needed. However, since less than 40 countries are likely to resist, the chances of getting the needed number of adhesions are better than one may expect.

On the other hand, exceptional circumstances abound in the case of agricultural products. One of them is the fact that subsidies for the industrial sector and products of critical interest to developed countries have been dealt with thirty plus years ago in the Tokyo Round, while a solution for agricultural subsidies drags on. Another, as proven in the cotton case, agricultural subsidies depress world prices and are causing extraordinary losses to cotton farmers in Francophone Africa with heavy negative economic, social and health impacts in those poor, cotton producing countries. If that was not enough, export subsidies and subsidised export credit are aiding subsidised agricultural products from developed countries in gaining market share against more cost competitive products from developing countries, adding more hardship to an already unfair situation. The list is long and the case for exceptional circumstances is clear.

In my view, initial discussions should start with a core group, which could be formed from Cairns Group countries. This group would prepare a very ambitious preliminary document that sets out the base for such an agreement. Other countries could then be invited to join the discussions if they like what they see. The main subsidisers are not likely to join if the maximum limits in the basic document, as expected, are way below the levels of subsidies and barriers (tariffs and tariff rate quotas) they are willing to accept.

---

2 China, EU-28, India, Japan and USA would be likely holdouts. If acceptable special safeguards can be negotiated, China and India could be brought in. Even the G33 countries may warm up to the idea of fair trade in agriculture that an IX:3 Plurilateral can provide. It can also calm their fears with regard to being flooded by subsidised products once their barriers are down.
Some have suggested a critical mass plurilateral as a way to go forward in agriculture if the Doha Round fails. The first problem here is that no one knows when the Doha Round will conclude, if ever. It is better to take the initiative now and go on the offensive with one's priorities. The second problem, and a big one, is the likelihood of free riders. Such an agreement would extend its benefits indiscriminately to signatories and non-signatories under the MFN clause but not its obligations, which is a great attraction for those Members who want more access for their products but not significant reductions in their own domestic and export subsidies - the so-called “free riders”. One may try to minimise the free rider effect by bringing more partners into the agreement, but that would probably mean accepting compromises that would only undermine its level of ambition. This, in turn, would probably not solve the subsidies problem entirely and/or extend significantly the agreement's implementation time.

Developing countries must stop waiting for a solution in agricultural subsidies and market access in the Doha Round and take action. A plurilateral agreement under Article IX:3 would carry the highest level of ambition possible and in a worst case scenario its negotiation may exert a desperately needed, healthy amount of pressure for a speedier resolution in the Doha Round.

---

Transparency and Monitoring in Agricultural Trade: Policy Options for the Post-Bali Agenda

By Tim Josling

Introduction

Transparency is an essential aspect of a well-functioning trade system. Providing transparency is an integral part of the agreements that set up the World Trade Organization (WTO) and, indeed, the WTO Secretariat devotes much of its resources to monitoring compliance with obligations undertaken by member governments. One author has concluded that “transparency mechanisms appear to be a particularly cost-effective tool for avoiding unnecessary obstacles to trade” (Moïse 2012).

There is little doubt that transparency has improved in the trade system as a whole in the past two decades, along with more exhaustive monitoring and surveillance activities. Transparency in the specific area of agricultural trade has also improved, although many issues still have to be addressed. The Secretariat, through the WTO website, provides ample information on the Agreement on Agriculture (AoA) and on related negotiations.

The monitoring of the obligations of WTO Members by the Committee on Agriculture has generated a considerable amount of information on agricultural policies. The strong point of the domestic support notifications is their inclusion of supporting tables that together enable a relatively detailed picture of the type and extent of support offered by the notifying country. The weakness is that the categories into which the support is classified neither provide adequate information on the trade impacts of the policies nor give detailed descriptions of the policies themselves. Moreover, the ways in which different countries choose to notify policy measures is strikingly inconsistent.

1. General transparency obligations

The current system of transparency provisions for the WTO is based on Article X of GATT 94 (Publication and Administration of Trade Regulations), which states (in part) that laws and regulations pertaining to trade must be “published promptly in such a manner as to enable governments and traders to become acquainted with them” (WTO 1995). Similar obligations are in the specific agreements that were negotiated in the Uruguay Round. Hoekman and Kostecki (2009, p. 71) report that there are in all about 200 notification requirements in the WTO agreements.

Other transparency mechanisms also exist. The Dispute Settlement mechanism itself is an important part of the process of transparency, shining a spotlight on particular issues while adding to the collective wisdom of trading partners. The spotlight can be turned on the issue of transparency itself. The establishment of the Trade Policy Review Mechanism (TPRM) has contributed significantly to the understanding that countries have of each other’s policies and is particularly useful for small countries whose trade ministries lack the resources to undertake the necessary research.
2. Transparency obligations in agricultural trade

With respect to the provision of information on trade-related rules, the general obligations mentioned above apply equally to agricultural regulations and decisions. However, three general problems hamper full transparency in this area: the policies themselves change frequently and in ways that could significantly impact trade, the details of the policies are often complex and their implementation (often the key to understanding their trade effects) is subject to local administrative decisions that are not always publically available, and the sensitivity of farm policies may prevent governments from making programme details widely available.

The main vehicle for monitoring and surveillance in the area of agricultural trade is the notification to the Committee on Agriculture (established in Article 17, AoA) of the levels of domestic support, along with parallel notifications on export subsidies, tariff-rate quotas and new green box measures. The obligation of WTO Members to submit notifications is contained in Article 18 (Review of the implementation of the commitments) of the AoA. The Committee on Agriculture is charged with reviewing progress in the implementation of commitments. The document includes guidelines on the intended frequency and timing of notifications; however, they seem to carry insufficient legal weight to over-ride the reluctance of members to provide information that can lead to criticism (Brink 2010, p. 34).

The monitoring of obligations by the Committee on Agriculture has generated a considerable amount of information on agricultural policies. The weakness is that the categories into which the support is classified neither provide adequate information on the trade impacts of the policies nor give detailed descriptions of the policies themselves. Moreover, the ways in which different countries choose to notify policy measures is strikingly inconsistent. This implies that any aggregation across countries is suspect, and even notifications by the same country over time can be rendered less useful by changes in the allocation to support categories. The problems stem in part from the lack of clarity of the agreed notification procedures (and in the terms of the AoA itself) and in part from the desire of governments to show their compliance with the schedules.

The problems in the domestic support notifications that need to be addressed include the following:

- The definition of non-product-specific support, and hence the significance of de minimis, allowances is unclear. Questions have been raised about the categorization of crop insurance premium support and other subsidies as non-product-specific when to the individual farmer the support is product-specific;

- The level of de minimis allowances for developing countries, particularly those with no notified base period for Aggregate Measures of Support, is dependent on the value of production used. No definition of value of production exists, and countries have used different concepts in their notifications;

- The treatment of input subsidies in some developing countries is controversial. Some countries include these as Development Programmes (Article 6.2) but the definition of the measures falling under this heading is not clear;
• The measurement of market price support (MPS), including the use of administered prices, reference prices and eligible quantities, gives rise to a number of ambiguities. Administered prices have been changed by some countries with no corresponding changes in domestic producer prices. Reference prices can be out of line with current market conditions, leading to misleading interpretations of market price support. The reporting of eligible quantities for MPS calculations is currently inconsistent among countries. Moreover, relatively small changes in policy can be reflected in large changes in the "eligible quantity" reported.

These and other examples of the lack of clarity in the way domestic support is defined and consequently notified give considerable scope for countries to present their policies in an inconsistent manner (Orden, Blandford, and Josling 2010).

The value of the notifications as a way of tracking the effectiveness of the AoA disciplines over time is seriously compromised by the delay in notifications to the Committee. Though several of the major countries have made an effort to bring their notifications more up-to-date, many still lag behind. Developing countries are now the main laggards. Notification of domestic support has slipped the most, with 43 per cent of the required notifications for the period up to 2011 still missing. Almost 40 per cent of required notifications on export subsidies over that time period have not been supplied.1 Some of these issues stem from the fact that concern with the trade effects of domestic support has been focused almost exclusively on industrial countries. These countries have traditionally been the major players in the support of agriculture, both by maintaining high prices and giving generous subsidies. By contrast, developing countries often taxed their agricultural sectors in the past and, in any case, were deemed to be less likely to engage in costly subsidy programmes for their large farm population. As a result, the constraints included in the AoA have not been onerous on developing countries, and they, in turn, have not appeared to take the notification requirements seriously. This situation may change in the future. As Brink points out (2011, p. 51), if the Doha Round draft modalities eventually become incorporated into a revised AoA, the bulk of allowable trade-distorting support will be available to developing countries as result of the larger de minimis limits applied to the large value of agricultural production.

Among the most pressing issues in the area of notification of agricultural policies is that of spending under the green box (AoA, Annex 2). At present, countries have to report spending under the 12 main headings of Annex 2 but are not required to justify their classification decision – unless requested to do so in a meeting of the Committee on Agriculture. Compared to the detailed reporting required for subsidies by the Subsidies and Countervailing Measures (SCM) Agreement, the requirements for notifying green box under the AoA are relative undemanding.2 Indeed, in some cases, the SCM reporting includes policy details pertaining to agricultural subsidies (which are covered by that Agreement as well as by the AoA). Policy changes since the introduction of the AoA (and supported by the AoA disciplines) have led to a greater interest in the green box, and new policy instruments have been introduced that may not fit conveniently into the categories in Annex 2.

1 The corresponding figures for missing notifications of tariff quotas and special safeguards are a more modest 11 percent for each category. A recent report by the WTO Secretariat (WTO, 2013) documents the status of notifications in the several areas of reporting on agricultural trade obligations.

2 Under the ASCM, any specific subsidies must be notified to the SCM Committee no later than June 30 each year, and notifications must be sufficiently detailed “to enable other Members to evaluate the trade effects and to understand the operation of the notified subsidy programmes.”
Another such underserved area is the monitoring of export restrictions and taxes for agricultural goods. This topic received attention in 2008, when the first of two price surges for food commodities hit agricultural markets. Governments in several exporting countries began to limit supplies, leading to rapid increases in prices. Importing countries faced the prospect of being unable to secure adequate supplies from abroad. However, until this point, WTO Members had little in the way of consistent data on available stocks and were thus unable to assess the significance of exporter policies. Obligations on exporters to take into account the impact of export restrictions on the food security of importing countries is explicit in Article 12 of the AoA, along with the requirement that advance warning be given to the Committee on Agriculture “as far as is practicable” and consult with importing countries that “have a substantial interest” in the matter. In 2008, and again in 2010, notice was not given and consultations do not appear to have been undertaken.3

A further issue that arose in the context of the sharp price increases of basic foodstuffs in 2008 and 2010 was the growing use of maize and soybeans as biomass for ethanol and biodiesel. This matter was also not illuminated by WTO notifications, as the subsidies paid to companies that used biofuels were not consistently reported to the WTO Committee on Agriculture (Josling, Blandford and Earley 2010). They conclude that “WTO notifications provide little insight into the magnitude of biofuels subsidies. In both the agricultural support and industrial subsidies contexts, US, EU and Brazilian notifications of biofuel support have fallen far short of their potential in terms of coverage, timeliness and transparency.”

3. Towards improvements in monitoring

The topic of improving the monitoring and surveillance of agricultural trade rules has been raised in the Doha Round. The most recent “modalities” document, dating from December 2008, includes in Annex M the text of a new version of Article 18 of the Agreement on Agriculture. Proposed changes to Article 18 would significantly increase transparency (WTO 2008). Under the heading of “objectives”, the new Article calls for the “effective surveillance of compliance with obligations” by ensuring transparency and giving Members the opportunity to “assess the contribution of the [AoA disciplines] to the long-term objective of a fair and market-based agricultural trading system.” The Agriculture Committee could establish subsidiary bodies (sub-Committees) to look at particular issues in more depth. In addition, there is the possibility of submitting a provisional notification pending the final notification.

With regard to specific aspects of notification, the proposed Article 18 would require the one-off notification of the administration of its tariff-rate quota commitments, as well as annual notifications of the imports entering under those commitments. Members would also be required to notify the use of the Special Safeguard Measure (and the current Special Safeguard if retained) along with triggers and remedies. In addition, the revision of notification rules “shall require that a Member that provides support that it claims is consistent with Annex 2 of the Agreement shall include in the initial notification a summary of the measure” (WTO 2008).

These changes could bring needed clarity to the monitoring process, though ambiguities in the rules themselves are unlikely to be resolved in this way. In the realm of changes in practice, one change could include the notification of biofuel subsidies, as discussed above. As both the SCM Agreement and the

3 The WTO Secretariat has summarized the somewhat limited information contained in the notifications called for by Article 12 (WTO 2013a). Since 1995, eight members have notified 14 export prohibitions and restrictions, including four new members of the EU. The notifications largely relate to wheat and wheat flour.
AoA require notifications of such subsidies, one could coordinate the information and oblige countries to provide enough information to allow a reasoned view of the impact of the development of biofuels on agricultural markets.

With respect to changes in monitoring the green box, besides the more complete notification of the policies themselves, one suggestion has been made that the Committee on Agriculture develop a “thematic work programme” on the topic (Cerda 2009, p. 577). This could pave the way for more focused work on the trade policy implications of the shift in domestic support to such measures. The green box currently contains so many programmes with different output effects that the trade rules may need to be revisited. In this respect, the data collected by the OECD for the Producer Support Estimate (PSE) calculations already includes relevant information relating to the administration of direct farm payments, particularly the extent to which they require production to maintain eligibility.

The Doha draft modalities (WTO 2008) include suggestions for making the notification of export taxes more effective. The draft text provides for notification within 90 days of the application of an export restriction (Paragraph 172), including the reasons for such a measure and periodic reporting to the Committee on Agriculture of the status of the restriction. Such restrictions would “not normally be longer than 12 months” unless an extension was agreed by “affected importing Members” (paragraph 179). Combined with better information on stock levels, such as is emerging as a result of the Agricultural Market Information System (AMIS) that combines the resources of the OECD, the FAO and other institutions, information on export restrictions would benefit the smooth functioning of the markets for food and agricultural products.

**Conclusion**

The most immediate improvement to transparency would follow from the adoption of the proposals in Annex M of the Doha Draft Modalities. Though negotiated as a part of a package, there seems to be no reason why it should not stand alone. The proposal does not involve changes in national regulations and does not appear to favour any country over others. It would merely replace the somewhat vague obligations in Article 18 with requirements that are more detailed. Resources could be made available for the developing countries that would have difficulty preparing notifications, though there could be a side-benefit to those countries themselves from having to describe policy measures in an agreed format.

More coordination within the WTO could also improve transparency and reduce overlapping activities. The notifications of subsidies made under the SCM Agreement have much in common with those under domestic support under the AoA. The SCM notifications are more descriptive and lack some of the structure of the AoA tables. There may be a case for combining the two notifications and allowing each committee to consider the combined report from their different viewpoints. This is particularly appropriate in the matter of biofuel subsidies, where coordinated information from the SCM and domestic support notifications, augmented by agreements on how such subsidies should be reported, would be valuable.

---

4 In the Non-Agricultural Market Access talks in the Doha Round, the EU proposed additional disciplines on export taxes. In order to increase the predictability of export taxes, the EC proposed that WTO members “undertake to schedule export taxes on non-agricultural products in their Schedules of Concessions and bind the export taxes at a level to be negotiated” (Korinek and Bartos 2011). The same change would greatly improve transparency in agricultural markets as well.
References


Strengthening the Deliberative Function of the Regular Committee on Agriculture

By Manzoor Ahmad and Ammad Bahalim

Introduction

As this note goes to press, governments have failed to translate last year’s Bali deal into legal instruments in Geneva. This work serves as a reminder, both of the fragility of agreements, as yet unrealized, and of the WTO’s reliance on specialized committees and their deliberations. These recent events strengthen the case for pressing ahead with the work of the regular Committee on Agriculture (CoA), since it remains a constant fixture of the WTO’s institutional architecture, regardless of the status of negotiations.

Members have tried to realize the promise of the Doha Round for more than a decade. After its 2001 launch, representatives in Geneva focused on the Special Session of the Committee on Agriculture, due to its role in reaching negotiating outcomes. The regular Committee’s monitoring of the implementation of the Agreement on Agriculture (AoA), through notifications and other submissions, took a back seat as countries tabled competing proposals on the rules governing international agricultural trade.\(^1\) Notifications often came years after they were due, if at all. As a result, members lost opportunities to consult on the implementation of their commitments under the AoA. This likely unintended trade-off may have been the right one for members with limited capacity, simultaneously negotiating on several fronts. As the work of the Special Session has stalled in the years following the 2008 impasse, the case for focusing on what can be accomplished today in the CoA has rarely been stronger.

1. Bali onwards

The ministerial decisions at Bali gave impetus to the WTO, especially for work on agriculture. Ministers agreed that the CoA would monitor and consult on tariff-rate quota underfill, public stockholding for food security purposes, and export competition, among other issues. In the days since Bali, members have made substantial, if insufficient, progress. Members have tabled proposals under the Special Session; however, in the long term, the Committee on Agriculture is how and where the Bali decisions will be monitored and implemented, since the AoA is within its remit.

Last December’s Ministerial Decision cannot be described as momentous or ambitious in scope, but it deserves recognition for bringing long-running issues to the fore: tariff-rate quota (TRQ) underfill and export competition, as well as emerging concern from developing country members who are increasingly likely to spend more on domestic support through public stockholding. Tariff-rate quotas, a tool from the Uruguay Round to convert quantitative restrictions on imports into ad valorem terms, have long been criticized by trade economists as being inefficiently administered, and a fix has been in the wings.\(^2\) Similarly, in 2005, Ministers promised to eliminate export subsidies, perhaps the most

---

1. This is addressed in better detail by Timothy Josling’s piece in this volume.

trade-distorting form of support, by 2013. Both of these issues are unambiguously overdue. Public stockholding emerged as a pressing concern ahead of Bali, but members were far from a consensus before they reached the Indonesian island. The common thread in all of these issues is that the monitoring function of the CoA is critical both to finding compromises and to putting solutions into place. These are not tasks to negotiate in the Special Session or outside of the realm of the AoA.

A report from the WTO Secretariat in May 2014 showed that 43 per cent of notifications that Members were obliged to make between 1995 and 2012 are still outstanding. It is clearly difficult to find solutions for problems when there is a lack of information. This problem similarly reared its head long before Bali when a questionnaire among members on their food stockholding programmes was only answered by a minority. Of the notifications mentioned above, the bulk of missing submissions are on export subsidies and domestic support, both areas that are essential in addressing the Bali work programme. The absence of information likely made progress difficult for members over the course of the year, culminating in the 31 July failure to move forward with the Trade Facilitation Agreement. An important caveat worth mentioning here is that, since the collapse of Doha Round talks in 2008, the number of years notified by members and their frequency has increased dramatically, perhaps not unsurprisingly to pre-2002 levels.

When members return to the bargaining table, they will need to work towards addressing the Bali work programme, especially where it concerns public stockholding, before their deadline of the next Ministerial. A June 2014 report from the CoA Chair noted progress on the methodology of notifying TRQs and expectations for new proposals on public stockholding. However, before they can get much further, they will need more information from Members. The Bali Ministerial and associated work programme are but one recent facet of the Committee and its discrete assignments serve as a reminder of the Committee's potential.

2. The role of the Committee on Agriculture

The mandate of the CoA is both simultaneously precisely defined and subject to a degree of interpretation. A 1995 decision by the General Council, the WTO's highest-level decision-making body in Geneva, defined the CoA's terms of reference rather simply:

"The Committee shall oversee the implementation of the Agreement on Agriculture. The Committee shall afford members the opportunity of consulting on any matter relating to the implementation of the provisions of the Agreement." 

The CoA should therefore be a place where WTO members are able to consult with others on all facets of the AoA. As a place where they can consult, it may not have the ability to adjudicate, but it should help participants understand their respective challenges. Debates about the creation of the body at

3 WTO 2005.
4 WTO 2014a.
5 WTO 2014a.
6 WTO 2014b.
7 WTO 2014.
8 WTO 1995.
the Preparatory Committee of the WTO in 1994, which also created the CoA, were about unresolved questions left over from the Uruguay Round. Members, however, reached consensus on the language above, with the hope, it seems, to “get off to a good and practical start.” This language should signify that the CoA is what members make of it, like so much of the practicality inherent in the WTO.

The worth of nearly any body of law is determined by how much it is adhered to or the degree of its enforceability. The AoA remains one of the most important legal documents in setting the boundaries of the shape of agricultural policies in 160 countries. The WTO’s dispute settlement processes offer a tried and tested means of ensuring compliance. However, by the time countries reach a decision in a dispute, time and funds have already been expended. The CoA affords a place where members may air their concerns, openly, well ahead of such processes. The existing mandate of the body, coupled with discrete tasks, such as those assigned at Bali, offer glimpses at the possibilities within the Committee.

3. Considerations from other bodies and next steps

Examples of change from other bodies of global governance could be instructive for the CoA. This is reviewed in detail in Ahmad (2011), but should be mentioned again here as an update. At the height of the food price spikes in 2008, governments acted quickly to deliver humanitarian relief, but the international architecture for food and agriculture was insufficiently equipped to deal with the structural shift from a demand- to the supply-constrained world that was afoot. As in responses to earlier crises, governments sought to create, re-equip or reform existing bodies to suit immediate needs. The UN Secretary General created the High Level Task Force (UNHLTF) on the Global Food Security Crisis, the FAO and other Rome-based food agencies revitalized a nearly defunct Committee on World Food Security (CFS), and other similar efforts took place in smaller bodies. We have now had several years to learn from these efforts and others.

The UNHLTF, after coordinating the UN agency response through a common framework for action, has now stepped out of the limelight. The CFS is emerging as the premier forum for the discussion of food security. Its most recent negotiations, on Responsible Agricultural Investment, treated states, civil society and the private sector as near equals to draft a set of voluntary principles that may potentially inform future norms in this area – putative “soft” law. Unfortunately, neither of these efforts carries the legal firepower of the WTO. Therefore, a point of comparison and recommendation has been the Human Rights Council, with its Universal Period Review, and, to a degree, the Trade Policy Review mechanism at the WTO. The former has limited legal weight, as does the latter, to a degree. The operative power of all the bodies mentioned rests in their ability to shed light on a specific issue and to persuade the offending party into compliance. The respective review processes are a daunting task to discharge and require significant financial and political commitment. A similar process reviewing trade and food security is still worth considering for a strengthened CoA but is perhaps too lofty a goal at this stage.

Alternative recommendations could be more earth-bound. Perhaps unbeknownst to Ministers, Bali offers an unusually optimistic path ahead. The CoA already has a mandate as a consultative and implementation-oriented forum. The built-in agendas of the AoA and the Doha Round offer detailed instructions on the direction of reform. Fundamentally, the following elements are still needed:

---

• Further reform – reductions in current bound levels of support and protection;

• Expanding scope – creating new disciplines to respond to current challenges;

• Clarifying disciplines – looking over current rules to see if they are uniformly and universally applied as intended during the Uruguay Round, and making clarifications of an interpretive nature where desired.\(^\text{10}\)

The manner in which Member States are motivated to tackle these elements as well as newer issues has been, in many ways, the stumbling block of Rue de Lausanne’s most staid institution. The peace clause offered to developing countries in Bali, possibly in breach of their Aggregate Measure of Support commitments, was premised on transparency, accountability and the express authorization to and of the CoA. If Member States are likely to exceed their limits they must: (a) have notified the CoA; (b) fulfil domestic support notification requirements; (c) provide additional information on their stockholding programme; and (d) provide additional statistical information. In addition, the stocks should not distort trade or adversely affect the food security of other members.\(^\text{11}\)

In simpler terms, if a Member would like to violate WTO rules to address food security needs, then it must consult with other members, provide a large amount of information, give advance notice that it is likely to do so, and ensure that trade is not distorted or food security undermined. This rather straightforward set of conditions could allow countries to break the letter but not the spirit of WTO rules. Everything would be monitored and implemented through existing bodies and rules, which would likely encourage compliance with notification requirements. Extending this principle further, within the amble of the Agreement of Agriculture, could allow the WTO to move forward, strengthen the Committee on Agriculture and tackle trade and food security, while avoiding being mired in the political trade-offs that come with multilateral negotiations.

The AoA’s three pillars – market access, domestic support and export subsidies – cover the gambit of agricultural trade policies by definition. If the CoA is able to better monitor its implementation and enforcement, then global trade and food security could benefit from it. So much of its work is seemingly routine and unimaginative but could easily be extended to under-addressed needs, such as clarifying disciplines.

4. The way forward

There are three issues:

• Meeting the obligation to notify timely;

• The availability of data;

• A valid basis for challenging any data.

When it comes to meeting the timely notifications, the WTO Secretariat can play a role. At least three months before any meeting of the Committee is scheduled, the Secretariat should remind the

\(^{10}\) Ahmad 2011.

\(^{11}\) WTO 2013.
relevant members of their obligation. A month before the start of the meeting of the Committee, the Secretariat should circulate a paper giving the status of notifications.

When it comes to the availability of data and advice on the validity of any claims regarding a threat to food security in any country, assistance could be sought from the Food and Agriculture Organization to the United Nations. The WTO and the FAO have collaborated on several agriculture-related issues in the past, and this would further enhance their partnership.

The other Ministerial decision relating to “tariff quota administration”– how a specific type of import quota (a "tariff quota" where volumes inside the quota have a lower duty) is to be handled when the quota is persistently under-filled – may not pose a similar level of difficulties. However, the way forward suggested for public stockholding could also apply in this case.
References


About the Authors

Manzoor Ahmad

Dr. Ahmad received his BSc (Hons) and MSc from the University of Peshawar and his PhD from the University of Hull, UK. He is a Senior Fellow at the International Centre for Trade and Sustainable Development in Geneva. A Pakistani national, he has served in various senior positions for his government and in international organizations. He was the Ambassador and Permanent Representative of Pakistan to the WTO from 2002 to 2008. During that period, he chaired the WTO Council for Trade-Related Intellectual Property Rights from 2004–08 and the Balance of Payments Restrictions Committee during 2003–04. He also served as the Director of the Liaison Office of the Food and Agriculture Organization to the United Nations from 2008–10. For the last two years, Dr. Ahmad has been working as an Independent Consultant on International Trade and Food Security Issues from Geneva and Islamabad. He is also one of the regular panellists on the WTO dispute settlement system.

He acts in various leading capacities in a number of global public policy institutions and think-tanks and is an adviser to the government of Pakistan. He has published several papers in international and local journals on issues relating to international trade and is frequently invited to make presentations at international conferences, academic institutes and other influential forums.

Giovanni Anania

Giovanni Anania is a Professor of International Trade, Trade Policies and Economics of Agro-Food Markets in the Department of Economics, Statistics and Finance at the University of Calabria, Italy. Dr. Giovanni obtained a degree in Economics from the University of Calabria and holds an MA in Social Science Data Analysis from the University of Essex in the United Kingdom as well as an MSc and a PhD in Agricultural Economics from the University of California, USA.

He has served as a consultant to many international institutions, such as the EU, the United Nations' Food and Agricultural Organization and the Organisation for Economic Co-operation and Development. Dr. Giovanni has authored numerous scientific publications in the fields of EU agricultural and trade policies, WTO negotiations on agriculture, and quantitative methods for the analysis of the effects of agricultural and trade policies.

Ken Ash

Ken Ash holds a BCom and an MBA in International Business and Resource Management from Memorial University, Canada. Mr. Ash is the Director of the Trade and Agriculture Directorate at the Organisation for Economic Co-operation and Development (OECD). Mr. Ash has effectively led the development, dissemination and communication of evidence-based policy to Ministers, senior officials and major stakeholders to identify pragmatic and concrete policy actions that governments could take to achieve common domestic goals, while avoiding trade conflicts. He has brought forward a widespread and deeper understanding of the benefits of further domestic and trade policy reform.
He was formerly a Deputy Director at the OECD and has 20 years of extensive experience with the Government of Canada, including as Director General for Economic and Policy Analysis with the Policy Branch of the Government of Canada. He played a leading role in the successful merger of the Trade and Agriculture directorates at the OECD. He has provided strategic policy guidance to governments on key trade policy issues during GATT/WTO negotiations, in the implementations of the Uruguay Round Agreement on Agriculture, and in the formulation of a government-wide Programme Review that resulted in major policy and organizational reforms.

Ammad Bahalim

Ammad Bahalim was a Programme Officer for Agriculture at the International Centre for Trade and Sustainable Development. He has worked with the UNDP International Policy Center on Inclusive Growth, the Instituto de Estudos do Comércio e Negociações Internacionais, the International Crops Research Institute for the Semi Arid Tropics, Pakistan’s Mission to the World Trade Organization, and the Free Software Foundation. He received an MPA from Cornell University and a BA in Philosophy, Politics and Economics of International Development from Brandeis University.

Christophe Bellmann

Christophe Bellmann is a Senior Resident Research Fellow at the International Centre for Trade and Sustainable Development (ICTSD). Mr. Bellmann joined the ICTSD in 1998, first as Programme Officer for Outreach and Partnership, then as Director of Policy Dialogues and finally, since 2002, as Programmes Director. Before joining the ICTSD, Mr. Bellmann worked for the Swiss Coalition of Development Organisations where he was responsible for activities on multilateral trade and sustainable development issues. During that time, he produced several papers and articles related, among others, to public participation in the WTO, possible multilateral disciplines on foreign direct investment, trade preferences for developing countries, agriculture trade reform and trade-related technical assistance. Mr. Bellmann has also worked as a Research Associate at the Economic Commission for Latin America and the Caribbean in Santiago, Chile, on the relationship between trade and the environment.

Mr. Bellmann has edited and published a wide range of books, articles and opinion pieces on trade and sustainable development in English, French and Spanish. He holds an MA in International Relations from the Graduate Institute for International Studies in Geneva.

David Blandford

David Blandford is a Professor of Agricultural and Environmental Economics and the former Head of the Department of Agricultural Economics, Sociology and Education at Pennsylvania State University. He obtained his PhD in Agricultural Economics from the University of Manchester in the United Kingdom. Dr. Blandford was formerly a Division Director at the Organization for Economic Cooperation and Development in Paris and a Professor at Cornell University. He has twice served as Chair of the International Agricultural Trade Research Consortium – an organization composed of researchers from government, academia and industry. He was President of the Agricultural Economics Society of the United Kingdom in 2010–11. Dr. Blandford has served as a Consultant
on policy issues for a range of international organizations, including the UN Food and Agriculture Organization, the International Food Policy Research Institute, the Organisation for Economic Co-operation and Development, and the World Bank.

He teaches courses in agribusiness at Penn State and conducts research into food and agricultural policies, including their environmental, trade and rural development aspects. Recent research has focused on WTO commitments to agricultural support and the implications of climate change policies for agriculture.

**Lars Brink**

Dr. Lars Brink works towards a better understanding of the agricultural policies employed in many countries and the size and nature of support to farmers, particularly in the context of the rules of the WTO. He focused on such issues in the latter part of his career with Agriculture and Agri-Food Canada and also at the Organisation for Economic Co-operation and Development. He is a Fellow of the Canadian Agricultural Economics Society, a Foreign Fellow of the Royal Swedish Academy of Agriculture and Forestry, a Senior Fellow of the Canadian Agricultural Trade Policy Research Network, and associated faculty at the Global Issues Initiative, Virginia Tech, USA. He has degrees in business and in agriculture (civilekonom and agronom) from Sweden, and his MSc and PhD in Agricultural Economics are from Purdue University, USA.

**Edward J. Clay**

Dr. Edward J Clay, a Senior Research Associate at the Overseas Development Institute, London, has extensively researched food security issues and advised many international agencies and governments on food aid policy, including on the draft modalities for food aid during the Doha Development Round. He was the lead author of *The Development Effectiveness of Food Aid: Does Tying Matter? (OECD, 2006)* and *Untying Aid: Is it working* (OECD, 2009).

**Eugenio Diaz Bonilla**

Eugenio Diaz Bonilla holds an MA in Economics and a PhD in Economics from the Department of Economics at Johns Hopkins University. He is currently a visiting research fellow at the International Food Policy Research Institute (IFPRI), focusing on macroeconomic trade issues related to food security and poverty at the global level and for Latin America and the Caribbean. Previously, he served as Executive Director for Argentina and Haiti at the Inter- American Development Bank.

He has more than 30 years of experience as an economist, working with the public and the private sector on development and poverty issues in developing countries, including grass-root work, academic activities, consulting work, and positions of institutional leadership in international organizations and governments. He has been extensively involved in project preparation, financing, and implementation in developing countries, mainly for agricultural and rural development operations. He has been a consultant and staff member with the World Bank, the United Nations Development Programme, the Food and Agriculture Organization, and the IFPRI. Dr. Diaz Bonilla has held several diplomatic positions representing Argentina in negotiations involving trade and agricultural issues. He has written extensively on economic development, trade, poverty and food security issues.
Harry de Gorter

Harry de Gorter teaches and conducts research on applied welfare economics and the political economy of agricultural trade policy at Cornell University. Prior to Cornell, he was part of the faculty at the University of Guelph Ontario and worked for the International Trade Policy Division of Agriculture and Agri-Food Canada in Ottawa. He has long been actively involved in advising many governments and international organizations on issues related to agriculture trade policy and renewable energy, including the World Bank, the Organisation for Economic Co-operation and Development, the International Monetary Fund, the WTO, UNCTAD Geneva, the Inter-American Development Bank, the UN’s Food and Agriculture Organization in Rome, the California Air Resources Board, the EU Commission, USAID, the Government of Canada, UNICA Sao Paulo, ICONE Sao Paulo, the Cato Institute, UNIGRAINS Paris, Kraft Foods International, the International Centre for Trade and Sustainable Development in Geneva, and the Swedish International Development Agency.

Mr. de Gorter has published over 100 scholarly articles and book chapters. Much of his recent work has been on biofuel policies, including the implications for the environment and agricultural trade reform and the Doha Development Agenda, especially the impact of subsidies and protection on developing countries. Other recent research focuses on the WTO disciplines in agriculture, alternative agricultural import barriers, domestic subsidy programmes and export subsidies, the implication of preferential tariffs and quotas for least developed countries, the economics of WTO trade disputes, and the impact of trade liberalization. His research is both theoretical and empirical with direct policy implications for governments, international institutions, and non-governmental organizations.

Jonathan Hepburn

Jonathan Hepburn is the Agriculture Programme Manager at the International Centre for Trade and Sustainable Development (ICTSD) in Geneva. He joined the ICTSD in 2006 and is responsible for the organization's work on how farm trade policy and rules affect food security, equity and the environment. He has previously worked on development financing as Oxfam International’s representative to the World Bank and IMF in Washington, D.C., and on trade, development and human rights issues with the Quaker United Nations Office in Geneva. He has written on a wide range of public policy and trade issues, including development financing, intellectual property rules, climate change, and food, agriculture and biodiversity.

Nicolas Imboden

Nicolas Imboden graduated in Law at the University of Geneva and holds a degree in development studies from the then African Development Institute as well as a MALD from the Fletcher School of Law and Diplomacy in Boston, in addition to having been an AMP student at Harvard. He is a partner and the cofounder of IDEAS Centre. Since the organization's creation in 2002, he has directed and provided high-level advice to all its projects: assistance in accession/post-accession, trade policy advice (WTO, regional integration, bilateral trade agreements), trade-related capacity-building, training and assistance.

Previously, Mr. Imboden was the Senior Vice-President of SGS (1999–2002), a Swiss Government trade and aid official with the rank of an ambassador (1992–99), the Governor of the regional development
banks (ADB, AfDB, IDB), and the Executive Director at the European Bank for Reconstruction and Development (1992). He was the Swiss negotiator for market access and agriculture during the Uruguay Round negotiations (1987–92). He also worked as an Agricultural Economist for the World Bank (1978–82), as a Researcher on aid monitoring for the Organisation for Economic Co-operation and Development (1974–78), and as a Programme Officer in Chad for the UNDP (1972–74).

He is currently a member of the International Food and Agricultural Policy Council. He has been a member of various Expert Groups of the World Bank, Inter-American Development Bank and of the UNDP Human Development Report.

**Tim Josling**

Tim Josling is a Professor Emeritus at the (former) Food Research Institute at Stanford University, a Senior Fellow at the Stanford's Freeman Spogli Institute for International Studies, and a faculty member at FSI's Europe Centre.

His recent books include *WTO Disciplines on Agricultural Support* (with David Orden and David Blandford, Cambridge University Press), *The Evolution of the Trade Regime: Politics, Law and Economics of the GATT and WTO* (with John Barton, Judith Goldstein and Richard Steinberg, Princeton University Press), *The WTO and Agriculture* (a two volume set of readings in the series "Critical Perspectives on the Global Trading System and the WTO" with Kym Anderson, Edward Elgar Press), and *Food Regulation and Trade: Toward a Safe and Global System* (with Donna Roberts and David Orden, Institute for International Economics).

His current research interests include the reform of the agricultural trading system in the WTO, the use of geographical indications in agricultural trade, the role of health and safety regulations in trade, the impact of climate change legislation on agricultural trade policies, and the role of regional and bilateral trade agreements in the multilateral trade system.

**Panos Konandreas**

Panos Konandreas has a PhD in Agricultural Economics from the *University of California* (Davis and Berkeley) and an MSc in Electrical and Mechanical Engineering from the *National Technical University of Athens*. In May 2008, he retired from the position of Head of the *Food and Agriculture Organization’s (FAO) Liaison Office in Geneva*, where he had worked since 1998 on trade issues related in particular to the negotiations on agriculture under the WTO. He spent 16 years in Rome (1982–98) at the *FAO Commodities and Trade Division* as Chief of Trade Policy and Commodity Projections Service and other senior positions. Earlier posts include: Principal Economist at the *International Livestock Centre for Africa* (1979–82) and Research Associate at the *International Food Policy Research Institute* (1976–79). He was a member of the Editorial Board of *Food Policy* for over 12 years and edited a special issue of this Journal on the Implications of the Uruguay Round for developing countries.

His main areas of research include international trade policy issues, commodity markets and price volatility, development assistance, food security and food aid policy, biofuel trends and related policies. Mr. Konandreas has authored some 100 research works on these subjects, including individual research monographs, technical reports and articles in refereed professional journals and books.
David Laborde

David Laborde is a Senior Research Fellow and leader of the Globalization and Markets research programme in the Markets, Trade and Institutions Division of the International Food Policy Research Institute (IFPRI). Prior to joining the IFPRI, he was an Economist at the Centre d’Etudes Prospectives et d’Informations Internationales in Paris, between 2003 and 2007 and a lecturer at the University of Pau (France). He received his PhD from the University of Pau in 2008. He has also worked as consultant for the European Commission, the Economic Commission for West Africa, the World Bank, USAID, and various UN agencies. He has participated and organized training sessions for researchers and policymakers in several developing countries, with a special focus on sub-Saharan Africa.

His research interests include international trade, the measurement and modelling of protectionism, multilateral and regional trade liberalization, as well as environmental issues (climate change, biofuels). He has developed the MACMapHS6 and the ADEPTA databases on tariffs as well as the TASTE software. He is a contributor to the GTAP database and has been a GTAP research fellow since 2005. Beyond his work on databases, he has developed several partial and general equilibrium models applied to trade policy and environmental issues, including the MIRAGE model and its extensions.

Iza Lejarraga

Iza Lejarraga is a Trade Policy Analyst in the Division on Trade in Services of the Organisation of Economic Co-operation and Development’s Trade and Agriculture Directorate. Mrs. Lejarraga has worked extensively with governments in Latin America and the Caribbean as well as in North and Sub-Saharan Africa on a wide range of trade policy issues, covering non-tariff measures, services and investment, export diversification policies, and regional negotiations. She was formerly in the Regional Integration and in the Economic Research departments of the African Development Bank. Mrs. Lejarraga worked at the International Trade Department of the World Bank and at the Trade Unit of the Organization of the American States, where she provided technical support to the Free Trade Area of the Americas negotiations. She has been a Visiting Scholar and Teaching Fellow at the Centre for International Development and did her graduate studies in Economics and Development at Harvard University.

Aluisio G. De Lima-Campos

Professor Aluisio G. De Lima-Campos is the Chairman of the ABCI Institute – Brazilian International Trade Scholars Inc, which is dedicated to the promotion of research and study of international trade issues; and senior advisor, under contract, on economic and trade matters to the Embassy of Brazil in Washington, D.C, where, among other duties, he coordinates a trade policy training program for Brazilian professionals from the government and private sectors. A specialist, with over three decades of experience on trade policies and trade policy formulation, international trade law, trade remedies, international trade agreements and negotiations, subsidies, trade preferences and barriers, he has provided assistance to Brazilian diplomats in bilateral and multilateral trade negotiations, in the reduction of barriers to Brazilian exports and in the resolution of trade disputes. As a result of his contributions in the drafting of present Brazilian trade laws and regulations, he was invited in 1995 by then Secretary of Trade Mauricio Cortes to be the first head of the newly formed department of trade
remedies (DECOM) at the Ministry of Development, Industry and Trade, an honour he was unable to accept due to contract obligations in Washington, DC. He holds a bachelor’s degree in Economics and a master’s degree in Development Banking from the American University, Washington, D.C.

Ricardo Meléndez-Ortiz

Ricardo Meléndez-Ortiz is co-founder of ICTSD and has been its Chief Executive since 1996. Previously, he co-founded and was General Director of Fundación Futuro Latinoamericano (Quito). He has represented Colombia as a negotiator in several multilateral fora, including as permanent delegate of Colombia in Geneva and as a negotiator in GATT’s Uruguay Round, the Rio’92 UN Conference process, UNCTAD VIII, the Climate Change Convention, the Intergovernmental Panel on Climate Change (IPCC) and the Montreal Protocol. He acted as spokesperson for the G77 in several fora and served as chair of the UN Standing Committees on Commodities and on Trade Preferences. Earlier, he had served as Principal Adviser to the Colombian Minister of Economic Development and as Chief of Administration of the Office of the President of Colombia.

Since 1997, Mr. Meléndez-Ortiz has been the publisher of BRIDGES and its sister publications, and has edited, authored and published a wide range of books, articles and opinion pieces in English, French and Spanish on economic governance, trade, sustainable development and conflict management. He has served or currently sits on advisory committees and the boards of a number of global policy initiatives, including as Member of the Board of Intellectual Property Watch (Geneva); the Operating Board of Accountability (London); the World Economic Forum’s Global Agenda Council on Trade and WEF’s Working Group on Trade and Climate Change; The Pardee Center Task Force on Governance for a Green Economy (U of Boston); The Center for Global Development’s Global Trade Preference Working Group (Washington, DC); The Evian’s Group Brains Trust (IMD); the Global Governance Network of Globus et Locus (Milano); the Steering Committees of DfID’s Global Trade and Finance Architecture Initiative and of UN DESA’s Sustainable Development Knowledge Partnership (New York), a Patron of the Earth Focus Foundation (Geneva); in the recent past he served as Chair of the Global Action Network’s Council (Cambridge, MA); and member of the U.N. Secretary General Millennium Project Task Force on Trade; the WTO’s Director General NGO Advisory Group; and the MOFCOM/IISD China Sustainable Development and Global Markets Task Force.

George Mermigkas

George Mermigkas joined the Office of the Food and Agriculture Organization of the United Nations (FAO) in Geneva in September 2013. He deals with trade issues and their relation to food security and rural development. He has a wealth of experience on the issue as he has served the Greek administration both in Athens, working for the Ministry of Rural Development and Food, and in Geneva, working for the Greek Permanent Mission. Additionally, he supported the Cyprus Presidency of the EU as a Trade Officer at the Permanent Mission of Cyprus in Geneva. His role includes, *inter alia*, monitoring the multilateral trade negotiations at the WTO and preparing reports on aspects having an impact on food security, monitoring international policy developments in Geneva related to the mandate and the objectives of the FAO, representing the FAO at forums related to trade, food security and rural development, and providing policy and strategic advice. Mr. Mermigkas holds a BA in Agricultural Economics and an MSc in Rural and Regional development, both obtained in Greece.

Seth Meyer

Seth Meyer holds a PhD in Agricultural Economics from the University of Missouri and a Master in Economics from Iowa State University. Mr. Meyer is a Senior Economist in the Office of the Chief Economist at the US Department of Agriculture. He was formerly an Economist with the Global Perspectives Studies Team of the Food and Agriculture Organization of the United Nations and has been a faculty member at the Department of Applied and Agricultural Economics of the University of Missouri. Furthermore, he worked at the Food and Agricultural Policy Research Institute (FAPRI).

He has extensive experience in the analysis of biofuel policy and renewable energy interactions with agricultural commodity markets. Mr. Meyers has written for various economic, energy and environmental journals, FAPRI’s own research reports, and the European Review of Agricultural Economics, where he examined the beneficiaries of technology adoption in the biofuels industry under existing US policies.

Raul Montemayor

Raul Montemayor is currently the National Business Manager and Programme Officer of the Federation of Free Farmers Cooperatives, Inc. and its mother organization, the Federation of Free Farmers of the Philippines. Mr. Montemayor has been also a member of the International Food & Agricultural Trade Policy Council since 2003. He was recently elected as Vice-President of the International Federation of Agricultural Producers. He is a private sector adviser to the Philippine government in the WTO and other negotiations involving agricultural trade.
Jamie Morrison

Jamie Morrison is a Senior Economist in the Trade and Markets Division of the Food and Agriculture Organization of the United Nations (FAO). He has extensive experience in agricultural and trade policy analysis, focusing on the impacts of policy reforms on poverty and food security during processes of structural transformation.

He has been actively engaged in debates related to trade negotiations and is the editor of several recent books including *WTO rules for agriculture compatible with development*, *Articulating and mainstreaming agricultural trade policy and support measures*, *The evolving structure of global agricultural trade and Food security in Africa: Market and trade policy for staples foods in Eastern and Southern Africa*.

Dr. Morrison has a PhD in Agricultural Economics from the University of London, an MSc in Agricultural Economics from Wye College, University of London, and a BSc in Agricultural Science from Massey University, New Zealand. Prior to joining the FAO in 2004, he was a Senior Lecturer in Agricultural Economics at Imperial College London.

Josef Schmidhuber

Josef Schmidhuber holds a PhD in Economics and an MSc in Agricultural Economics from the Technical University of Munich. Dr. Schmidhuber is the Head of the Global Perspective Studies Unit of the Food and Agriculture Organization of the United Nations (FAO). He is the co-author of *World agriculture: towards 2015/2030*, the FAO’s long-term perspective of global agriculture. His work has been published in several books, peer-reviewed articles and documents for international organizations such as the Organisation for Economic Co-operation and Development (OECD), the International Panel on Climate Change (IPCC) and the FAO. Dr. Schmidhuber is a member of numerous international task forces and initiatives. He is, notably, a lead author of the chapter on agriculture in the IPCC’s fourth assessment report and a member of the International Task Force on Commodity Risk Management.

He started his professional career in 1990 as a consultant with the World Food Council before working as an Econometrician and Economist with the FAO and as a Senior Economist with the OECD. His work areas include commodity market analysis and outlook, global food and nutrition issues, bioenergy, trade and climate change.

Harsha V. Singh

Harsha V. Singh is Senior Associate at ICTSD for Strategic Research and Policy Analysis. Dr. Harsha Vardhana Singh has been Deputy Director-General at World Trade Organization for eight years from 1st October 2005 till 30th September 2013. He has worked for over three decades on policies relating to international trade, development, infrastructure regulation and global governance. As Deputy Director General at WTO, his areas of responsibility included trade in agriculture, services, trade and environment, technical barriers to trade, sanitary and phytosanitary measures, and electronic commerce.
Earlier, he worked for twelve years from mid-1985 in GATT/WTO on economic research, trade policy reviews, rules, trade and environment and technical barriers to trade, and in the Director General's Cabinet. In India, Dr. Singh has been economic advisor and then secretary of the Telecom Regulatory Authority of India, and played a key role in the reform of the Indian telecom sector. He has been chair/member of high level policy committees, chair of WTO dispute settlement panels, and a visiting faculty member at research institutes on international trade, sustainable development and regulation. For the 2013-14 academic year, he has been appointed Adjunct Professor of International and Public Affairs at the School of International and Public Affairs, Columbia University. He is a Ph. D. in Economics from Oxford University where he went as a Rhodes Scholar from India.

Vincent H. Smith

Vincent H. Smith is a Professor of Economics in the Department of Agricultural Economics and Economics at Montana State University (MSU) and the Co-director of MSU's Agricultural Marketing Policy Center. He is currently also the Director of the American Enterprise Institute’s agricultural policy research programme and a Senior Consultant to the International Food Policy Research Institute. Dr. Smith received his PhD from North Carolina State University in 1987 and his Bachelor’s and Master’s degrees from the University of Manchester in 1970 and 1971.

Dr. Smith’s current research programme examines agricultural trade and domestic policy issues, with a particular focus on agricultural insurance, domestic and world commodity markets, risk management, agricultural trade policy, and agricultural science policy. He has authored nine books and monographs, including his widely known work with Dr. Barry Goodwin, The Economics of Crop insurance and Disaster Aid, and has published well over 100 articles on agricultural and other policy and economic issues. His contributions have been recognized nationally through multiple national awards for outstanding research programmes and, in 2008, he became a Distinguished Scholar of the Western Agricultural Economics Association.

Stefan Tangermann

Stefan Tangermann was, until the end of 2008, the Director for Trade and Agriculture at the Organisation for Economic Co-operation and Development (OECD) in Paris. He is now a Professor Emeritus at the Department of Agricultural Economics and Rural Development at the University of Göttingen, Germany. Before joining the OECD in 2002, Mr Tangermann was a Professor of Economics and Agricultural Economics at the universities of Frankfurt/Main and Göttingen. His academic work has concentrated, among other topics, on the need and options for reforming agricultural policies in OECD countries, and on strengthening the rules for agricultural trade, with a particular emphasis on the WTO.

Mr. Tangermann has been a member of the German Scientific Advisory Council of the Federal Ministry of Consumer Protection, Food and Agriculture, and of the Academy of Science at Göttingen. He was also the Director of the Institute of Agricultural Economics, the Dean of the Faculty of Agriculture and the Vice-President of the University of Göttingen. He was a member and Chair of the Scientific Council of Germany and a member of the Academy of Science at Göttingen.
Mr. Tangerman's academic work includes topics on the need and options for reforming agricultural policies in OECD countries and on strengthening the rules for agricultural trade. He has written numerous books and articles that have contributed to the international debate on agricultural policies and trade. He was awarded the Order of Merit, First Class, by the President of the Federal Republic of Germany, and is a Fellow of the European Association of Agricultural Economists. He has advised several governments and international organizations.
At the ninth WTO Ministerial Conference in Bali, Ministers agreed to prepare a “clearly defined” work programme on the remaining Doha Development Agenda issues. However, the global agricultural trade landscape has evolved significantly since negotiations froze in 2008 – and even more so since Doha was launched in 2001. As WTO Members start crafting the contours of a possible post-Bali agenda, developing a sound understanding of this new global reality and its implications for future multilateral disciplines in agriculture is critical.

This volume builds on the most recent analysis of global trends and domestic policy reforms to inform negotiations on a post-Bali agricultural trade agenda. It features a series of concise, non-technical and solution-oriented papers by leading experts and thinkers, covering systematically all elements of the agricultural negotiations on market access, domestic support and export competition. By making this compilation widely available to policy makers and analysts, the editors intend to make a constructive and policy-relevant contribution to the debate over the shape of a possible post-Bali work programme.

Edited by
Ricardo Meléndez-Ortiz, Christophe Bellmann and Jonathan Hepburn