The Relationship between Food Security Policy Measures and WTO Trade Rules

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based on a full-length document by Kim Burnett

This paper will also be available in French and Spanish at http://quno.org/areas-of-work/food-sustainability.


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A note about Food and Sustainability at QUNO

The Food & Sustainability programme of the Quaker United Nations Office addresses the complex and intertwined issues of trade and innovation policy and how they relate to poverty, hunger and food insecurity. We look at these issues with a particular focus on small-scale farmers, including fisherfolk, forest dwellers and pastoralists, a critical yet largely unheard voice in trade and innovation policy-making. Our work is collaborative, providing the space where it is safe to think, share and explore creative alternatives to a food system that does not work for the majority of the world's population.

Half the world’s food today is produced by 1.5 billion small-scale farmers. The figure is higher for food produced in the non-industrialized world -- up to 80%. Small-scale farmers are stewards of biodiversity; they maintain, adapt, improve and distribute plant varieties. The agricultural biological diversity they enhance and develop provides a major contribution to health and nutrition. They find ways to deal with new pests and disease. They are also active players in critical ecosystem processes, developing and adapting ideas for nutrient cycling, effective water use and the maintenance of soil fertility, both traditional and from elsewhere. Who could be better placed to help the world cope with global environmental change and feed the world than over a billion small-scale farmers living, working and experimenting on the front lines of change? Our work aims to ensure that trade and innovation policy are supportive of, and do not undermine, the critical role of small-scale farmers in providing local and global food security and the resilience we will need to facing ever-increasing environmental change.

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I. Introduction

The concept of food security has evolved separately from the incorporation of agriculture into international trade rules via the World Trade Organization (WTO). Trade rules were not designed to ensure food security, and as such are not always in alignment with its achievement.

The logic of trade liberalization, in which barriers to the free exchange of goods are removed or reduced to the greatest extent possible, lies behind the global trade rules framework. Proponents of trade liberalization hold that it will increase the availability and accessibility of food worldwide. Critics believe that liberalization, in exposing developing countries to volatile international markets and constraining their domestic policy options, will threaten food security and undermine rural development.

Governments’ freedom to take appropriate measures to support food security and rural livelihoods in their own countries can be restricted by their obligations under the WTO. This is exacerbated by the ambiguous nature of many provisions in the WTO rules, which are subject to conflicting interpretation. This can work against developing countries, many of whom lack the legal and administrative capacity to effectively navigate the complex rules framework.

This report first provides a historical overview of both the concept of food security and the incorporation of agriculture into international trade negotiations. It then turns to the relationship between food security policy options and the WTO’s trade rules, and highlights opportunities for governments to implement policies that support food security while meeting their international obligations. It concludes by laying out a range of policy measures to enhance food security, assessing the compatibility of each with WTO regulations.

II. Food Security and Trade

Food Security: Evolution of a Concept

Our collective understanding of what is meant by ‘food security’ has evolved since the concept was introduced in the 1970s. Food security was first conceptualized as an issue of food availability. This was influenced by high commodity prices during the 1972-3 global food crisis, which were thought at the time to be the result of global production shortfalls. Thus policies of the time focused on production, i.e. increasing and stabilizing supply, with the aim of ensuring price stability. However, as our understanding of the causes of hunger evolved, so too did the concept of food security. Amartya Sen’s 1981 essay on famines introduced and prioritized the idea of food accessibility over availability. This access component was incorporated by the Food and Agriculture Organization of the United Nations (FAO) in its updated definition of food security that year.

Subsequent refinements to accessibility have considered temporal factors (the concept of ‘chronic’ food insecurity), macroeconomic conditions, conflict, food preferences and cultural diets, and nutrition – resulting in the 1996 World Food Summit definition, which is still used predominantly today: “Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.” In addition to availability and access, the definition is based on two other pillars: utility (including distribution within families, nutritional composition, 

access to clean water, cultural relevance and food safety) and stability (including the temporal aspect and vulnerability to price volatility).

**Shifts in Policy**

The evolving understanding of what is meant by food security has shaped national and international policies designed to address hunger. The focus in the 1970s on food availability gave rise to policies that aimed to increase national supply and develop national and regional food reserves. During this Green Revolution era, high-tech solutions to production challenges were pursued, such as early warning weather systems, the development of high-yielding varieties, modernized farm management practices and the use of chemical fertilizers and pesticides. These measures made possible remarkable increases in cereal production and productivity.

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The FAO credits productivity gains during the Green Revolution with averting an impending food crisis in Asia and serving as bedrock for rapid economic growth and poverty reduction China, South Asia and Southeast Asia.\(^8\) While considerable progress was made in tackling traditional protein-calorie deficiencies, the unintended consequences of the Green Revolution included dietary simplification, malnutrition and micronutrient deficiencies.\(^9\) Whole populations were left behind in accessing the benefits. The application of modern techniques and technologies was concentrated in already-favourable areas, and as a result poverty reduction in marginal production environments languished.\(^10\) Existing power disparities such as unequal distribution of assets (particularly land) weakened the positive effects of agricultural growth on poverty reduction.\(^11\)

The incorporation of the access dimension in the 1980s shifted the unit of analysis from national self-sufficiency to individual or household food security. This introduced the premise that food insecurity was best tackled by reducing poverty – shifting the focus away from agricultural development as a catalyst for development more broadly defined. With this came an emphasis on free trade, as a means of facilitating more efficient production, more rapid agricultural development and thus improved livelihoods.

**Trade and Agriculture**

Prior to the establishment of the World Trade Organization (WTO) in 1995, agriculture was effectively exempted from international trade regulations, largely due to resistance from the US and other industrialized countries seeking to protect and support their domestic agricultural sectors.\(^12\) In 1955, the US was granted a waiver from the General Agreement on Tariffs and Trade (GATT) obligations. This benefited producers in other

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8 Food and Agriculture Organization of the United Nations (FAO), “Towards a New Green Revolution,” N.D.
countries, due to lax enforcement of the prohibition on import and export restrictions. Export subsidies in European countries took off after the Second World War and the region became a net food exporter by the 1970s.\(^\text{13}\)

“The deal that emerged during the Uruguay Round remained weighted in favour of developing countries.”

This situation had become untenable by the 1980s. Spending on agricultural supports in OECD countries was high and there was growing dissatisfaction among some net food exporters in the developing world, prompting calls for agriculture to be subjected to GATT ‘disciplines’.\(^\text{14}\) Liberalization of agricultural trade commenced during the Uruguay Round (1986-94) of multilateral trade negotiations, resulting in the Agreement on Agriculture (AoA). The AoA sought to:

- **Improve market access** by reducing agricultural market protections such as quotas and converting them to tariffs (“tariffication”)
- **Reduce and remove all domestic support measures** considered to be trade-distorting, such as market price support
- **End export subsidies**

During the Uruguay Round, developing countries made concessions on domestic support in order to gain greater access to agricultural markets in developed countries and ensure that developed countries reduced their export subsidies. However, the deal that emerged during the Round remained weighted in favour of developed countries. Developing countries sought and secured recognition of the development dimension of international trade in the Doha Round, which began in November 2001. The Round became known semi-officially as the Doha Development Agenda (DDA), but its original development goals failed to live up to their promise due to a lack of political will in subsequent


years. Agriculture was a main point of contention, in particular “the gap in level of ambition between market access and domestic support.”

Nearly 20 years after the closure of the Uruguay Round, negotiators were finally able to make some modest progress towards incorporating development measures into agricultural trade rules during the WTO Bali Ministerial Conference in December 2013. The ‘Bali Package’ includes some preferential rules for Least Developed Countries (see below). However, despite this progress, there remain significant differences in opinion between developed and developing countries. In particular, the issue of domestic support, used as a bargaining chip during the Uruguay Round, has since the food price crisis of 2007-8 returned to the forefront of debates around the purpose of agricultural trade.

Modern food security policymaking has returned to an emphasis on production and the liberalization of agricultural trade. Under this framework, increased yields, improved nutrition and greater resource efficiency are to be achieved simultaneously through a second Green Revolution based on modern seed technologies, productive inputs and genetic engineering. Trade liberalization and the Green Revolution are premised on similar logic: increased food availability as a result of productivity gains will, if underpinned by solid growth rates, guarantee food security into the future.

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18 South Centre, “Analytical Note – Subsidies and food security in WTO: a permanent solution is still pending,” (Geneva: South Centre, 2014).
20 See the communications of the Cairns Group, a group of 20 agricultural exporters from the global North and South, e.g. their communiqué issued during the Bali Ministerial: “We understand that open, fair and well-functioning markets spur investment, and create new opportunities for growth in output and improvements in farmers’ incomes. Furthermore, we recognise policies which distort trade and production in agricultural products can impede long term food security.” Available at: http://cairnsgroup.org/pages/131202-communique.aspx
Critics have suggested that this logic does not hold in practice.²¹ Agriculture in developed countries remains heavily subsidized, which has artificially depressed food prices on global markets. Low prices can benefit the urban poor but disenfranchise producers.²² Food import dependence exposes countries to food price volatility, as in the food crises of the 1970s and 2007-2008.²³ Cambridge economist Ha-Joon Chang has detailed how the same industrialized countries who today advocate for liberalization once made extensive use of such subsidies, policy supports and market productions as part of their own economic development.²⁴

Opening developing countries up to international markets may also have

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The relationship between food security policy measures and WTO trade rules

unintended consequences similar to those of the Green Revolution. Nutrition transitions associated with trade liberalization can have a significant impact on the prevalence of chronic non-communicable diseases such as obesity and diabetes.\(^{25}\)

Trade liberalization can also lead to irreversible changes in modes of agricultural production, threatening food stability.\(^{26}\) Furthermore, markets are poorly configured to take account of socio-economic and environmental externalities, such as biodiversity loss, acceleration of climate change, erosion of soil and pollution of water systems, which could put the future of food production at risk.\(^{27}\)

Relatively neglected in this discussion is the need to support small-scale farmers in their role as innovators and custodians of agrobiodiversity, and thus building the capacity of farming systems to adapt to uncertain future growing conditions. Some have suggested that agricultural trade has been particularly damaging for small-scale farmers, who produce as much as 70% of the world’s food and who are often the custodians of the world’s biodiversity.\(^{28}\)

Greater space within the multilateral rules framework is necessary for governments in developing countries to provide market supports and protections in line with their food security objectives. However, trade regulations are to a certain extent now a permanent fixture of the international architecture, and policymakers wishing to promote and safeguard food security must take them into consideration.

III. Domestic support at the WTO

Many of the provisions within the international regulatory framework for agricultural trade are ambiguous and often subject to conflicting interpretation. This ambiguity can exert a chilling effect on domestic food security policies, as risk-averse governments cannot be completely confident that a given policy will not provoke a trade dispute within the WTO. Most of the rules governing agricultural trade fall under the WTO Agreement on Agriculture (AoA), but also discussed here are the General Agreement on Tariffs and Trade (GATT) and the agreement on Subsidies and Countervailing Measures (SCM).

Domestic support rules

The total amount of non-exempt domestic support that a government provides to its own agricultural sector is called the ‘Total Aggregate Measurement of Support’ (Total AMS). Under the AoA, developed country Members committed to reducing their AMS by 20% over 6 years (from 1986-88 levels), while developed countries committed to a reduction of 13% over 10 years. The AoA also specifies which kinds of supports are considered exempt from AMS calculations. Types of domestic support, or subsidy groups, are categorized into three ‘boxes’ (Table 1).

Amber box measures are subject to AMS reduction commitments and include those intended “to support prices, or subsidies directly related to production quantities.” The de minimis rule is an important qualification to amber box measures. Under the de minimis provision, developing countries are not required to reduce trade-distorting domestic support when, in any given year:

1. The aggregate value of the product-specific support is not greater than 10% of the supported product’s aggregate value; or
2. Non-product specific support is less than 10% of the value of total

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30 World Trade Organization (WTO), “Background Fact Sheet: Domestic Support in Agriculture.”
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<table>
<thead>
<tr>
<th>AoA subsidy group</th>
<th>Description</th>
<th>Trade-distorting?</th>
<th>Subjection to reduction commitments?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amber box</strong></td>
<td>All domestic supports except those in the green and blue boxes; support prices and production subsidies.</td>
<td>Yes</td>
<td>Yes. De minimis rule is the only exception.</td>
</tr>
<tr>
<td><strong>Blue box</strong></td>
<td>Support payments for limiting production by imposing production quotas or requiring farmers to set aside part of their land.</td>
<td>Less than amber box</td>
<td>No, provided they are linked to fixed areas and yield and production is taking place.</td>
</tr>
<tr>
<td><strong>Green box</strong></td>
<td>Supports such as research, extension, food security stocks, disaster payments, environmental protection, animal welfare and structural adjustment programs.</td>
<td>Minimally</td>
<td>No</td>
</tr>
<tr>
<td><strong>Developmental measures</strong></td>
<td>Exempt subsidies and supports designed to provide agricultural and rural development support.</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 1: Analysis of subsidy groups under the WTO Agreement on Agriculture

agricultural production

The equivalent de minimis ceiling for developed countries is 5%.

**Green box** supports are considered to be non- or minimally-trade distorting and are thus exempt from reduction commitments. It allows for specific government services, such as research, training and extension services, infrastructural
development and domestic food aid.

The green box also contains provisions for direct payments to producers that are unrelated to production (known as decoupling). Under this system, decoupled income support and natural disaster relief are allowed; direct price support is not. Most policy recommendations that are focused on supporting small-scale farmers in developing countries will fall under the green box allowances, which account for about 60% of public support for agricultural sectors in developing countries.\(^{31}\)

**Blue box** supports allow for support to production limiting programs, so long as they are made to fixed areas and yield or fixed numbers of livestock, and are exempt from reduction commitments.\(^ {32}\) An example may be payments to producers for setting aside a portion of their land to lie fallow.

**Developmental measures** are exempt subsidies that are designed to provide agricultural and rural development support, both direct and indirect, that are considered an “integral part of the development programmes of developing countries.”\(^ {33}\) They include investment subsidies, agricultural input subsidies to low-income and resource-poor producers, and supports to producers encouraging diversification away from illegal narcotic production.\(^ {34}\)

**The Marrakech Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries** was designed to address concerns around rising food prices as a result of agricultural trade liberalization.\(^ {35}\) However, its focus is aid, not promoting the capacity of developing countries to implement food security policies.

**General exceptions**


\(^{33}\) Elamin, “Agreement on Agriculture: Domestic Support Measures.”

\(^{34}\) Article 6.2 of the WTO AoA.

The relationship between food security policy measures and WTO trade rules

There is a limited set of circumstances, laid out in Article XX of the GATT, under which governments can discriminate against other countries in their trade policies. In particular, Article XX (b) allows for the adoption of such measures when “necessary to protect human, animal and plant life or health.” This is conditional on the measures not being “applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”

Article XX (b) provides a potential opening for exceptions to be made on the grounds of, for example, realizing the right to food, achieving food security, or preserving environmental integrity. Exceptions have been honoured in rulings under GATT Article XX from the WTO dispute settlement mechanism, notably on some environmental issues, under particular conditions and restrictions. However, states

36 GATT Art XX (b).
37 The right to food is enshrined in the International Covenant on Civil and Political Rights, which has been ratified by 160 states. See: General Comment 12 of the International Covenant on Economic, Social and Cultural Rights. 38 See for example Elizabeth R. DeSombre and J. Samuel Barkin, “Turtles and Trade: The WTO’s Acceptance of Environmental Trade

Central market in Port Louis. Photo credit: Marian One/Flickr
advocating for greater market protections risk exposing themselves to challenges within the WTO by proponents of free market policies. Moreover, empirical analysis has demonstrated that the WTO dispute settlement mechanism tends to work to the disadvantage of states with weak legal capacity—very often the states whose agricultural producers are most in need of support.

Challenges for developing countries

The rules governing domestic agricultural support pose four main challenges for developing countries looking to implement non-trade distorting food security measures:

1. Many policies that developing countries would like to see integrated into green box

2. Many of the exemptions that permit investment require administrative capacities that developing countries often lack.

3. Reduction commitments are measured against the amount of agricultural support in 1986-8. This can create problems for developing countries whose AMS levels were already low (in many cases at zero) during this period due to political and fiscal constraints. Conversely, allowances for industrialised

Restrictions.” Global Environmental Politics 2:1 (2002). In this case, the WTO allowed for environmental concerns to take precedence over adherence to WTO regulations, but under specific circumstances that demonstrated that the international trade system was bound by principles of sustainable development.


Ibid.

South Centre, “Subsidies and food security in WTO.”
countries tend to be much higher, as their levels of support were high in 1986-8. In more than half of industrialised countries, support exceeded 50% of agricultural GDP at the time.44

4. Currency adjustments and high inflation rates in developing countries further reduces their nominal support allowances. Unclear provisions within the AoA intended to take account of these effects do not specify what qualifies as “an excessive rate of inflation”, and attempts by some countries to adjust their external reference prices to reflect inflation rates have been questioned by the WTO’s Committee on Agriculture.

Given these challenges, what are the options for a WTO member state looking to safeguard food security domestically while avoiding a dispute within the WTO? Table 2 presents a range of possible measures for enhancing food security and examines their relationship to the reduction requirements under the WTO’s domestic support rules.45

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45 Elamin, “Agreement on Agriculture: Domestic Support Measures.”

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<table>
<thead>
<tr>
<th>Food security policy</th>
<th>Contribution to food security</th>
<th>Relationship to trade rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>National food reserves</td>
<td>Price and supply stability. Emergency food aid during times of shortage.</td>
<td>Exempt under Annex 2; some restrictions discourage use and are currently calculated as part of AMS. New exemption negotiated by India and US extended to existing stockholdings.</td>
</tr>
<tr>
<td>Investment in agriculture</td>
<td><strong>Hard infrastructure</strong></td>
<td>Specific exemptions listed in Annex 2</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>increases access to markets and availability of inputs, and lower transaction costs.</td>
<td>Ambiguous. Depends on whether support is considered product-related or for the indiscriminate benefit of rural communities and resource-poor producers. Surpluses may distort prices. Could fall within de minimis limits.</td>
</tr>
<tr>
<td></td>
<td><strong>Storage</strong> mitigates losses from post-harvest waste. Extension services may be used to improve access to technologies and practices to assist farmers with improved production and market participation.</td>
<td></td>
</tr>
<tr>
<td>Information and Communication Technologies</td>
<td>provides market and weather information, extension services, early warnings and facilitates monitoring of development projects.</td>
<td>Specific exemptions listed in Annex 2</td>
</tr>
<tr>
<td>Agricultural Input Subsidies</td>
<td>Fertilizer and seed inputs, water use and transportation services.</td>
<td>Constrained under WTO rules. Exemptions: de minimis allowances; development measures</td>
</tr>
<tr>
<td>Research and Development</td>
<td>Yield increases, biotic stress resistance, climate resilience, other sustainability, production and quality traits. Benefits depend on focus and how new research prioritizes smallholders and sustainability.</td>
<td>No restrictions, exempt under Annex 2.2(a), must not provide price support to producers.</td>
</tr>
</tbody>
</table>
## The relationship between food security policy measures and WTO trade rules

<table>
<thead>
<tr>
<th>Policy Measure</th>
<th>Description</th>
<th>WTO Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extension Services</strong></td>
<td>Dissemination of advice and information, increase uptake of technologies and new practices. Benefits depend on focus and how advice, information, and research prioritizes sustainability as well as farmer to farmer exchange of best practices, advice and information.</td>
<td>No restrictions, exempt under Annex 2.3(d)</td>
</tr>
<tr>
<td><strong>Price Supports</strong></td>
<td><strong>Price supports</strong> have varied impact on domestic market prices: lower prices to increase accessibility for consumers; raise prices to support producers and boost production.</td>
<td>Explicitly prohibited. Exemptions: Blue box allowances for limiting production; de minimis allowances.</td>
</tr>
<tr>
<td><strong>Marketing boards &amp; STEs</strong></td>
<td><strong>Marketing boards &amp; STEs</strong> provide guaranteed and stable market for producers; stabilize supply in domestic markets and ensure affordable supply for consumers; increase import/export efficiency; counter consolidated market power; especially beneficial where there is a lack of infrastructure.</td>
<td>Permitted under certain conditions. Must be non-discriminatory and non trade-distorting. STEs with import monopolies and those which stabilize domestic prices are exempt.</td>
</tr>
<tr>
<td><strong>Direct Consumer Subsidies</strong></td>
<td>Food stamps and school feeding programs targeting resource-poor consumers.</td>
<td>No restrictions</td>
</tr>
</tbody>
</table>
Export restrictions

Control domestic supply and prices, keep prices low for consumers; imposed during times of shortage and natural disaster. Can have negative impact on food security.

Article XI of GATT prohibits direct export restrictions but simultaneously allows duties, taxes and other charges that can effectively restrict exports limitlessly.

Import Protections

Protect domestic production and income of producers; increase price stability and political stability. Can have negative impacts in terms of increased prices for consumers and less competition that leads to efficiency gains.

Trade distorting. Exemptions: de minimis allowances; protection of vulnerable domestic sectors through Special Safeguard Mechanism; allowances under GATT require significant legal and institutional capacities.

Table 2: Compatibility of various food security policies with existing domestic support reduction requirements within the WTO

IV. Conclusion

International agricultural trade is a powerful tool for contributing to poverty reduction and food security, both of which are globally recognized development priorities. However, the argument that sufficiently liberalized agricultural trade can by itself guarantee food security ignores their distinct historical trajectories and, moreover, does not hold up to the evidence. Ensuring that the benefits of agricultural growth are equitably distributed may require strong public sector support and investment. Such support can be provided in a manner consistent with WTO obligations. National governments can take advantage of the exemptions available to them, defend this existing policy space and advocate for trade rules that reflect a more evolved understanding of food security.
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