THE IMPACT OF THE WTO AGREEMENT ON AGRICULTURE ON FOOD SECURITY IN DEVELOPING COUNTRIES

Jelena Birovljev  
University of Novi Sad, Faculty of Economics in Subotica, Serbia  
birovljevja@ef.uns.ac.rs

Biljana Ćetković  
University of Novi Sad, Faculty of Economics in Subotica, Serbia  
biljanas@ef.uns.ac.rs

Abstract: Free trade has become a modern-day creed, accepted by both wealthy industrialized countries and many governments of developing countries as the generator of economic growth, development and employment. However, free trade has also been condemned by non-governmental organizations (NGOs) in developing countries as the tool through which the economic dominance of wealthy, developed countries is institutionalized and maintained. Agriculture has been one of the most controversial issues in the multilateral trade negotiations for the past fifty years. The aim of this article is to examine food security implications of the WTO Agreement on Agriculture. It discusses the WTO Agreement on Agriculture, which is systematically favoring agricultural producers in industrialized countries at the expense of farmers in developing countries, and explores ways in which the Agreement may be modified to achieve a more equal chance for success for both parties. The article also deals with the extent to which realization of the Agreement’s stated objective – the establishment of a fair and market-oriented agricultural trading system—is likely to advance food security in developing countries. The first section defines food security, discusses the relationship between trade and food security, and analyzes the impact of the WTO Agreement on Agriculture on food security in developing countries. The second section sets forth the reforms necessary to address inequities in the global trading system for agricultural commodities, and enhance and protect food security in developing countries. The last section concludes that leveling the playing field between industrialized and developing countries is a necessity, but not sufficient to promote food security. Promotion of food security requires additional trade reforms, so as to provide developing countries with a wide range of solutions and ensure access by all people at all times to sufficient, safe and nutritious food.

Keywords: free trade, WTO, agriculture, developing countries, food security
PRELIMINARIES

Reducing the number who suffer from hunger is crucial. Improving food security is central to the first Millennium Development Goal. While food security has improved in some developing countries, in others increasing numbers suffer from undernourishment. Liberalizing trade in agricultural markets could elevate food security in developing countries, but can also have a negative effect. The issue of the links between reducing trade barriers and food security has added significance in the context of the current World Trade Organization Doha Round negotiations and the recent commodity price spikes in world markets, in terms of predicting the implications of further trade liberalization in a more uncertain world (McCorriston et al., 2013).

Over the last decade the Trade reform has been an important feature of the policy environment in developing countries. The ‘Development Round’ and negotiations have paid particular attention to the potential impact of trade policy reforms on, and the specific concerns of, developing countries. There is a particular focus on the impacts on the most vulnerable sections of society (McCorriston et al., 2013). Currently around 850 million people are facing hunger on a daily basis (FAO, 2011), and agricultural trade policy reforms are likely to directly impact the supply of and access to food within countries. Food security remains an ongoing challenge for the international community and, more directly, for policy-makers across many developing countries.

Trade policy in agriculture has always differed from the overall trade policy, both the motives and the effects on the exchange itself. The same applies for international trade rules including the General Agreement on Tariffs and Trade (General Agreement on Tariffs and Trade - GATT) in 1947. With the establishment of the WTO (World Trade Organization - WTO), January the 1st in 1995, the situation on the international level had changed. One of the results of the Uruguay Round of multilateral trade negotiations under the GATT was the adoption of the Agreement on Agriculture (Agreement on Agriculture) and the Agreement on Sanitary and Phytosanitary Measures (Agreement on Sanitary and Phytosanitary Measures) through which the application of the international trade in agricultural products should be gradually subsumed under the general rules of the WTO and make less different from that of trade in industrial products.

One of the basic principles of GATT 1947 (as well as the WTO) was that the customs were the only legitimate instrument of protection in international trade. The exception was (among other things) the exchange of agricultural products in which (unlike the trade with industrial products) to the governments of member states was allowed the usage of quotas and other non-tariff barriers (variable
tariffs, tariff quotas, etc.) to limit imports of agricultural products. In contrast to the rules for industrial products, in the agricultural sector, export subsidies and measures of support to domestic production could be approved. Exceptions are mainly applied by developed countries which led to strengthening the agricultural protectionism (EU, USA) and difficulties in agricultural products trade on the world market. Justification for the support and protection that resulted with distortion in agricultural products trade was commonly found in the following:

1. Agriculture is considered a primary and strategic sector, and the aim is to provide sufficient food to meet the needs of the population—the tendency is self-sufficiency;

2. The influence of climatic factors is very significant in agricultural production, therefore it is essential to use political measures in order to create reserves for crisis periods, and

3. The protection of the interests of farmers, which (especially in developed countries) are well organized and have a strong influence on the governments of their countries (Prekajac, 2005).

By the end of the Uruguay Round of international trade negotiations of agricultural products remained outside the multilateral trade rules established under the GATT. Previous attempts of its involvement in negotiations, as well as the application of basic principles of international trade policy and the exchange of agricultural products remained unsuccessful, primarily because of the opposition and conflict between the European Union (EU) and the United States. This issue was of particular interest to developing countries, but the developed part of the world was not ready to give up protectionist trade policy in the agricultural sector.

It was not until the Uruguay Round led to the conclusion of the Agreement on Agriculture (and Sanitary and Phytosanitary Measures). The international exchange of agricultural products for the first time became regulated by the international trade rules. Although the provisions contained in the Agreement are not (and will not) lead to significant reduction of protection in agriculture, its adoption permanently changed the attitude towards agriculture and laid the foundation for further reforms in agricultural policy, through the future rounds of WTO negotiations. The negotiations on agriculture continued within the WTO initiated in March of 2000 (as it was as prearranged in the Agreement), within special sessions of the Committee on Agriculture. At the Ministerial Conference held in Doha in November 2001, a new round of negotiations began, and agriculture has become a very important and still controversial part that unique endeavor.
1. DEFINING FOOD SECURITY

Food security is a multi-dimensional issue and can be defined at global, national, regional, local or individual levels. Barrett (2002) observes that there have been three distinct phases in the analysis of food security. The early emphasis was on availability as an aggregate dimension to food security, followed by highlighting the importance of access, as described in the work of Amartya Sen (1981) who shows that even if food supplies in any geographical location are plentiful, if an individual does not have sufficient ‘entitlements’, hunger and malnutrition can still arise. Entitlement can be determined by economic, political or social factors which can influence an individual’s ability – directly or indirectly – to access food and appropriate nutritional intake (Sen 1999). Since the 1980s, the concept of food security has shifted away from the national to the household level, and from the production of food towards access to food. Sen’s entitlement approach provided a useful analytical framework, in which production was recognized as one of four possible sources of food, the others being trade, labor and transfers (Sen 1981). Finally, food security also relates to ‘stability’, with the emphasis on the importance of risk and uncertainty. As Barrett (2002) points out, if the focus was on ‘food insecurity’ rather than ‘food security’, this would place more emphasis on the risk and uncertainty issue than has been commonplace in much of the empirical literature.

With this in mind, we can refer to the FAO definition that food security exists: when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO 2002). In WTO terms, “food security” concerns primarily the availability of imported food for net food importing countries if world prices rise and/or the supply of concessional food declines as a consequence of trade liberalization. Like the World Bank report and the World Food Summit, this article recognizes that poverty is a major cause of food insecurity and that the eradication of poverty is critical to improving access to food.

2. THE AGREEMENT ON AGRICULTURE AND FOOD SECURITY

Agriculture has always been protected from the rules applicable for industrial products and benefited from special arrangements which derogate from the rules within the GATT. Food security has been put forward as a reason for the exceptional treatment of agriculture (Desta, 2001). Protecting the sector was perceived as a means of ensuring consumers reasonable prices and protecting producers against fluctuations in the price of agricultural products (Delcros, 2002) so as to guarantee food supply. The concerns of states resulted in the protection of the sector with high tariffs and introduction of support to farmers.
The Uruguay round pronounced the end of this distortion by introducing some disciplines to the sector. The WTO Agreement on Agriculture affects food security in developing countries in two distinct ways. First, the Agreement increases food insecurity by exacerbating rural poverty and inequality and second, the Agreement hampers the ability of developing countries to adopt measures to promote food security (Gonzales, 2002).

The Agreement on Agriculture is an important first step in regulating international trade in agricultural products. The estimated time for its implementation is within six years from the entry into force for the developed countries (from 1st of January in 1995 till 31st of December 2000), and ten years in the case of developing countries. The agreement aims to reform trade in agricultural products, as well as national policy of this sector in the period ahead, and also to contribute to the implementation of market-oriented policies in order to increase the predictability and stability for both the exporting and importing countries of agricultural products. The new rules contained in the Agreement are as follows:

1. market access,
2. support domestic production and
3. subsidies and other forms of support for agricultural exports, which represent the 'three pillars' of the Agreement on Agriculture.

By the end of the Uruguay Round agricultural imports were limited by quotas and other non-tariff barriers. The Agreement provided to carry out their transformation into customs through the process of tarification since they are the most transparent hedging measures. Developed countries are required to lower the level of tariff protection of agricultural products by an average of 36% in the period of 6 years, while the corresponding decrease in developing countries should be 24% within 10 years. The minimum tariff reduction for individual products is 15% for developed countries and 10% for developing countries. The least developed countries among the developing countries are exempt from the application of the obligations under this Agreement. It is envisaged that special protection may be applied to specific cases in to partially offset the negative effects of a significant fall in prices of imported product or growth in imports. It also includes a clause for special treatment when dealing with sensitive situations that allow for non-trade reasons (food safety, environmental protection, etc.) to retain existing import restrictions for an individual product. In this way there is a possibility of exemption from the tarification obligation under certain conditions. This way, the developing countries will be able to deviate from their reduction commitment on more products compared to developed countries. The flexibility for developing members to designate and make a smaller tariff reduction commitment on special products is essentially meant to enable these countries to ensure that the livelihoods and food security of domestic agricultural producers are not threatened as a result of foreign competition (Mulleta 2010). A system of tariff quotas was introduced to ensure
the continuation of same import quantities of agricultural products as prior to the entry into force of the Agreement. The essence of the tariff quota is that a certain amount of products will be imported by a lower rate of duty, and that higher customs duties will be applied on imports that exceed the established quotas. ‘In the absence of appropriate supervision of the tariff conversion process and to prevent backsliding, members often resort to ‘dirty tariffication’ or ‘ceiling binding’ by grossly overestimating the tariff value of their equivalent previous non tariff barriers’ (Islam, 2009).

The Agreement on Agriculture distinguishes between support programs that directly stimulate production and those which do not have direct effects. Domestic politics with direct effects on production and trade of agricultural products should be reduced as follows, in developed countries 20% in the six-year period beginning in 1995. and in developing countries by 13.3% within 10 years. The measures that have minimal impact on trade and are free to use are Green box measures. 'Green box' subsidies are qualified as measures that have no distorting effects on trade. These measures tend to be programmes that are not directed at particular products, and include direct income supports for farmers that are not related to (are “decoupled” from) current production levels or prices.¹ Specific types of policies which fall under the green box are general services, including measures providing services or benefits to agriculture or the rural community that do not involve direct payments to producers or processors, measures such as pest and disease control, extension and training services, research and infrastructural service. Members are also allowed to provide income insurance and disaster relief services on condition that farmers are not made to profit from it. Moreover, members can also provide assistance for structural adjustment, environmental and regional development purposes. There is a tendency (primarily among all developed countries) to classify measures of domestic support in this group, with the explanation that these measures have minimal distorting effect, but its impact on production and trade in agricultural products can be very significant.

Subsidies covered by the 'blue box' are an exception to the general rule that all measures relating to the production process must be reduced or their use must be within the defined minimum. These measures are direct payments to farmers when they are asked to limit the production, with certain government assistance programs in developing countries when they want to encourage the development of agriculture and rural areas in their countries, as well as other measures of support when the value compared to the total value of production which is supported is low (5% or less in the case of developed countries, and 10% or less in developing countries). The Blue Box contains production limiting programs which are exempt from reduction commitment provided the payment is based on

¹ Retrieved from:
http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd00_contents_e.htm
fixed area and yield, or made on 85% or less of the base level of production while for livestock if the payments are made on a fixed number of head. It covers payments directly linked to acreage or animal numbers, but under schemes which also limit production by imposing production quotas or requiring farmers to set aside part of their land (retrieved from http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd00_contents_e.htm).

The blue box measures are available for every member of the WTO, irrespective of development status.

Finally, support measures which have significant trade distorting impact fall within the amber box. The total value of these measures must be eliminated. The Agreement on Agriculture prohibits export subsidies for agricultural products unless the subsidies are specified in the list of commitments of the Member States. In that case it is required from the countries to reduce the value of export subsidies and export volume which is being supported. It was found that the developed countries should reduce the value of export subsidies by 36% within six years of starting since 1995 and developing countries by 24% for 10 years. It was also agreed that in the same period developed countries must reduce the quantity of subsidized exports by 21% and the developing countries by 14%. Poor developing and least developed countries cannot make use of any measure falling under the amber box, with few exceptional measures such as the de minimis level of support and the Development Box measures. The level of de minimis support for developed countries is 5% while for developing countries it is 10% of the total value of production of a basic agricultural product during the relevant year (McMahon, 2006). Development Box measures include generally available agricultural investment subsidies, agricultural input subsidies generally available to low income or resource poor producers and support to encourage diversification from growing illicit narcotic crops.

Table 1: Agreed cuts in the three principal areas of the AOA

<table>
<thead>
<tr>
<th>Type of country</th>
<th>Domestic subsidies</th>
<th>Tariffs</th>
<th>Value of export subsidies</th>
<th>Volume of subsidized export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>20% over 6 years</td>
<td>36% over 6 years</td>
<td>36% over 6 years</td>
<td>21% over 6 years</td>
</tr>
<tr>
<td>Developing</td>
<td>13.3% over 10 years</td>
<td>24% over 10 years</td>
<td>24% over 10 years</td>
<td>14% over 10 years</td>
</tr>
</tbody>
</table>

Source: Stevens, Devereux and Kennan, 2003.

The mayor concern related to disciplining the export subsidies and domestic support is the potential increase in the price of food which will in turn increase the import bills of food importing countries and threaten food supply for emergency food aid. The reform under the AOA was predicted to seriously affect least developed countries and net food importing developing countries; hence the two groups were treated in a peculiar way with in the WTO regime.
3. THE WTO AGREEMENT’S INFLUENCE ON FOOD SECURITY

The Agreement requires from developing countries to open up their markets to foreign competition while developed countries are enabled to continue subsidizing and protecting domestic producers. This section describes how the Agreement may influence on food security in developing countries.

3.1. Market Access

The WTO Agreement on Agriculture did not enable trade liberalization in OECD countries. Developed countries used dirty tariffication, selective tariff reduction and the Agreement’s Article 5 safeguard provision and weaknesses in the minimum market access requirements for avoiding the Agreement’s market access obligations. Developed country markets were not open for developing country producers. Some developing countries were engaged in dirty tariffication but most developing countries did not engage in tariffication at all. Many of the developing countries have declared bound tariffs which were a subject to reduction commitments in accordance with the terms of their individual country schedules. However, limitations on the use of the Agreement’s Article 5 safeguard provision can compromise the developing countries in protecting domestic producers when sudden import surges or unusually low import prices emerge. Certain developing countries adopted tariff reduction commitments that may prevent the use of tariffs to protect particularly sensitive agricultural products or to protect domestic producers from unfair competition from subsidized developed country farmers. Many developing countries agreed in implementing a uniform rate of binding and reduction for all agricultural products which resulted with very little flexibility to provide higher protection for basic foodstuffs and other sensitive agricultural products.

3.2. Export subsidies

The WTO Agreement on Agriculture emphasized the existing injustice between developed and developing countries regarding the availability of export subsidies as a tool of agricultural policy by permitting past users of export subsidies to maintain these subsidies with certain reduction obligations, while prohibiting the introduction of new subsidies. The Agreement sealed up the unfair competitive advantage held by developed country producers because the developing countries are deprived of an important tool of agricultural policy which may be used to increase export revenues and create employment opportunities in the agricultural sector. However, a country granting subsidy for its agriculture has to make sure that the support should not result in that country having more than an equitable share of world export trade in that product (Article XVI/3 GATT). The AOA also permits the use of export subsidies which are absolutely prohibited by the Subsidies Agreement. The agreement rather
requires countries to reduce expenditure for export subsidies as well as volume of subsidized exports and it allows permissible levels of market distortion (Gonzales, 2002). The obligation on export subsidies brings with it two major concerns. ‘To the extent that developed countries reduce export subsidies, developing countries products will become more competitive on both domestic and world markets, thereby boosting the production of both cash and subsistence crops’ (Gonzales, 2002). However, it will also create concern for food importing countries as their import bill may increase as a result of increase in food price following reduction of support.

3.3. Domestic Subsidies

The WTO Agreement on Agriculture exacerbated the injustice between developed and developing countries observing the use of trade-distorting “amber box” subsidies by restricting their use by developing countries. Most developing countries do not have domestic subsidy reduction obligations because only few developing countries ensured significant domestic agricultural subsidies during the 1986-88 base period. The Agreement prevents developing countries from adopting “amber box” support measures in the future that exceed de minimis levels of support and they may only use them if they fall within the “rural development” exemption of the Agreement. In developing countries the “blue box” and “green box” exemptions to the domestic support provisions affect on food security by encouraging over production in developed countries, which depresses world prices and creates disincentives to domestic production. The “blue box” exemptions allow the U.S. and the E.U. to promote exports by paying farmers the difference between a government target price for agricultural commodities and the corresponding market price. The “green box” exemption enables developed countries to evade subsidy reduction obligations by transforming prohibited subsidies into direct payments to farmers decoupled from production. These provisions mainly used by developed countries have enabled them to avoid domestic subsidy reduction obligations without assigning significant advantages to developing countries.

CONCLUSION

The WTO’s Agreement on Agriculture essentially includes three areas: market access, domestic support and export subsidy which are related to food security. Due to various reasons, creating a fair and market oriented agricultural trading system is the objective that is not yet achieved. In developing countries the WTO Agreement on Agriculture adversely affects food security by increasing poverty and inequality by restricting the tools available to governments to promote food security. Due to the historic differences in agricultural policy between developed and developing countries, it is necessary to differentiate between reforms directed at developing countries and those directed at developed countries.
### Table 2: Necessary reforms of the WTO Agreement on Agriculture

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market access</strong></td>
<td></td>
</tr>
<tr>
<td>- Greater access to developed country markets in order to increase the trade-based entitlements of developing countries and to address developed countries’ evasion of the Agreement on Agriculture’s market access requirements.</td>
<td>The WTO Agreement on Agriculture should give developing countries maximum flexibility in the implementation of tariff reductions in recognition of the fact that developing countries frequently rely on tariff revenues to fund measures to boost production-based entitlements and transfer-based entitlements (tariff revenues for financing programs to promote domestic food production, such as subsidized or free inputs research and extension services, irrigation projects, and investment subsidies, food price subsidies, targeted feeding programs and income safety nets).</td>
</tr>
<tr>
<td>- Greater market access through further reduction of developed country tariffs in order to address dirty tariffication, application of tariff reductions on a product-by-product basis rather than industry-wide averages in order to avoid selective tariff reduction, elimination of tariff escalation on products of export interest to developing countries, and greater transparency in tariffs in order to avoid abuses.</td>
<td>- The Agreement should exempt developing countries from tariff reduction obligations for particularly sensitive agricultural commodities, such as food staples.</td>
</tr>
<tr>
<td>- The Agreement’s Article 5 safeguard provisions should be restricted to developing countries, or at a minimum, should be reformed to specify the calculation of the trigger price.</td>
<td>- The Agreement’s Article 5 safeguard provisions should be made available to all developing countries (regardless of whether or not they engaged in tariffication) in order to enable them to increase tariff protection when import surges or particularly low import prices threaten domestic production.</td>
</tr>
<tr>
<td>- The Agreement’s minimum market access requirements should be expanded and clarified in order to ensure that trading opportunities are made available for developing country and to compensate countries whose preferential access to developed country markets will be eroded by trade liberalization.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Export subsidies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- The WTO Agreement on Agriculture should flatly prohibit developed countries from subsidizing exports (direct aid to producers that is not contingent on export performance).</td>
</tr>
<tr>
<td>- The Agreement should contain binding obligations with respect to minimum interest rates and maximum credit terms, in order to prevent developed countries from promoting exports by providing government credit on concessional terms.</td>
</tr>
<tr>
<td>- The Agreement should eliminate the Article 13 “peace clause” that currently prevents developing countries from imposing countervailing duties or initiating WTO dispute settlement proceedings to challenge the trade distorting measures adopted by developed countries to promote agricultural exports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Domestic subsidies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Re-characterizing the exempted “blue box” and “green box” subsidies utilized by developed countries as trade-distorting “amber box” subsidies and requiring that these subsidies be reduced.</td>
</tr>
<tr>
<td>- “Blue box” subsidies (such as U.S. deficiency payments and E.U. compensation payments, both of which involve direct payments to farmers based on production) directly subsidize agricultural production, and should be included in the category of trade-distorting “amber box” measures.</td>
</tr>
<tr>
<td>- The exempted “green box” subsidies, such as payments to farmers decoupled from production, income safety net programs and crop insurance programs, indirectly subsidize agricultural production by increasing farmer revenues.</td>
</tr>
<tr>
<td>- The renegotiated Agreement should develop a more precise definition of nontrade-distorting “green box” measures or, in the alternative, place a cap or ceiling on these “green box” measures.</td>
</tr>
<tr>
<td>- The Agreement should require sharp AMS reductions in light of the fact that the original requirements achieved negligible domestic subsidy reductions as a result of the exemptions and of the fact that the 1986–88 base period was one of extremely high domestic subsidies.</td>
</tr>
</tbody>
</table>

Source: Gonzales, 2002.
Trade liberalization produces winners and losers. Generally the winners are large enterprises and domestic large-scale farming operations and the losers seem to be poor farmers and rural laborers, whose livelihoods were undermined by cheap food imports that depressed food prices while government cuts in agricultural input subsidies increased the price of farm inputs and because of the loss of rural employment. Small farmers were forced to pay more for agricultural inputs while receiving less for their output. In developing countries trade liberalization led to increasing emphasis on export production. The food insecurity grew because more land and resources were devoted to export crops and the domestic food production declined. However, declining world prices for many agricultural commodities did not provide small farmers in developing countries with better prices for export commodities.

The AOA is currently under renegotiation which is also focused on the three pillars. So far, the progress made under the Doha round indicates a positive sign towards achieving a fair and market based agricultural trading system. This will be very important for the majority of agricultural producers whose products have been denied of fair and competitive marketing environment for so long.

REFERENCES


Gonzales, C. (2002). Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security and Developing Countries, 27 Colum J.Envt L.


www.wto.org