



INSTITUTE FOR AGRICULTURE AND TRADE POLICY

# Trade and Food Reserves

What role does the WTO play?

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ECOFAIR TRADE DIALOGUE

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Trade and Food Reserves: What role does the WTO play?

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## I. Introduction

Grain reserves are an important part of a food security strategy. Reserves are an obvious and practical tool that has been in use for thousands of years. They are proven to be effective. They are not on their own sufficient to ensure food security, and, like any tool, they can be counter-productive if not properly established—but they are worth the effort.

Agricultural trade, too, is important, including trade in regional and global markets. Trade, too, has also been important for thousands of years, and it remains central to food security. Globally, the total volume of food that crosses international borders is relatively small (very roughly estimated at around 10 percent), but it is nonetheless critically important, especially for particular countries and regions, among them some of the poorest regions in the world. When it comes to protecting food security, even relatively tiny volumes of food (whether in a reserve or in trade) can have disproportionately large importance.

For decades, many governments in developing countries either ignored or taxed agriculture so as to pay for industrial development projects (Anderson, 2009). In some regions, particularly in Africa, high tariffs prevented the movement of food across borders where historically trade had been common. Cheap food for urban populations was a high priority, for policy and political reasons. Then, over the last two to three decades, the world has witnessed a global experiment with trade, pushing trade to the fore of development agendas. By the mid-1990s, government leaders and policymakers from dozens of countries and institutions were insisting that global trade and private investment dispense with the need for economies built on local food production and exchange. There have always been skeptics, IATP and the participants in the EcoFair Trade Dialogue among them. From the skeptics' perspective, the experiment further damaged already fragile food systems around the world, in developed and developing countries alike, and exacerbated food insecurity.

The number of skeptics has grown significantly in the past three years. For the mainstream global policy community, wider acceptance of the critiques was first signalled by the World Bank's acknowledgment of mistakes in its 2008 World Development Report (published in October 2007), a report that was devoted to agriculture. That same month, an internal evaluation of the World Bank's agriculture projects in Africa came to some scathing conclusions about World Bank staff's misplaced hopes for the private sector to replace a number of functions that had previously been provided by governments (World Bank, 2007). Then came the deaths from hunger and civic violence that ensued from the 2007-08 food crisis, attracting strong media interest and widening the circle of policymakers who accepted publicly that global markets had

inherent weaknesses. Since 2008, a large number of governments have shown markedly more interest in the question of how to manage volatility in global commodity markets, and how to protect people from escalating food costs.

Reserves offer an obvious way for governments to reduce price and supply volatility. There is considerable tension among economists on the relative merits of trade and reserves, in a debate that often assumes that the policies are somehow in competition with each other. The idea of food reserves tends to find favor among those who do not believe trade liberalization serves food security well. Those that are persuaded by free trade arguments tend to see reserves as market distorting and an unnecessary public expense. In fact, trade and reserves policies should be complementary strategies.

Perhaps because the food security policy field has been colored by the debate between proponents of state-led versus market-led development, there is an assumption that the trade rules put in place by the WTO curtail countries' ability to establish and operate a grain reserve. The truth is more complicated. In fact, WTO rules do not preclude the operation of a food reserve system. On the other hand, the rules do not make it easy either, and they do prohibit (though not especially effectively) some of the policies that a reserve is likely to depend upon if it is to work well. In other words, the multilateral system could do much better. These issues are explored in the paper.

This paper complements an earlier paper published by IATP in October 2009 entitled "Strategic Grain Reserves In an Era of Volatility." The October 2009 paper provided a brief review of grain reserves—why governments created reserves, to a large extent dismantled them and are now again interested in re-establishing them in some form. This paper does not revisit that discussion, but readers who wish to know more about the history of grain reserves are encouraged to read the earlier paper (Murphy, 2009).

This paper is in part prompted by the clear revival in political interest in establishing grain reserves. At the G8 meeting held in Italy in April 2009, some 30 governments and a wide range of inter-governmental organizations signed the L'Aquila Joint Statement on Food Security, which includes the following recommendation:

The feasibility, effectiveness and administrative modalities of a system of stockholding in dealing with humanitarian food emergencies or as a means to limit price volatility need to be further explored.<sup>1</sup>

At the World Summit on Food Security, at the FAO in Rome in November, 2009, India said:

We need to give serious thought to some practical mechanisms such as establishment of regional and global physical reserves as suggested in the background papers.

Other countries joined the chorus, including the Philippines, which is actively pursuing a more effective rice reserve mechanism in the context of ASEAN (Association of South-east Asian Nations). In March 2010, the four BRIC countries (Brazil, Russia, India and China) met in Moscow and agreed to support the establishment of a system of national grain reserves (Reuters, March 26 2010). Together, BRIC account for 25 percent of the world's land and 40 percent of the world's people. They are global giants in the food economy.

In June 2010, Canada played host to a G20 summit. Disappointingly, the Canadian government chose not to pursue a discussion on global food security or to move ahead with the commitment to at least explore the possible contribution of global grain reserves. France, however, which will host the 2011 G20 summit, has already committed to holding a special session on agriculture in March 2011, with a preparatory meeting with civil society planned for November 2010. In October 2010, the newly revamped FAO Committee on Food Security will discuss food price volatility as one of three core issues at its first session. The Comprehensive Framework for Agriculture, a joint UN-system (including the WTO, World Bank and IMF) response to the global food crisis, also includes reserves as a policy tool in its recommendations. The governments have an agenda, have made some commitments to exploring the idea and they have venues to move this agenda forward. The challenge now is to see that they actually do it.

Food stocks—neglected for several decades in the push for open markets and to reduce the role of governments in the regulation of the economy—are back in vogue.

## II. Context

A key dynamic of the 2007–08 global food price crisis was the way a number of major food commodity exporters imposed restrictions on their exports. More recently, Russia has imposed restrictions on wheat exports. Whether to raise more money for the government budget or to safeguard the food supply for domestic constituencies, these governments restricted (and in some cases banned) exports of some foods. Many economists lamented these decisions and called for tougher WTO disciplines to make such measures illegal (for example, see the statement from IPC & ICTSD, 2010). Although few of the measures were in place for more than a few weeks, the economists were right to worry: The trade

restrictions shook the foundation on which trade policy has rested for over 20 years. The policy prescription dictating that food security should rest on access to global markets was seriously challenged by the sudden unwillingness of some exporters to play ball.

The global market is not the sum total of all markets, but a share—sometimes a very small share—of total global production. The global food crisis made it impossible to ignore the fact that world food markets can fail. Much like local food markets, world food markets can be volatile. They are subject to political pressures and concentrated market power. Several national markets are many times larger than the global market in a given commodity (China or India's rice market, for example, both dwarf the global rice market). The global market faces its own supply and demand pressures, its own distribution problems linked to grossly unequal levels of purchasing power, and its own set of failures linked to the market's inability to capture the value of public goods, such as water quality. Production for export markets is highly concentrated by geography (two countries dominate the rice export shares; five dominate wheat), which makes supply for the global market vulnerable to weather patterns. Trade liberalization will affect this reality, but it cannot move arable land between countries.

Although small, the share of food that goes into a global (rather than local or national market) has a disproportionate impact on prices and availability of food across the board. If global markets pay more, local supply is diverted away from local markets to the global market. This should bring income to producers, although most producers sell to intermediaries and fail to realize all the income gain they should. It also raises prices in local food markets, which can stimulate increased production (for most developing countries this is critically important) but can also increase hunger, especially in the short-term, because people living in poverty, whether farmers or not, spend half or more of their income on food. As imports, traded foods can play an essential role in food security. Many of the world's poorest countries depend on imports, both as food aid and commercially. But imports need careful management if they are not to undermine or even destroy, rather than support, local production systems. Import prices are set by wholly different factors than those affecting local supply, including hidden and open domestic and export subsidies to producers and trading companies in the country-of-origin that result in unfair, and unsustainable, competition (see the FAO series of briefs on import surges).

Just a fraction of the foods people eat are traded in significant volumes as agricultural commodities. A few of the heavily traded cereals, particularly maize and soy, are predominantly traded for use as feed for livestock and in biofuel production.

But food markets are interconnected: In local markets, the price of wheat or rice has a direct bearing on the price of millet and cassava. The world's population is increasingly urbanized, which increases the share of food that is bought rather than grown for local consumption. In turn, this increases the degree to which market prices (local, national and global) and price volatility can disrupt people's access to food.

Industrial-scale meat production and the biofuel industry create a more elastic demand for commodities than the markets for staple cereals. Indeed, the link to energy markets and energy demand is one of the reasons for high levels of volatility in commodity markets at the time of the food price crisis. The fact that energy markets are elastic and food markets are not does not mean that the volatility of commodities affected by energy markets does not have implications for food commodities. On the contrary, By globalizing commodity markets through trade and investment agreements, food prices are vulnerable to factors that have little or nothing to do with local supply and demand. The implications for food security are alarming. As agricultural expert Joachim von Braun wrote recently, "Today, low-income countries and the poor are actually more vulnerable than before the last food crisis," (von Braun, 2010).

Grain reserves are gaining increasing attention as a way to protect food supplies from at least some of the price and supply uncertainty that global markets have brought in their wake.

### **III. Agricultural price volatility: What's the problem?**

Price fluctuations are essential for a market to function. Price differentials create the incentive to move food from areas of plenty to those areas of need where people can afford market prices. They create an incentive for farmers to invest in raising productivity levels and improving the quality of their production. In the right conditions, price volatility contributes to stabilizing farm income for those producers who sell a surplus, because so long as farmers produce a crop, higher prices help compensate for poor yields, just as higher volumes can make up for low prices.

Price instability, however, or volatility that is too extreme, causes significant damage. For producers, business investors and for household consumers, for whom food is not an optional item in the budget, it is important to have some idea of likely prices in both the short- and medium-term. If neither consumers nor producers know where prices are likely to settle, or if prices start to rise very rapidly, or stay

below farmers' production costs over a period of years, then food security—and the productivity and profitability of the agricultural sector as a whole—will suffer.

Historically, price spikes have tended to give rise to large increases in public investment in agriculture, especially in countries whose governments are subject to public pressure. The track record, however, suggests the funding does not last, not least because high price spikes are short-lived. Private investment is likely to increase, too, if prices go high enough, but not if there is volatility coupled with prices that are below cost of production, as was broadly true from about 1998 to 2005. If these investments are not carefully thought through, the investment is followed by a supply glut as this year's productivity gains more than compensate for the poor harvest of last year that caused high prices. Typically, a price spike is followed by a prolonged period of depressed prices, a phenomenon known as a cobweb because of the graph it produces (rather than supply and demand finding equilibrium at various points along a straight line, the relationship is unstable and the variables create a much more complex graph). The pattern is a disincentive to sustained investment in agriculture. Yet sustained investment in agriculture is exactly what is needed to respond to the rural development and the food security crises. Agriculture demands forward planning and sometimes a wait of five to ten years before realizing a return on investment.

### **IV. Trade to limit price volatility**

Trade offers a number of useful features in managing volatility. Trade is flexible, allowing the flow of goods to vary as both supply and demand evolve. Trade allows the private sector to do what it is good at—assess where and how to make a profit by supplying a need—while the government can limit the costs entailed in storing food, as well as the onerous (if not impossible) task of anticipating every need and demand. Global supply of many commodities is larger than most national supplies of the same, especially in the case of the world's least food-secure countries. Since global markets source from more than one country, supplies can also be more stable than markets that depend on a single country's production.

Using these and similar arguments, development policymakers from most of the world's global institutions, as well as most bilateral aid donors, have insisted on fully liberalized trade as the cornerstone of developing countries' agriculture and food security strategies for the past 30 years. Yet free trade has important disadvantages.

First, free trade creates new sources of demand, not just new sources of supply. In an open economy, domestic consumers also have to compete with consumers in other countries for their domestic supply. And as the recent interest in global land and water investment deals highlights, that competition is not just for food, but also for the inputs necessary to grow food. A global hunt for land and water has begun, marked by an explosion of new investment contracts starting in 2008.<sup>2</sup> One reason for the 2007-08 food price crisis was the demand (actual and anticipated) for biofuels, which use grains normally used for animal feed and human food. The subsidies and government mandates for minimum levels of biofuel production put in place by the EU and the U.S. exacerbated shortages caused by poor harvests in several major suppliers to the world market. Demand is also growing as a function of continuing growth in world population and changing eating habits as parts of the world get richer.

Second, free trade has been coupled with policies to float currencies on open markets. This has increased uncertainty over how much things will cost in a particular local market at any given time. The volatility of currency values, particularly the U.S. dollar, which is the denomination in which many commodities are priced worldwide, has made budgeting for food purchases more unpredictable. One estimate suggests the depreciation of the dollar was equivalent to a 20-percent rise in the price of food on world markets between January 2002 and June 2008 (Mitchell, 2008). Those countries whose export earnings are calculated in dollars are dependent on the dollar in the way U.S. exporters are. Most international trade is calculated in U.S. dollars, making the value of the dollar particularly important in calculating the costs and gains from international trade. Many developing countries have weak currencies. Those who can afford to invest their money abroad do so. For developing countries, a weak currency can be good for exports, potentially, because it makes their exports cheap for others to buy. But it undermines the purchasing power countries require to buy imports, including the food imports that many countries are dependent upon to complete their food supply.

Third, the quantity of food available on the world market is not infinite. For many foods, the total amount traded is both relatively small, and sourced from only a few countries. The top five or six countries (sometimes fewer) as measured by production can account for 80 percent or more of supply in the global market. The world market is bigger than some national markets, but not all: China and India both grow and consume far more rice than the world market has available. The possibilities of the world market are very different for different countries, depending on their relative production and consumption.

Fourth, the global market is not sufficiently competitive. Although the dominant firms claim to compete fiercely with one another, just a few firms dominate international trade in most agricultural commodities. A few of these firms are dominant across a large number of commodities. There are huge barriers to entry, from the capital necessary to finance grain shipments, to the infrastructure of ships, grain terminals and rail cars required, to the marketing information needed to price contracts profitably. In many local markets, where producers sell their grain, one or two firms will operate what is effectively a monopoly (or duopoly) on exports and imports.

Fifth, these global firms operate large financial services divisions in commodity exchanges with far more information than the average farmer or individual investor. Commodity markets have also attracted a number of other investors, few of them actually engaged in buying or selling physical commodities. The U.S. government passed into law new regulations to curb some of the most disruptive practices of investors on commodity markets in July 2010, despite a heavily funded campaign by Wall Street to block the reforms.<sup>3</sup> But speculative investment remains a serious concern for governments who wish to ensure national food security.

Sixth, world markets are subject to their own forms of instability (Abbot, 2010). If China abandoned its reserve policy and increased its reliance on the world market, there would be significant short- and medium-term shocks. Any instability in a country whose supply and demand are as big as China's will have global repercussions. There are a few other such very large countries whose food consumption is too big to be managed comfortably in today's world markets. These so-called price-makers have to move slowly in making policy changes and have to make a careful assessment of how much supply is available to them from world markets. Meanwhile, the vast majority of countries are price-takers. They have to formulate their policies based on what the giants decide; the world market can more than meet most of their needs, but if there is a sudden shift in supply or demand (as occurred in 1973 and again in 2007-08), the price-takers need a contingency plan. Most price-taker countries have little purchasing power. Those that do have the spending power might find, as in 2008, that the physical supply of what they want is simply not available at any price.

Seventh, world markets are not transparent, which undermines the efficiency of open markets. Very large stocks can depress prices, as parties to several of the international commodity agreements found out (tin is a notorious example of a commodity that got over-stocked). But in the absence of known public stocks, the largest holders of grain are farmers and the privately held trading companies. Hoarding by Thai rice farmers is one of the reasons rice prices went so high in



March 2008, but by and large, farmers do not control enough stock to affect world prices, nor can they afford to stockpile grain for more than a short period of time.

Nor does it make economic sense for the companies to hold large stocks: Stocks are expensive and tie up precious capital (Ray, 2008). How much private grain traders actually do hold is a matter of speculation because the companies keep information on what stocks they have as tightly held secrets. These companies—Cargill, ADM, Bunge and a few others—dwarf all the state traders and the other firms in the private market, in the volume of their sales, in the range of goods and services they buy and sell, and, not least, in the profits they make. A few state trading companies may come close to the private companies for individual commodities, for instance in China or India, but none deals with the range of products that the top companies do. Some, like the Canadian Wheat Board are constrained by law to operate in a single national market (either to buy, as the Canadian Wheat Board is, and/or to sell, as most state trading companies are). The dominant companies control marketing and distribution infrastructure (silos, grain terminals and shipping capacity) as well as buying and selling. There are opportunities for price manipulation because of the lack of competition and a lack of possibilities for price discovery. The vertical integration of the industry means that basic necessities required for the market to function well, such as open entry to newcomers and perfect information, are not met.

It is these failures in world markets that focus policymakers' attention on the possible contribution of food reserves to food security, and on the question of whether multilateral trade rules prevent or discourage the re-establishment of food reserves in some form, to the detriment of sound public policy for food and agriculture.

## **V. Do trade rules and grain reserves conflict?**

Most countries operate a relatively open market in agricultural products. Tropical commodities, many of which were developed explicitly for export under colonial rule, do not face big trade barriers unless they compete with an equivalent temperate product, as is the case with sugar. Trade in staple foods such as wheat and maize is also relatively free in most countries, due to the reforms introduced by structural adjustment programs, the WTO agreements and regional and bilateral trade agreements. An exception is rice, which a number of Asian countries protect in multiple ways, and which the U.S. subsidizes heavily to satisfy a small but powerful political constituency.

In general, rich countries protect a handful of agricultural products with high tariffs (or stringent standards), though a few rich countries (such as Norway and Switzerland) protect almost everything they grow. These protectionist countries (known at the WTO as the Group of 10 or G10) are also among the largest importers of food. In contrast, developing countries tend to have higher tariffs overall than richer countries, including on agricultural products, but they do not always apply them at the maximum level allowed. Many foodstuffs are imported into developing countries at relatively low tariff levels. Overall, food exports to developing countries have increased significantly in the past two decades, reflecting both growing prosperity (for example in China and India) and increasing domestic shortfalls in staple food production, particularly in sub-Saharan Africa, but also in least-developed countries around the globe (FAO, 2005). The liberalization of trade and investment flows has underpinned the growth of trade in both cases.

Over the past several decades, multilateral and bilateral aid donors focused food security efforts on market-based tools. These tools have included lowering tariffs, measures to attract foreign direct investment, creating commodity exchanges in developing countries and encouraging farmers to use futures contracts to hedge their risks (Galtier, 2009). These tools focus on strategies to cope with volatility rather than seeking to limit the volatility itself, and on a private, market-based system rather than using public sector interventions in the market. The role given to the public sector was to finance and oversee infrastructure projects (roads and warehouses); to establish and enforce regulations, including quality grades and standards; and to administer trade, including the operation of customs authorities. In other words, the state's role was to facilitate the operations of the private sector.

This emphasis on private sector action has not worked as well as policymakers hoped. Farmers have been slow to take up the new commodity exchanges on offer (Galtier, 2009), the private sector response to the removal of public monopolies in many developing countries has been muted or failed to materialize at all, and world markets have not proved as stable a food supply as was expected.

In a wide-ranging review of policy measures to address volatility in developing countries, research commissioned by the French government has concluded that countries need to be looking at a basket of tools rather than any single approach (Galtier, 2009). Different needs, different contexts and different opportunities should color governments' choices, rather than an ideological predisposition to either state- or market-led agricultural systems.

There are several issues to consider.

**1. FINANCING RESERVES** A reserve costs money to establish and run. Trade rules constrain how much governments spend on agriculture and what programs they can spend on.

**2. GOVERNING RESERVES** State-trading enterprises (STEs) are subject to specific (if not unambiguous) trade rules. Historically, a number of grain reserves have been connected to STEs of some kind. There are few rules governing government procurement, but those rules, too, would come into play in managing a public reserve.

**3. OPERATING PRICE BANDS** To be effective, a grain reserve needs to operate a price band, so that authorities know when to release stocks to ease prices down and when to buy stock to ease downward price pressure. Price bands are technically illegal under WTO and a number of bilateral trade rules.

**4. MANAGING VOLUME** Trade rules are predisposed to favor tools that operate on price signals, not volume levels. At the WTO, volume-based variable levies are illegal and volume-based tariffs have largely been replaced with ad valorem (value-based) equivalents. A reserve is about a quantity of food available, which links to, but is not the same as, a price. This issue includes concerns about conditions under which grain from the reserve is released and how it is disposed of or sold.

Each of these issues is considered below in turn. Because of limitations in the scope of this paper, the discussion focuses on the WTO rules—not because the bilateral and regional trade rules are not important (in a number of cases, they are more important than the WTO rules). Also, while some of the regional and bilateral agreements go further than the WTO agreements, in many cases, the WTO creates something of a blueprint which sets the tone for regional and bilateral negotiations.

#### A. Financing reserves

A well-run reserve should not cost a vast sum of money. The normal volatility in agriculture markets means that, so long as the price band is set intelligently, over a period of years, the stock should be able to buy and sell grain at reasonable prices, making a profit when the reserve successfully buys low and sells high. There are nonetheless fixed costs that will require regular disbursements, and the cost of establishing a reserve is also likely to be high.

The WTO Agreement on Agriculture (AoA) introduced a number of restrictions on domestic support (i.e., public spending) for agriculture. Since grain reserves involve recurring costs on the public budget, the rules and regulations that affect spending are a central part of the relationship between trade and reserves. The rules concerning domestic support are mostly contained in the following sections of the AoA: articles 6 and 7, annex 2 (known as the Green Box) and annexes 3 and 4.

For developing countries, the AoA rules on domestic support are generous. The AoA's starting assumption is that support to agriculture should be in ways that do not distort trade or production. Thus all spending is restricted (and some spending is banned). But then the rules introduce a number of exceptions, which in practice introduce the possibility of significant public investment in agriculture.

For example, article 6.2 of the AoA exempts “government measures of assistance, whether direct or indirect, to encourage agricultural and rural development (that) are an integral part of the development programs of developing countries, investment subsidies which are generally available to agriculture in developing country Members and agricultural input subsidies generally available to low-income or resource-poor producers [...]” A country establishing and operating a reserve in attempt to encourage further investment in agriculture by stabilizing returns and evening out supply could argue that the reserve was part of a rural development plan. The reserve would have to be part of a thought-through and clearly articulated strategy for rural development, along the lines of existing experiments with warehouse receipts, for example.

A question arises for developing countries around how to define “low-income and resource-poor” producers. Is this a local, relative standard? Is it a more global standard, comparing farmers in India or Nicaragua with farmers in Korea? To be effective, a reserve would have to purchase from larger producers as well as small, although it might discriminate in some ways to favor smaller producers. In a number of countries, few small-scale producers grow enough food to create the surplus a reserve relies upon. The WTO language is ambiguous, no doubt intended to stop larger developing countries with considerable industrialized agricultural production (such as Brazil or Argentina) from using article 6.2 as a loophole for subsidies. No country has ever challenged a developing country's use of Article 6.2. Yet the ambiguous categorization creates confusion over what kinds of programs are acceptable and has an arguably chilling effect on what kinds of programs governments are willing to experiment with.



Article 6.4 outlines the *de minimis* provisions, which create a threshold below which programs do not have to be accounted for. The *de minimis* threshold for developing countries allows governments to spend up to 10 percent of the total value of agriculture on general support to the agriculture sector, plus an equivalent of a further 10 percent of the value of each crop can be spent on support to that crop. For developed countries, the rules cap *de minimis* spending at 5 percent. The whole program must be less than this ceiling or none of the spending can count in this category. The U.S. has a certain number of programs in the *de minimis* box, but the European Union has almost none, because its programs cost more than the five percent threshold. For developing countries, the allowance is very generous, not least because government revenues in most cases are comparatively small, while agriculture continues to represent a large share of GDP.

Consider Mali as an example. In 2009 Mali had an estimated GDP of US\$15.52 billion in 2009 (CIA World Factbook, accessed June 2010). Forty-five percent of that total is from agriculture; i.e. the sector is worth just under US\$7 billion. The government is entitled to spend up to 10 percent of this US\$7 billion on support to agriculture as a whole (i.e., just under US\$700 million). That US\$700 million is equivalent to roughly half Mali's annual government budget, which in 2006 was estimated to include US\$1.5 billion in revenues and US\$1.8 billion in expenditures. This is an impossibly large sum of money. Under the Maputo agreement of 2003, African Union governments committed themselves to spending just 10 percent of their national budgets on agriculture. None of the African Union governments has yet reached the 10 percent target, which in Mali's case, would mean a budget of roughly US\$150 million.

As countries get richer, the *de minimis* looks less generous because the relative value of agriculture as a share of GDP declines. But it remains a very high spending threshold. For instance, in Costa Rica, 10 percent of the total value of agriculture is equivalent to something like one third of the total government budget, rather than half. But it is still not likely that government spending will approach such a high ceiling.

A grain reserve might involve some aspects of public expenditure that would be categorized as general support, but the primary spending would likely be crop specific. A reserve is not a biodiversity project, nor will it incorporate all the food crops of a given country or region. Rather, a reserve is used to reduce volatility in one or two crops that dominate household food budgets, in part with a view to reducing volatility in food markets more broadly.

This implies that spending limits on a possible rice reserve, for example, would be linked to the size of the rice sector specifically, not to agriculture as a whole. In the U.S., wheat

programs are small enough as a share of the value of the sector to qualify for the *de minimis* exemption, but maize programs are too big. (The creation of a wheat reserve in the U.S. would possibly raise overall support for wheat to a level above the *de minimis* threshold, a threshold that might anyway be breached if the Doha proposals to cut the *de minimis* by 50 percent are adopted into law).

Note, the WTO rules are about curbing spending on crops that already receive significant public support. If a country was to support investment in a neglected sector, or to seek to replace dependence on particular imports through significant expansion in the domestic acreage given to a particular crop, the *de minimis* exemption could be meaningless because the starting point might be zero, or close to it: Ten percent of zero is still zero.

Article 6.5 (known as the Blue Box) addresses the question of direct payments from the government to the producer as part of a production-limiting program. In the U.S. context, such programs were known as set-asides, and involved payments to farmers to leave land fallow when stocks were too high so as to avoid a glut. Only a few developing countries list programs in their schedules under this category because only a few developing countries are spending money on retiring land from production. Article 6.5 states governments may spend without limit on programs that pay farmers to cut production, so long as:

- (i) such payments are based on fixed area and yields; or
- (ii) such payments are made on 85 percent or less of the base level of production; or
- (iii) livestock payments are made on a fixed number of head.

Blue Box programs were an important part of European and to some extent U.S. farm programs in the 1990s, but they are less important now. Under the Doha negotiations, proposals to expand the category of programs included in article 6.5 to accommodate the U.S. so-called "counter-cyclical" payments introduced in the 2002 Farm Bill have now been accepted (though they will not become law until the Doha agreements are concluded). The Doha proposals would also introduce spending limits where none currently exist.

For a developing country that might consider procuring food for a reserve, article 6.5 is unlikely to be useful because the country is not likely to attempt to limit production. Indeed, it is clear, for instance in sub-Saharan Africa, that the first big hurdle in establishing even village reserves and grain banks is the lack of surplus production (ROPPA and EAFF in public presentations, October 2009 and June 2010). A reserve program would be part of stimulating production rather than curbing it.

But in countries where production is not so constrained, it is possible these blue box payments would have some pertinence because while price spikes command more attention in policy circles, it is depressed commodity prices that are more common. And depressed prices, too, undermine food security. Depressed farmgate prices can devastate rural economies by limiting the available capital for local investment. Long-term food security suffers, too, because there is no incentive to invest in enhanced production. Instead, where there is any surplus capital, farmers invest in value-added activity (such as building ethanol plants). Reserves establish a price floor, not just a price ceiling. Land placed in set-asides (possibly associated with payments to farmers to keep the land idle) could be an invaluable complement to a workable price band. Indeed, there is some traction for the idea that land banks should form part of a reserves strategy for food emergencies, because they are cheaper to manage than physical stocks but are still able to provide a relatively quick response if supply levels start to fall. (Sarris at IGC, Russia June 2009).

Plans for a global grain reserve would need to consider the implications of the Blue Box. The primary producers for export of many grains are developed countries—the United States for wheat and maize; France, Australia and Canada for wheat. If these countries were to jointly manage a global reserve, land set-aside policies could again be important.

The AoA's curtailment of production-limiting programs is not necessary for an open, transparent and regulated international trade system. Rather, it reflects a bias that favors large commodity processors (who want high volume and low prices) and undermines efforts to curb dumping in world markets, a problem that has plagued world markets and is still not satisfactorily resolved.

**Annex 2, also known as the Green Box, discusses public stockholding explicitly in paragraph 3:**<sup>4</sup>

### 3. Public stockholding for food security purposes

Expenditures (or revenue foregone) in relation to the accumulation and holding of stocks of products which form an integral part of a food security program identified in national legislation. This may include government aid to private storage of products as part of such a program.

The volume and accumulation of such stocks shall correspond to predetermined targets related solely to food security. The process of stock accumulation and disposal shall be financially transparent. Food purchases by the government shall be made at current market

prices and sales from food security stocks shall be made at no less than the current domestic market price for the product and quality in question.

The clear preoccupation behind this language is to ensure countries do not use a reserve to provide price support to producers. The stricture that targets be “predetermined” makes sense: For a reserve to be effective, it needs to operate in a transparent and predictable fashion, protected from the whims of the current ruling party.

The insistence on “current market prices,” however, is ambiguous. It is not clear which market is intended—global, national or local. Prices on commodity exchanges are in constant flux, and so are currency values, further complicating the measurement. The footnote to Annex 2 paragraph 3 acknowledges that a reserve stocked at administered prices (i.e., for which the government declares at what price it will purchase grain for the reserve rather than buying on an open market at the price the market sets) will need to count any difference as trade-distorting support. This support is captured in the Aggregate Measure of Support, or AMS. For a country that declared no AMS when it signed the AoA, as is the case for most developing countries, the difference will have to respect the *de minimis* limits. This is not likely to pose a problem.

In 2006, the then chair of the Doha agriculture negotiations, Ambassador Falconer of New Zealand, wrote about food aid provisions in Annex 2 (the Green Box) as part of a series of reference papers to try to elucidate where governments were agreed and where interests continued to diverge. Here is what Ambassador Falconer had to say about what constitutes a market price:

In a situation, for instance, where a developing country government effectively is the main (if not sole) purchaser of products from producers for provision at less than the purchase price to the needy, what is the effective meaning of a “market price” in the first place? In that situation—and it can surely not be denied that footnotes 5 and 6 [N.B. see footnote 2 below] provide very precisely for that situation—how can it be said meaningfully that the effective standard to govern that is a “current market price”? In that situation there isn't a “market price”. There is a purchase price from the government. There is a (subsidized) price to consumers. And, by definition, that purchase price is higher than the sale price. It is, in that sense, subsidized, but seemingly legitimate through the existing provisions.<sup>5</sup>

**Ambassador Falconer seems to be suggesting a pragmatic reading of the rules. If WTO members could clarify this point, it could encourage developing countries to play a more**

active role in tackling the weaknesses of their food markets, without suggesting a return to centralized control of food commodity markets that a number of developing countries used to practice.

Note, the AMS explicitly does not count the other costs associated with a price-support program, such as storage costs; only the gap between administered and market prices.

The Aggregate Measure of Support (AMS or Amber Box) is a calculation of all public support to agriculture not otherwise excluded in Article 6 or in Annex 2. Its parameters are outlined in Annex 3 of the AoA. Developed country WTO members committed to reduce their AMS by 20 percent over five years (1995–2000), while developing countries agreed to a 13.3 percent cut over ten years. LDCs were not required to reduce their AMS—a moot point given they did not actually have such programs.

The AoA rules came about in part because the U.S. and the EU started the 1980s with large public stocks and spent the 1980s trying to outspend one another's export subsidies in a bid to find export markets for the surpluses. The rules governing the use of these stocks were inadequate and their disposal disrupted markets for both local producers in developing countries and for competing exporters. Food aid was one of the many vehicles used to dump the surpluses.

This is not the reality confronting WTO members in 2010. The WTO negotiations on agriculture look increasingly crippled by their adherence to the Uruguay Round framework, first outlined in 1985, and finally signed into law in 1994. The U.S. and the EU continue to subsidize agriculture (though the programs have changed). Their farmers continue to go out of business, while those who remain make up an ever-older segment of the population. The policies in place are dismaying, and in some cases scandalous. But they are not the primary concern of most of the world's agricultural officials, confronted as they are with rising levels of hunger, a still-growing population, increasingly uncertain growing conditions due to climate change, soil erosion and water shortages, and with new and large demands on the food supply to meet non-food needs such as energy. There is an urgent need for new trade rules that acknowledge these challenges head-on. Increased public investment in agriculture is part of the new reality for trade officials.

## B. Governing reserves

A number of aspects of government spending and regulation of the economy remain outside the purview of the WTO. The rules concerning government procurement are part of a plurilateral agreement, meaning that only some (in this case 28) member states have committed themselves to the rules. Governments continue to shelter many public services and goods from open bidding processes—particularly from bids made by companies based in other countries.

If the government is issuing contracts to buy and sell grain for a public reserve, then public procurement rules could come into play. If the government operates through a third party, then that party will also be subject to disciplines, possibly as a state-trading enterprise (STE).

The WTO defines a state-trading enterprise as follows:

Governmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level or direction of imports or exports.

The general rules governing STEs are set out in article XVII of the original 1947 GATT agreement. A grain reserve will have to be a state-trading enterprise of some form. But it need not engage in international trade directly, and so may not be subject to article XVII. Yet even without engaging directly in trade, if the reserve is a big buyer and seller in the domestic market, it is likely that existing and would-be trade partners will monitor the reserve's behavior very carefully. GATT rules put the onus on STEs to operate from purely commercial considerations, which could be said to preclude the kind of public policy objectives outlined for a reserve here. On the other hand, it is possible to argue that the kinds of objectives a government might have in mind, including the need to limit price volatility, are also commercial considerations—in particular for a nascent or under-capitalized private sector. To flourish, the private sector needs a regulatory framework. Risk needs to be kept to manageable levels. For a number of developing countries, a case for some kind of “priming of the pump” could be made on commercial grounds.

GATT Article XVII 1. (b)

The provisions of subparagraph (a) of this paragraph shall be understood to require that such enterprises shall, having due regard to the other provisions of this Agreement, make any such purchases or sales solely in accordance with commercial considerations,\* including price, quality, availability, marketability, transportation

and other conditions of purchase or sale, and shall afford the enterprises of the other contracting parties adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sale.

The Doha proposals on state trading enterprises are contained in Annex K of the December 2008 text, which deals specifically with “Agricultural Exporting State Trading Enterprises.” It is effectively an annex about the Canadian Wheat Board (CWB); after a dozen failed attempts to have the CWB declared illegal under its trade agreements with Canada, the U.S. is now seeking new WTO rules to eliminate the entity. The new rules would also curtail future attempts to establish a monopoly over exports among any large exporter. They do not preclude the establishment of a grain reserve; the CWB attracts attention because it is a commercial competitor for agribusinesses such as Cargill and Bunge. A grain reserve is quite likely to trade to some extent in international markets, but its operations would be too small in most imaginable scenarios to warrant commercial attention. There are also provisions to create special and differential treatment for small-scale STEs in developing countries, where the STEs handle less than a 5-percent share of world trade.

### C. Operating price bands

A price band refers to a policy of keeping prices within a particular range. The price can rise and fall as the market dictates, but when it hits a pre-determined floor or ceiling, the government (or an arms-length institution) will intervene to either stop prices falling any lower, or to stop them rising any higher. Most public stock policies that are intended to limit price volatility use their stocks to make this happen: They buy and release stock according to the way prices are moving. Trade policy can also play a role in managing a price band: The point of tariff quotas, for example, is to allow a certain amount of imports in and then to discourage any further imports by making the tariff much higher on any imports above the predetermined level.

Systems such as the EU’s variable levies, which had constantly changing tariffs so as to keep domestic prices as stable as possible, worked along these lines. But the variable levy is banned under AoA rules. In practice, the EU’s use of the levies did a lot of damage to some developing countries’ agriculture by pushing the effects of price instability within the EU entirely onto world markets. In practice, it has proved difficult for governments to resist the pressure to abuse variable levies to keep food prices higher than they would be under freer trade, at the expense of poorer consumers.

Tariff quotas persist, however, under rather complicated AoA rules. Countries can continue to operate more than one tariff level for the same product. However, the tariff does not vary according to price (as a variable levy would); instead, the lower tariff is set to allow goods to come in and the higher tariff is usually prohibitive, designed to block most or all imports above the agreed quota.

The AoA obliged developed country WTO members to commit to lower their tariffs by a given percentage. It also required developing countries to reduce their tariffs, albeit by a lesser amount. Some developing countries had the option of binding their tariffs instead (committing never to raise above the bound level) but not committing to actually lower their tariffs by a fixed percentage (all LDCs were given this option). The prohibition against raising tariffs above bound levels is a powerful one for a number of WTO members: The Doha negotiations broke down in 2008 over the question of whether the special safeguard mechanism (SSM), proposed by the G33 for use by developing countries, should allow countries to raise tariffs over the levels that were bound in the AoA.

In practice, the AoA rules have created tariff ceilings that are well above actual tariff levels. Many developing countries apply much lower tariffs than the ceilings they set in their AoA schedule, giving governments the ability to raise and lower tariffs in practice. This policy space, often referred to as “water” in the tariffs, is frowned upon by exporting countries, because their exporters dislike the uncertainty it creates. In practice, governments have proved reluctant to raise tariffs, even in the face of import surges, leading policymakers to argue that increased tariff flexibility (e.g., as sought by the G33 in the Doha negotiations) is not useful. Not all WTO members have a gap in their bound and applied tariff rates. In any case, an ad hoc system has little to commend it, from the perspective of either the public or private sector.

The interests of an open and transparent trading system would be better served by ending the reliance on informal “water” in the tariffs. Countries should be allowed to operate properly administered tariff systems that allow tariffs to rise and fall based on clear and published criteria so that traders may plan accordingly. Such a policy would require changes to the AoA and to the proposals now included in the Doha negotiations.

Governments banned price bands in the WTO rules on the grounds they are trade-distorting, yet there are many reasons why governments might want to set price floors and ceilings. Price bands are common in a number of sectors (particularly in energy), where the national interest is seen to need protection from purely market-based outcomes. If the sector is not sufficiently competitive, for example, price bands can protect from predatory pricing practices. Or if a



sector is under-capitalized, the stability of a price band can attract investment and help secure long-term growth in a sector such as agriculture that is marked by highly unstable short-run price fluctuations.

There are ways around the WTO rules because so many governments operate lower tariffs than the levels they have bound, but they are not particularly satisfactory—in any case, circumventing the rules is hardly best practice, even if it has some practical merit. A price band is essential for the functioning of an effective reserve system. Although the price band does not have to operate at the border, it cannot operate without distorting prices at some level. It does not have to apply variable levies to succeed. AoA rules will need to be revised in the future if a lasting system of reserves is to be established.

#### D. Managing volume

One of the major preoccupations shared by economists and the private grain companies alike with regard to stocks is how the surpluses will be handled. Historically, low-price years outnumber high-price years and it is difficult for authorities to estimate the level of stocks to maintain. There is an inherent tendency to over-estimate the price required for a given level of production. The existence of the stock changes the cost-price calculations of the producers involved, which encourages more production (since the price is stable) than would normally occur at the same price in an open market (which would be a much less predictable event). Consumption patterns also change in periods of scarcity; to the extent a reserve is providing emergency cover for a crop failure, for example, the amount required will be less than the amount of food eaten in more normal times, as the reserve will release food under conditions that are not themselves normal.

On the import and export side, the rules governing state trading enterprises may apply. If this were the case and if the grain is sold for less than prevailing market prices, the difference will count as a subsidy to producers and it must be counted in the AMS. If the grain is sold for higher than prevailing prices, as India has done with its domestic wheat stocks in some years, there could also be a subsidy implied under WTO rules.

If the grain is exported, there are also rules on export subsidies to consider:

AoA. Article 9. 1. (b)

The sale or disposal for export by governments or their agencies of non-commercial stocks of agricultural products at a price lower than the comparable price charged for the like product to buyers in the domestic market;

If the reserve is properly managed, the price gap should not be large. The point of a functioning reserve is to avoid price spikes that will endanger peoples' access to food. By buying when prices are low, the government both creates a stock against future shortages, but also takes some of the downward pressure off market prices by absorbing some of the supply.

The AoA rules reflect a preoccupation with prices, and with removing volume-based trade measures (such as the variable levies considered above). The logic of the system suggests that one world price would be the best ultimate reference point. The logic of WTO rules is to converge on traded prices (e.g., import prices) and, ultimately, global prices, so that the most efficient producers on a global scale are rewarded. Yet the income disparities that exist mean that the majority of the world's population have no purchasing power in such a market.

Stocks work on a slightly different logic, on the assumption that prices are an imperfect indicator of supply and demand, and that supporting measures are needed to ensure price signals do not mislead farmers or consumers into short-term responses that might undermine food security. At the same time, stocks make the statement that, no matter where short-term prices may go, there is food on hand. Ultimately, food security depends upon a secure supply (supply is a necessary if not sufficient precondition for the realization of food security). That supply can come from production, trade and/or stocks. In a crisis, stocks are the obvious first port of call. Their presence, properly managed, can in turn provide the stability to allow for longer-term investment and planning.

Managing stock rotation (and total volume) is one of the biggest challenges a reserve will face. It is something an open market does very well, making a public reserve look clumsy by comparison. For the market to do its job, however, a number of pre-conditions have to be met. Some of these pre-conditions, such as perfect information, perfect competition and no barriers for new entrants to the market, are very difficult to meet even partially in practice. And there are things that no market can do, however perfectly its underlying assumptions are met: A market cannot meet the demands of those who lack the purchasing power to be "heard" in the market. If money is said to talk, then a fifth of the world's population has no voice.



A decentralized system of reserves that supports local development objectives and provides a country with a dispersed physical reserve of grain could avoid the expense and complications of a large, centralized granary. For the majority of developing countries, such actions would have too little impact on world markets to be likely to raise commercial concerns for traders. For countries with a large population, however, governments will have to decide if their priority is to accept the principles of the AoA, which requires “least trade-distorting” options and presumes the public good is best served by open markets, or whether they want a more interventionist role, that requires trade policies to meet equity as well as efficiency objectives.

## VI. Trade rules and reserves: Some ways forward

The AoA has little to say directly about reserves. Some of the rules are restrictive; most are not. Strategically, especially given how badly blocked the Doha negotiations are, it might make sense to get one or more governments to experiment again with reserves in a more serious way, to test just how and when the AoA rules are a hindrance, and to guide where best to make reforms. Judging by the speeches made in Rome in November 2009, at the World Summit on Food Security, there are a few governments who are ready to take this step.

Nevertheless, the rules are not as supportive as they might be. Perhaps it is time to revisit article 20 of the AoA, which provided the terms for governments to review the AoA in the light of countries’ implementation experiences. In 1998, when the process of so-called “Analysis and Information Exchange” began, the AoA was arguably too new for there to be a useful debate. Now, 15 years after the coming into force of the AoA, it could be time to look at article 20 again.

Part XII: Article 20

Continuation of the Reform Process

Recognizing that the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform is an ongoing process, Members agree that negotiations for continuing the process will be initiated one year before the end of the implementation period [i.e. in 1999], taking into account:

- a) the experience to that date from implementing the reduction commitments;
- b) the effects of the reduction commitments on world trade in agriculture;
- c) non-trade concerns, special and differential treatment to developing country Members, and the objective to establish a fair and market-oriented

agricultural trading system, and the other objectives and concerns mentioned in the preamble to this

Agreement; and

d) what further commitments are necessary to achieve the above mentioned long-term objectives.

One of the issues confronting the operators of a reserve is the decision on where to set prices. Failure to get this right has collapsed many reserves. The first big parameter is the market; a reserve has to reflect underlying market realities. But there are other issues, too, that policymakers have to consider, not least because prices are a flawed though important signal for economic activity. The food price crisis understandably focused minds on price spikes. Yet a reserve is important for the more normal situation of commodity prices that are at or below break-even prices for producers as well.

Agricultural prices are problematic because of their tendency to hover at prices below what is profitable for producers. While the profits available to agriculture as a whole are significant, the farmgate share of those profits is often too small to allow farmers to cover their costs, let alone to invest in the future. Low prices plague producers in many countries, and under many different policy conditions. Recent prices, including the 2008 price spike, which affected a large number of agricultural commodities simultaneously, still left prices relatively low in historic terms. In any case, the increase in the prices of agricultural inputs, especially seeds and fertilizer, took a big piece of the profits out of farm household net income (Mitchell, 2008).

A number of policy initiatives push for higher prices to combat this trend, arguing that rural economies need the influx of capital and the environment needs the cushion of more profitable farm operations. If governments get into reserves, they are going to need to consider these issues when they set the price band around which to operate.

An argument is often heard at this point as to where to set prices: low for consumers or high for producers? The dichotomy is not especially helpful; the long-run interest has to be remunerative prices for agriculture with sufficient competition to ensure rising productivity (using measures that account for environmental costs). Making food accessible to those who lack purchasing power is better solved through income-related strategies than by asking producers to subsidize consumers with cheap food. In any case, neither a grain reserve nor more-than-open trade directly tackle the problem of chronic hunger linked to poverty. Yet under the right conditions, both have the potential to contribute to greater rural prosperity.

## VII. Time for a new trade framework

The AoA was prompted by a desire to limit the problems created, in large part, by the European Union, Japan and, in some instances, the United States. In the 1980s, particularly, as the U.S. lowered the loan rate it paid to farmers, creating a big increase in production as farmers tried to keep their income steady, and as the EU failed to deal with its butter and grain mountains, there was a strong multilateral consensus that tough rules were needed to liberalize agricultural trade. The programs were also deeply unpopular with multinational agribusiness, which wanted less public regulation and interference in the markets, cheaper commodities (and so an end to production limits) and increased trade volumes.

The AoA rules reflect this preoccupation with curbing over-production, an issue that in today's volatile and uncertain markets seems passé. AoA rules also highlight the political difficulties members faced in attempting real reform: both the main offenders of 1980s global agriculture, the U.S. and the EU, continue to operate a number of trade-disrupting programs.

The AoA rules are also largely geared around prices. Measures that look at volumes rather than prices of imports (e.g., volume-based import tariffs or quantitative restrictions of any form) are frowned upon or banned altogether. Subsidies are assessed (in a convoluted and rather unsatisfactory way) based on discrepancies between prices paid to producers and prices prevailing in world markets, which requires some rather valiant assumptions about how those prices are set and what they tell us about what situation might prevail were governments not in the mix. The WTO rules ignore the problem of how excessive private-sector market power distorts prices in agricultural commodity trade.

Even though the problems the rules were designed to address have not disappeared, the context in which WTO members are working—and the composition of the WTO membership—have changed significantly. The WTO now comprises 153 members. These include 32 of the 49 countries classified by the UN as Least Developed Countries (LDCs). An additional 24 WTO members are classified as net-food importing developing countries (NFIDCs). A number of these countries are heavily dependent on international agricultural commodity trade for such export revenues as they receive and so they have clear interest in the rules that govern such trade.

Practically, trade negotiators should be looking to amend the AoA so as to establish a framework of rules that:

a) allows the operation of price bands for food;

b) explicitly acknowledges the need to stimulate production in many developing countries, and acknowledges the inherent weaknesses of the private sector in many of these countries, thereby creating an important role for local or national public authorities;

c) tackles the problem of unduly concentrated market power in global commodity markets;

d) recognizes the specificities of agricultural economics and the limitations of standard assumptions in free trade economics as they apply to the sector;

e) gives a clear and unambiguous place to governments' obligation to realize the universal human right to food, including the need to regulate markets if food security is thereby enhanced; and

f) allows governments to develop policies that encourage surplus capacity to produce food, but that keeps that surplus in reserve rather than fully exploited. That is, governments should aim to have a cushion should normal supplies fail, but not a constant production glut that keeps prices depressed, ecosystems over-exploited and agriculture under-valued.

Reserves are about volumes rather than prices, though of course the two elements are intimately linked. But a physical reserve of food provides insurance that a given amount of grain will be available at all times. A financing mechanism is only a guarantee that the country can buy as much food as that amount of money can buy at a given time; the actual volume of food the money will buy will fluctuate because food prices fluctuate. A financial reserve is cheap, simple to administer, but not, ultimately, edible. Nor is access to world markets enough of an answer, however important such access is in the wider fight to end hunger. A reserve can co-exist with other tools, including global trade, and play a vital role in the realization of the universal human right to food.

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2. GRAIN website (<http://farmlandgrab.org>).
3. See commentary by Steve Suppan at <http://iatp.typepad.com/thinkforward/>, category: Market Speculation.
4. (This is footnote 5 of Annex 2) "For the purposes of paragraph 3 of this Annex, governmental stockholding programmes for food security purposes in developing countries whose operation is transparent and conducted in accordance with officially published objective criteria or guidelines shall be considered to be in conformity with the provisions of this paragraph, including programmes under which stocks of foodstuffs for food security purposes are acquired and released at administered prices, provided that the difference between the acquisition price and the external reference price is accounted for in the AMS." A second footnote, number 6, also refers to paragraph 3: "For the purposes of paragraphs 3 and 4 of this Annex, the provision of foodstuffs at subsidized prices with the objective of meeting food requirements of urban and rural poor in developing countries on a regular basis at reasonable prices shall be considered to be in conformity with the provisions of this paragraph."
5. Para. 4; p. 4, [http://www.wto.org/english/tratop\\_e/agric\\_e/ref\\_paper\\_greenbox\\_e.pdf](http://www.wto.org/english/tratop_e/agric_e/ref_paper_greenbox_e.pdf).

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