

***The Estey***

---

**Journal of  
International Law and  
Trade Policy**

---

**Food Security, Strategic Stockholding and Trade-Distorting Subsidies: Is There a Permanent Solution?**

William A. Kerr

*Associate Member, College of Law, University of Saskatchewan, Canada*

In 2013 the Bali Package was agreed by members of the WTO. One aspect of the Bali Package dealt with the acquisition of stockholdings of agricultural products for food security purposes. India, in particular, had been pushing hard for an exemption for these purposes from the limits on domestic support for agricultural producers it had agreed in the Uruguay Round. India wanted no limits on its use of such subsidies; some other members of the WTO rejected open-ended subsidies. The members of the WTO, including India, agreed that the larger Bali Package could go ahead, with the provision that there would be a moratorium on the launching of countervail suits against subsidies for acquiring stockholdings while a permanent solution was negotiated by the WTO Ministerial in 2017. The moratorium would end in 2017 even if a permanent solution were not yet agreed. India subsequently changed its stance, instead demanding that the moratorium on countervailing actions remain in place until a permanent solution could be negotiated. The Bali Package was held up until almost the end of 2014, when members agreed to India's demand. Thus, finding a permanent solution becomes central to disciplining domestic agricultural support provided by developing countries. The likelihood of a permanent solution being found is investigated in the article and no obvious solution identified. Thus, developing countries appear no longer constrained by

trade law when making expenditures to support farmers. This is a major retreat from the achievements of the Uruguay Round Agreement on Agriculture.

Keywords: Bali Package, domestic support, food security, India, stockholdings, trade distortion

Yesterday marked a year since the gavel came down at the Ministerial Conference in Bali to agree the 10 decisions which we now call the Bali Package. That package constituted a huge success for the WTO. It was the first multilateral outcome in the history of the organization. But, despite that hard-won success, we ran into some trouble in implementing what had been agreed. Since July we had an impasse which has had a paralyzing effect on negotiations across the board.

The impasse related to the political link between two of the Bali decisions — the Decision on Public Stockholding for Food Security Purposes, and the Trade Facilitation Agreement. But I'm pleased to say that 10 days ago we resolved this impasse. WTO members came together in a Special General Council meeting and took a number of important decisions.

First, they clarified the Bali Decision on Public Stockholding for Food Security Purposes to say that the peace clause agreed in Bali will remain in force until a *permanent solution* is found. It also established an accelerated timeframe for the negotiations [emphasis added].

Roberto Azevêdo  
Director General  
World Trade Organization  
December 8, 2014

The member states of the World Trade Organization have been seeking some means of moving the Doha Round of negotiations toward a successful conclusion since the middle of the first decade of the 21st century – but progress has remained elusive. Over the tenure of Pascal Lamy as director general of the organization, the approach was steadfastly constrained to finish the round as a *single initiative*, whereby nothing could be agreed until all issues were agreed. The approach led to deadlocked negotiations. When Roberto Azevêdo was appointed to replace Mr. Lamy as director general he abandoned the *single initiative* approach in favour of a piecemeal approach. Considerable effort was put into having a success so that the credibility of the WTO as an institution where trade negotiations could be successfully conducted was restored. A package of supposedly *low-hanging fruit* was assembled for the WTO Ministerial to be held in Indonesia in December 2013 – the so called *Bali Package*. While there were the usual last-minute brinkmanship and the theatre of meetings into the early hours of

the morning, a deal was hammered out and a relieved Director General Azevêdo could announce a success (Kerr, 2014). The centrepiece of the Bali Package was an Agreement on Trade Facilitation, but there were a number of other trade issues that were also part of the Bali Package – including one that dealt with subsidies used to acquire strategic stockholdings of food for purposes of food security. The major member state interested in this question was India, although its resolution had ramifications for many developing countries, and for the broader conduct of trade in agricultural products.

India wanted the use of subsidies provided for acquiring stockholdings for food security reasons to be unconstrained. Some other members of the WTO would not accept this – what was once considered a *low-hanging fruit* where an agreement could be reached no longer appeared as such. India attempted brinkmanship to get a positive result for its position at the Bali Ministerial, refusing to agree to the Bali Package unless its view was accepted. The Bali Package almost failed to be agreed at the Ministerial, which would have had serious consequences for Director General Azevêdo's vaunted piecemeal approach, the prestige of the WTO and Roberto Azevêdo's personal reputation and ability to lead the organization. In the end India found a way to compromise and the Bali Package was saved.

The relief was, however, temporary and all was not well. On July 23, 2014 the Indian delegation at the World Trade Organization indicated that it could not support the implementation of the Trade Facilitation Agreement – the centrepiece of the Bali Agreement reached in December 2013 (Bridges 2014 – July 24). As WTO decisions are taken by consensus, India's failure to render support effectively put the progress made at the WTO Ministerial meeting in Bali on hold. In essence, India was reneging on its commitments made at the Bali Ministerial. This impasse continued until the end of November 2014. In essence, India got most of what it wanted – although *de facto* rather than explicitly.

In the lead-up to the Bali Ministerial, India put forth the position that purchases of agricultural products from its farmers for the purposes of building up stocks for food security purposes should be allowed without limit. The stocks would then be sold to consumers at subsidised prices. The purchase of stocks would put upward pressure on prices for farmers, leading to additional trade-distorting output. The additional domestic output would mean less demand for imports, thus reducing the benefits exporters could expect from WTO commitments. Thus, the Indian proposal could be seen as a simple policy of subsidising farmers – exactly the type of policy the limits on domestic support agreed in the Uruguay Round were to discourage (Gaisford and Kerr, 2001). Stripped of its stockholding rationale, the Indian policy would be

considered an actionable subsidy. From the viewpoint of the United States and the EU, if a permanent exemption for stock-building was allowed without limits, this would release India (and other developing countries) from commitments on the use of domestic support from the Uruguay Round. In the lead-up to the Bali Ministerial, no acceptable proposal on limits to stockholdings was reached.

A classic diplomatic compromise was proposed and accepted by the United States and most of the WTO membership – the exemption from countervail actions would be allowed for four years while negotiators attempted to find a permanent solution. In essence, this was *kicking the can down the road* and leaving resolution to future negotiations. If no solution was found after the four years, the exemption would end. In effect, what was proposed meant that if India exceeded its Uruguay Round limits on domestic support, other WTO members would not bring forth countervail suits for the four years. India would not agree to the compromise, precipitating the crisis at the Bali Ministerial. To save the Bali Package, India finally agreed to an arrangement whereby the parties would continue negotiations to find a permanent solution – the negotiations should be concluded by the WTO Ministerial meeting in 2017, or approximately within four years. WTO members agreed not to bring countervailing duty cases if Uruguay Round limits of domestic support were breached by India (or other developing countries) until the 2017 WTO Ministerial. There was also a new, *soft law* commitment that stockholding policies would not adversely affect the food security of other members (Bridges, 2013). Again, if no permanent solution were found by the 2017 deadline, Indian subsidies could have been subject to retaliation through countervailing duties.

This compromise was what India reneged on, subsequently refusing to budge, thus holding the implementation of the Agreement on Trade Facilitation to ransom through the entire latter half of 2014. The resolution of the impasse was what was reported in the quote that began this article – that no countervail suits would be brought against subsidies justified on the basis of acquiring stockholdings for the purposes of food security until a permanent solution is found. There is no deadline specified for the finding of a permanent solution. If no solution is agreed, the *peace clause*, whereby WTO members refrain from bringing countervail suits, will remain in place indefinitely. *De facto* this means that there are no constraints on the use of agricultural subsidies by developing countries. Thus, while India did not explicitly receive the exemption it sought from WTO limits on the use of subsidies for the purposes of acquiring stocks of food, *de facto* it has achieved its goal. Thus the question of whether a permanent solution is achievable requires further examination.

The current impasse – or lack of a permanent solution – stems from three different interrelated policy goals. The first is food security, and how it can be achieved. The second is stockholding of foodstuffs as part of the policy mix to achieve food security. The third is the subsidization of agricultural production through raising prices. Raising domestic prices encourages farmers to increase output, which reduces the opportunities for trading partners – in the case of an importing country, raising domestic prices paid to its farmers and increasing output means fewer opportunities for imports – a trade distortion (Gaisford and Kerr, 2001).<sup>1</sup> One way to raise domestic prices is for governments to enter the market to purchase food to expand stockholdings.

In the years leading up to the Uruguay Round negotiations, the European Union, the United States and many other countries were intervening heavily in their agricultural markets to raise the prices farmers received – in attempts to increase incomes from farming. These interventions considerably distorted trade and the price subsidies continued to grow. This situation led to beggar-thy-neighbour subsidy wars and spilled over into other aspects of international relations. Prior to the Uruguay Round, subsidies for agriculture were exempt from the General Agreement on Tariffs and Trade (GATT) disciplines.<sup>2</sup> To reduce international acrimony and the continued expansion of trade-distorting subsidies, it was agreed that disciplines on agricultural subsidies would be included in the Uruguay Round agenda for negotiations. The Uruguay Round's Agreement on Agriculture included limits on *domestic support* for agriculture (Brink, 2006).

The limits agreed on domestic subsidies are total expenditure caps known as Aggregate Measurement of Support (AMS), which were notified to the WTO by individual member states based on an agreed list of subsidies that were considered trade distorting (Orden, et al., 2011). A number of countries, particularly developing countries, did not notify the WTO of an AMS value. In those cases, the effective limit on the use of trade-distorting subsidies became the *de minimis* values allowed all countries – maximum values of subsidies which are allowed without the threat of countervail actions being brought by other member states of the WTO. In the case of developed countries the *de minimis* limit is 5 percent of the annual value of agricultural production, while for developing countries it is 10 percent.<sup>3</sup>

For India, according to Gopinath,

As India did not establish a Bound Total AMS, it has zero calling on CTAMS.<sup>4</sup> The allowable AMS support is therefore limited to the *de minimis* level of 10 percent of a product's value (for each product specific AMS) and 10 percent of the total value of agricultural production (for non-product specific AMS) (2011, 283).

The *de minimis* values fluctuate from year to year because they are based on the current value of production. India's AMS was established when Indian subsidies were relatively small and easily covered by the *de minimis* exemptions (Gopinath, 2011). As part of the Doha Round, there have been discussions surrounding reductions in the *de minimis* exemptions for both developed and developing countries (Brink, 2006).

In 1994 India, along with all other members of the GATT, accepted the Uruguay Round Agreement on Agriculture, including a low limit on its domestic support for agriculture. In the 20 years since the end of the Uruguay Round, India has changed considerably. From being a poor, developing country overwhelmingly based on agriculture, it has initiated major reforms of the economy (Perdikis, 2000), has been able to grow rapidly and diversify the economy to become a member of what have become known as *emerging economies* (Khorana et al., 2010). It is one of the BRIC<sup>5</sup> countries. As with many countries that become diversified and grow, India wishes to provide support to its lagging sectors, particularly agriculture.<sup>6</sup> India also wishes to ensure that poor consumers have reasonable access to sufficient food. One way to accomplish these dual objectives would be for government to enter the market and purchase food – in the process driving up prices for farmers and then selling that food at lower prices to consumers. This is a classic deficiency payment policy that was typical in developed countries in the past.<sup>7</sup> The problem is that to put such a policy in place would mean that the required subsidies could exceed the *de minimis* limits agreed in the Uruguay Round.

Exceeding the *de minimis* limits means that the subsidies, as currently classified, could be subject to countervailing duty actions. Further exceeding the *de minimis* limit does not simply mean that the excess above the limit is subject to countervail. According to Brink,

An AMS can increase from zero without any consequence until it reaches the threshold level. When it exceeds that level, the consequence is immediate: the whole AMS (not just the part that exceeds the threshold) is included in the CTAMS (2011, 31).

In effect this means that the entire subsidy is subject to countervail duties actions. India might exceed its *de minimis* limits sometime in 2015, depending upon a complex set of factors (Gopinath, 2011). Expansion of subsidies to achieve the goals of increasing farm prices and lowering food prices for the poor could well push India over its *de minimis* levels. Hence, India in particular among developing countries has been keen on finding some method of lifting the constraint.

One of the proposals that arose from the *food price crisis* of 2007-2008 was that:

... developing countries would not need to account for MPS<sup>8</sup> in the AMS when they procure public stocks at subsidized prices *in certain situations*

from low income or resource poor producers. This would effectively include some MPS measures in the green box<sup>9</sup> [emphasis added] (Brink, 2011, 46).

Thus, there was some urgency on India's part that the provision on public procurement for purposes of acquiring stockholdings be part of the Bali Package. India was seeking a means by which it could escape the constraints on agricultural subsidies that it had agreed to in the Uruguay Round Agreement on Agriculture. India wished to use these subsidies without constraint or limit. If that could be agreed, then the *de minimis* would be lifted.

Other members of the WTO, while understanding that public stockholdings could contribute to food security, were not willing to agree to their procurement being unfettered – the only *in certain situations* referred to in the quote above. Otherwise, procuring public stockholdings could become a major loophole whereby the hard-won progress on restraining domestic support agreed at the Uruguay Round would be nullified in the case of developing countries. Some other members of the WTO could not accept such a loophole. It would be the domestic support equivalent of the infamous indefinable pre-Uruguay Round provision whereby GATT members were only admonished to control the use of export subsidies if their impact resulted in no “more than an equitable share of world export trade in the product” (Rude, 2007, 284). As a result, export subsidies were able to be used without limit and led to major distortions to international trade and subsidy wars. Some WTO members could see that the unlimited use of procurement for public stockholdings would have a similar effect for expenditures on trade-distorting domestic support.

The question arises then, if unconstrained use of subsidies will not be an acceptable solution to the public stockholdings for food security purposes, what would constitute the promised permanent solution? India is unlikely to accept a limit that is simply larger than the 10 percent of the value of agricultural production available under its agreed developing-country *de minimis*. The new value also cannot be tied to *de minimis* because, as part of the broader Doha Round negotiations on agriculture, there is a proposal to reduce the *de minimis* values below their current levels (Brink, 2006). Hence, having the permanent solution tied to *de minimis* could threaten the wider Doha Round because India would not accept it. Further, while some value greater than 10 percent of the value of production could be negotiated with India, it may not suit the needs of other developing countries that may wish to engage in stockholding. For transparency, some general rule is required, not arbitrary limits negotiated for each developing country individually.

A permanent solution thus requires a closure mechanism that sets limits to the acquisition of stockholdings. Thus, the permanent solution needs to be found

elsewhere, presumably in the policy goal of food security, or in the operation of stockholding policies.

Starting with food security, there exist almost as many definitions as there are institutions or individuals that propose them (Kerr, 2011). To explore the facets of food security that pertain to the question of constraining expenditures on agricultural subsidies, one of the most commonly accepted definitions has been chosen – that of the Food and Agricultural Organization of the United Nations (FAO). The FAO definition is as follows:

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life (FAO, n.d.).

The definition is rife with vague or difficult to operationalize notions. This does not mean that it is not a good definition – it clearly captures the essence of what it means to be food secure. It is just that there is a great deal that could be argued over by a country seeking to remove constraints on its agricultural subsidies. What is “sufficient food”? One might be able to define dietary needs – some mix based on nutrition possibly – but adding in food preferences would seem to leave how much of what kind of food wide open. What does “social access” to food mean? “All people” is very broad – if need be, a great deal of food could be purchased and distributed. What is enough food for a “healthy life”? What is sufficient food for an “active life”? Active athletes tend to consume very large quantities of “calories”. Presumably, active athletes fit into the definition of “all people”. Does this mean that food security requires that sufficient food must be available so that “physical, social and economic access” can be guaranteed just in case everyone becomes an active athlete. While, of course, this is a rather silly interpretation of food security, experience would suggest that in the arena of agricultural trade policies and subsidies, extreme interpretations of the *letter of the law* are the norm rather than the exception.<sup>10</sup> Once a definition is accepted into trade law, then it will be open to extreme interpretations.

The bottom line is that the permanent solution to the disagreement over expenditures by developing countries to acquire stockholdings for food security purposes cannot lie in loosely worded definitions such as those which exist for food security. Over time, WTO dispute panels might provide some clarity around the terms in a food security definition such as the one above, but what a panel would decide cannot be predicted with any certainty and, thus, neither side is likely to agree to such a definition. There is no automatic closure threshold that would constrain the use of procurement subsidies. In other words, member states might accept a limit greater

than the current *de minimis* provisions as long as expenditures could be expected to be constrained rather than open ended. The attainment of food security provides no such automatic constraint.

If food security does not provide the basis for a permanent solution to the agricultural subsidy question surrounding stockholdings, does a solution exist in the theory of stockpiling? The question of optimal levels of stockholding has been of long-term interest to, among others, agricultural economists (see, for example Johnson and Sumner, 1976; Hillman et al., 1976; Houck and Ryan, 1979).<sup>11</sup> It is still a topic of considerable academic interest (Gilbert and Morgan, 2010; Timmer, 2010; Gilbert, 2012). It is also the subject of considerable debate. There is no consensus on an optimum level of stockholdings. There is not even agreement as to whether public stockholdings reduce volatility in food prices or increase it – although the latter has more to do with the political reality of managing stocks, based on experience, than purely theoretical considerations. There is also no theoretical reason why food destined for stockholdings must be sourced from domestic production. It could be acquired in the international market. Of course, there is likely a political preference for sourcing stocks from domestic producers.

Given there is no agreement on a stockholding strategy to foster food security, it is unlikely that it can be used as a mechanism to discipline the use of agricultural subsidies. Agricultural subsidies are used to acquire stockholdings – by bidding the purchase price of product up against alternate purchasers. Stocks are acquired in this manner so that they are available for release into the market to moderate price rises, or to distribute to individuals in need when food prices spike due to disruptions in alternative sources of supply. This price-smoothing function can contribute to food security, particularly among the poor. For the disciplining of subsidies, an optimum, or even a maximum, stockholding quantity is required.

The optimum (or maximum) stockholding, however, is a function of the perceived degree of future market disruptions – drought, pest infestations, diseases, wars and other conflicts that disrupt food production, interruptions in international trade, internal transport failures between domestic markets, etc. While it is possible to use data from past events to determine the probability of markets failing to meet food security targets, and by how much, past events may not be good predictors of the future. Thus, a country can always argue that it needs more stocks, just in case a future disruption is larger than has been the case in the past. If stockholdings become *stocked out* at any point, then food security is not achieved.

Beyond the cost of acquiring stocks, holding stocks also incurs costs associated with storage. One might think that at some point the budgetary costs of holding and

managing stocks would naturally cap expenditures on acquiring additional stockholdings. Past experience from the EU, however, suggests that governments are willing to hold stocks far in excess of any food security need. In the pre-Uruguay Round Common Agricultural Policy of the EU, to raise farm prices large quantities of agricultural products were purchased and stored (although not for food security reasons). These stockholdings became the butt of many jokes – butter mountains, wine lakes, beef mountains, etc. The costs of storage were large, particularly for perishable products such as beef, which had to be kept frozen. At times, more than a year's supply of beef was kept in cold storage (Kerr and McGivern, 1991). Thus, the cost of holding and managing stocks seems unlikely to be a constraint on government expenditures to acquire stocks.

A further question pertaining to expenditures to acquire stocks relates to the turnover of stocks. Stocks are held to be released in times of shortages and rising prices – purchase stocks and hold them until needed. The reality is, however, that agricultural products tend to be perishable or subject to shrinkage due to the activities of pests such as rats, mice, birds and insects. As a result, stocks need to be renewed to ensure palatability, safety and expected quantities being available. In other words, long before they are actually needed, existing stocks will be released (or possibly destroyed) and new quantities acquired to replenish stocks. Thus, the length of time products are held in stock is flexible. If stocks are, for example, released to poor consumers, a government that wishes to raise the prices farmers receive by purchasing more can reduce the time products stay in storage, thus increasing the quantities required for replenishment. Given the diversity of products that can comprise stockholdings, no general rule can likely be agreed multilaterally regarding the duration of storage. As with food security objectives, stockholding theory does not appear to provide an obvious brake on expenditures for acquiring stockholdings for purposes of food security that would be required for a permanent solution at the WTO.

Hence, it would appear that no non-arbitrary basis for a permanent solution likely exists to the problem of acquiring stockholdings for purposes of ensuring food security. As a result, the outcome that arose from the agreement in late 2014 is likely to remain in place indefinitely. As countries have agreed to refrain from launching countervailing duties actions when expenditures for acquiring stockholdings exceed the limits for domestic support from the Uruguay Round, it would appear that developing countries no longer face any constraints on the amount of trade-distorting domestic support they can provide to their farmers. This is a considerable retreat from the achievements of the Uruguay Round. It may also make any further progress in the Doha Round more difficult.

## References

- Azevêdo, R. (2014) Azevêdo Opens 29th Geneva Week for Non-resident Members and Observers. Geneva: World Trade Organization, December 8, [https://www.wto.org/english/news\\_e/spra\\_e/spra45\\_e.htm](https://www.wto.org/english/news_e/spra_e/spra45_e.htm).
- Bridges (2013) Bridges Daily Update #5 | Historic Bali Deal to Spring WTO, Global Economy Ahead. *Bridges Daily Update*, No. 5, December 7, <http://www.ictsd.org/bridges-news/bridges/news/bridges-daily-update-5-historic-bali-deal-to-spring-wto-global-economy>.
- Bridges (2014) WTO Members Weigh Options as India Pushes Food Security Link on Trade Facilitation Deal. *Bridges News*, 18 (27) July 24, <http://www.ictsd.org/bridges-news/bridges/news/wto-members-weigh-options-as-india-pushes-food-security-link-on-trade>.
- Brink, L. (2006) WTO Constraints on US and EU Domestic Support in Agriculture: The October 2005 Proposals. *Journal of International Law and Trade Policy* 7(1): 96-115.
- Brink, L. (2011) The WTO Disciplines on Domestic Support. In D. Orden, D. Blandford and T. Josling (eds.) *WTO Disciplines on Agricultural Support*, 23-58. Cambridge: Cambridge University Press.
- FAO (n.d.) *Food Security Statistics*. Rome: Food and Agricultural Organization, <http://www.fao.org/economic/ess/ess-fs/en/>.
- Gaisford, J.D., and W.A. Kerr (2001). *Economic Analysis for International Trade Negotiations*. Cheltenham: Edward Elgar.
- Gilbert, C.L. (2012) International Agreements to Manage Food Price Volatility. *Global Food Security* 1(2): 134-142.
- Gilbert, C.L., and C.W. Morgan (2010) Food Price Volatility. *Philosophical Transactions of the Royal Society B* 265: 3023-3034.
- Goeul, C. (2013) Rules Versus Discretion in Food Storage Policies. *American Journal of Agricultural Economics* 95(4): 1029-1044.
- Gopinath, M. (2011) India. In D. Orden, D. Blandford and T. Josling (eds.) *WTO Disciplines on Agricultural Support*, 277-309. Cambridge: Cambridge University Press.
- Hillman, J., D.G. Johnson, and R. Gray (1975) Food Reserve Policies for World Food Security: A Consultant Study of Alternative Approaches (CSP/75/2). Rome: Food and Agriculture Organization, January.
- Hobbs, J.E., W.A. Kerr, and S.J. Smyth (2014) How Low Can You Go? The Consequences of Zero Tolerance. *AgBioForum* 16(3): 207-221.

- Houck, J.P., and M. Ryan (1979) *Economic Research on International Grain Reserves: The State of Knowledge*. Station Bulletin 532. St. Paul: Agricultural Experiment Station, University of Minnesota.
- Johnson, D.G. (1991) *World Agriculture in Disarray*. 2<sup>nd</sup> edition. London: Macmillan.
- Johnson, D. G., and D. Sumner (1976) An Optimisation Approach to Grain Reserves for Developing Countries. Reprinted in J. Antle and A.D. Sumner (eds.) *Selected Papers of D. Gale Johnson, Economics of Agriculture* (Vol. 1, 1996). Wallingford: CABI.
- Kerr, W.A. (2011) The Role of International Trade in Achieving Food Security. *Journal of International Law and Trade Policy* 12(2): 44-53.
- Kerr, W.A. (2014) Bali High or Bali Low: Is a Piecemeal Approach the Way Forward for the WTO? *Journal of International Law and Trade Policy* 15(1): 1-11.
- Kerr, W.A., and D.B. McGivern (1991) A Problem of Multiple Displacements - Canadian Concerns Over the Importation of Irish Beef. *Irish Journal of Agricultural Economics and Rural Sociology* 14: 49-65.
- Kerr, W.A., and L.J. Loppacher (2004) Antidumping in the Doha Negotiations: Fairy Tales at the World Trade Organization. *Journal of World Trade* 38(2): 211-244.
- Khorana, S., N. Perdikis, M.T. Yeung, and W.A. Kerr (2010) *Bilateral Trade Agreements in the Era of Globalization*. Cheltenham: Edward Elgar.
- Orden, D., T. Josling, and D. Blandford (2011) Introduction. In D. Orden, D. Blandford, and T. Josling (eds.) *WTO Disciplines on Agricultural Support*, 3-22. Cambridge: Cambridge University Press.
- Perdikis, N. (ed.) (2000) *The Indian Economy: Contemporary Issues*. Aldershot: Ashgate.
- Rude, J. (2007) Direct and Indirect Export Subsidies. In W.A. Kerr and J.D. Gaisford (eds.) *Handbook on International Trade Policy*, 282-291. Cheltenham: Edward Elgar.
- Timmer, C.P. (2010) Management of Rice Reserve Stocks in Asia: Analytical Issues and Country Experience. *Commodity Market Review 2009–10*, 87-120. Rome: Food and Agricultural Organization.

## Endnotes

---

<sup>1</sup> Although the trade distortion is delayed until stocks are released.

<sup>2</sup> The GATT organization was the predecessor of the WTO.

<sup>3</sup> The provisions for *de minimis* are further complicated by there being two categories, product specific *de minimis* and non-product specific *de minimis*. See Brink (2011) for a detailed explanation of *de minimis* provisions of the Uruguay Round Agreement on Agriculture.

<sup>4</sup> Current Total Aggregate Measurement of Support, which is the AMS for any given year. See Brink (2011) for a detailed explanation of CTAMS.

<sup>5</sup> Brazil, Russia, India and China.

---

<sup>6</sup> Of course, this has been the case for most developed countries and the reason for the very large agricultural subsidies that are lavished on farmers, and the source of the trade issues surrounding agricultural subsidies (Johnson, 1991; Gaisford and Kerr, 2001).

<sup>7</sup> And ironically was abandoned by developed countries because it became too expensive from a fiscal perspective.

<sup>8</sup> Market Price Support – subsidies that increase the price received by farmers.

<sup>9</sup> Under the Agreement on Agriculture domestic support is classified into two categories – actionable and non-actionable. Actionable subsidies are those which can be subject to countervailing duty actions. Non-actionable subsidies can be used without fear of countervail. Actionable subsidies are commonly designated as yellow/amber box subsidies and non-actionable subsidies as green box subsidies.

<sup>10</sup> The previously mentioned case of agricultural export subsidies and no “more than an equitable share of world export trade in the product” is one example (Rude, 2007; Gaisford and Kerr, 2001). The assumptions often made when determining dumping margins is another – using, for example, Japanese wages as a proxy for Indian wages (Loppacher and Kerr, 2004). The zero tolerance policy of the EU regarding imports of genetically modified foods is yet another (Hobbs et al., 2014).

<sup>11</sup> Of course, we know that the Biblical figure Joseph (of the coat of many colours) was advising the Egyptian Pharaoh on public stockholding to tide over seven lean years. See the Holy Bible, Genesis 41.