

RENEGOTIATION OF THE WTO AGREEMENT ON AGRICULTURE: ACCOMMODATING THE NEW BIG ISSUES

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Abstract The WTO Agreement on Agriculture was designed to maximize trade flows at a time of surplus agricultural production. It required Members to open markets and to reduce domestic and export subsidies. Proposals for reform in the Doha Round negotiations largely adopt the same pattern. Yet, as surplus is replaced by shortage, Members are increasingly concerned about food security and the impact of agriculture on climate change. And contemporary agricultural policies crystallize around ‘sustainable intensification’, where domestic production is promoted, but not at the expense of future production. This article suggests that, although both the Agreement on Agriculture and the Doha Round proposals do provide some scope for measures to address this new policy paradigm, there are instances where they may work actively against it.

Keywords: climate change, Doha Round negotiations, domestic support, export competition, export prohibitions and restrictions, food security, market access, sustainable intensification, WTO Agreement on Agriculture.

I. INTRODUCTION

The dynamics of international agricultural trade are changing. It is even arguable that a paradigm shift is taking place as agricultural markets move from surplus to shortage and countries introduce trade measures to ensure the availability of their food supplies. At the same time, there is growing awareness that agriculture has the capacity to impact both positively and negatively upon climate change, with the negative impact generated by the livestock sector being under especially close scrutiny. As a response to these new imperatives, consensus is now gathering round the concept of ‘sustainable intensification’: in other words, current production and/or productivity must be increased while husbanding the means of production for the future. All of this raises serious questions as to the extent that the WTO Agreement on Agriculture is ‘fit for purpose’. Its overall policy objective is rather ‘to establish a fair

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and market-oriented agricultural trading system'.¹ And the legislative provisions to implement this agenda require Members gradually to reorient their agricultural policies towards a more liberal, free-trade model by imposing specific quantitative reductions in their use of import tariffs and of domestic and export subsidies. To the extent that the Agreement on Agriculture does address production levels, it arguably reflects the time of relative surplus when it was enacted, even privileging support granted by Members to their producers aimed explicitly at reducing their domestic agricultural production (so-called 'production-limiting programmes'). This approach would appear understandable when it is considered that, as the Uruguay Round negotiations were moving towards their conclusion, the scale of surplus was such that EU stocks in the cereals sector alone stood at some 33.4 million tonnes (notwithstanding that 36 million tonnes had been exported).² Yet, by the time of the 2007–08 food crisis, the figure had fallen below 500,000 tonnes.³ Further, while the need to protect the environment was already recognized in the Agreement on Agriculture as a 'non-trade concern',⁴ climate change and sustainability more generally could not be regarded as central to its focus. Rather, as evidenced in the operative provisions, 'fairness' was conceptualized in terms of the breaking down of trade barriers and the removal of trade-distorting subsidies.

Accordingly, this article will seek to explore the degree to which the Agreement on Agriculture remains 'fit for purpose'. Such inquiry will commence by scoping the (r)evolution which is taking place in the agricultural sector, with specific reference to developments which have world trade consequences. As indicated, food security and climate change feature prominently in this context, but it will also be highlighted that the nature, and end uses, of agricultural products are changing. Secondly, there will be examination of the main policy response to emerge so far, namely sustainable intensification. Indeed, the Outcome Document of the 2012 Rio+20 Conference contained a specific resolution 'to increase sustainable agricultural production and productivity globally'.⁵ A difficulty which would at once seem to present itself, however, is that this concept remains ill-defined. Definitely, it is still to be encapsulated in a coherent legislative framework. And this must present significant hurdles for an Agreement on Agriculture designed to bear down upon concrete, trade-distorting measures. Thirdly, the main body of the article will be devoted to a more detailed examination of the compatibility

¹ Preamble (2).

² European Commission, *The Agricultural Situation in the Community: 1993 Report* (European Commission 1994) 52–3.

³ Council Regulation (EC) 1/2008 temporarily suspending customs duties on imports of certain cereals for the 2007/2008 marketing year [2008] OJ L1/1, Preamble (5).

⁴ Agreement on Agriculture, Preamble (6).

⁵ Available at <<http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf>> para 110, accessed 7 May 2013.

of the provisions of the Agreement on Agriculture with these new policy goals. In this regard, emphasis will be placed on the rules which are centred round its three 'Pillars' covering respectively market access, domestic support and export competition, but it will be suggested that other provisions which have traditionally attracted less attention may now have a larger role to play, most notably the disciplines on export prohibitions and restrictions. In this third section, account will also be taken of the ongoing Doha Round negotiations, examining the ways in which they are accommodating the sea change that is occurring in the agricultural sector and, more specifically, in international agricultural trade. As a preliminary point, it may be observed that the negotiations likewise commenced at a time of relative surplus; and that Article 20 of the Agreement on Agriculture mandates an ongoing reform process, which builds upon existing rules whose long-term objective is the substantial and progressive reduction of support and protection. In consequence, agricultural trade liberalization (as opposed to sustainable intensification) would seem likely to remain the primary objective of the Doha Round. Finally, the conclusion will endeavour to identify certain provisions within the current legislative framework that are *prima facie* contrary to the new agricultural paradigm. Arguably, they offer the opportunity for an 'early harvest' within the ongoing reform process, whether through their substantial amendment or even complete removal. The conclusion will also endeavour to identify instances where the Agreement on Agriculture and proposed amendments in the Doha Round negotiations do have the capacity to foster sustainable intensification. But some caution will be expressed as to the advisability of looking to the Agreement on Agriculture for a contribution which extends beyond its stated role of regulating international agricultural trade.

For the purposes of such discussion, extensive (although not exclusive) reference will be made to the regulatory frameworks in the EU and the United States. The reasons for this are twofold. First, as shall be seen, the notion of sustainable intensification enjoys a longer history in developing countries and, in their case, there is a respectable argument that the Agreement on Agriculture already provides some accommodation for its promotion. In consequence, any re-focusing on a 'productivist' model is likely to present more novel issues for developed countries and, in particular, the EU and the United States, the world trade rules not granting them like accommodation. Secondly, as shall again be seen, a potential barrier to any policy of sustainable intensification is the privileging by the Agreement on Agriculture of production-limiting support; and there is wide consensus that the privileging of such support was a direct result of the Blair House Accord between the EU and the United States which opened the door to conclusion of the Uruguay Round.⁶ Any change in the

⁶ See generally eg WD Coleman and S Tangermann, 'The 1992 CAP Reform, the Uruguay Round and the Commission: Conceptualizing Linked Policy Games' (1999) 37 *Journal of*

status of production-limiting programmes would therefore specifically affect measures introduced at the instigation of the EU and the United States.

II. THE CHANGING AGRICULTURAL SECTOR

As already observed, during the 2007–08 food crisis, EU cereal stocks fell dramatically.⁷ And, significantly, such pressure on cereal stocks was being replicated globally, with the FAO projecting that these would fall to their lowest level for 25 years by the close of 2008 harvests.⁸ Despite a temporary easing in the international markets after 2008 and a slight drop in the world price for grain,⁹ the momentum of this paradigm shift from surplus to shortage would now appear to be restored. Not least, the 2012 harvest in both Russia and the United States was negatively impacted by drought conditions, resulting in fears of a repetition of the 2007–08 food crisis.¹⁰

This has real consequences in terms of world trade in agricultural products. Perhaps most importantly, a series of export restrictions and bans have been placed on various commodity crops, in particular wheat and rice.¹¹ The FAO found that approximately one-third of the 105 countries surveyed until 2011 were still imposing some form of export restrictive measure on foodstuffs and maximizing their imports rather than raising barriers;¹² and in the summer of 2012 there were again live fears that Russia would implement export restraints (although denied by the Russian Agriculture Minister).¹³ Even as some countries have sought to limit or prohibit exports, others have sought to increase imports. Thus, the EU temporarily suspended import duties on most

Common Market Studies 385; C Daugbjerg and A Swinbank, *Ideas, Institutions, and Trade: The WTO and the Curious Role of EU Farm Policy in Trade Liberalization* (Oxford University Press 2009); and A Cunha and A Swinbank, *An Inside View of the CAP Reform Process: Explaining the MacSharry, Agenda 2000, and Fischler Reforms* (Oxford University Press 2011) 68–101.

⁷ Council Regulation (EC) 1/2008 temporarily suspending customs duties on imports of certain cereals for the 2007/2008 marketing year [2008] OJ L1/1, Preamble (5).

⁸ See eg FAO, *Crop Prospects and Food Situation: No. 2, April 2008* (FAO 2008) 6.

⁹ See eg Organisation for Economic Co-operation and Development (OECD) and FAO, *Agricultural Outlook 2012–2021* (OECD and FAO 2012) 20–1.

¹⁰ See eg Agra Europe, ‘Soaring Commodity Prices Raise Fears That 2007/08 Crisis Will Be Repeated’, 24 July 2012.

¹¹ For a very useful survey of these restrictions and bans, see eg D Headey and S Fan, *Reflections on the Global Food Crisis* (International Food Policy Research Institute 2010) 43–53.

¹² R Sharma, ‘Food Export Restrictions: Review of the 2007–2010 Experience and Considerations for Disciplining Restrictive Measures’ FAO Commodity and Trade Policy Research Working Paper No 32 (FAO 2011) Table 1.

¹³ See eg E Terezo and C Weaver, ‘Fears Grow over Russian Grain Exports’, *Financial Times*, 25 July 2012; and A Anishchuk, ‘Russia Farm Minister Rules out Grain Export Ban’, Reuters, 17 August 2012, <<http://www.reuters.com/article/2012/08/17/us-grain-russia-idUSBRE87G0K520120817>> accessed 7 May 2013. In the case of the United States, see eg S Nelson, *Forecasts Show U.S. Drought Getting Worse*, Reuters, 16 July 2012, <<http://www.reuters.com/article/2012/07/16/us-usa-drought-crops-idUSBRE86FOHA20120716>> accessed 7 May 2013; and it may be noted that a website was created solely to support farmers suffering from drought: <<http://www.drought.gov/portal/server.pt/community/drought.gov/202>>.

cereals for the 2007–08 marketing year, citing ‘the exceptionally tight situation on the world and EU cereals markets and the record price levels’.¹⁴ And the need for such measures may be illustrated by the unusual circumstance that in 2008 the value of cereal imports exceeded exports.¹⁵

Another consequence of tightness of supply has been the reduction or abandonment of certain production-limiting and resource retirement programmes. By way of illustration, during the 2007–08 food crisis the EU took the major step of abolishing, first temporarily and then permanently, any requirement that farmers should set aside arable land, so taking it out of production, as a condition for receipt of subsidy.¹⁶ In the words of the European Commission, ‘[t]he foreseeable demand and supply situation for cereals, including the demand linked to the fulfilment of the biofuel target set by the EU, argues for mobilising land which is presently kept out of production through the compulsory set aside scheme’.¹⁷ The consequences of this abolition were considerable, it being estimated that between 1.6 and 2.9 million hectares of agricultural land would be released for production, bringing approximately 10 million tonnes of grains onto the market;¹⁸ and this may account, in part at least, for the fact that the EU rapidly returned to the position of being a net-exporter of cereals. Similarly, the amount of land which may be enrolled in the voluntary Conservation Reserve Program in the United States has fallen considerably, the maximum authorized acreage having been reduced from 39.2 million for the period 2002–09 to 32 million for the period 2009–12.¹⁹ Again these domestic policy initiatives have real consequences in terms of world trade in agricultural products, in that, as already indicated and as shall be explored more fully later, production-limiting and resource retirement programmes have enjoyed privileged status under the Agreement on Agriculture.

¹⁴ European Commission, IP/07/1977, ‘Agriculture: European Union Suspends Import Duties on Most Cereals’, Brussels, 20 December 2007; and, for the implementing legislation, see Council Regulation (EC) 1/2008 temporarily suspending customs duties on imports of certain cereals for the 2007/2008 marketing year [2008] OJ L1/1.

¹⁵ European Commission Directorate-General for Agriculture and Rural Development, *Agriculture in the European Union: Statistical and Economic Information 2011* (European Commission 2012) Table 3.7.2.

¹⁶ For temporary removal of compulsory set-aside in respect of the calendar year 2008, see Council Regulation (EC) 1107/2007 [2007] OJ L253/1; and, for its permanent removal as from 1 January 2009 under the ‘Health Check’ of the Common Agricultural Policy, see Council Regulation (EC) 73/2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers [2009] OJ L30/16, Preamble (30).

¹⁷ European Commission, ‘Communication from the Commission to the Council and the European Parliament: Preparing for the “Health Check” of the CAP Reform’ COM (2007) 722, 6.

¹⁸ European Commission, IP/07/1402, ‘Cereals: Council Approves Zero Set-Aside Rate for Autumn 2007 and Spring 2008 Sowings’, Brussels, 26 September 2007.

¹⁹ 16 USC Section 3831(d). See also generally eg D Orden, ‘WTO Disciplines and Economic Dimensions of the 2008 US Farm Bill’ in B Karapinar and C Häberli (eds), *Food Crises and the WTO* (Cambridge University Press 2010) 220; and MR Grossman ‘Good Agricultural Practice in the United States: Conservation and Climate Change’ (2011) 13 *Environmental Law Review* 296.

In addition to this shift from surplus to shortage, two further developments in the agricultural sector may be highlighted. First, the role of agriculture in combating climate change now enjoys an increasingly high profile. It has been estimated that agriculture accounts for some 10–12 per cent of total anthropogenic greenhouse gas emissions;²⁰ and, in this context, studies such as the 2006 FAO report, *Livestock's Long Shadow: Environmental Issues and Options*, have graphically brought to the attention of the public the potential negative impact of livestock farming.²¹ Consistent with such concerns, a subsequent 2009 World Bank survey found preference across a wide range of developed and developing countries for the sacrifice of agricultural land so as to preserve or expand forested areas as a buffer against climate change.²² The potential conflict between this goal and that of boosting food production is readily apparent. On the other hand, agriculture is also recognized as capable of providing solutions as well as problems. In the United Kingdom, greenhouse gas emissions from agriculture have fallen by 20 per cent between 1990 and 2010, with 'key drivers' being the reduction in both livestock numbers and fertilizer applications.²³ Notwithstanding such advances, the FAO considers the mitigation potential to still be 'extremely large', with there being the added bonus that the majority of this potential can be realized in developing countries (primarily through soil carbon sequestration).²⁴

Secondly, agriculture has been called upon to supply a far broader variety of products for a far broader range of end uses. Most controversially, it now supplies very significant amounts of feedstock for biofuels, to the extent that such production has been regarded as contributing to both the 2007–08 food crisis and the recurring commodity shortages of 2012.²⁵ That these concerns are treated seriously may be illustrated by the European Commission proposal

²⁰ P Smith et al, 'Agriculture' in B Metz et al (eds), *Climate Change: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2007) 497, 499.

²¹ FAO, *Livestock's Long Shadow: Environmental Issues and Options* (FAO 2006); but cf eg, ME Pitesky, KR Stackhouse and FM Mitloehner, 'Clearing the Air: Livestock's Contribution to Climate Change' (2009) 103 *Advances in Agronomy* 1.

²² World Bank, *Public Attitudes towards Climate Change: Findings from a Multi-Country Poll* (World Bank 2009) 32.

²³ Committee on Climate Change, *Meeting Carbon Budgets: 2012 Progress Report to Parliament* (Committee on Climate Change 2012) 196 (noting also that the downward trend had been marginally reversed in 2010). For CO₂ reductions across the EU more generally, see eg European Commission, *Commission Staff Working Document: The Role of European Agriculture in Climate Change Mitigation* SEC (2009) 1093, 8.

²⁴ FAO, *Enabling Agriculture to Contribute to Climate Change Mitigation*, 1 <<http://unfccc.int/resource/docs/2008/smsn/igo/036.pdf>> accessed 7 May 2013.

²⁵ For an illuminating discussion of the role played by increased biofuel demand during the 2007–08 food crisis, see Headey and Fan (n 11) 28–31; and, more recently, see eg J Graziano da Silva (FAO Director General), 'The US Must Take Biofuel Action to Prevent a Food Crisis', *Financial Times*, 9 August 2012. For an alternative view, see eg USDA News Release 254.12, *Agriculture Secretary Vilsack Announces Support for Producers to Grow Renewable Feedstocks for Advanced Biofuels* Washington, DC, 27 July 2012; and fuel security (delivered in part through biofuels) would seem to remain a central plank of United States policy: President Barack

of October 2012 to limit the use of ‘food-crop based biofuels’;²⁶ and the close interface between climate change and food security is clearly revealed by the reason provided for this limitation, namely ‘to stimulate the development of alternative, so-called second generation biofuels from non-food feedstock, like waste or straw, which emit substantially less greenhouse gases than fossil fuels and do not directly interfere with global food production’.²⁷

As farmers look to diversify into numerous forms of less-traditional, but high-value, production, considerations of this sort would not seem confined to biofuels. And this direction of travel is being actively promoted throughout the EU, the European Commission advocating a policy of ‘partial replacement of non-renewable products by more sustainable bio-based ones’.²⁸ Thus, by way of example, greater demands are being placed on agriculture as a source of pharmaceuticals, with the potential also for field crops to be genetically modified so as to produce specific drugs and vaccines (‘biopharming’).²⁹ Another innovation is the manufacture of biodegradable plastic bags from a range of natural materials, including corn starch or linseed oil. Accordingly, the end use of agricultural production has become ever more diverse, extending beyond the provision of food and fibre as previously understood; and, from the viewpoint of the legislator (and, in particular, the world trade legislator), it may become increasingly difficult to draw bright-line distinctions between what is ‘agricultural’ and what is ‘industrial’. Indeed, the very notion of what is ‘agriculture’ becomes less susceptible of ready definition, with the obvious difficulties that this generates for the continuation of a bespoke regime within the legislative framework of the WTO.

III. SUSTAINABLE INTENSIFICATION

Faced with these new imperatives, consensus would seem to be clustering round a policy of ‘sustainable intensification’. It has been seen that there was a specific resolution to such effect in the Outcome Document of the 2012 Rio+20 Conference; and, when drawing up its Strategic Framework for the period 2010–19, the FAO identified ‘sustainable intensification of crop

Obama, Transcript: Obama’s Victory Speech (7 November 2012) <<http://blogs.wsj.com/washwire/2012/11/07/transcript-obamas-victory-speech/>> accessed 7 May 2013.

²⁶ European Commission, ‘Proposal for a Directive of the European Parliament and of the Council amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources’ COM (2012) 595.

²⁷ European Commission, IP/12/1112, ‘New Commission Proposal to Minimise the Climate Impacts of Biofuel Production’, Brussels, 17 October 2012.

²⁸ European Commission, ‘Innovating for Sustainable Growth: A Bioeconomy for Europe’ COM (2012) 60, 5.

²⁹ See eg A Elbehri, ‘Biopharming and the Food System: Examining the Potential Benefits and Risks’ (2005) 8 *AgBioForum* 18; and JB Ruhl, ‘Agriculture and Ecosystem Services: Strategies for State and Local Governments’ (2008) 17 *NYU Environmental Law Journal* 424.

production’ as ‘Strategic Objective A’ and ‘increased sustainable livestock production’ as ‘Strategic Objective B’.³⁰ Similar sentiments are being expressed at national and regional level. In 2011, the United Kingdom *Foresight Report* stated that ‘[o]ne of the strongest arguments for the Project’s conclusion that the global food supply must be increased through sustainable intensification without significant new land being brought into cultivation is the emissions of greenhouse gases that would otherwise result’;³¹ and, in 2012, the European Commission in its Communication, *Innovating for Sustainable Growth: A Bioeconomy for Europe*, affirmed that ‘the EU needs to produce “more with less” and develop smart sustainable farming’.³² It may also be emphasized that these sentiments are shared across the Atlantic. When assessing the priorities for the United States 2012 Farm Bill, the Secretary for Agriculture asserted that the new legislation would address ‘the changing needs of agriculture and the challenges for rural America’—and that ‘[i]t’s about providing an adequate food supply for our nation and the world’.³³ Significantly, notions of sustainable intensification could be found in the same speech, which identified as a core principle ‘the need to support sustainable productivity’.³⁴

Notwithstanding this convergence in thinking, the precise contours of ‘sustainable intensification’ remain relatively ill-defined. Initially, it was associated with developing countries,³⁵ but arguably a key element of its present configuration is that additional effort is now also being required of developed countries, with a clear role for ‘big agriculture’: thus, for the purposes of the ‘New Vision for Agriculture’ proposed by the World Economic Forum, ‘[t]he most crucial driver is improving the productivity of all farms, small and large, while balancing their environmental footprint’.³⁶ Against this background, a useful (and recent) definition may be found in the *Foresight Report*, where the term is stated to mean ‘simultaneously raising yields, increasing the efficiency with which inputs are used and reducing the negative

³⁰ FAO, *Strategic Framework 2010–2019* (Conference, Rome 18–23 November 2009) <<ftp://ftp.fao.org/docrep/fao/meeting/017/k5864e01.pdf>> accessed 7 May 2013. See now also FAO, *Reviewed Strategic Framework* (Conference, Rome 15–22 June 2013) <<http://www.fao.org/docrep/meeting/027/mg015e.pdf>> accessed 23 August 2013.

³¹ Foresight, *The Future of Food and Farming: Final Project Report (Foresight Report)* (Government Office for Science 2011) 30. See also eg The Royal Society, *Reaping the Benefits: Science and the Sustainable Intensification of Global Agriculture* (The Royal Society 2009).

³² COM (2012) 60, 4.

³³ USDA Transcript: Release 458.11 *Agriculture Secretary Vilsack on Priorities for the 2012 Farm Bill*, Ankeny, Iowa, 24 October 2011.

³⁴ *ibid.*

³⁵ See eg J Pretty, ‘The Sustainable Intensification of Agriculture’ (1997) 21 *Natural Resources Forum* 247.

³⁶ World Economic Forum, *Putting the New Vision for Agriculture into Action: A Transformation is Happening* (World Economic Forum 2012) 6. It may be observed that, under the New Vision, a continuing role for small scale farms is nonetheless envisaged; and see also eg House of Commons Environmental Audit Committee, *Eleventh Report of Session 2010–12: Sustainable Food*, HC 879, paras 63–67.

environmental effects of food production'.³⁷ In this definition can be detected a different emphasis from the Outcome Document of the 2012 Rio+20 Conference, with greater weight placed on an increase in productivity than on an increase in production (so as to avoid, for example, the inappropriate conversion of biodiverse land to arable use). And this different emphasis is likewise articulated by Garnett and Godfray who state that '[t]he prime goal of sustainable intensification is to raise *productivity* (as distinct from increasing *volume of production*) while reducing environmental impacts'.³⁸ Also, more generally, the same authors capture very effectively the inherent uncertainty which prevails in any attempt at categorization:

It is still not clear what sustainable intensification might look like on the ground, how it might differ amongst production systems, in different places, and given different demand trajectories, and how the tradeoffs that inevitably arise, might be balanced. However it provides a framework for exploring what mix of approaches might work best based on the existing biophysical, social, cultural and economic context and a growing body of work is starting to emerge that explores what implementation might look like in practice.³⁹

Accordingly, the implementation of sustainable intensification is very much work in progress and, as already observed, this is problematic in any assessment of the compatibility of both the Agreement on Agriculture and the Doha Round negotiations with current agricultural priorities. That said, the broad contours of the new policy objectives would seem reasonably clear. Measures to increase production and/or productivity are to be encouraged. Measures to protect the environment are likewise to be encouraged. But, arguably of greatest importance, it is the successful combination of these two objectives which is to be most encouraged. This gives rise to novel and complex issues for an Agreement on Agriculture which, as a rule, is inimical to support for production and which addresses the need to protect the environment as a 'non-trade' concern, undoubtedly to be taken into account, but not central to the legislative framework which it lays down for international agricultural trade.

IV. COMPATIBILITY OF THE AGREEMENT ON AGRICULTURE

A. General

As has been seen, the stated aim of the Agreement on Agriculture is to make trade in agricultural products between all Members of the WTO fair

³⁷ *Foresight Report* (n 31) 35.

³⁸ T Garnett and C Godfray *Sustainable Intensification in Agriculture: Navigating a Course Through Competing Food System Priorities* (Food Climate Research Network and the Oxford Martin Programme on the Future of Food 2012) 14 (although accepting that, in practice, some increases in production may be required, for example in sub-Saharan Africa).

³⁹ *ibid.*, 8.

and market-oriented.⁴⁰ And ‘fairness’ is achieved only when both support for domestic agricultural production and protection of domestic agricultural markets are progressively removed. A fair international agricultural trading system is therefore one where market conditions prevail: the supply of agricultural products should fluctuate only in response to the demand for them and neither demand nor supply should be distorted by support measures implemented by Members or other ‘protectionist’ domestic agricultural policies. This aim is to be achieved primarily through the rules which govern the three central ‘Pillars’ of market access, domestic support and export competition; and, as indicated, the compatibility of the rules of each ‘Pillar’ with current policy imperatives will be considered in turn, together with the relevant proposals in the Doha Round negotiations. In addition, attention will be directed to disciplines on export prohibitions and restrictions, which, for the reasons already outlined, have acquired great contemporary resonance. But before commencing such exercise, it may first be considered whether the coverage of the Agreement on Agriculture is itself ‘fit for purpose’, in light of the diversification by farmers into new forms of cropping and new end uses. The question is far from otiose in the context of world trade, since, where a product is covered by the Agreement on Agriculture, it may benefit from advantages (such as exemption from domestic support reduction commitments) which would not be enjoyed if it were instead regarded as ‘industrial’ and regulated by the general rules on trade in non-agricultural goods in, *inter alia*, the GATT (and this would be the case even if it were competing directly with the ‘industrial’ product).

B. ‘Agricultural Products’

Although the title of the Agreement on Agriculture suggests universal coverage of all aspects of international agricultural trade, there would in fact seem to be a somewhat more narrow conception of what constitutes an ‘agricultural product’ for its purposes. The term ‘agricultural product’ is defined in Article 2, together with Annex 1. Covered products are listed according to their customs classification or Harmonized System Code,⁴¹ and not by any general definition referring to their connection to the ‘cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products’.⁴² This classification method means that the list

⁴⁰ For full discussion of the Agreement on Agriculture, see eg M Desta, *The Law of International Trade in Agricultural Products: From GATT 1947 to the WTO Agreement on Agriculture* (Kluwer 2002); and JA McMahon, *The WTO Agreement on Agriculture: A Commentary* (Oxford University Press 2006).

⁴¹ The Harmonized System of the World Customs Organization was last updated in 2012. For classification under the Harmonized System in the context of the WTO, see WTO, *Current Situation of Schedules of WTO Members G/MA/W/23/Rev.9*.

⁴² Definition in Oxford English Dictionary (<http://www.oed.com/>).

of products deemed to be 'agricultural' can in some instances be esoteric and, on occasion, inconsistent with other international regimes. For example, whilst many familiar products, such as live animals, cereals and sugars are included, forestry and fish are not.⁴³ On the other hand, the list would seem to include specialist crops destined for pharmaceutical purposes,⁴⁴ and there is no restriction to products in their 'raw' state. Indeed, even some items at quite advanced stages of industrial processing are covered: notably, sausages, chocolate and bread are all 'agricultural' for the purposes of the Agreement on Agriculture.⁴⁵

Notwithstanding that, for the purposes of exploring this definition, some assistance can be obtained from consideration by GATT panels of what constitutes a 'primary product' within agriculture-specific exemptions from the GATT rules,⁴⁶ the WTO panels and Appellate Body have not dwelt on the matter in any depth, instead confining their assessment to brief reference to the list of products found in Annex 1. As the panel succinctly observed in the *Canada–Dairy* dispute when determining whether butter, cheese and milk fell within the Agreement on Agriculture: '[t]he "agricultural products" set out in Annex 1 include the products at issue in this dispute (butter, cheese and "other milk products"), all of which fall under HS Chapter 4. We thus find that the Agreement on Agriculture applies to the issue at hand'.⁴⁷

In essence, an 'agricultural product' is one which was selected as such by Members during the Uruguay Round of multilateral trade negotiations. Using the Harmonized System Code to designate covered products was a way of conveniently capturing these political choices. This methodological approach means the list of products does not owe its coherence to any abstract or dictionary definition of 'agriculture' or 'agricultural products'; and, on the basis of the panel and Appellate Body treatment of the list, it must be regarded as closed: products will only be added as a consequence of further multilateral trade negotiations, rather than through any process of dynamic treaty interpretation by the panel or Appellate Body. That there is some need to update the list may be evidenced by the proposal of India during the Doha Round negotiations that products such as rubber, jute and sisal should be included.⁴⁸ Despite this proposal, the most recent draft

⁴³ By contrast, it may be noted that, for the purposes of the FAO, 'agriculture' embraces both fisheries and forestry: see generally MA Young, 'Fragmentation or Interaction: The WTO, Fisheries Subsidies, and International Law' (2009) 8 *World Trade Review* 477.

⁴⁴ Agreement on Agriculture, Annex 1, Harmonized System ch 12.

⁴⁵ *ibid*, Annex 1 (respectively Harmonized System chs 16, 18 and 19).

⁴⁶ See eg *EEC–Subsidies on Export of Pasta Products* SCM/43, 19 May 1983 (unadopted).

⁴⁷ *Canada–Measures Affecting the Importation of Milk and the Exportation of Dairy Products* WT/DS103/R and WT/DS/113/R, 17 May 1999, para 7.18.

⁴⁸ WTO, *Proposals by India in the areas of: (i) Food Security, (ii) Market Access, (iii) Domestic Support, and (iv) Export Competition* G/NG/AG/W/102, 15 January 2001, 5.

modalities for agriculture in the Doha Round negotiations leave Annex 1 unchanged.⁴⁹

However, perhaps the greatest area of ongoing difficulty is biofuel feedstock. This enjoys no distinct classification under the Harmonized System and much would therefore appear to depend upon its form and origin.⁵⁰ For example, bioethanol (including that produced from potential crops such as cereals or sugar) would seem to qualify as an 'agricultural product' under Chapter 22. But biodiesel would seem to fall under Chapter 38 as an 'industrial product', notwithstanding that it may be produced from oilseed rape which is itself an agricultural product (under Chapter 12).⁵¹ Moreover, biomass may be generated from forestry, and forestry products likewise fall outside the scope of the Agreement on Agriculture.⁵² This may create perverse incentives, in that biofuel feedstock generated from forestry is understood to be environmentally superior to that generated from food crops,⁵³ yet does not attract the benefits conferred upon agricultural products under the Agreement of Agriculture. Similar considerations apply in the case of 'dual use' crops. For example, as noted, oilseed rape can be employed not just in the manufacture of food, but also in the manufacture of biodiesel. In the latter case, it inevitably competes against mineral oils; and, for world trade purposes, this competition would not be on a level playing field if it retains its status as an 'agricultural product', for the reason that (unlike mineral oils) it may be capable of receiving domestic support which qualifies for exemption from reduction commitments under the Agreement on Agriculture.⁵⁴ Should this interpretation be correct, then there

⁴⁹ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008. In the context of WTO negotiations, 'modalities' are employed to provide outlines for final commitments (including formulas or approaches for tariff reductions): see eg WTO, *Glossary*. <http://www.wto.org/english/thewto_e/glossary_e/glossary_e.htm> accessed 6 May 2013.

⁵⁰ See eg R Howse and AL Eliason, 'Domestic and International Strategies to Address Climate Change: An Overview of the WTO Legal Issues' in T Cottier, O Nartova and S Bigdeli (eds), *International Trade Regulation and the Mitigation of Climate Change* (Cambridge University Press 2009) 48; and S Switzer and JA McMahon, 'EU Biofuels Policy-Raising the Question of WTO Compatibility' (2011) 60 ICLQ 713.

⁵¹ See eg International Food and Agricultural Trade Policy Council (IPC) and Renewable Energy and International Law (REIL), *WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace* (IPC and REIL 2006) 10; A Swinbank, 'EU Policies on Bioenergy and Their Potential Clash with the WTO' (2009) 60 *Journal of Agricultural Economics* 485; and Switzer and McMahon (n 50).

⁵² 'Live trees' under Harmonized System Code Chapter 6 are restricted to those commonly supplied by nursery gardeners or florists. See also, in the context of European Community law, Joined Cases C-164/97 and C-165/97 *Parliament v Council* [1999] ECR I-1139.

⁵³ Short-rotation coppice would provide a good illustration (for the environmental credentials of which see eg House of Commons Environmental Audit Committee, *First Report of Session 2007–08: Are Biofuels Sustainable?*, HC 76-I, para 31).

⁵⁴ By way of illustration, in the EU most domestic support is now comprised within the Single Farm Payment, which is understood to be exempt from domestic support reduction commitments on the basis that, not being dependent upon any particular form of production, it qualifies for exemption from reduction commitments as 'decoupled income support': Agreement on Agriculture, Annex 2, para 6; and, since a key feature of the Single Farm Payment is that farmers are free to follow market signals in terms of crop selection, there would seem to be nothing

would also be the adverse consequence that privilege is accorded to a form of 'food-crop based biofuel'; and, as has been seen, such biofuels are considered to impact negatively on both the environment and food security, giving rise to the EU proposal to limit their usage.⁵⁵

One suggested response has been to create a separate Harmonized System Code for biofuels, with it then being for WTO Members to agree whether or not to include that Code within Annex 1 to the Agreement on Agriculture.⁵⁶ For the time being, it may be observed that, when the Harmonized System was revised as from 1 January 2012, the heightened profile of 'biodiesel' was recognized by its being conferred with separate identification, while remaining under Chapter 38.

C. Market Access

Maximizing market access for agricultural products by reducing import restrictions was an important objective of the Uruguay Round of multilateral trade negotiations. Market access even came first in the list of key difficulties negotiators decided to address.⁵⁷ From this background, it is not surprising that the overall thrust of the market access 'Pillar' of the Agreement on Agriculture is to open markets of Members to exports of agricultural products from other Members by ensuring that only the most transparent restrictions can be imposed and that even those restrictions which the rules do permit are reduced over time. The underlying assumption of the Agreement on Agriculture is therefore that Members will always seek to 'protect' their domestic farmers from cheaper imports unless they are specifically prevented from doing so by the multilateral trade rules.

The only market access restriction permitted by the Agreement on Agriculture is the tariff, that is, a customs duty on the import of agricultural products.⁵⁸ The tariff was thought to be more transparent than other measures which Members used to protect their domestic markets from cheaper imports of agricultural products in the GATT period, such as the notorious variable import levy employed by the European Economic Community. The Agreement on Agriculture required that all other non-tariff barriers should be 'converted' into tariff equivalents through the controversial, Member-driven practice of 'tariffication'.⁵⁹ Members were further required to make specific binding

to prevent a farmer choosing to grow oilseed rape which may subsequently be used in biofuel production. For the EU legislation governing the Single Farm Payment see Council Regulation (EC) 73/2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers [2009] OJ L 30/16.

⁵⁵ European Commission (n 26).

⁵⁶ See eg IPC and REIL (n 51) 11.

⁵⁷ GATT, *Punta del Este Ministerial Declaration on the Uruguay Round of 20 September 1986*, Part D, 'Agriculture', paras (i)–(iii), BISD 33S/19 (1987).

⁵⁸ Agreement on Agriculture, art 4.2.

⁵⁹ This 'tariffication' process was not without its problems: see eg MD Ingco, 'Tariffication in the Uruguay Round: How Much Liberalisation?' (1996) 19(4) *World Economy* 425.

commitments to reduce their existing tariffs and any new tariff equivalents generated by ‘tariffication’, with these reduction commitments being more extensive in the case of developed countries and, in particular, developed countries with a history of high levels of border protection.⁶⁰ The specific reduction obligations are not contained in the Agreement on Agriculture itself, but are instead found in the general provisions of the GATT Modalities, and also in the Schedule of Commitments of each Member.⁶¹ Moreover, the Appellate Body made it clear in an early dispute under the WTO Dispute Settlement Understanding that such Schedules form an ‘integral part of the GATT 1994. . . [and] the concessions provided for in that Schedule are part of the terms of the treaty’.⁶² This means Members must not exceed the maximum levels of border protection as specified in their Schedules and that they must also guarantee a minimum level of market access to agricultural products from other Members.⁶³ In addition, panels and the Appellate Body have robustly enforced the rules, sometimes in ways that have surprised the Members involved in the dispute.⁶⁴

The ‘anti-protectionist’ paradigm of the Agreement on Agriculture at first sight also seems to dominate the proposals to change the market access ‘Pillar’ in the Doha Round negotiations. The proposals are for deeper, asymmetric cuts in tariffs, designed to open the agricultural markets of the most pernicious ‘protectionist’ Members, like the EU, at an accelerated rate beyond that set for other, less ‘protectionist’, Members.⁶⁵ However, what is interesting is that within the Doha Round negotiations there is also acute awareness that the market access provisions must specifically address food security.

⁶⁰ When a Member makes these binding commitments, the tariff is referred to as a ‘bound tariff’. Minimum access was also guaranteed through tariff quotas in accordance with the mechanism in GATT, *Modalities for the Establishment of Specific Binding Commitments under the Reform Programme*, MTN.GNG/MA/W/24, 20 December 1993 (GATT Modalities), Annex 3B.

⁶¹ In the case of agricultural products, Part 1A of a Schedule covers tariffs, Part IB covers tariff quotas: <http://www.wto.org/english/tratop_e/schedules_e/goods_schedules_e.htm> accessed 7 May 2013.

⁶² *European Communities—Customs Classification of Certain Computer Equipment* (5 June 1998) WT/DS62/AB/R, WT/DS67/AB/R and WT/DS68/AB/R, para 84 (reiterated in the context of agricultural trade in *Canada—Measures Affecting the Importation of Milk and the Exportation of Dairy Products* (13 October 1999) WT/DS103/AB/R and WT/DS113/AB/R, para 131). By contrast, the GATT Modalities may not be the basis of dispute settlement proceedings, but may be employed for the purposes of interpretation: see eg *European Communities—Export Subsidies on Sugar* (15 October 2004) WT/DS265/R, para 7.350 (where the panel declares that: ‘[c]learly, the [GATT Modalities are] not a covered agreement and thus cannot provide for WTO rights and obligations to Members. Nonetheless, [they] could be relevant when interpreting the *Agreement on Agriculture*, including Members’ Schedules’).⁶³ GATT Modalities (n 60) Annex 3.

⁶⁴ For example, Chilean surprise at the scope of tariffication in *Chile—Price Band System and Safeguard Measures Relating to Certain Agricultural Products* (23 September 2002) WT/DS207/AB/R.

⁶⁵ Cuts are to be undertaken according to a ‘tiered formula’ and, for, developed countries at least, there should be a minimum average cut of 54 per cent (compared to a maximum average cut of 36 per cent for developing countries): WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, December 2008, paras 59–65.

Indeed, the Doha Ministerial Declaration itself requires that special and differential treatment for developing countries must be embedded within the negotiations in such a way as to enable them effectively to 'take account of their development needs, including food security and rural development'.⁶⁶ Accordingly, policy space has been created for, in particular, the proposed introduction of 'Special Products', to be self-designated by developing countries, guided by indicators based on the criteria of food security, livelihood security and rural development.⁶⁷ And such 'Special Products' would not be subject to the full rigours of tariff reduction commitments, with the result that developing countries would be able to reduce the speed with which they needed to open these forms of domestic production to competition from imported products. Under the current draft modalities in the Doha Round negotiations, developing countries could designate up to 12 per cent of tariff lines as 'special' and the benign treatment which they would enjoy for market access purposes would take the form, as a general rule, of freedom from any cut in the case of up to 5 per cent of tariff lines and an overall average cut limited to 11 per cent.⁶⁸

Notably, the illustrative list of indicators provided in the current draft modalities is heavily dependent on welfare considerations.⁶⁹ For example, the product must be a staple food, or part of the basic food basket of the developing country (through, *inter alia*, laws and regulations); and the product must account for a significant proportion of total food expenditure, or total income, of households in a particular region or nationally. Further, there is focus on domestic production, including express reference to production on smallholdings and in drought-prone regions; and a specific criterion is that 'the product contributes a relatively high proportion to value addition in the rural areas, in a particular region or at the national level, through its linkages to non-farm rural economic activities, including handicrafts and cottage industries or any other form of rural value addition'. Such support for increased, but sustainable,

⁶⁶ WTO, *Doha Ministerial Declaration*, WT/MIN(01)/DEC/1, 20 November 2001, para 13.

⁶⁷ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, paras 129–131. There is also mitigation from tariff reductions for so-called 'Sensitive Products'. There is no separate definition of this category, and Members can elect which products they regard as sensitive for the purposes of the tariff reduction commitments in the Doha proposals. This 'Sensitive Product' designation is open to all members to varying degrees, so it may be that members rely on these provisions to allow certain areas of agricultural production to thrive in line with 'sustainable intensification' ideals.

⁶⁸ It may be observed that the current proposals on their face record that certain developing countries have reservations over these figures: *ibid*, para 129. A 'tariff line' means a product defined in a list of tariff rates: see eg WTO, *Glossary* (n 49).

⁶⁹ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex F. See also JA McMahon, *The Negotiations for a New Agreement on Agriculture* (Martinus Nijhoff 2011) 288–9; and F Smith, 'Food Security and International Agricultural Trade Regulation: Old Problems, New Perspectives' in JA McMahon and M Desta (eds), *Research Handbook on the WTO Agriculture Agreement: New and Emerging Issues in International Agricultural Trade Law* (Edward Elgar 2012) 45.

food production is strongly reminiscent of the definition of ‘sustainable intensification’.⁷⁰

Accordingly, the Doha Round negotiations offer the potential for food security and rural development to become more clearly embedded within the market access regime, notwithstanding that such exceptional treatment may have the capacity to impact negatively on trade liberalization.⁷¹ It may be suggested, on the one hand, that the overarching imperative of these provisions is more socio-economic than ‘productivist’, in that they should allow farmers to remain on the land in difficult circumstances (as opposed to, for example, promoting any major restructuring of the agricultural sector so as to achieve economies of scale). Yet, on the other hand, measures which have the effect of retaining farmers on the land may also have production benefits, a real possibility in their absence being land abandonment (which remains a policy concern even within the EU).⁷²

D. Domestic Support

The Agreement on Agriculture has likewise sought to reduce the trade-distorting effect of domestic support.⁷³ By reference to a 1986–88 base period, the levels of such support have been reduced with varying degrees of severity according to the category of Member concerned. Thus, developed countries were required to implement a reduction of 20 per cent in their domestic support over the period 1995–2000; and developing countries were required to implement a reduction of 13.3 per cent over a period of up to 10 years (but no reduction at all was required of least developed countries).⁷⁴ That said, there are three significant exemptions to these rules.

First, when calculating their level of support in any year from 1995 onwards, Members are not required to include ‘*de minimis*’ support.⁷⁵ For developed countries, this can amount to 5 per cent of the total value of production of a basic agricultural product in the case of product-specific support (which would include, for example, targeted subsidies for cereals) or 5 per cent of the value of total agricultural production in the case of non-product specific support. The percentage is raised to 10 per cent for developing countries.

Secondly, and perhaps most importantly in the present context, direct payments under certain domestic production-limiting programmes are also

⁷⁰ See generally eg C Kaufmann and S Heri, ‘Liberalizing Trade in Agriculture and Food Security: Mission Impossible?’ (2007) 40 *VandJTransnatlL* 1039.

⁷¹ See eg K Anderson and W Martin, ‘Agricultural Trade Reform and the Doha Development Agenda’ (2005) 28 *The World Economy* 1301; and D Laborde, W Martin and D van der Mensbrugge, ‘Implications of the Doha Market Access Proposals for Developing Countries’ (2012) 11 *World Trade Review* 1.

⁷² See eg A Renwick et al, ‘Policy Reform and Agricultural Land Abandonment in the EU’ (2013) 30 *Land Use Policy* 446.

⁷³ See generally eg McMahon (n 40) 63–88.

⁷⁴ GATT Modalities (n 60) paras VIII, XV and XVI.

⁷⁵ Agreement on Agriculture, art 6(4).

to be excluded from annual calculations of support levels.⁷⁶ Such payments have commonly been referred to as ‘Blue Box’ support; and the ‘Blue Box’ captured many of the payments made to farmers by both the European Community and the United States during the 1990s. In fact, as previously indicated, there is a respectable argument that the ability to shelter these subsidy regimes within the ‘Blue Box’ operated as the lever which opened the door to conclusion of the Uruguay Round.

Thirdly, domestic support that comes within the scope of Annex 2 to the Agreement of Agriculture falls completely out of calculation, being commonly referred to as ‘Green Box’ support. However, if measures are to qualify for this exemption, they must also meet the ‘fundamental requirement’ of having ‘no, or at most minimal, trade-distorting effects or effects on production’. Unfortunately, there is some difficulty in assessing whether a measure meets this criterion, since the wording of the provision has not yet been the subject of detailed judicial discussion. More specifically, in *United States–Subsidies on Upland Cotton*, both the panel and the Appellate Body felt able to decide the dispute without fully addressing the factors which determine whether the measure concerned does indeed have no, or at most minimal, trade-distorting effects or effects on production.⁷⁷ Annex 2 does, nonetheless, expressly require that the measure must conform to two basic criteria,⁷⁸ plus policy-specific criteria and conditions. These policy-specific conditions and criteria cover a wide range of programmes: general services (such as research, training services and extension and advisory services); public stockholding for food security purposes; domestic food aid; and direct payments to producers.⁷⁹ And the forms of direct payment which may attract exemption are diverse, varying from decoupled income support to support under structural and environmental schemes.⁸⁰ Accordingly, the ‘Green Box’ is broad in its sweep and would now appear, through several years of ‘box-shifting’, to exempt a far greater proportion of domestic support than was the case at the time of the conclusion of the Uruguay Round. Not least, the EU has largely dismantled its ‘Blue Box’

⁷⁶ *ibid.*, art 6(5). To qualify as direct payments under a production-limiting programme, it is necessary to show either: (i) such payments are based on fixed area and yields; or (ii) such payments are made on 85 per cent or less of the base level of production; or (iii) livestock payments are made on a fixed number of head’: *ibid.*, art 6(5)(a)(i)–(iii).

⁷⁷ See respectively WT/DS267/R, 8 September 2004, para 7.412; and WT/DS267/AB/R, 3 March 2005, para 334.

⁷⁸ The two basic criteria are that: (a) the support in question shall be provided through a publicly-funded government programme (including government revenue foregone) not involving transfers from consumers; and (b) the support in question shall not have the effect of providing price support to producers’: Agreement on Agriculture, Annex 2, para 1(a) and (b).

⁷⁹ *ibid.*, Annex 2, paras 2–5.

⁸⁰ *ibid.*, Annex 2, paras 6–13 (the full list comprising: decoupled income support; government financial participation in income insurance and income safety-net programmes; payments for relief from natural disasters; structural adjustment assistance provided through producer retirement programmes; structural adjustment assistance provided through resource retirement programmes; structural adjustment assistance provided through investment aids; payments under environmental programmes; and payments under regional assistance programmes).

exempt production-limiting programmes, with most direct payments now comprised in the Single Farm Payment, which, according to the EU, qualifies for 'Green Box' exemption as 'decoupled income support', namely support which is not conditional upon any specific form of production or even production at all.⁸¹

Despite increased policy focus on boosting production and/or productivity, the Doha Round negotiations would seem to be proceeding on the basis that the 'Blue Box' should continue, albeit on a reduced scale. In the case of developed countries, the amount of such subsidy would, as a general rule, be subject to an overall limit of 2.5 per cent of the average total value of agricultural production over a 1995–2000 base period.⁸² Moreover, perhaps somewhat surprisingly, the current draft modalities propose the introduction of an additional category of 'Blue Box' exemption, over and above direct payments under production-limiting programmes, which would cover 'direct payments that do not require production' at all.⁸³

Accordingly, neither the 'Blue Box' rules as found in the Agreement on Agriculture nor their currently proposed amendment in the Doha Round negotiations sit easily with notions of 'sustainable intensification'. A constant theme which underpins this new imperative is that the available amount of agricultural land is unlikely to expand to any material degree;⁸⁴ and, in consequence, there is every reason to make full (but sustainable) use of the land which is available. Further, the practical importance of the 'Blue Box' has materially declined over recent years. Most notably, it may be highlighted that, with the abolition of compulsory set-aside in the arable sector, the EU has moved away from production-limiting programmes and, in turn, this may account for a willingness by the EU to see the size of the 'Blue Box' reduced during the Doha Round negotiations. Against this background, serious consideration may be given to going so far as eliminating any 'Blue Box' exemption for programmes which either limit production or require no production at all.⁸⁵

⁸¹ See eg the EU notification concerning domestic support commitments for the marketing year 2007–08: G/AG/N/EEC/68, 24 January 2011. Some doubt has been expressed as to whether the EU Single Farm Payment Scheme does in fact meet all the criteria for 'Green Box' exemption: see eg A Swinbank and R Tranter, 'Decoupling EU Farm Support: Does the New Single Payment Scheme Fit within the Green Box?' (2005) 6 *The Estey Centre Journal of International Law and Trade Policy* 47; and M Cardwell and CP Rodgers, 'Reforming the WTO Legal Order for Agricultural Trade: Issues for European Rural Policy in the Doha Round' (2006) 55 *ICLQ* 805.

⁸² WTO, *Revised Draft Modalities for Agriculture* TN/AG/W/4/Rev.4, 6 December 2008, para 38.

⁸³ *ibid.*, para 35 (although this additional category would be subject to the same overall limit applicable to developed countries of 2.5 per cent of the average total value of agricultural production over a 1995–2000 base period).

⁸⁴ See eg FAO *Strategic Framework 2010–2019* (n 30) 8; and *Foresight Report* (n 31) 15.

⁸⁵ It may be noted that early in the Doha Round the Cairns Group proposed elimination of the 'Blue Box': TN/AG/R/4, 18 October 2002.

By contrast, the 'Green Box' would seem to provide greater opportunities for the promotion of sustainable intensification. In line with the Preamble to the Agreement on Agriculture, many of the programmes which are exempted from domestic support reduction commitments under Annex 2 could be considered to promote 'non-trade concerns', such as food security and the need to protect the environment, and both food security and the need to protect the environment would generally be accepted as integral to any policy of sustainable intensification.⁸⁶ On the other hand, it may be recalled that all 'Green Box' measures must meet the fundamental requirement that they have no, or at most minimal, trade-distorting effects or effects on production.⁸⁷ While the restriction on anything more than minimal trade-distorting effects would seem fully consistent with the purpose of the Agreement on Agriculture, if sustainable intensification is vigorously to be pursued, there would seem to be something counter-intuitive if 'Green Box' exemption were to be excluded from support which has more than minimal effects on production. Subject to this considerable proviso, individual programmes may be examined, with specific reference to those which will promote intensification and those which may promote sustainability. Decoupled income support would also seem to merit detailed attention, on the basis that it is now the main mechanism for subsidizing EU farmers.

Turning first to measures which may boost production and/or productivity, it has been seen that general services (exempt under paragraph 2 of Annex 2) cover research (including research programmes relating to particular products) and extension and advisory services; and there is evidence that future productivity gains in agriculture may be dependent on public investment in agricultural research, with particular reference to mitigating the anticipated adverse effects on productivity of climate change and increasing water scarcity.⁸⁸ Besides, in the *Foresight Report* itself, new science and technology are located at the heart of the drive to realize sustainable intensification, it being unequivocally stated that '[i]nvestment in food production research needs to focus on raising yields in conjunction with improving sustainability and maintaining ecosystem services'.⁸⁹ The potential role for general services measures would also be enhanced if the relevant provisions were to be

⁸⁶ See Agreement on Agriculture, Preamble (6): '[N]oting that commitments under the reform programme should be made in an equitable way among all Members, having regard to non-trade concerns, including food security and the need to protect the environment'; and, on 'non-trade concerns' generally, see eg F Smith, "'Multifunctionality" and "Non-trade Concerns" in the Agriculture Negotiations' (2000) 3 *Journal of International Economic Law* 707; A Vatn, 'Multifunctional Agriculture: Some Consequences for International Trade' (2002) 29 *European Review of Agricultural Economics* 309; and MR Grossman, 'Multifunctionality and Non-trade Concerns', in MN Cardwell, MR Grossman and CP Rodgers (eds), *Agriculture and International Trade: Law, Policy and the WTO* (CAB International 2003) 85.

⁸⁷ Agreement on Agriculture, Annex 2, para 1.

⁸⁸ See eg Y Sheng et al, *A Turning Point in Agricultural Productivity: Consideration of the Causes – ABARES Research Report 11.4* (Canberra 2011).

⁸⁹ *Foresight Report* (n 31) 17. See also The Royal Society (n 31) *passim*.

amended as proposed in the Doha Round negotiations. A new category would be added, with specific reference to developing countries, comprising policies and services related to, *inter alia*, rural development and rural livelihood security in such countries; and, among the examples given, are infrastructural services, land rehabilitation, soil conservation and resource management, drought management and flood control, rural employment programmes and nutritional food security.⁹⁰ Besides, such a provision should materially assist the productivity of smallholders in developing countries, identified as an urgent priority by the United Nations High Level Task Force on the Global Food Security Crisis.⁹¹

In addition, levels of production (if not productivity) may be enhanced through income insurance and income safety-net programmes (exempt under paragraph 7 of Annex 2) and through payments for relief from natural disasters (exempt under paragraph 8 of Annex 2). Definitely, it is apprehended that such support may cause farmers to be less risk averse, and thus encourage production in high-risk areas. That said, research in the United States has indicated that, while increased insurance participation is correlated with additional acres planted (and to an extent which is statistically significant in some cases), the total amount of additional acres remains relatively small.⁹² At the same time, the WTO rules present a fairly high hurdle before entitlement may be triggered,⁹³ while recent policy development favours the limitation of crop insurance programmes to the coverage of catastrophic risks.⁹⁴ Yet, in light of recent climatic events, the role of such payments may still prove to be substantial, and on an ongoing basis: by 1 August 2012 more than half of the counties in the United States had been designated disaster areas.⁹⁵ Perhaps reflecting these developments, a central plank of current EU reforms to

⁹⁰ WTO, *Revised Draft Modalities for Agriculture* TN/AG/W/4/Rev.4, 6 December 2008, Annex B.

⁹¹ See eg United Nations High Level Task Force on the Global Food Security Crisis, *Updated Comprehensive Framework for Action: September 2010* (United Nations 2010) 21–4; and see further Ministerial Declaration, Action Plan on Food Price Volatility and Agriculture, Meeting of G20 Agriculture Ministers, Paris, 22 and 23 June 2011 <http://agriculture.gouv.fr/IMG/pdf/2011-06-23_-_Action_Plan_-_VFinale.pdf> para 13, accessed 7 May 2013.

⁹² See eg BK Goodwin, ML Vandevver and J Deal, 'An Empirical Analysis of Acreage Effects of Participation in the Federal Crop Insurance Program' (2004) 86 *American Journal of Agricultural Economics* 1058.

⁹³ For example, in the case of payments for relief from natural disaster, production loss must exceed 30 per cent of the average of production in the preceding three-year period or a three-year average based on the preceding five-year period, excluding the highest and the lowest entry: Agreement on Agriculture, Annex 2, para 8(a). In this respect, the current draft modalities provide flexibility for developing countries: WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex B.

⁹⁴ See eg OECD, *Managing Risk in Agriculture: Policy Assessment and Design* (OECD 2011).

⁹⁵ USDA News Release 260.12 *Agriculture Secretary Vilsack Announces New Drought Assistance, Designates an Additional 218 Counties as Primary Natural Disaster Areas*, Washington, DC, 1 August 2012.

the CAP is the enhancement of risk management measures, including crop insurance, these having been identified in the proposed regulations as one of six priorities for rural development over the period 2014–20.⁹⁶ It may also be noted that ‘Green Box’ exempt payments which have the capacity to support production may be available to farmers in disadvantaged areas through regional assistance programmes (under paragraph 13 of Annex 2). Significantly, the level of payments under these programmes is fixed by reference to ‘the extra costs or loss of income involved in undertaking agricultural production’, which would seem well calculated towards the objective of maintaining farming activity, and agricultural output, in adverse circumstances.

On the other hand, production and/or productivity are unlikely to be fostered by payments under resource retirement programmes, ‘Green Box’ exempt under paragraph 10 of Annex 2. With supplies becoming tight, it may legitimately be questioned whether the Agreement on Agriculture should privilege support which is conditional upon the retirement of land from marketable agricultural production for a minimum of three years (or, in the case of livestock, conditional on slaughter or definitive permanent disposal).⁹⁷ In practice, however, the potentially negative impact of this provision would appear to have been reduced following the decision of the United States no longer to notify payments under its flagship Conservation Reserve Program as payments under a resource retirement programme.⁹⁸

If the emphasis is switched from intensification to sustainability, paragraph 12 of Annex 2 grants ‘Green Box’ exemption to payments made under domestic environmental programmes. For such payments to be eligible, they must be part of a clearly-defined government environmental or conservation programme and they must also be dependent upon the fulfilment of specific conditions under the government programme, which may include conditions related to production methods.⁹⁹ These criteria would therefore seem more appropriate for support under agri-environmental schemes, as opposed to support linked to production per se; and it may be highlighted that payments under the Conservation Reserve Program are now notified as payments under paragraph 12 (as opposed to payments under resource retirement programmes).

⁹⁶ European Commission, COM (2011) 627, Preamble (37) and art 5. For subsequent political agreement on these reforms, see European Commission, MEMO/13/621, ‘CAP Reform – An Explanation of the Main Elements’, Brussels, 26 June 2013.

⁹⁷ Annex 2, para 10(b).
⁹⁸ See eg R Schnepf, *CRS Report for Congress: WTO Compliance Status of the Conservation Security Programme (CSP) and the Conservation Reserve Program (CRP)* (Congressional Research Service 2007); and A Effland, *Classifying and Measuring Agricultural Support: Identifying Differences Between the WTO and OECD Systems* (USDA Economic Research Service 2011).

⁹⁹ And it may be reiterated that the programme must meet the fundamental requirement of not having more than minimal effects on production.

That said, agri-environmental schemes may *de facto* take land out of production, as again may be illustrated by the Conservation Reserve Program, in respect of which an initiative introduced in 2012 is to increase the area for wetland restoration by some 200,000 acres.¹⁰⁰ As a result, in the case of agri-environmental schemes, there is scope for tension between the twin priorities of, on the one hand, boosting output and, on the other, ensuring environmental sustainability, with at least some policy choices leaning towards the latter priority. And, at times of greatest shortage, such tension becomes the more acute, as may be illustrated by the decision in August 2012 to permit emergency cropping of hay and grazing on 3.8 million acres enrolled in the Conservation Reserve Program (with many of these acres having wetland-related characteristics).¹⁰¹

Nevertheless, in any assessment of the scope which the ‘Green Box’ offers to promote sustainable intensification, perhaps the most difficult issues arise in the context of ‘decoupled income support’ under paragraph 6 of Annex 2, with their difficulty being compounded by the fact that, as has been seen, this category of support now accounts for the vast majority of direct payments to farmers in the EU.¹⁰² Two such issues may be highlighted. First, it is arguable that the detailed WTO criteria which govern decoupled income support preclude its employment as an engine to boost agricultural production. An express stipulation is that ‘[n]o production shall be required in order to receive such payments’.¹⁰³ While this has the clear advantage of generating production neutrality and thereby encouraging farmers to respond to market signals (as opposed to making crop selection based upon the availability of specific subsidies), it would now perhaps be unwise for so important a category of domestic support to be dependent upon a condition which, while not prohibiting production, precludes a positive obligation to do so.¹⁰⁴ Even where production is undertaken, any incentive element would seem to be excluded by provision that ‘[t]he amount of such payments in any given year shall not be related to, or based on, the type or volume of production (including livestock units) undertaken by the producer in any year after the base period’.¹⁰⁵ Further, in this context, the Appellate Body in *United States–Subsidies on Upland Cotton* has confirmed that the expression ‘related to’

¹⁰⁰ USDA News Release 76.12, *Agriculture Secretary Vilsack Announces New Conservation Reserve Program Initiative to Restore Grasslands, Wetlands and Wildlife*, Washington, DC, 2 March 2012.

¹⁰¹ USDA News Release 260.12 (n 95).

¹⁰² Indeed, Commissioner Fischer Boel claimed that by 2006 nearly 90 per cent of direct payments within the EU-25 would already be production neutral: Speech/05/511, ‘The Common Agricultural Policy: History and Future’, Washington, DC, 15 September 2005.

¹⁰³ Agreement on Agriculture, Annex 2, para 6(e).

¹⁰⁴ For full discussion of this criterion by the Appellate Body, see *United States–Subsidies on Upland Cotton* (3 March 2005) WT/DS267/AB/R, paras 318–342 (and, in particular, para 326: ‘[i]n contrast to the other subparagraphs of paragraph 6, paragraph 6(e) does explicitly distinguish between positive and negative production requirements, because it prohibits positive requirements to produce’).

¹⁰⁵ Agreement on Agriculture, Annex 2, para 6(b).

extends to ‘both positive and negative connections between the amount of payment and the type of production’, namely situations where farmers are both required to produce certain agricultural products and situations where they are expressly required not to.¹⁰⁶

Secondly, by contrast, decoupled income support does have a long association with a policy tool which would appear well suited to the delivery of sustainable intensification, this being cross-compliance (under which environmental and other conditions are attached to direct payments to farmers). Such conditions can be specifically tailored so as to impose sustainable agricultural practices and, as compared with agri-environmental schemes, there would seem to be the opportunity to create a closer link with the act of production. In addition, there is the advantage that cross-compliance regimes are already in force in several Members, including the EU, Korea, Switzerland and the United States, with probably the most fully developed regime being that implemented within the EU.¹⁰⁷

Under the EU regime, the vast majority of direct payments are now subject to: first, a range of statutory management requirements which extend beyond the protection of the environment to include also public, animal and plant health and animal welfare; secondly, a general obligation to maintain all agricultural land in good agricultural and environmental condition; and, thirdly, an obligation to maintain land under permanent pasture.¹⁰⁸ These obligations will also be enhanced during the period 2014–20: for farmers to be entitled to payment under a new basic payment scheme, they will be required to observe specified agricultural practices beneficial for the climate and the environment; and, in return, they will receive a separate ‘greening payment’, with 30 per cent of the total amount of direct payments of each Member State being allocated for this purpose.¹⁰⁹ That said, while the enhanced obligations may be regarded as an efficient engine to promote good husbandry in crop and livestock production, controversy has already been generated by the inclusion of ‘ecological focus areas’ among the specified practices beneficial for the climate and the environment. These areas were non-exhaustively described in the proposed regulation as ‘land left fallow, terraces, landscape features, buffer strips and afforested areas’.¹¹⁰ They may

¹⁰⁶ (3 March 2005) WT/DS267/AB/R, para 324.

¹⁰⁷ See eg OECD, *Environmental Cross Compliance in Agriculture* (OECD 2010).

¹⁰⁸ For the current legislation, see Council Regulation (EC) 73/2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers [2009] OJ L30/16, arts 4–6 and Annexes II and III. See generally eg D Bianchi, ‘Cross-Compliance: The New Frontier in Granting Subsidies to the Agricultural Sector in the European Union’ (2007) 19 *GeoIntEnvntLRev* 817; and J Phelps, ‘Much Ado About Decoupling: Evaluating the Environmental Impact of Recent European Union Agricultural Reform’ (2007) 31 *HarvEnvntLRev* 279.

¹⁰⁹ For political agreement to this effect, see European Commission, MEMO/13/621 (n 96); and, for the earlier proposed regulation, see European Commission, COM (2011) 625, arts 29–33. Significantly, this ‘greening’ is considered ‘to go beyond cross compliance’; *ibid*, Explanatory Memorandum, 7–8.

¹¹⁰ European Commission, COM (2011) 625, art 32.

therefore lead to a material reduction of overall output, since, as a general rule, they must initially extend to at least 5 per cent of land eligible for direct payments (excluding areas under permanent grassland). The wisdom of such an approach has been openly questioned at a time when demand for agricultural products is rising.¹¹¹ But, sensitive to such criticism, the Commissioner for Agriculture and Rural Development has emphasized that '[t]his is not set-aside!': rather the measure was 'a long-term investment in a sustainable competitiveness'.¹¹²

Likewise, in the United States the opportunity to deploy cross-compliance may also be blunted. For it to be effective, there must be direct payments upon whose receipt the environmental conditions may be attached; and a study for the year 2010 found that only approximately 20 per cent of farms received such payments.¹¹³ Further, there is every indication that the current Farm Bill, when eventually passed, will materially reduce the role of direct payments.¹¹⁴

Despite these limitations, such regimes would still appear well suited to the delivery of sustainable intensification, with strong arguments in favour of their expansion, but unfortunately their treatment under the Agreement on Agriculture is far from straightforward. In particular, it is not immediately clear whether the focus of the support is sufficiently 'environmental' to qualify for 'Green Box' exemption as payments under an environmental programme. In the EU, emphasis is laid upon the 'greening' of direct payments, with increasingly rigorous environmental conditions being imposed upon their receipt; and such emphasis is especially marked whenever successive Commissioners for Agriculture and Rural Development have sought to explain the rationale behind CAP reform to civil society.¹¹⁵ Yet, at

¹¹¹ See eg Agra Europe, 'Ecological Focus Area Plan "Still Reaps Yield Gains"', 10 February 2012.

¹¹² Commissioner Ciolos, Speech/12/112, 'Meeting the Challenge', Birmingham, 21 February 2012. In addition, it may be noted that the proposed direct payments regulation envisaged a higher percentage of land being devoted to 'ecological focus areas' (7 per cent), but this was resisted by both the European Parliament and the Council (whose negotiating positions favoured initial coverage of 3 per cent in the case of the European Parliament and 5 per cent in the case of the Council): see, respectively, <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2013-0084+0+DOC+XML+V0//EN&language=EN>> and <http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/agricult/136582.pdf> both accessed 7 May 2013.

¹¹³ R Claassen, *The Future of Environmental Compliance Incentives in U.S. Agriculture: The Role of Commodity, Conservation, and Crop Insurance Programs* (USDA/Economic Research Service 2012) 5 (although it should also be noted that these farms did cover approximately 71 per cent of cropland). See also WJ Even, 'Green Payments: The Next Generation of U.S. Farm Programs?' (2005) 10 *DrakeJAgriL* 173.

¹¹⁴ In particular, the Senate voted in June 2012 to eliminate direct payments, but, with the Bill itself failing to pass Congress, direct payments under the 2008 Farm Bill were extended to 30 September 2013.

¹¹⁵ See eg Commissioner Fischler, Speech/03/515, 'CAP Reform and EU Enlargement: the Future of European Agriculture', Leuven, 4 November 2003; and Commissioner Ciolos, Speech/10/400, 'I Want a CAP That Is Strong, Efficient and Well-balanced', Brussels, 20 July 2010. Also

least in the case of current EU direct payments, this would not seem to displace their primary character for WTO purposes as decoupled income support;¹¹⁶ what can be said with some certainty is that the European Commission has claimed exemption on such basis.¹¹⁷ And, even though the new ‘greening payment’ is more determinedly environmental, it may still lack the targeting necessary to qualify as a ‘clearly-defined government environmental or conservation programme’ as required for ‘Green Box’ exemption under paragraph 12 of Annex 2 (while at the same time being less obviously capable of characterization as ‘decoupled income support’).

Accordingly, a major policy initiative which may operate to secure *sustainable* intensification remains to be incorporated coherently within the WTO legislative framework. In light of the purpose and architecture of the Agreement on Agriculture, this is perhaps inevitable. Domestic support regimes which have the capacity to deliver sustainable intensification – and, not least, direct payments subject to cross-compliance conditions – are always in danger of running up against WTO rules designed to preclude support for production, while remaining insufficiently ‘green’ to qualify as environmental support.

Finally, any consideration of domestic support in the context of sustainable intensification must inevitably address the specific circumstances of developing countries. As already noted, early notions of sustainable intensification tend to be associated with developing countries and, more precisely, smallholder farming.¹¹⁸ Without doubt, in line with its mandate to provide special and differential treatment for such countries,¹¹⁹ the Agreement on Agriculture does offer them opportunities of consequence to promote agricultural production and/or productivity unfettered by domestic support reduction commitments. Perhaps most importantly, under Article 6(2), exemption is conferred in respect of, *inter alia*, ‘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 in developing country Members’. And it is expressly stated in the current draft modalities that ‘[t]he provisions of Article 6.2 of the Agreement on Agriculture shall remain unchanged’.¹²⁰

At the same time, although not formally part of the domestic support regime, the Marrakesh Decision on Measures Concerning the Possible Negative Effects

see generally eg A Swinbank, *Multifunctionality: A European Euphemism for Protection?* (FWAG Conference, Stoneleigh 2001).

¹¹⁶ See eg M Cardwell, *The European Model of Agriculture* (Oxford University Press 2004) 365.

¹¹⁷ See eg European Commission, ‘Mid-term Review of the Common Agricultural Policy’ COM (2002) 394, 19; and Swinbank and Tranter (n 81).

¹¹⁸ See eg Pretty (n 35); and Garnett and Godfray (n 38) 9.

¹¹⁹ Agreement on Agriculture, Preamble (6).

¹²⁰ WTO, *Revised Draft Modalities for Agriculture* TN/AG/W/4/Rev.4, 6 December 2008, para 18. Interestingly, while the Cairns Group proposed elimination of the ‘Blue Box’, there was full acceptance that Article 6(2) should continue in full force and effect: TN/AG/R/4, 18 October 2002.

of the Reform Programme on Least-developed and Net Food-importing Developing Countries (NFIDC Decision) expressly provides that full consideration should be given in aid programmes to requests for the provision of technical and financial assistance to such countries for the purposes of improving their agricultural productivity and infrastructure.¹²¹

Again with regard to food security, developing countries are likely to be the main beneficiaries of the ‘Green Box’ exemptions granted in respect of public stockholding of agricultural products for food security purposes (under paragraph 3 of Annex 2) and in respect of domestic food aid (under paragraph 4 of Annex 2).¹²² That said, as might be expected, the detailed conditions target these forms of support on humanitarian concerns, as opposed to promoting production for the more extensive demands now being made on agriculture. For example, in the case of public stockholding, it is expressly provided that ‘[t]he volume and accumulation of such stocks shall correspond to predetermined targets related solely to food security’, while, in the case of domestic food aid, eligibility is dependent upon ‘clearly-defined criteria related to nutritional objectives’. It may further be noted that, under the Doha Round negotiations it is proposed that the humanitarian focus be reinforced, by exempting also ‘the acquisition of foodstuffs at subsidized prices when procured generally from low-income or resource-poor producers in developing countries with the objective of fighting hunger and rural poverty’.¹²³

In consequence, the Agreement on Agriculture, together with proposed amendment in the Doha Round negotiations, does seem to offer particular latitude for developing countries to provide domestic support for sustainable intensification without their support being subject to reduction commitments. On the other hand, in the case of developing countries, a constant theme is that effective implementation of such policies is stifled in practice by lack of the necessary financial resources: to give a graphic example, it has been estimated that the expansion of agricultural output of developing countries would require an average annual net investment of 83 billion Dollars in primary agriculture and necessary downstream services.¹²⁴ At the same time, there is arguably more that could be done in terms of policy development to address recent food shortages. For example, there has been advocacy of a ‘Food Security Box’

¹²¹ Para 3(iii). It may be observed that reference is made to improving agricultural *productivity*, as opposed to increasing the amount of production per se. See also WTO Fourth Ministerial Conference, Doha, 9–14 November 2001, *Implementation-related Issues and Concerns: Decision of 14 November 2001*, WT/MIN(01)/17, 20 November 2001, para 2.2 (adopting the text as set out in G/AG/11, 28 September 2001).

¹²² For full discussion of this aspect, see eg C Häberli, ‘Food Security and WTO Rules’ in B Karapinar and C Häberli (eds), *Food Crises and the WTO* (Cambridge University Press 2010) 297; and Smith, McMahon and Desta (n 69).

¹²³ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex B.

¹²⁴ FAO et al, *Price Volatility in Food and Agricultural Markets: Policy Responses* (FAO and OECD 2011) para 47.

for developing countries, permitting general subsidies to increase domestic food production (such subsidies to cover, *inter alia*, seed and fertilizer), with no requirement that the recipients be low-income or resource-poor farmers.¹²⁵ Such an initiative should have the capacity to mobilize production across a range of agricultural structures, with a positive outcome in terms of promoting greater domestic self-sufficiency (although care would need to be taken to ensure that the increase in production was sustainable).

E. Export Competition

Consistent with the provisions on market access and domestic support, the Agreement on Agriculture seeks to reduce barriers to trade in the field of export competition.¹²⁶ Under Article 8, Members undertake not to provide export subsidies so as to enable their farmers to export their products, except in conformity with the Agreement itself and with the commitments laid down in their respective Schedules. Again different levels of reduction were imposed according to the category of Member concerned.¹²⁷ Developed countries were required to make two reductions over the period 1995–2000 (as from a 1986–1990 base). First, they were obliged to reduce expenditure on export subsidies by 36 per cent; and, secondly, they were obliged to reduce the quantity of subsidized exports by 21 per cent. In the case of developing countries, the percentages were set lower, at respectively 24 and 14 per cent, and the implementation period was extended to up to 10 years, while no reduction at all was required of least developed countries.

It should at once be mentioned that the regime for export competition does already contain a provision which has the capacity to promote food security. Article 10(4) conditions international food aid on requirements which are intended to prevent commercial displacement: thus, for example, it is necessary for Member donors to observe the FAO Principles of Surplus Disposal and Consultative Obligations. Significantly, under the Doha Round negotiations the current draft modalities propose a substantial recasting of this provision, in ways which render far more explicit humanitarian considerations and which focus on protecting local production.¹²⁸ Accordingly, all food aid transactions must be needs-driven.¹²⁹ And, in terms conducive to sustainable production (if not sustainable intensification), Member donors are to refrain from providing in-kind food aid ‘where this would cause, or would be reasonably

¹²⁵ See CG Gonzalez, ‘Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security, and Developing Countries’ (2002) 27 *ColumJEnvtlL* 433, 489.

¹²⁶ See generally eg McMahon (n 40) 89–145.

¹²⁷ GATT Modalities (n 60) paras XI, XV and XVI.

¹²⁸ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex L.

¹²⁹ *ibid*, Annex L, para 2(a). See also the proposal for a ‘Safe Box’ in emergency situations: *ibid*, Annex L, paras 6–10.

foreseen to cause, an adverse effect on local or regional production of the same or substitute products', instead being encouraged to procure food aid locally or regionally so far as possible (provided that this does not unduly compromise the availability and prices of basic foodstuffs in these markets).¹³⁰

That said, arguably the most significant development in the Doha Round agricultural negotiations was agreement at the 2005 Hong Kong WTO Ministerial Meeting that developed countries should ensure the parallel elimination by 31 December 2013 of all forms of export subsidies and disciplines on all export measures with equivalent effect.¹³¹ This would be consistent with the current state of agricultural markets, where exports can generally be secured without any form of financial support: indeed, EU expenditure on export refunds has fallen away dramatically, to the extent that it constitutes a fraction of the current agricultural budget.¹³² On the other hand, it is interesting to note that the proposed EU legislative framework for the period 2014–20 does retain a system of export refunds.¹³³ And, should a policy of sustainable intensification prove (over) successful, then once again there may be surpluses that are difficult to shift on international markets without subsidy.

F. Beyond the Three Pillars: Export Prohibitions and Restrictions

As indicated above, the Agreement on Agriculture was originally negotiated at a time of surplus production; and it may be recalled that, at the end of the 1992–93 marketing year, EU cereal intervention stocks stood at some 33.4 million tonnes, even though during the same marketing year nearly 36 million tonnes of cereals had been exported. It is therefore easy to understand why the primary focus of WTO negotiations was upon export refunds rather than export prohibitions and restrictions.¹³⁴ But export

¹³⁰ *ibid.*, Annex L, para 3.

¹³¹ WTO, Hong Kong Ministerial Declaration, (WT/MIN(05)/DEC), 22 December 2005, para 6; but agreement at Hong Kong did not preclude further negotiation of issues of detail (such as value versus volume commitments): see eg 'Challenge Paper' of 30 April 2007 <http://www.wto.org/english/tratop_e/agric_e/agchairtxt_30apr07_e.pdf> para 55, accessed 7 May 2013.

¹³² See eg the low levels of expenditure on export refunds as set out in Title 05 (Agriculture and Rural Development) of the Draft General Budget of the European Union for the Financial Year 2013, Volume III/241. For a useful survey of EU expenditure on export refunds, see eg A Matthews, *End the Use of Export Subsidies in the 2013 CAP Review* <<http://capreform.eu/end-the-use-of-export-subsidies-in-the-2013-cap-review/>> accessed 7 May 2013 (noting that export refunds fell from 3.8 billion Euros in 2003 to an appropriation of just 138 million Euros in the draft 2012 Budget).

¹³³ European Commission, COM (2011) 626 (and, in particular, Preamble (94)).

¹³⁴ See generally eg J Scott, 'Tragic Triumph: Agricultural Trade, the Common Agricultural Policy and the Uruguay Round' in N Emiliou and D O'Keefe (eds), *The European Union and World Trade Law: After the GATT Uruguay Round* (John Wiley 1996) 165; and TE Josling, S Tangermann and TK Varley, *Agriculture in the GATT* (Macmillan Press 1996) 175.

prohibitions and restrictions are not outside the rules; rather, they are subject to a ‘lighter touch’.¹³⁵

Article XI(2)(a) of the GATT provides exemption from the general elimination of quantitative restrictions in the case of ‘[e]xport prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party’ and this provision is supplemented by Article 12 of the Agreement on Agriculture (although not applicable to developing countries, unless they are net-food exporters). In particular, Article 12 lays down procedural constraints. First, there is an obligation to give due consideration to the effects of export prohibitions and restrictions on the food security of importing Members. Secondly, there is an obligation to give prior written notice, as far in advance as practicable, to the Committee on Agriculture; and this notice must contain, for example, information as the nature and the duration of the measure. Thirdly, there is an obligation to consult, upon request, with any Member that has a substantial interest as an importer. That said, the obligation to give prior written notice has not consistently been honoured in practice, even during the 2007–08 food crisis.¹³⁶

Over and above any such difficulties in practice, the wording of these provisions could be questioned both for their strength and precision. Not least, the obligation to give ‘due consideration’ to the effects of the prohibition or restriction is a weak one. Further, there is no definition of what constitutes a ‘critical shortage’, while information on the duration of the measure may prove unreliable.¹³⁷ This may be illustrated by the export ban imposed by the Russian Federation in August 2010, which was predicted by the President to last no longer than the end of the year,¹³⁸ but in the event continued until 1 July 2011.¹³⁹ In respect of these issues, however, assistance may now be derived from the jurisprudence of the Appellate Body in *China–Raw Materials* (albeit in the context of ‘other products essential to the exporting contracting party’ as opposed to foodstuffs).¹⁴⁰ Importantly, it was observed that a case-by-case analysis was required; and that ‘[i]nherent in the notion of criticality is the

¹³⁵ For export prohibitions and restrictions, see Agreement on Agriculture, art 12.

¹³⁶ S Mitra and T Josling, *Agricultural Export Restrictions: Welfare Implications and Trade Disciplines*, IPC Position Paper (International Food and Agricultural Trade Policy Council 2009) 15; and Sharma (n 12) 23.

¹³⁷ See eg B Karapinar, ‘Export Restrictions and the WTO Law: How to Reform the “Regulatory Deficiency”’ (2011) 45 *Journal of World Trade* 1139.

¹³⁸ See eg BBC, ‘Russia Ban on Grain Export Begins’, 15 August 2010 <<http://www.bbc.co.uk/news/business-10977955>> accessed 7 May 2013.

¹³⁹ On the other hand, it may be rather optimistic to expect Members to be able to gauge *ab initio* when critical food shortages are likely to abate. Note also continued use by the Ukraine of its export ban despite vociferous protests by other net-food importing WTO members: Committee on Agriculture, *Summary Report of the Meeting Held on 18 November 2010*, G/AG/R/60, 19 January 2011, paras 19–20.

¹⁴⁰ WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R, 30 January 2012 (and, in particular, paras 318–328).

expectation of reaching a point in time at which conditions are no longer “critical”¹⁴¹.

The Agreement on Agriculture’s preoccupation with opening markets continues into the Doha Round negotiations with the result that export prohibitions and restrictions are pushed towards the end of current draft modalities and dismissed as simply ‘other issues’.¹⁴² Proposed additions to Article 12 of the Agreement on Agriculture are again primarily procedural. Members imposing any export restrictions and prohibitions would be obliged to do so in an open and transparent manner and, on request, in consultation with Members ‘having a substantial interest as an importer’.¹⁴³ There is also a duty to monitor the impact of the measure imposed on the WTO Committee on Agriculture.¹⁴⁴

Although the current draft modalities do not make explicit reference to ‘sustainable intensification’ as such, there is still in this context some hint at a broader agenda beyond trade liberalization. Existing export prohibitions and restrictions imposed on foodstuffs and feeds must be removed at the end of the first year following their implementation,¹⁴⁵ clearly acknowledging the ‘chilling’ effect they can have on food production in that they tend to reduce domestic prices (this generally being the motivation for their introduction in the first place) and so prompt farmers to reduce or even cease growing the crop concerned.¹⁴⁶ Further, imposing a time limit for existing and subsequent export prohibitions and restrictions recognizes that such measures may have very adverse consequences in terms of food security on net-importing countries, and particularly so in the case of NFIDCs.¹⁴⁷

In any event, since the current draft modalities were issued in December 2008, the imposition of export prohibitions and restrictions has moved swiftly up the WTO agenda. Thus, in June 2011 Egypt initiated a proposal to prevent restrictions being imposed on exports of agricultural products to NFIDCs;¹⁴⁸ and, at the Eighth WTO Ministerial Conference held in December 2011, several ministers urged Members to commit both to removing existing food export restrictions and to refraining from their employment in the future.¹⁴⁹

¹⁴¹ *ibid.*, para 328.

¹⁴² WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Part V.

¹⁴⁴ *ibid.*, para 176.

¹⁴⁵ *ibid.*, para 178.

¹⁴³ *ibid.*, paras 171, 172, 174 and 175.

¹⁴⁶ Mitra and Josling (n 136) 3.

¹⁴⁷ See generally eg A Valdés and W Foster, *Net Food-Importing Developing Countries: Who They Are, and Policy Options for Global Price Volatility* (International Centre for Trade and Sustainable Development 2012).

¹⁴⁸ For discussion of this proposal, see eg International Centre for Sustainable Trade and Development, *Ban Proposed on Export Restrictions That Undermine Food Security*, 27 June 2011 <<http://ictsd.org/i/press/109409/>> accessed 7 May 2013. See also Bridges, ‘WTO Members Table Proposals on Agricultural Export Restrictions’, 15(37), 2 November 2011.

¹⁴⁹ WTO, Eighth Ministerial Conference, Geneva, 15–17 December 2011, Chairman’s Concluding Statement, WT/MIN(11)/11, 17 December 2011.

IV. CONCLUSION

It would now be hard to argue that the demands on agriculture are not undergoing a paradigm shift. If there had been any lingering uncertainty, it would seem to have been dispelled by the renewed pressures on supply imposed by the adverse climatic conditions of the summer of 2012. The consequent question whether the Agreement on Agriculture (and its Doha Round renegotiation) adequately address this changed landscape is not an easy one. First of all, some caution would seem advisable before suggesting that the template as agreed in the Uruguay Round has become materially redundant. For example, it would clearly be an error to abandon the existing legislative framework in favour of one with focus purely on export restraints. Likewise, it would seem to be a mistake to stop the deepening of curbs on protectionism: a 2012 European Commission report found a steady increase in the incidence of potentially trade-restrictive measures during the latter part of 2011 and early part of 2012, and across a wide range of sectors.¹⁵⁰ Moreover, even though tightness of supply may be anticipated for the foreseeable future, there must be wisdom in retaining a set of rules which is at least capable of regulating a return to surplus. An illustration of the dangers of moving too hastily may perhaps be provided by reference to the objectives of the CAP. Over the period leading up to conclusion of the Treaty of Lisbon, there was considerable advocacy of a move away from the 'productivist' model which they represented (and, in particular, the objectives of stabilizing markets and assuring the availability of supplies),¹⁵¹ with a view to throwing greater emphasis on environmental concerns. Yet, while environmental concerns continue to be genuine, few would currently dispute the merits of stable markets and ready availability of supplies.

In addition, there is a strong argument that the Agreement on Agriculture (whether in its current form or as renegotiated in the Doha Round) has the capacity to foster increased production and/or productivity, whether through its overall effect or detailed measures. Definitely, in the view of the WTO Director-General, the overall effect is positive, as evident in his letter of 14 December 2011 to the United Nations Special Rapporteur on the Right to Food: '[i]n response to an enhanced transmission of unbiased price signals competitive producers adjust their production and investment decisions. This supply response helps to mitigate price pressure, contributing to improved availability of affordable food'.¹⁵² And, to illustrate the potential of detailed

¹⁵⁰ European Commission Directorate-General for Trade, *Ninth Report on Potentially Trade Restrictive Measures: September 2011–1 May 2012* (European Commission 2012).

¹⁵¹ See then EC Treaty, art 33(1), now TFEU, art 39(1). Even the Commissioner for Agriculture and Rural Development considered such calls for greater production 'somewhat anachronistic': Franz Fischler, Speech/03/515, 'CAP Reform and EU Enlargement: the Future of European Agriculture', Leuven, 4 November 2003.

¹⁵² The letter addressed criticism of the current WTO legislative framework in the Activity Report prepared by Professor Olivier de Schutter, the United Nations Special Rapporteur on the

measures, three examples may be recalled. First, under Article 6(2) there is scope for developing countries to provide exempt support for agricultural investment; secondly, research into farming practices which directly foster sustainable intensification may in the correct circumstances be subsidized as a 'Green Box' exempt general service;¹⁵³ and, thirdly, the current draft modalities propose that 'Green Box' exemption similarly be conferred on policies and services in developing countries which address climate change concerns (such as drought management).¹⁵⁴

On the other hand, it would seem reasonable to suggest that the international agricultural trade rules should no longer privilege measures which may actually militate against sustainable intensification; and the future role of the 'Blue Box' may legitimately be brought into question. In particular, there is now less logic in exempting from domestic support reduction commitments direct payments under production-limiting programmes (or direct payments which do not require production at all, as envisaged in the current draft modalities).¹⁵⁵ In this respect, the Doha Round negotiations arguably display an element of path dependency and fresh thinking may be required. Further, there is general consensus that the 'Blue Box' was introduced as a mechanism to break the *impasse* which had been reached in the Uruguay Round negotiations (by providing a shelter for the bulk of EU and United States domestic support); and it may perhaps therefore be regarded as a temporary expedient, with there being no immediate reason why production-limitation should be so vital on a long-term basis for an Agreement on Agriculture designed to generate trade flow. Interestingly, no reference is made to 'Blue Box' measures in the Preamble. Similarly, it may be asked whether there is an ongoing justification for the fundamental requirement that all 'Green Box' support has both no, or at most minimal, trade distorting effects *and* no, or at most minimal, effects on production. The former criterion would seem absolutely in line with the ethos of the Agreement on Agriculture; the latter less so.

Positive incentives to promote sustainable intensification would also seem to generate inherent difficulties for world trade rules. First, as has been seen, the precise nature of 'sustainable intensification' itself remains fully to be worked out, with the result that both the current Agreement on Agriculture and any revised version negotiated within the Doha Round are likely to be faced with novel instruments and measures, not capable of ready categorization.

Right to Food, *The World Trade Organization and the Post-Global Food Crisis Agenda: Putting Food Security First in the International Trade System* (United Nations 2011) <http://www.wto.org/english/news_e/news11_e/agcom_14dec11_e.htm#letter> accessed 7 May 2013.

¹⁵³ Research which has already provided beneficial includes that into ways of reducing methane emissions from cattle: see eg S Tamminga et al, *Feeding Strategies to Reduce Methane Loss in Cattle* (Wageningen UR 2007).

¹⁵⁴ WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex B.

¹⁵⁵ *ibid.*, para 35.

Again by way of illustration, having identified increasing financial stability for agricultural producers and food independence as priorities for agriculture over the period 2013–20, the Russian Federation announced in the summer of 2012 that it would make per hectare payments to farmers, with the amounts based upon output volumes and climatic conditions; and, significantly, WTO compatibility was claimed for those payments.¹⁵⁶

Secondly, the Agreement on Agriculture is generally hostile to support for specific crops, as evidenced by the rules governing the use by Members of decoupled income support, which preclude connection between the amount of payments and the type or volume of production.¹⁵⁷ Accordingly, by way of illustration, it may not be easy for a Member to provide exempt support in favour of a form of biomass production which is apprehended to have a very light carbon footprint.¹⁵⁸ In like vein, developing countries may struggle to find ways of providing exempt support for a commodity crop which is of heightened importance in terms of their climate or economy.¹⁵⁹ That said, one possibility not to be overlooked is *de minimis* support, which, despite being limited in scale, may be product-specific.

Thirdly, there is the overarching hurdle that, although ‘sustainable intensification’ may not be a contradiction in terms,¹⁶⁰ it does nevertheless exhibit certain ‘Janus-like’ qualities, with the result that both domestically and at WTO level there is a need for subtle balancing of competing interests. Within the WTO context, it may be reiterated that measures which place their emphasis on production may struggle to comply with the provisions of the Agreement on Agriculture. By contrast, measures which place their emphasis on sustainability may qualify for ‘Green Box’ exemption as environmental programmes, but the specific nature of such programmes renders them an unlikely vehicle for delivering sustainable intensification. And, where the link between intensification and sustainability is perhaps most close, namely cross-compliance regimes, there are again genuine problems of accommodation within the existing framework of the Agreement on Agriculture. Thus, although receipt of the EU Single Farm Payment is conditional upon observing good agricultural practice, in world trade terms it would seem to fall between two stools. On the one hand, the cross-compliance requirements are in all

¹⁵⁶ I Khrennikov, ‘Russia to Pay Farmers for Land Worked in WTO-Support Move’, *Bloomberg Businessweek*, 20 September 2012 <<http://www.businessweek.com/news/2012-09-20/russia-to-pay-farmers-for-land-worked-in-wto-support-move>> accessed 7 May 2013.

¹⁵⁷ Agreement on Agriculture, Annex 2, para 6(b).

¹⁵⁸ See eg European Environment Agency Scientific Committee, *Opinion of the EEA Scientific Committee on Greenhouse Gas Accounting in Relation to Bioenergy*, 15 September 2011 (highlighting that, for the purposes of combating climate change, the source of the biomass is critical).

¹⁵⁹ On the other hand, in the case of the market access ‘Pillar’, the proposal in the Doha Round negotiations that developing countries should be able to designate ‘Special Products’ would seem well calculated to address this problem (as evidenced by the illustrative list of indicators which are to govern such designation): WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, 6 December 2008, Annex F.

¹⁶⁰ Garnett and Godfray (n 38) 10.

probability insufficiently rigorous to justify exemption as an environmental programme and, on the other hand, if it is to secure exemption as decoupled income support, according to the world trade rules there must be no obligation to produce.

In consequence, some ingenuity will be necessary if the Agreement on Agriculture is to become a major force for the promotion of sustainable intensification. As has been seen, even what constitutes an 'agricultural product' is now open to interpretation. But perhaps most critically, the primary goal of the Agreement on Agriculture is to establish a fair and market-oriented agricultural trading system and one would not expect it to transform into an engine which develops detailed measures for a very different policy objective (and one which, as yet, remains properly to be defined). Rather, its role is to assess whether measures developed elsewhere distort trade in ways that cannot be justified. To this extent, the Doha Round negotiations would seem to display some awareness of the changes which have occurred in the agricultural sector: not least, there is greater emphasis on the need to tackle food security and climate change in developing countries. Indeed, perversely, the delay in concluding the Doha Round may yet prove to be an opportunity, since the new challenges facing agriculture, somewhat opaque at the time of Seattle and even Doha, are now more fully revealed and capable of being addressed.¹⁶¹ Grasping this opportunity, and still holding true to its main purpose, a good first step forward would be to negotiate a new Agreement on Agriculture which is not positively inimical to a more 'productivist' model and which also grants Members the policy space to foster sustainable intensification in ways which impact as little as possible on the free flow of trade.

¹⁶¹ Proposals to accommodate new issues such as food security are gathering momentum towards the Ninth Ministerial Meeting in December 2013; BNA WTO Reporter, 'U.S., Others Put Forward Proposals to Facilitate WTO Bali Deal Package', 1 May 2013.