International Trade Disciplines and Policy Measures to Address Climate Change Mitigation and Adaptation in Agriculture

By David Blandford

Introduction

It is now widely accepted that the world’s climate is changing and that we are in a period of global warming. Agriculture is a significant source of global greenhouse gas (GHG) emissions, although it can also contribute to carbon sequestration. The sector is particularly susceptible to the effects of climate change on crop and livestock production. A key issue is whether policy measures that are emerging to promote mitigation or adaptation in the sector are consistent with GATT/WTO disciplines. What modifications (if any) might be made to allow countries to achieve objectives in this area while at the same time preventing undue restrictions on trade? Climate change policies could easily become a guise for protecting domestic food and agricultural sectors from international competition.

1. Domestic climate change policy measures and international trade disciplines

The use of taxes to internalize the costs imposed by pollution (in this case GHGs) has been advocated by economists. Some countries already use explicit taxes on GHG-emitting inputs, such as energy or fertilizer, primarily to raise government revenue. These could be more broadly applied and targeted to reducing the use of such inputs in agriculture. Implicit taxes can also be imposed through cap-and-trade schemes for emissions or through process or product regulations affecting agricultural production. As such measures are likely to be reflected in higher production costs and to tend to reduce output, they would be unlikely to be challenged under GATT/WTO agreements. However, implicit subsidization through the exemption of agriculture from emission reduction measures or provisions that permit the sale of GHG-reduction credits by farmers under cap-and-trade schemes might be subject to challenge on the grounds that they could increase agricultural output.

There is often a marked preference among policy-makers for the use of subsidies to pursue environmental objectives in agriculture. Subsidies are covered by the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Agriculture (AoA). Under the SCM, a measure qualifies as a subsidy if it entails a financial contribution, is made by a government or public body, and confers a benefit. A subsidy is subject to the full disciplines of the SCM if it is specifically provided to an enterprise or industry, or a group of enterprises or industries. Subsidies may be challenged by a trading partner on the basis of injury to its domestic industry due to imports of subsidized products, serious prejudice (e.g. through displacement of its exports), or through nullification or impairment of benefits (e.g. improved market access under a negotiated reduction in bound tariffs being undercut by the effects of the subsidy).
A wide range of explicit or implicit subsidies could potentially be used in climate change policies for agriculture. Some of these might qualify under the green box (Annex 2) heading of the AoA as being minimally production or trade distorting. Prime examples would be expenditures on research and development (R&D) for new production methods or technologies relating to mitigation/adaptation and the diffusion of knowledge relating to these elements. It is unlikely that such expenditures would be challenged by other countries in the WTO, particularly since some of the resulting benefits may be transferable across borders.

Payments under environmental schemes linked to climate change objectives, e.g. the promotion of mitigation activities such as reduced tillage, idling of farmland, or its conversion to sequestration activities, such as the production of woody biomass, may also fall under the provisions of Annex 2. Agriculture can play a role in sequestering atmospheric carbon by avoiding deforestation or the use of environmentally sensitive lands (e.g. peat land) and through the use of certain production practices. The green box provisions for payments under agri-environmental schemes, if strictly applied, are quite limiting since they restrict payments to compensation for costs incurred or loss of income involved in complying with a programme, i.e. they exclude incentive payments. To the extent that payments under an agri-environmental scheme enhance production, they would be potentially subject to challenge under the SCM.

Payments with clearly defined agri-environmental objectives are likely to be superior to those whose primary purpose is to provide income support, even if the latter have environmental provisions attached (e.g. a requirement to keep land in good environmental condition). Viewed from the perspective of providing environmental goods, there is a strong likelihood of over-compensation and increased risk of production and trade distortions. Some recoupling of payments to production may be required in order to achieve environmental objectives, but there is a need for consensus on what is permissible. There is also a need for contestability (through notification and enhanced scrutiny with possibilities for challenge) to limit the possibility that environmental schemes will become a popular vehicle for protection.

Other forms of expenditure associated with climate change objectives may qualify for the green box, e.g. domestic subsidies for the adoption of new technologies, payments for crop or livestock losses associated with extreme climatic events, or insurance subsidies. Government financial participation in crop or income insurance and income safety net programmes and payments triggered by natural disasters are permitted under the green box, but only under strict conditions. The provisions seek to ensure that payments under these categories do not become a permanent subsidy and that they are minimally production distorting. When there is a continuing element of subsidy (e.g. through a government-supported insurance scheme) payments are likely to fall under the heading of amber box support – either product-specific or non-product-specific depending on the type of scheme employed.

Payments relating to structural adjustment (including investment subsidies) and for permanently disadvantaged regions are included under the green box category, providing that these satisfy certain conditions. Such payments could become more prevalent if climate change severely disadvantages certain producers or regions. Infrastructural and input subsidies (e.g. for irrigation) that are more broadly applied would generally qualify for inclusion under the amber box. Input subsidies can be counterproductive for climate change mitigation and have negative impacts on natural resources. Subsidies relating to the use of fertilizer, energy or water can be particularly damaging in this regard.
Agriculture is increasingly being called upon to provide biomass for non-food uses (e.g. biofuels). The role of biofuels in climate change and the broader environmental impact of biofuel feedstock production, as well as potential effects on food prices, are controversial. Subsidies for the production of agricultural products that are feedstocks for biofuel are required to be reported as product-specific support under the AoA. However, there is some ambiguity as to whether biomass produced exclusively for energy use would be covered by this requirement. Support for feedstocks can be provided by demand-enhancing measures, such as consumption or blending mandates for biofuels. The indirect support provided through such measures is not covered by the AoA or the SCM.

2. Border measures associated with climate change policies and international trade disciplines

Concern is often expressed that domestic environmental policies can be undermined by international trade. Climate change is likely to alter comparative advantage in many countries. The transfer of production to countries that employ low-emission technologies can result in a global reduction in emissions per unit of agricultural output. Attempting to cut emissions in each country individually is not necessarily the most efficient way to achieve a global reduction. However, if a domestic industry is being taxed in order to reduce its emissions, imports of products from untaxed industries in competing countries using similar technologies will not help achieve such a reduction. It will simply result in a cross-border relocation of production (carbon leakage). Consequently there may be pressure to offset the competitive effects of domestic taxes or environmental regulations through tariffs or other border measures.

Countries have a limited ability to adjust tariffs under existing WTO agreements. Applied tariffs can be increased if they are lower than bound tariffs, but increases cannot be discriminatory. Higher tariffs cannot be levied on imports of products from countries that generate high emissions per unit of output. Hence, while a general tariff increase could help reduce imports from high carbon emitters with relatively low production costs, it will disproportionately affect low carbon emitters with relatively high production costs.

Article XX of the GATT provides some exceptions for the use of border measures that are inconsistent with GATT principles (e.g. import bans). Exception (g) covers measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. The ruling in a dispute settlement case (Shrimp-Turtle) seems to open the possibility that non-discriminatory import restrictions could be imposed under this exception. However, the requirement for non-discrimination severely limits the practical usefulness of the exception. Despite the questionable status of environmental provisions under WTO agreements, a growing number of free trade agreements (FTAs) are incorporating such provisions.

3. Process or product regulations and environmental labelling

Environmental standards for food products and environmental labelling are being adopted in some countries. The most popular approach is labelling based on the carbon “footprint” of a product, which corresponds to the amount of carbon emissions generated by its production, processing and transportation. The majority of the labelling initiatives are associated with private voluntary standards
(PVS) created by retailers. PVS are likely to impose additional costs on suppliers. However, it is difficult to argue that PVS are an explicit discriminatory device against traded products, since they are generally also imposed on local suppliers. Local small-scale suppliers of food and agricultural products are often vocal in complaining about additional costs that PVS can create for them.

From an international perspective, a difficulty arises if PVS are transformed into legislated standards (LS) and if these are structured in such a way as to discriminate against imports. The treatment of product standards is covered by the Agreement on Technical Barriers to Trade (TBTs); several other WTO agreements, e.g. the Agreement on Sanitary and Phytosanitary Measures (SPS), may also be relevant. All these agreements indicate that no country should be prevented from taking measures necessary to ensure the protection of human, animal or plant life or health. The TBT Agreement extends this principle to the protection of the environment. All the agreements specify that measures used should not be discriminatory or constitute a disguised restriction on international trade.

The TBT Agreement focuses on ensuring equality of treatment in technical regulations for imported products and “like products” of national origin (Article 2:1). An important issue is whether the environmental provision in the Agreement would permit countries to impose technical regulations associated with the environmental characteristics of products, such as their carbon footprint. The TBT does not allow countries to impose their domestic production regulations or standards on other countries, nor does it allow prohibitions on imports produced using a lower standard. On the other hand, the ruling in the shrimp-turtle case seems to suggest that an exemption to this requirement might be possible under Article XX. If carbon labelling is required for both domestic and imported products, this would seem to be permitted under the TBT Agreement. However, since the Agreement requires equal treatment for imports of “like” products, imports alone could not be required to be labelled and the nature of the labelling should not result in discrimination. Again, there might be a case for an exemption under Article XX if it could be shown that the requirement was necessary for the protection of natural resources.

WTO agreements that relate to standards place particular emphasis on the development of international standards. The SPS Agreement, for example, provides an explicit link to the work of bodies such as the FAO’s Codex Alimentarius Commission and the International Office of Epizootics (OIE). The role of international standardization is also central to the TBT Agreement. This suggests that an international approach to identifying the environmental characteristics of goods, such as their carbon footprint, would reduce the likelihood of challenge through the WTO to the use of standards or labelling requirements, and could also help limit the tendency for the proliferation of private standards.

In many countries where product standards and labelling are an issue, governments are not necessarily in the vanguard of such initiatives. These are often led by private companies. Organizations such as GlobalGAP, which establishes voluntary standards for the certification of agricultural products as being “safe and sustainable” have emerged to provide certification for farmers wishing to prove to retailers that they meet certain production standards. The SCM Agreement makes reference to the activities of “private bodies” in the provision of subsidies, so that such activities are not entirely excluded from the ambit of WTO agreements. However, it remains to be seen to what extent specific activities undertaken by private entities that may provide a competitive advantage to domestic producers or disadvantage foreign suppliers could be subject to challenge under WTO agreements. The SCM specifies that this may be the case if “a government makes payments to a funding mechanism, or entrusts or directs a
private body to carry out functions (for which a subsidy shall be deemed to exist) which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments." (Article 1.1 (iv)).

4. Developing countries, climate change and international trade disciplines

It is generally accepted that the agricultural sectors in many developing countries will face major challenges in adapting to climate change. The GATT/WTO framework provides for special and differential treatment for developing countries; an important issue is how this would be applied to climate change policies for agriculture. The AoA currently provides for special treatment for investment subsidies in developing countries and for agricultural input subsidies to low-income or resource-poor producers. Rules that are premised on the notion that agricultural subsidies add to surpluses and retain inefficient productive capacity may not be suited to some developing countries, particularly the poorest. Some relaxation of rules for developing countries has been proposed during the Doha negotiations, for example, criteria to be applied to income insurance and disaster relief. Few would argue that developing countries that seek to modernize their agricultural sectors to improve productivity and resilience in the face of climate change should be prevented from doing so through international trade disciplines. However, the compatibility of some measures – particularly input subsidies for energy and aids for conversion of land to agricultural uses – with climate change objectives is questionable. In particular, the provision of subsidies for the use of energy or water in agriculture needs to be avoided if the environmental footprint of agriculture is to be reduced.

Investment in basic research and new technologies, for example the development of drought resistance in food crops and more efficient irrigation systems, will be needed to address the productivity challenges facing many developing countries. However, of equal importance is the need to address structural limitations in the adoption and use of available technology, by strengthening extension efforts, expanding access to credit and insurance, and achieving greater integration of input and output markets through improvements in local institutions and infrastructure for example. There is considerable scope for national aid programmes and for international financing mechanisms to be refocused to address environmental sustainability in developing countries, while at the same time promoting increased productivity. For example, existing technical assistance programmes such as Aid for Trade could be strengthened to enhance climate change resilience in the agricultural sectors of developing countries and to enable them to cope with the challenges and opportunities that will be created for the international trading system by climate change policy.

5. WTO priorities in the area of climate change

International trade can make a positive contribution to addressing the challenges posed by climate change for global food security. At the same time, the pursuit of climate change policies for agriculture opens up the possibility of conflicts with existing international trade disciplines. The challenge will be to allow countries flexibility in reducing the environmental footprint of agriculture and promoting greater sectoral resilience, while at the same time letting the benefits
of freer trade to be realized. There is a need for an international consensus on which domestic policy measures are likely to be effective in tackling the effects of climate change in agriculture and are also the least trade distorting. There is also a need for enhanced monitoring and scrutiny of measures used in order to avoid trade disputes.

The immediate priority for the WTO is to conclude the current Doha Round of trade negotiations. In doing so, some important priorities relating to climate change measures could be addressed. These include:

1. The clarification of criteria to be applied under Annex 2 of the AoA (green box criteria) to ensure that these exempt policies with clear climate change objectives, combined with enhanced transparency and scrutiny of such policies to ensure that they are minimally production and trade distorting;

2. The provision of special exemptions for the least developed countries in the use of measures to increase agricultural productivity and resilience in the face of climate change (e.g. certain types of input subsidies that would otherwise be disciplined under the AoA);

3. Greater transparency in the use of explicit and implicit subsidies for the use of biofuels through enhanced requirements for the notification of biofuels policies and scrutiny of such policies.

Over the medium to long-term, additional important issues to be addressed in the WTO could include:

1. The clarification of preferred domestic policy measures for climate change mitigation and adaptation in terms of effectiveness and minimally distorting effects on international trade, in the same way that measures for domestic support have been classified by colour codes (amber, blue and green) on the basis of the objective of reducing protection;

2. The clarification of the definition and use of environmental standards in WTO agreements (particularly the SPS and TBT agreements);

3. The clarification of the scope of Article XX and its application in ways that address climate change issues, such as carbon leakage, while minimizing the use of discriminatory trade measures.

The challenges that face agriculture and the world economy as a result of significant climate change cannot be dealt with solely through agreements that focus on international trade. However, it is eminently feasible to ensure that these agreements operate in support of global efforts to address climate change.