

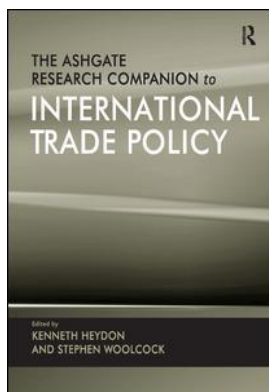
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PART III

Sectoral Challenges

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Agriculture

Stefan Tangermann

Introduction

Why is there a chapter on agriculture in a book on international trade, while there are none on automobiles, electronic equipment or any other sector producing specific goods? Is trade in agricultural products such an important part of world trade? Certainly not. In 2008, agricultural products accounted for no more than 8.5 per cent of world merchandise trade (WTO 2010), and that share is on a secular declining trend. It is the potential of agriculture to cause trouble in trading relations among otherwise friendly nations that tends to place agriculture high on the trade agenda. That trouble does not derive from any inherent characteristics of agricultural products – they are neither explosive nor toxic, and most of them are easily tradable. The trouble that agriculture tends to cause in international trading relations originates from the fact that many governments interfere heavily with markets for agricultural products and by doing so distort trade and international competition. Of course, agriculture is not the only sector where governments pursue policies that distort trade and create problems for other nations. However, the degree to which policies interfere with markets and trade is particularly pronounced in agriculture. What is more, there is a tendency for many governments to consider their agricultural policies a matter of national sovereignty which cannot easily be subjected to international disciplines. As a result, international trade negotiations, as pursued multilaterally in the World Trade Organization (WTO) or bilaterally, typically face particularly difficult issues when it comes to negotiating the treatment of agriculture.

When taking a closer look at agricultural trade issues it makes sense to start with at least a brief overview of the intensity of government policies in the agricultural sector. This is what the first section of this chapter will do. The question then immediately arises as to why governments pursue these policies, and that is what the following section will be devoted to. Some, if not all, of what governments try to achieve in agriculture may well be justified, but that does not say that interference with markets and trade is the most effective and efficient way of pursuing these objectives. We shall therefore turn, in the central section of this

chapter, to a discussion of possible policy alternatives that may both perform better domestically and create fewer distortions in international trade.

Obviously, the nature of policy issues in agriculture and the specific characteristics of the instruments used in agricultural policies differ widely from country to country. However, there are certain similarities across many industrialized countries, and in discussing the fundamental issues in their agricultural trade one can, to some extent, generalize. The nature of issues and policies in many developing countries, though, is different from the situation in developed economies, and hence requires a separate treatment. Given the limited space available for this chapter, its focus will be primarily on the situation in the rich countries, not least because they account for the bulk of distortions in world agriculture.

The Nature of Agricultural Policies

From a trade perspective, the first point to make about agricultural policies is that tariffs in agriculture continue to be high, in both absolute terms and relative to tariffs on non-agricultural goods. As shown in Figure 8.1, the averages of all agricultural tariffs levied by the Organization for Economic Cooperation and Development (OECD) countries, be it on basic agricultural commodities or on processed agricultural products, are multiples of the average of tariffs in the textiles and clothing sector (typically also highly protected) or for manufactures. Developing countries outside the OECD area on average charge somewhat lower tariffs on primary agricultural commodities, and at the same time they charge higher tariffs on textiles/clothing and on manufactures than the rich countries. Hence, in developing countries tariff protection in agriculture is not as far above the level of tariffs on non-agricultural goods as in the developed countries. Behind these tariff averages across countries and products there is wide variety. In agriculture there are still many mega tariffs, often above 100 per cent and in some cases several hundred per cent (Jales et al. 2005). Moreover, agriculture tariff structures are often complex, with a mix of specific and *ad valorem* tariffs, seasonal variation and other complicating features. In addition, there are many cases of tariff rate quotas, with lower tariffs up to a given volume of imports and higher tariffs for quantities beyond that threshold.

Tariffs are clearly a major impediment to international trade, and their high level in agriculture is already an indication of the extent to which international trade in agriculture suffers from distortions. However, tariffs are but one dimension of the policy picture in agriculture. There are also ample subsidies to farmers, in particular in the developed countries. The OECD provides regular estimates of the totality of all transfers to farmers, whether they come in the form of price protection as provided through border measures or in the form of domestic payments from the public purse. The overall amount of transfers, called the producer support estimate (PSE), is best expressed as a percentage of all farm receipts (%PSE). As shown in Figure 8.2, the %PSE stood at close to 40 per cent in the mid-1980s and

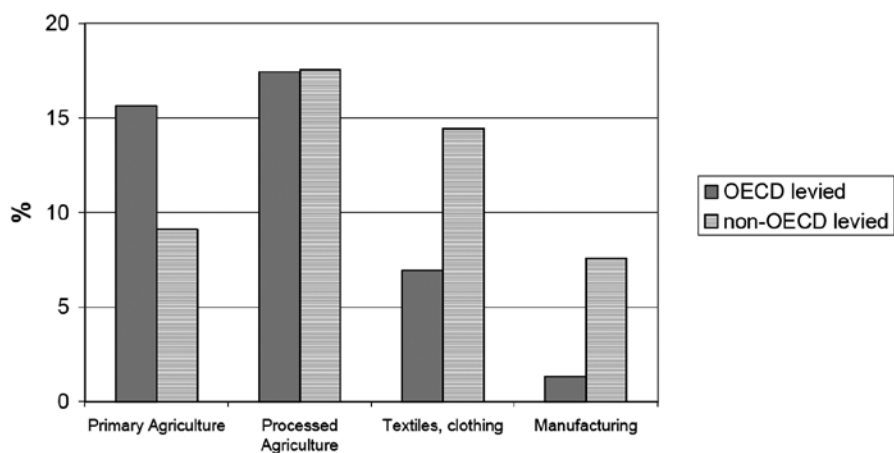


Figure 8.1 Average applied import tariffs by sector and country group, 2001
 Source: OECD (2006).

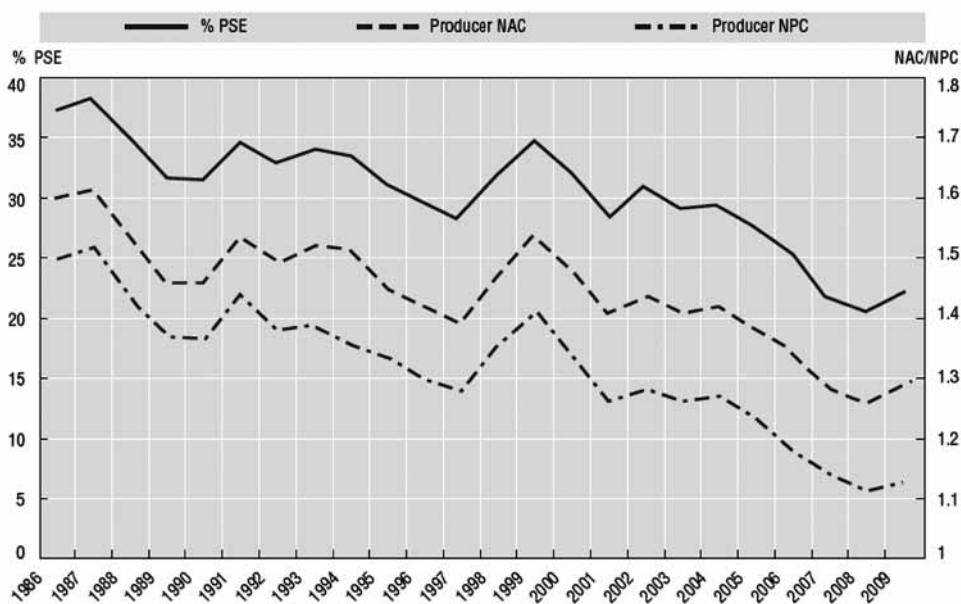


Figure 8.2 Indicators of agricultural support, OECD area
 Source: OECD (2010).

has then exhibited a declining trend. However, it still is above 20 per cent, meaning that out of each dollar in gross receipts of the average farmer in the OECD area, more than 20 cents come through policies while only the remaining less than 80 cents originate from the market. The nominal protection coefficient (NPC), at 1.13 in 2009, indicates that domestic producer prices received by farmers in the OECD countries are 13 per cent higher than the equivalent prices in international trade.

It is clear that such output price support for domestic farmers can only be maintained if trade is prevented from flowing freely across borders. While tariffs are the major form of border protection, in agriculture the WTO rules also still allow the granting of export subsidies. The overall sum of export subsidies notified to the WTO has declined significantly after the Uruguay Round, but is still large, in both absolute terms and as a share of the total value of agricultural production in some individual countries (Table 8.1 and Figure 8.3).

Table 8.1 Export subsidy outlays in agriculture

Million dollars and percentages

	1995		1996		1997		1998		1999		2000	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
European Union (15)	6314	88.8	6748	89.7	4797	87.7	5676	90.1	5628	89.6	2462	87.1
Switzerland	446	6.3	369	4.9	295	5.4	292	4.4	290	4.6	189	6.7
Norway	83	1.2	78	1.0	102	1.9	77	1.2	128	2.0	45	1.6
United States	26	0.4	121	1.6	112	2.1	147	2.2	80	1.3	15	0.5
Other countries	243	3.4	202	2.7	166	3.0	144	2.2	151	2.4	116	4.1
Total	7112	100.0	7519	100.0	5473	100.0	6636	100.0	6278	100.0	2826	100.0

Source: WTO (2006).

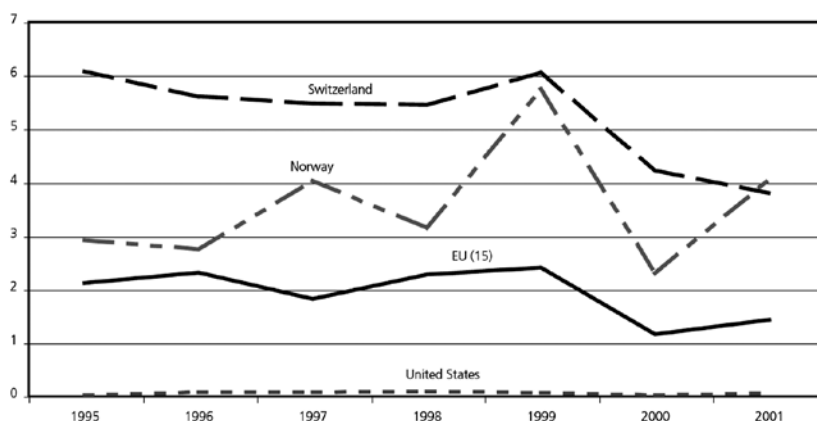


Figure 8.3 Export subsidies as share of total value of agricultural production, selected countries

Source: WTO (2006).

Regarding the nature of agricultural policies there are, however, wide differences across countries. In the OECD area, %PSEs vary between close to zero in New Zealand and Australia and around 50–60 per cent in Japan, Korea, Iceland, Switzerland and Norway (Figure 8.4).

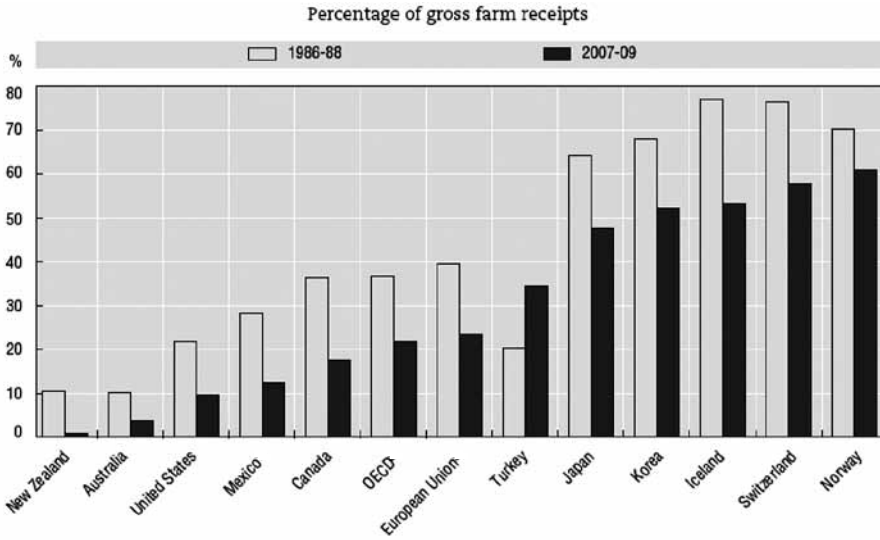


Figure 8.4 Producer support estimate by country in the OECD area

Source: OECD (2010).

Outside the OECD area, farm support is typically far below the level in many rich countries. In major emerging economies, the %PSE is in the order of magnitude of 5 to 10 per cent (Figure 8.5). In developing countries with lower living standards, the agriculture sector is often taxed, rather than supported. Import subsidies and export taxes are used to keep domestic food prices low in the interest of poor consumers, and other forms of taxation are used to channel transfers from agriculture to the rest of the economy, supposedly in the interest of a more dynamic overall development. Thus the global picture of agricultural policies is one of support to farmers in the rich countries and taxation of agriculture in developing countries as shown in Figure 8.6, where the nominal rate of assistance (NRA) provides largely the same information as the %PSE, except that its denominator is producer receipts valued at border prices (rather than gross farm receipts at domestic prices inclusive of support payments as in the case of the PSE).

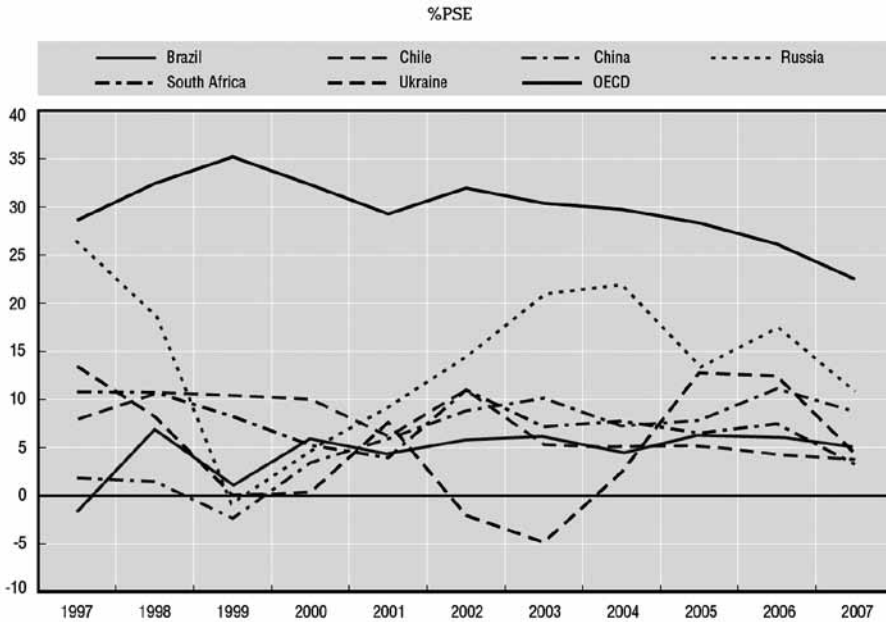


Figure 8.5 Producer support estimates for selected countries outside the OECD area

Source: OECD (2009).

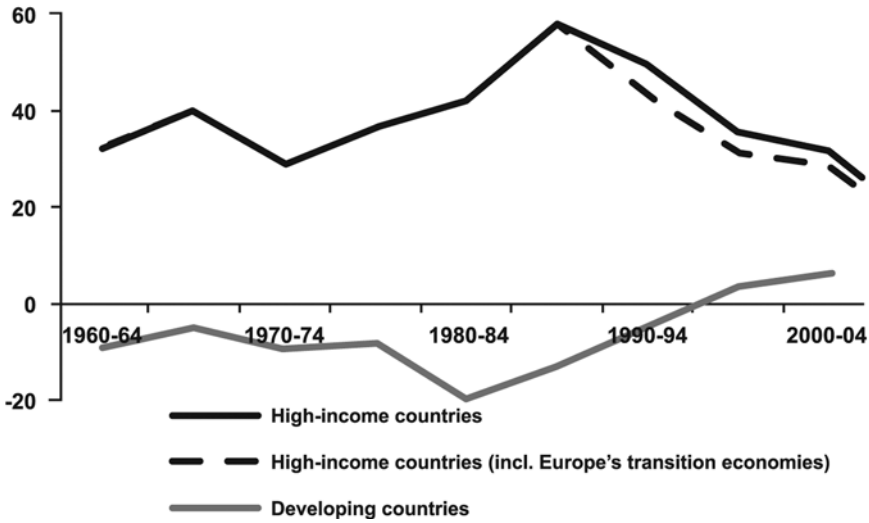


Figure 8.6 Nominal rates of assistance to farmers

Source: Lloyd et al. (2009).

From the statistics shown here it is evident that the level of farm support in the rich countries has declined over the last 25 years or so. Also, the composition of farm support from different categories of policy measures has changed over time (Figure 8.7). Support based on the quantities of output produced and inputs used, as well as support based on area (A), number of animals (An), revenue (R) or income (I) with production required has declined, as a share of both producer receipts and total support. This is welcome news as these forms of support are most distortive of markets and international trade, because they provide direct incentives to expand agricultural production. However, these most distorting agricultural policies still account for around three-quarters of all farm support in the OECD countries. Why are the governments of so many rich countries engaged in such policies, and is there any way the resulting distortions in international trade could be reduced? This is what will be discussed in the remainder of this chapter.¹

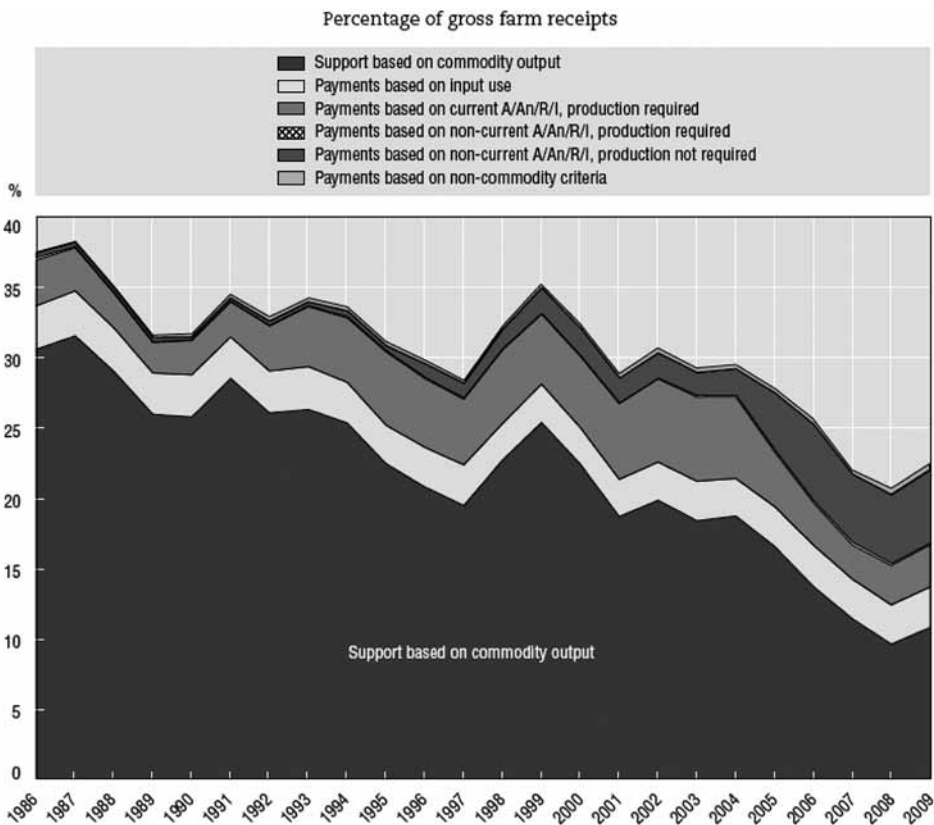


Figure 8.7 Composition of producer support estimate in the OECD area

Source: OECD (2010).

¹ Some of the following discussion is adopted from Tangermann (2004).

What are Agricultural Policies Trying to Achieve?

There must be reasons why governments in the rich countries provide so much support to agriculture. Some of these reasons may be purely political, and they will not be discussed here. But there are also very concrete objectives that policymakers identify when engaging in measures that address agricultural issues. With a minor degree of simplification, these objectives can be categorized into two groups: those concerned with equity, and those related to market failure. The equity issue in agricultural policies has to do with farm incomes. Market failure may occur in areas such as the relationship between agriculture and the environment.

As far as the farm income issue is concerned, the economic background is the secular adjustment process going on in agriculture. Demand for agricultural products, for both food and non-food uses, grows less than overall income in modern societies. People in the rich countries are well fed and have a limited capacity to eat. In developing countries, food demand grows more rapidly than in the rich countries, but even there the income elasticity of demand for food is generally below one as suggested by Engel's law (Abler 2010), with the implication that even in that part of the world expenditure on food lags behind overall economic growth. The situation is similar for non-food agricultural products. These characteristics of the demand side, taken by themselves, would already mean that farm revenue and hence farm income overall tends to grow less than overall income in most economies.

But a typical supply-side factor in agriculture aggravates the situation even further. Productivity of agriculture around the world tends to grow fast, due to successful breeding of crops and animals, improvements in agricultural production practices, innovation in farm machinery, and a continuous updating of farmers' skills. Productivity growth in world agriculture is more rapid than on average in the economy, and it has been so for more than a century. The combined result of these trends in demand and supply on agricultural markets is that there is a secular tendency for farm product prices to decline in real terms, and this decline can actually be empirically observed on many markets for agricultural products. This price development puts additional pressure on income of the farm sector overall.

At the macroeconomic level this is shown by the fact that the share of agriculture in GDP is in secular decline. At the sectoral level, this development requires a downward adjustment of the overall resources employed in agriculture. Combined with the secular increase in the (opportunity) cost of labour relative to the cost of capital and intermediate inputs, there is strong pressure for labour to leave agriculture. This reduction in the number of people working in agriculture has indeed taken place universally, and it continues. However, as in all similar cases, it is typically triggered by a situation in which incomes of the individuals concerned lag behind the incomes in other sectors, a development that is particularly noticeable in wealthy nations. This is the essence of the farm income issue, and the economic core of one particularly strong factor motivating agricultural policy in rich countries.

Market failure, as a second motivation for agricultural policy, may occur where externalities and public goods are involved (Arrow 1969). In agriculture, externalities may take the form of positive or negative effects that farm production can have on the environment. Agriculture in the OECD area accounts for a large share of total land and water use and, in many countries, dominates and shapes the landscape. Contrary to many other economic activities, agriculture has both harmful and beneficial effects on the environment through changing the quality or quantity of soil, water, air, biodiversity and landscapes. Increasing food demand, together with policies encouraging production, and technological and economic changes, has often led to a marked intensification of agriculture (more output per unit of land or labour) and to farming on environmentally sensitive land, which in some cases has led to environmental harm. These harmful effects include mainly water and air pollution, but also the loss of wildlife, habitats and landscape features. Soil degradation and water depletion are also serious concerns in some areas.

On the other hand, environmental benefits may in some circumstances include contribution to water accumulation, flood control, nutrient recycling and fixation, soil formation, carbon sequestration by trees and soil, wildlife and biodiversity protection and providing recreational services and aesthetic values. Landscape characteristics can also be a public good provided by agriculture. For example, livestock grazing on pasture may well be considered a desirable feature of the countryside in certain regions. However, tourists or other visitors cannot be made to pay for this benefit as individuals, because they cannot be excluded from the pleasure of viewing an agreeable landscape while walking through it. In a case like that, the government may have a role to play in making sure that farmers provide this public good. Similarly, maintenance of a thriving rural economy may require government activity. For some countries, food security is a concern, in the sense of making sure that the nation overall always has access to sufficient food supplies.

Are Current Agricultural Policies Doing a Good Job?

There is no point in debating the fundamental validity of such policy objectives, relating to farm incomes and market failure. However, the policy analyst may well ask whether current policies are most effective and efficient in obtaining these objectives, and whether there are alternatives that could achieve the same domestic outcome with less distortions of international trade.

In this regard, there are good reasons to argue that many agricultural policies in the rich countries are not doing the best possible job. This is particularly true for those policy measures that provide support directly coupled to farm products, such as price support and payments based on quantities of outputs and inputs, or payments based on other criteria but requiring production of agricultural commodities. As we have seen above, these policies strongly dominate agricultural policymaking in the OECD area, still accounting for around three-quarters of all support provided to farmers.

As far as support for farm incomes is concerned, providing price and output support is an approach that is unnecessary, inefficient and inequitable. It is unnecessary as there is not in reality a general problem in all OECD countries regarding the income level of people living on farms. In many OECD countries, incomes of farm households are well in line with, if not above, household incomes in the overall economy (OECD 2003a). In some other OECD countries, incomes of farm households are somewhat below the average level in the economy, but generally not by a large margin. Does this empirical finding not contradict the argument advanced above, that secular developments in the agricultural sector tend to generate a farm income problem? It does not, for two reasons. First, incomes of farm households include income from non-farm sources. In many cases, these incomes earned outside agriculture make up for a rather large share of total household income. In a way, they represent one element of an actual solution to what otherwise might have been a farm income problem: farmers and their families adjust to deteriorating on-farm incomes by looking for alternative sources of income. More generally, as adjustment processes in terms of farmers actually leaving agriculture, partially or completely, occur, the income gaps that induce them are closed.

Second, incomes of farm families include not only income from their labour, but also income derived from their land and capital assets. Thus, while actual labour income in agriculture may indeed be depressed, family income overall may do reasonably well. But where this is the case, are governments not called upon to provide support to agriculture, such that farmers can earn a 'fair' remuneration for all their resources employed on the farm, including their labour? If governments actually were to try and do this, they would completely undermine all adjustment processes, with the implication that the underlying farm income problem becomes worse and worse and at some point reaches an order of magnitude that is beyond the capacity of even the richest government to cure. An appropriate return to factors of production, that is labour, capital and land, is an issue of resource allocation, best left to market forces. Equity concerns must relate to family incomes, because they determine the standard of living. In this sense, there is not a general problem in rich country agriculture, and from that point of view broad-based support measures such as price and output support are unnecessary.

Price support is also a rather inefficient way of trying to raise farm incomes. This is because for each extra dollar spent, by consumers and taxpayers, on price support for agriculture, no more than 25 cents tend to end up in farmers' pockets, as remuneration for farm-owned labour and land, while the rest is capitalized in land values, goes to input suppliers or evaporates in inefficient resource use (OECD 2003a).

There are alternative agricultural policies that exhibit much higher transfer efficiency. For example, payments based on historical entitlements, such as production in a past reference period, can raise farm operator income by close to 50 cents for each extra dollar spent on this form of support – a transfer efficiency that is still not huge, but already twice that of price support. Policies of this nature,

which are more decoupled from current production decisions taken by farmers, have more recently been introduced in some OECD countries.

Finally, providing farm income support through price and output-related measures is an inequitable approach. This is a most serious comment on a policy that is arguably motivated by equity concerns, related to the particular income situation in agriculture. But it is easy to see why transferring money to farmers through price and output support creates inequities. If governments keep domestic market prices high, or provide payments per tonne of output, then of course farms with large volumes of output receive more support, in terms of the absolute sum of money transferred, than farms producing a small amount. Typically, farmers owning farms with large output volumes have higher incomes than their colleagues producing less. In other words, price and output support favours the richest farmers more than the poorest.

To sum up, support that is directly coupled to agricultural production, such as price support and payments based on output and input, does a poor job of assisting farm incomes. In addition to not being necessary as a general policy, it is inefficient in transferring income to farmers, and the transfer that finally ends up in farmers' pockets goes to the wrong recipients. But can these policies do a better job in dealing with market failures, in addressing externalities and public goods related to agriculture?

Consider typical cases of negative environmental externalities resulting from agricultural production (OECD 2008a). Fertilizers in agriculture and animal effluent from livestock account for as much as 40 per cent of nitrogen and 30 per cent of phosphate emissions in surface water in some OECD countries, contributing significantly to the problems of eutrophication due to the depletion of oxygen in water. Nitrate leakage into groundwater is a significant problem in some areas with high concentration of livestock production. Pesticide runoff from agricultural land also impairs drinking water quality and harms water-based wildlife. Certainly these problems cannot be cured through policies such as price support that result in an expansion, and often also intensification, of agricultural production. On the contrary, price and output support aggravates such negative externalities. But what about positive externalities of agriculture, say flood control going along with rice production on paddy fields, or the preservation of cultural heritage through the maintenance of farm buildings in rural villages? There may be a tendency for such positive externalities to expand when agricultural output grows, but the linkage between the quantity of rice, wheat or milk produced and the provision of such positive services is weak at best. In many cases, a certain low level of agricultural activity is sufficient to make sure that the positive effects are achieved. Any policy-induced production beyond that level does not contribute to the desirable effect, but adds to economic costs. Moreover, typically the service required from agriculture is location-specific, while price and output support at the national level cannot differentiate among local conditions. The situation is similar regarding public goods that agriculture may provide, such as a pleasing landscape: most observers would agree that the beauty of a given countryside does not improve, and may actually deteriorate, if agricultural production is expanded and

intensified beyond a certain point. Food security, too, does not improve beyond a given level of domestic production, if trying to expand domestic production beyond what market forces generate is at all considered the right approach to provide for a secure supply of food (OECD 2003b, 2008b).

With regard to the positive externalities that may go with agricultural production, and any public goods that agriculture may provide, reference is often made to the multifunctional character of agriculture (OECD 2001b). In the same context, the term 'non-trade concerns' has been coined in international trade negotiations. Agriculture is certainly not the only economic sector that has multifunctional characteristics, but the nature and variety of the services that agriculture can provide beyond commodity production may indeed be somewhat special. There may well be a role for government policies in this context. However, price and output support can rarely do a good job to promote the multifunctional performance of agriculture, and may indeed be counterproductive in a number of dimensions (OECD 2003b).

Policy Reform in Agriculture: Better Performance, Less Trade Distortion

If three-quarters of farm support provided in the OECD area is not sufficiently effective and efficient in helping to reach the most important objectives of agricultural policy, and may sometimes even be counterproductive, what can be done to improve the situation? The way forward consists of three strategic components, which can also be considered, in a time dimension, as three successive steps towards reform of agricultural policies: decoupling, targeting and reducing support to agriculture. Reform along these lines would not only improve the domestic performance of agricultural policies, but also greatly reduce trade distortions.²

Decoupling Support from Production

Decoupling means breaking the link between support and producer decisions in agriculture. This can be done by moving from price support, or payments based on current output or input quantities, in the direction of direct payments to farmers that are based on parameters which the farmer cannot change through production decisions. For example, the payment can be based on the monetary value of transfers through 'old' policies that a given farmer used to receive in a historical reference period. Why make such payments, rather than simply do away immediately with all existing forms of farm support?

² For a more extensive treatment of the options for agricultural policy reform in developed countries, see OECD (2002, 2008c).

In most OECD countries, farm support has been provided for decades. Farmers have got used to the expectation that governments will continue to engage in these policies. Based on these expectations, they have decided to become farmers, take over the farm from their parents, make investments and forgo other opportunities outside agriculture. Once policy embarks on a new course, they should be given time to adjust, as a matter of fairness and equity. Also, and closely related to this reasoning, political resistance to policy reform would be difficult to overcome if farmers could not be compensated. Direct payments decoupled from production can allow the process of reform to start, and buy time for everybody involved.

But what is, then, the advantage of decoupling support from production, while the level of support may not yet decline? There are four fundamental benefits to decoupling, all related to the fact that policy-made production incentives for farmers are reduced. First, where price and output related support was counterproductive in reaching policy objectives, this drawback disappears. For example, negative environmental externalities going along with an expansion and intensification of agricultural production are redressed. Second, with a given amount of transfers to the agricultural sector, farm incomes rise, because decoupled payments are more transfer-efficient than output-related policies. Third, overall economic welfare of the nation is enhanced as production structure is brought more in line with comparative advantages. And fourth, distortions of international trade, and hence international spillover effects of agricultural policies, are reduced.

This fourth benefit is worth commenting on further. When major problems of current agricultural policies in many OECD countries were discussed in the preceding section, the focus was on the domestic functioning of these policies, from the perspective of the objectives that agricultural policies are supposed to pursue. But there is one additional big problem with many current policies, occurring at the international level. As policies relying on price and output support, dominant in most OECD countries, induce domestic farmers to produce more, they take markets away from farmers in other countries. Viewed from the angle of the secular trends of supply and demand for agricultural products, such policies can be interpreted as an attempt of governments to protect domestic farmers against adjustment pressures by simulating additional demand for their products. After all, the higher prices on domestic markets, resulting from government intervention, create the impression for farmers that there is more demand for their output than what the market actually generates. However, these government policies cannot really expand demand at the global level, as they do not add to purchasing power worldwide. The result is that the extra output generated by these farm policies, pushed onto the world market, depresses prices for farm products in international trade. This means that, in effect, the apparent additional demand for domestic farm output in the high-support countries is in reality nothing less than market share taken away from farmers in other countries. In other words, well-intentioned assistance to domestic farmers, delivered through market-distorting policy measures, effectively exports adjustment pressure to farmers in other parts of the world.

This seemingly somewhat abstract interpretation of the international repercussions emanating from price and output support policies in OECD agriculture has a very concrete counterpart in the tensions that these policies create in international trade. For a long time in the history of the General Agreement on Tariffs and Trade (GATT), agriculture proved so difficult a subject that it effectively remained outside operational rules and disciplines (Josling et al. 1996). It was not until the Uruguay Round that agreement was finally reached on how to integrate agriculture into the overall regime governing international trade. But tensions over agricultural issues continue to plague trade relations, both among OECD countries and between developed and developing nations. Among OECD countries, there was a tendency to respond to other countries' support policies by shielding domestic farmers through matching policies. Of course, while several countries' policies moved up the spiral of subsidies and tariffs, international market prices were driven down even further. Farmers in those OECD countries that have essentially opted out of this vicious cycle, such as Australia and New Zealand, feel left out in the cold. Similarly, farmers in developing countries that produce temperate zone products, or have the potential to do so, are left behind. Their governments do not have the economic means to provide matching subsidies, and because food consumers in these countries are poor, they also cannot engage in policies that raise the domestic price levels for farm products.

Surely these negative global repercussions of domestic price and output support policies in major OECD countries are unintended international spillover. But they are nevertheless real. Decoupling, and the resulting reduction in market and trade distortions, can make a major contribution to putting a break on the problematic implications for international trade that result from current domestic support policies. This is true even if decoupling of support from farm production does not completely eliminate all distortions to farmers' incentives. OECD research has shown that any support that is provided to farmers on condition that they are farmers has some effect on production decisions (OECD 2001a). However, the distortion effects of support that is decoupled, in the sense that it is not based on variables that farmers can affect through their production decisions, are orders of magnitude smaller than those of price and output-based support.

In a very practical way, the international trade dimension of moving towards domestic decoupling comes in the form of less reliance on tariffs and export subsidies. Price support to domestic farmers requires border measures. Tariffs are needed to prevent imports from undercutting domestic support prices. When production incentives to domestic farmers are strong enough to generate a surplus on the home market, export subsidies are also required to bridge the gap between high domestic and low international prices for quantities shipped to the world market. When decoupling takes place and price support is converted into direct payments, tariffs and export subsidies are no longer needed. In other words, decoupling can also make a major contribution to bringing tariffs and export subsidies down in international trade negotiations.

Targeting Support to Objectives

The second strategic ingredient into the reform of agricultural policies is targeting measures directly to the policy objectives pursued. This essentially means tackling each policy issue at its source, rather than dealing with the symptoms. As argued above, broad-based support policies, such as price support and payments based on output and input quantities, are neither effective nor efficient in solving income problems in agriculture and dealing with externalities and public goods. Targeted policies that directly address these issues do a much better job. This is common sense, but also a direct application of the Tinbergen (1956) principle that in order for a policy regime to be effective there must be as many independent policy instruments as there are targets to be pursued.

With respect to farm incomes, such targeted measures include assistance to improve on-farm performance, through enhancing farmers' skills and upgrading technology. They can also help farmers to diversify their income sources, through strengthening rural development outside the agricultural sector. Severe risks, in terms of farm income fluctuations over time, can be targeted through measures that improve the functioning of commodity markets, and any remaining income risks can be dampened through government-assisted income insurance. Finally, systemic problems of poverty in agriculture, to the extent they are not covered by generally available social safety nets, can be addressed by specific assistance to the individuals concerned, and through programmes that enhance their ability to adjust.

Regarding the effects of agriculture on the environment, negative externalities are best addressed by an appropriate combination of taxes and regulations specifically targeted to the individual environmental issue concerned. Positive contributions of farmers to improving the environment and biodiversity can be encouraged through specific payments based on the service desired. For example, payments can be made per metre of hedge planted, or for cutting grass late on a meadow where rare birds tend to nest. Public goods that farmers can provide would typically be best dealt with by paying per unit of service rendered. In some cases, it may even be possible for governments to create markets for what at first glance may appear to be public goods (OECD 2003b). Clearly, targeted payments can involve considerable transaction costs, for identifying the performance of the farmers concerned and administering the programme. However, in the overwhelming majority of cases, these transaction costs are likely to be significantly less than the economic losses resulting from unspecific and broad-based policies such as support to farm output that may provide the required service as a by-product. Only in rare cases may such transaction costs be high enough to justify general support to farm output (OECD 2003b). In order to strengthen rural communities, programmes that cover a wide array of economic activities do better than measures that focus exclusively on the agricultural sector. Farm support contributes less to rural development than measures that target any systemic policy bias against rural and remote areas, relating to the provision of infrastructure and public services.

Reducing Support

As decoupling of support from farm production, and targeting policies directly to the issues at hand, is more effective and avoids inefficiencies, it is possible to reduce support levels while still enhancing the degree to which policy objectives are achieved. The larger income transfer efficiency of decoupled payments, as explained above, is a typical example of why the reform strategy outlined here can go along with a reduction in support without any loss in farm incomes. In other words, this strategy can result in gains on all sides: farm incomes improve; the environment is better served; tensions in international trade are reduced; and the burden on consumers as well as taxpayers declines. From this perspective, there is no reason why all three elements of the reform strategy, that is decoupling, targeting, and reducing support, should not be pursued simultaneously.

However, in actual policymaking it may be easier to consider them as three successive steps. Reform can start with a move towards decoupling, by reducing price and output support and introducing decoupled payments instead. A second step can convert some part of the decoupled payments to all farmers into specific targeted payments directly based on specific services. And while this process is underway, the general decoupled payments can be gradually reduced and finally eliminated. In this context it is useful to remember that the central justification of decoupled payments is to allow farmers time to adjust to the new conditions under a reformed policy. In the long run, the focus can completely shift to payments that are targeted to specific objectives. Of course this strategy demands a precise and operational definition of the objectives pursued, and a careful analysis of which specific measures work best in achieving them. But these requirements are anyhow fundamental criteria for any public policy.

Are agricultural policies in the OECD area moving in the direction indicated by this reform strategy? The extent to which this is the case differs from country to country. Figure 8.8 provides an impression of developments over the last 20 years or so in selected countries, for the two dimensions of decoupling and reducing support. In this graph, a movement to the south signifies an improvement in policy structure towards more decoupled and hence less distorting instruments (as measured by the share of support on output and unconstrained inputs in the PSE), while a movement to the west indicates a reduction in the overall level of farm support (as measured by the %PSE). The length of the arrow for the individual country can be taken as an indication of the depth of change. For the OECD aggregate, the movement points in the right direction, that is south and west. Most individual countries also have made progress in policy reform, to varying degrees.³ But a lot remains to be done before all farm policies in OECD countries have reached a large degree of decoupling and are firmly embarked on the path towards lower

³ The movement of New Zealand towards north-west may look odd, but its northward component has little importance given that the overall level of support in New Zealand has declined to close to zero.

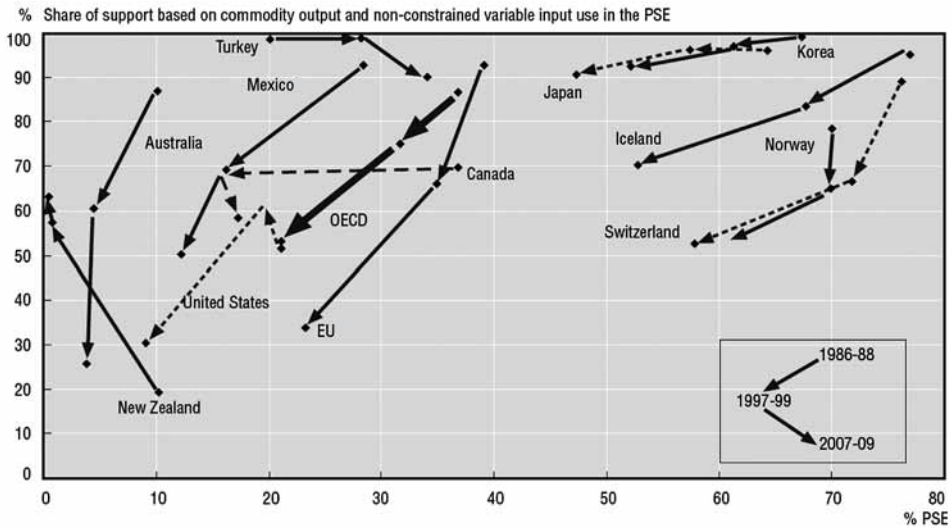


Figure 8.8 Changes in level and composition of farm support in the OECD area

Source: OECD (2010).

levels of support. Moreover, much improvement can still be achieved in terms of better targeting policies towards specific objectives.

Agriculture in the WTO

Agricultural policy reform, in the direction described above, is in the enlightened interest of the countries still pursuing outdated policies. As indicated, it is indeed taking place, though the political economy involved makes reform a slow and partial process. International pressure can accelerate progress, and that is precisely what has happened, in particular through negotiations in the GATT/WTO. As mentioned above, agriculture has for a long time escaped effective disciplines in the GATT, though the letter of the General Agreement applied fully to the farm sector as well (Josling et al. 1996). The Agreement on Agriculture concluded in the Uruguay Round (URAA) has ended that agricultural exceptionalism, ironically through establishing a rather specific framework of rules and disciplines for agriculture (Josling 2010).

Creating a special sectoral regime for agriculture in the Uruguay Round was, though, the price that obviously had to be paid for ending what effectively was a non-treatment that agriculture had ‘enjoyed’ under the GATT before the Uruguay Round. From an economic perspective, what really counts is not so much the legal

and institutional approach chosen, but an effective reduction of the large distortions that had plagued world trade in agriculture for decades. And it can well be argued that the URAA opened up a road leading in that direction.

The core achievement of the Uruguay Round in agriculture was that vague qualitative rules of the 'old' GATT gave way to reasonably well defined quantitative commitments which WTO member countries are now expected to honour in pursuing their agricultural policies.⁴ Most important, in the domain of *market access* the host of non-tariff barriers (NTBs) that were so characteristic of agricultural trade before the Uruguay Round underwent 'tariffication' and were replaced by bound tariffs. In this regard, agriculture is now special in a rather welcome way as it is the sector with the highest share (100 per cent) of bound tariffs. On the side of *export competition*, the non-workable GATT rule of the 'equitable share' in world trade was replaced by quantified limits to the quantities of subsidized exports and budgetary outlays on those subsidies, and the commitment to reduce these limits over time. Regarding *domestic support*, the qualitative rules of the Subsidies Code were complemented by a newly defined yardstick for support levels (the Aggregate Measurement of Support, AMS), quantified maximum amounts of support and reduction commitments, and rules regarding the implementation of these new elements (Orden et al. 2011).

The URAA was progress in one sense but not in another (Tangermann 2002). It was certainly a huge step forward in the historical evolution of the trading order for agriculture as it established completely new and largely effective rules of the game where none had existed before. The URAA did not, though, directly force a break in actual agricultural policies of WTO member countries as the quantitative commitments agreed were set such that they contained too much water. However, there is no doubt that the Uruguay Round was effective in promoting the process of agricultural policy reform.

Its impact on actual policymaking in agriculture began already before the Round was concluded and the Agreement on Agriculture entered into force. The most notable case is that of the MacSharry reform of the Common Agricultural Policy (CAP) which was enacted in order to create the conditions under which the EU could agree to an agricultural accord in the Round (Daugbjerg and Swinbank 2009; Moyer and Josling 2002). After the URAA was concluded, the existence of the new disciplines began to be one of the arguments that played a role in the debate about agricultural policy settings in quite a number of countries. To be sure, all sorts of domestic concerns continued to be the major driving forces in agricultural policy making in most cases, but considerations relating to the WTO in one way or another also began to have some effect.

Perhaps even more important than the impact of the URAA commitments as such is the effect that expectations regarding future WTO disciplines in agriculture have had on agricultural policymaking. The EU and recent reforms of its CAP are clearly a case in point, in particular the Agenda 2000 decisions and, even more so,

⁴ For an extensive account of the agricultural negotiations during the Uruguay Round, as well as an outline and analysis of the URAA, see Josling et al. (1996).

the 2003 Fischler reform of the CAP (Swinnen, 2008 and 2010). These changes to the CAP were, to some extent, conditioned by the expectation that the enlarged EU would probably have to accept further reductions of the limits to its domestic support in the Doha Development Agenda (DDA) negotiations, and by a desire to avoid, through anticipatory action, a repeat of the situation in the Uruguay Round where the EU realized that it had to effectively interrupt the negotiations, do its policy reform homework, and only then come back to the negotiating table prepared for a conclusion of the round. As a result of the post-URAA adjustments to the CAP, the EU can indeed now reasonably easily accept rather large cuts to its domestic support commitments in the ongoing DDA negotiations, as envisaged in the draft modalities of December 2008 (Orden et al. 2011). The EU is also, in principle, prepared to agree to an elimination of export subsidies. On the other hand, the EU continues to protect its farmers through high tariffs and finds it difficult to accept the tariff cuts considered in the DDA negotiations, in particular for 'sensitive' products such as dairy products, beef and sugar.

Another real world impact of the URAA will also materialize only in the future, but it may be its most important achievement. The rules and commitments agreed in the Uruguay Round have provided a wholly new basis for the talks in subsequent rounds of WTO negotiations. Negotiations can now move straight to the reduction rates for the various types of commitments. Market access is particularly important in that regard. There is no need any more to debate the acceptability or otherwise of various kinds of NTBs. The core negotiating business is now the scale of reduction rates to be agreed. Clearly, all sorts of other issues are also on the negotiating table, not the least the provisions to be applied to 'sensitive' and 'special' products, as well as the treatment of the (regrettably still existing, and possibly even new) tariff rate quotas. However, the URAA has allowed the focus of future negotiations to be clearly on reduction rates, and that offers the hope that all water will eventually be squeezed out of the commitments agreed under the URAA, and that further reductions can then be agreed that truly bite into the flesh of existing policies.

As far as provisions of major significance to agricultural trade are concerned, in addition to the Agreement on Agriculture, the Uruguay Round also yielded progress in the area of food regulation, through the Agreement on the Application of Sanitary and Phytosanitary Measures, the Agreement on Technical Barriers to Trade and the Agreement on Trade Related Aspects of Intellectual Property Rights (Josling et al. 2004). Important progress was also made through the Understanding on Rules and Procedures Governing the Settlement of Disputes, and a number of agricultural disputes under these new rules have reinforced the impact of the URAA on national policies (Daugbjerg and Swinbank 2009).

Conclusion

Agriculture remains a particularly controversial sector in international trade relations, not because of inherent characteristics of the products it produces, but as

a result of government farm policies pursued in many rich countries. Policymakers identify important objectives, having to do with equity issues regarding farm incomes, and relating to market failures in areas such as the relationship between agriculture and the environment. There is no point in questioning these objectives – it is for the political process to decide on them. Moreover, there is no doubt that the pursuit of such objectives may justify, and indeed require, government action.

However, there are good reasons to argue that much of current agricultural policy in the OECD area is not the most effective and efficient approach towards achieving the objectives relating to agriculture. In particular, policies that have the effect of providing strong incentives to farmers to expand production are not doing a good job, neither in improving equity nor in dealing with market failures. Yet, three-quarters of all farm support in OECD countries still come in this form. These policies are not only less than satisfactory in their domestic performance, they also generate problematic spillover at the international level. In trying to solve agricultural problems at home, many current policies make life more difficult for farmers in other countries, including developing countries.

The solution is not to do away with all agricultural policies. There are concerns in agriculture that cannot be left to markets. However, there is an important issue of policy choice: which measures work best domestically, with least spillover at the international level? The OECD has designed a positive agenda for reform that meets these criteria. It rests on the three pillars of decoupling farm support from production, targeting support to well specified objectives, and reducing support as reformed policies become more effective. At the international level, this strategy also facilitates reduced tariffs and export subsidies.

Overall, the development of agricultural policies in the OECD area is gradually moving in this direction, and some countries have more recently made significant steps towards reforming their agricultural policies in line with this strategy. However, reform progress is uneven and can be accelerated. International debate and multilateral trade negotiations can make a significant contribution to moving the reform process forward. Joint reform efforts across countries can facilitate policy change, because they help to reduce the burden of economic adjustment and to share the political pain. The time has come to move forward on agricultural policy reform. The WTO negotiations on the Doha Development Agenda provide an excellent opportunity to do this in a multilateral context, and to defuse the tensions that continue to plague international trade in agriculture.

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