

# A Vision for the Common Agricultural Policy

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December 2005



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# EXECUTIVE SUMMARY

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**This paper sets out a vision for the future of the European Union's Common Agricultural Policy. Its aim is to stimulate and help inform debate.**

The Common Agricultural Policy (CAP) remains the most visible and expensive common policy of the EU, but is increasingly out of step with the need for Europe to respond to the challenges of globalisation. Internationally, it continues to attract criticism, to create tensions in the EU's relations with trading partners, and to impose significant costs on developing countries. Domestically, it imposes substantial costs on consumers and taxpayers but is inefficient in delivering support to farmers and promoting an attractive rural environment. Indeed much of the CAP still has a negative impact on the environment.

Radical change of the sort proposed in this paper has to be seen in the longer-term perspective. The vision in this paper focuses on where we need to be in 10 to 15 years time, and why. It does not set out a route map for getting there. That must be the subject of debate across Europe and achieved through gradual and carefully managed change to give clear signals and time for farmers to adjust their businesses, not an overnight upheaval. Change would take place against the backdrop of multilateral trade negotiations with our major trading partners, both developed and developing. Farmers will want time to plan and the ability to make most effective use of available resources, so that they can best manage the transition.

The changes set out in this paper are designed to deliver the long-term vision of an industry that is fundamentally sustainable and an integral part of the European economy. They support policies that better protect the environment, more effectively support those most in need, and promote more broad-based sustainable economic development in rural areas. They seek to reduce the costs of protectionism on developing countries and promote the expansion of world trade. And in so doing, they help ensure Europe can meet the challenges of globalisation in the decades ahead.

**Chapter 1 discusses what a sustainable model of European agriculture might look like.** Our vision for agriculture within the next 10 to 15 years is for an industry which is fundamentally sustainable and an integral part of the European economy. It should be:

- internationally competitive without reliance on subsidy or protection;
- rewarded by the market for its outputs, not least safe and good quality food, and by the taxpayer only for producing societal benefits that the market cannot deliver;
- environmentally-sensitive, maintaining and enhancing landscape and wildlife and tackling pollution;
- socially responsive to the needs of rural communities;
- producing to high levels of animal health and welfare; and
- non-distorting of international trade and the world economy.

Although the CAP has evolved since its introduction, and recent reforms in particular have made significant progress, the costs of the CAP are still substantial. Half of farm support (about €50 billion per annum) is still geared towards keeping market prices high, the major source of the economic distortion the CAP imposes on the EU and the rest of the world. In particular, the tariffs necessary to support this system are still very high, both in absolute terms and in comparison to those imposed on non-agricultural goods. Whilst the average tariff for non-agricultural goods is 4 per cent, for agricultural goods it is around 20 per cent, with tariffs of 70 per cent or more not uncommon for core CAP commodities. Tariffs are low for goods not produced in the EU such as coffee, tea and spices.

A sustainable CAP would comprise:

- a free, fair and level playing field throughout the EU for farmers to produce and market their goods in a single market, as in other sectors of the economy;
- central to this, the integration of agriculture within EU competition policy;
- a clear framework, set at EU level, to define the goals of EU agricultural policy, focussing in particular on maintaining the environment and promoting sustainable rural development, particularly in the more environmentally sensitive regions of the EU;
- within this framework and in the long-term, targeted, non production-distorting measures defined and applied at Member State, regional and local levels to achieve these goals in accordance with local priorities and consistent with EU competition policy;
- import tariffs for all farm sectors progressively aligned with the much lower level prevailing in other sectors of the economy;
- no price support, export refunds or other production or consumption subsidies; and
- EU spending on agriculture would be based on the current Pillar II and would support these objectives as appropriate, allowing a considerable reduction in total spending by the EU on agriculture and bringing this into line with other sectors.

**Chapter 2 considers the CAP from a sustainable development perspective and sets out the economic, financial, social and environmental costs to the EU of the CAP.**

**Economic and financial costs:**

- economic analysis, even on conservative assumptions, suggests the CAP will leave the EU economy around €100 billion poorer over the period of the next financial perspective (2007-13);
- the financial cost to ordinary citizens is much greater – around €100 billion each year according to OECD estimates, half from taxpayers and half from consumers owing to higher food prices. This is an average cost to an EU family of four of around €950 a year, with only around €20 of this spent as EU money on targeted environmental programmes;



- the CAP has been estimated to be equivalent to a value added tax on food of around 15 per cent;
- removing market price support would bring a one-off reduction in inflation of 0.9 per cent;
- many of its benefits accrue to the landowner because of the tendency for support to capitalise into the value of inputs such as land – only around 10 per cent of market price support, which forms half of the CAP, actually reaches farmers in their capacity as farmers;
- a quarter of market price support is lost through economic inefficiencies. Over a third goes to suppliers of inputs such as machinery, pesticides and fertilisers;
- up to 90 per cent of the value of coupled area payments goes to the landowner, who may or may not be a farmer. In Member States such as France where the proportion of rented land is high less than 20 per cent of such payments reaches farmers; and
- the CAP results in a substantial reallocation of resources between Member States.

**Social costs:**

- the €50 billion annual cost to consumers arises from higher food prices and so falls disproportionately on the poorest in society as they spend a much greater proportion of their income on food;
- the CAP sits uneasily with the needs of the EU's new Member States – it is poorly targeted at promoting the restructuring and modernisation of agriculture or at improving rural infrastructure, services and employment; and
- support for farmers takes no account of the relative income or wealth of farm households compared to other sectors of society. Many farmers are poor, but in many Member States, taken as a group, farmers are not uniquely or predominantly the poorest in society. Average farm household incomes are higher in many Member States than the all household average.

**Environmental costs:**

- the intensification of agriculture in the EU over the last 20 to 30 years has caused significant environmental problems such as water pollution and damage to wildlife and bio-diversity, as evidenced by the steep decline in farmland bird populations across the EU. Cleaning up diffuse water pollution caused by agriculture is estimated to cost £211 million a year in the UK, another cost ultimately borne by all citizens in their water bills. This intensification has been encouraged by the high levels of market price support in the CAP. Whilst aspects of the CAP such as cross-compliance and set-aside can have positive environmental benefits, these could be secured in a more efficient and more targeted way.

**Chapter 3 examines the scope for further reform of the CAP through a series of questions:**

- it is sometimes argued that rural development in the EU depends on the current structure of the CAP. Is this the case? The evidence suggests that agriculture is not the dominant source of employment in rural areas, and that the EU's rural economies would be able to adjust to CAP reform, just as they have been dealing with the substantial structural changes that have been affecting agriculture over the last four decades. Indeed, the rural economy could benefit significantly from shifts away from general agricultural support towards more targeted rural development;
- the capacity of the agricultural sector to adjust to policy reform is sometimes questioned. Can EU agriculture adapt to further CAP reform? The experience of other OECD countries such as Sweden, Australia and New Zealand suggests that EU agriculture would successfully adjust to lower levels of support provided that change is carefully managed;
- similarly, the ability of farmers to prosper in a free market is sometimes called into question. Farmers face competitive pressures even with the benefit of market price support. A key difference, in the absence of market price support, would be the level of price risk faced by farmers. The evidence suggests that farmers can and do manage such risks in a variety of ways;
- food safety and food security benefits for the EU are often cited as a justification for the CAP. But the evidence suggests that a combination of EU regulation and international standards assists in protecting the EU from unsafe imports, and would ensure that further CAP reform would not diminish these standards; and
- concerns are sometimes expressed that CAP reform may damage the environment. Are such fears justified? The evidence suggests that reduced levels of market price support should have the effect of reducing (though not eliminating) the environmental damage caused by modern agriculture. The environmental benefits would be enhanced if the coverage of agri-environment schemes is strengthened at the same time.

**Chapter 4 sets out the international dimension and the impact of protectionism on developing countries:**

- securing further trade reform would generate substantial benefits for the global economy and poverty reduction. Global income could increase by \$290 billion by 2015 if trade-distorting policies in merchandise trade including agriculture were eliminated. Over half of these gains would come from ending agricultural protectionism in rich countries;
- agriculture is extremely important to developing countries, especially the poorest, where it accounts for 40 per cent of GDP, 35 per cent of exports, and 50-70 per cent of total employment. Three quarters of the world's poorest people live in rural areas, and are either wholly or partly dependent on agriculture;

- the EU is not the only rich country to provide support to its farmers: Japan provided \$49 billion and the United States \$47 billion in 2004. Nearly half of rich country producer support, \$133 billion, went to EU farmers, and the EU accounted for over 40 per cent of market price support;
- about half the benefits to developing countries from agricultural reform in all rich countries would come from the EU;
- the EU already takes a higher share of imports from low income countries than do other major trading nations, partly reflecting its temperate geographical position. Nonetheless, on the World Bank's measure of overall trade restrictiveness, the EU is more restrictive than the US and Canada but less restrictive than Japan;
- the impact of further reform will vary between countries, depending on factors such as the investment climate and infrastructure;
- some developing countries would immediately gain from a liberalised agriculture market in the EU and other OECD countries. A large number will benefit in the longer term once they have built up the capacity they need to trade – economic infrastructure, human capital, institutions and social protection systems to safeguard people through change;
- there are other countries that may lose out in the short term because they will lose their trade preferences or face higher food import bills. But their economies are unlikely to develop if they remain trapped in distorted and non-competitive production resulting from preferences. Preferences have been of limited value, encouraging countries to over-invest in areas in which they would not normally have a comparative advantage. So these are not reasons for delaying EU and OECD agricultural reform; and
- it will be of fundamental importance that, side by side with efforts to open markets and phase out subsidies, developed countries make the necessary investments in the capacity of poor countries to trade as well as their ability to cope with the challenges they face in the short term.



# A VISION FOR AGRICULTURE

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**1.1** This chapter presents a vision for a sustainable model of European agriculture, illustrates the key challenges which face agricultural policy at the start of the 21st century and proposes solutions to be brought in over a timescale of 10 to 15 years.

**1.2** The context for this is sustainable development. The aim is to progress economic, social and environmental improvements in a co-ordinated way, in order to improve quality of life for all, without compromising the quality of life of future generations. As well as promoting sustainable development within the EU, policies must look beyond borders and support the sustainable development of the rest of the world.

**1.3** Agricultural policy has a fundamental part to play. It has a significant effect on the EU and international economy. It has an important role in the development of thriving rural communities. And it has a major influence on the landscape, biodiversity and pollution.

## A VISION FOR AGRICULTURE

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**1.4** The Common Agricultural Policy remains the most visible and expensive common policy of the EU, but one which is increasingly out of step with the need for Europe to respond to the challenges of globalisation. Internationally, it continues to attract criticism and to create tensions in the EU's relations with trading partners. Domestically, it imposes substantial costs on consumers and taxpayers but is inefficient in delivering support to farmers and promoting an attractive rural environment. Indeed much of the CAP still has a negative impact on the environment.

**1.5** Our vision for agriculture within the next 10 to 15 years is for an industry which is fundamentally sustainable and an integral part of the European economy. It should be:

- internationally competitive without reliance on subsidy or protection;
- rewarded by the market for its outputs, not least safe and good quality food, and by the taxpayer only for producing societal benefits that the market cannot deliver;
- environmentally-sensitive, maintaining and enhancing landscape and wildlife and tackling pollution;
- socially responsive to the needs of rural communities;
- producing to high levels of animal health and welfare; and
- non-distorting of international trade and the world economy.

**1.6** Households and businesses involved in farming within 10 to 15 years will be able to generate viable livelihoods in their own right by being flexible, entrepreneurial and closely connected to their markets, suppliers and customers. Those in the industry will be innovative, skilled and make use of the latest technology, and as now many will combine farming with non-farming activities. Some might apply these qualities by specialising in farming. Others may diversify, maintaining an agricultural business alongside other enterprises, based on or off farm. Special efforts made to protect and

enhance the environment will be eligible for public funding. As a result, consumers and taxpayers can expect to enjoy cheaper, more diverse and better quality produce.

## The story so far

**1.7** The CAP has undergone a series of significant reforms, most recently those of Agenda 2000 reform (1999) and the Mid Term Review reforms of June 2003 and April 2004. The last two rounds are in the process of being implemented. Another milestone was passed in May 2004 as the EU agreed to phase out export subsidies in parallel with others as part of an overall WTO Doha Development Round agreement. In November 2005, the first major reform of the sugar regime for nearly 40 years was agreed. Reform however remains far from finished. A prosperous, globally competitive and responsible EU requires the process of phasing out production-linked support and protection, and the targeting of measures on to non-market and environmental outcomes, to be completed, and the Single Farm Payment to be progressively reduced and phased out.

## The case for further reform is compelling

**1.8** The CAP has played a central role in EU agriculture, and the recent reforms mark an important improvement.

### The Costs of the CAP

**1.9** But the CAP is still not right for Europe, because it is not sustainable. Its roots are still in the mid twentieth century, where protection rather than enterprise was at the centre of policy-making. It significantly distorts the overall EU economy. It damages the environment and constrains rural development. It distorts international trade and inhibits economic development in some of the world's poorest countries. Finally, it costs EU consumers and taxpayers some €100 billion each year, or around €950 a year for the average family of four.<sup>1</sup>

**1.10** Even on the most conservative estimate cited in a recent European Commission paper<sup>2</sup> the CAP, unreformed, will leave the EU economy around €100 billion poorer over the period of the next financial perspective (2007-13) than it would otherwise have been. These costs are large in the context of the significant success the EU has had in improving the prosperity of its citizens through other policies: according to Commission estimates the Internal Market brought the average household a cumulative total of €5,700 extra prosperity over the ten year period to 2002.<sup>3</sup> The economic, financial, social and environmental costs are examined in chapter 2; a few of these are illustrated in Box 1.1.

<sup>1</sup> OECD (2005).

<sup>2</sup> Wichern (2004).

<sup>3</sup> European Commission (2002).

### Box 1.1 Some costs of the CAP

The CAP imposes significant costs on the EU. For example:

- one of the more conservative estimates available suggests the CAP will leave the EU economy around €100 billion poorer during the next financial perspective (2007-13);
- the financial cost to ordinary citizens is much greater – around €100 billion each year according to OECD estimates, half from taxpayers and half from consumers owing to higher food prices. This is an average cost to an EU family of four of around €950 a year, with only around €20 of this spent as EU money on targeted environmental programmes;
- this support represents nearly 100 per cent of the agricultural sector's net value added;
- the CAP has been estimated to be equivalent to a value added tax on food of around 15 per cent;
- removing market price support would bring a one-off reduction in inflation of 0.9 per cent; and
- the €50 billion annual cost to consumers arises from higher food prices and so falls disproportionately on the poorest in society as they spend a much greater proportion of their income on food.

The evidence and issues are examined in more detail in Chapter 2.

### Agriculture and the Lisbon Agenda

**1.11** The Lisbon Agenda commits us to pursue economic reforms that will put the EU at the forefront of the globalised economy. Central to this is the reality that “security is not achieved by resisting or delaying reform. It is by embracing change that the social and environmental results Europeans value can be preserved and even improved.”<sup>4</sup> “Facilitating change to more competitive sectors and better quality jobs is critical to the success of the Lisbon Strategy.”<sup>5</sup> The CAP sits uneasily with this agenda, and this will become more acute over time. According to OECD estimates,<sup>6</sup> even following the 2003 reforms around half of the CAP's total cost is still in the form of (the most trade distorting) market price support, the burden for which falls mainly on consumers and is disproportionately borne by the poorest, while around €30 billion is provided as direct payments to farmers themselves, the burden being borne by taxpayers. Only a fraction of the total budget is targeted specifically on securing wider societal (for example agri-environmental) benefits which would not otherwise be provided. Artificially high prices – including through high levels of border protection – have led to an expansion of production with consequent costs for consumers, the environment and poor people in the EU and developing countries. Surpluses are disposed of on world markets with the benefit of substantial export subsidies (although these have fallen significantly in recent years). The policy distorts the world economy, not least the economies of developing countries.

<sup>4</sup> Kok et al. (2004).

<sup>5</sup> European Commission (2005a).

<sup>6</sup> OECD (2004).

**1.12** The CAP also sits uneasily with the needs of many of the new Member States, where there is a considerable gap between the share of the population working in agriculture and the share of agriculture in GDP. Building more prosperous economies will entail providing incentives for agriculture to restructure and modernise and targeting resources at the development of rural infrastructure, services and the creation of diverse employment opportunities. Yet as it stands the CAP does not prioritise rural development and provides strong incentives against agricultural restructuring. These incentives have increased significantly compared to pre-accession arrangements for all the central European states except Slovenia – exactly the opposite of what would normally be considered beneficial economic policy.

**Much support  
does not  
reach farmers**

**1.13** Moreover, the CAP is inefficient in delivering benefits to the very people at whom it is principally directed – farmers in the EU. The OECD has estimated that only around 10 per cent of market price support actually reaches farmers in their capacity as farmers.<sup>7</sup> And nor are direct support payments particularly efficient alternatives, though decoupling will improve their efficiency. The OECD has estimated that up to 90 per cent of the value of coupled area payments is rapidly capitalised into land prices so that the benefit accrues mainly to the landowner who may or may not be a practising farmer. With around 40 per cent of EU farmland owned by non-farmers, this means that only half of the value of direct payment actually benefits farmers themselves. In some Member States, such as France, even more farmland is owned by non-farmers, so that according to European Commission calculations less than 20 per cent of coupled area payments reach French farmers.<sup>8</sup> The value of decoupled payments also quickly capitalises into land values or the value of the entitlements to payments – so landowners or entitlement owners will benefit, but not from their work as a farmer.

**1.14** Furthermore, this capitalisation severely limits the effectiveness of market price support and direct payments linked to land in providing *ongoing* support to farmers. The benefits accrue primarily to the *initial* landowners, quota-holders, entitlement holders and owners of other inputs used intensively in agriculture, whilst those wishing to enter farming subsequently and farmers who wish to expand their husbandry are disadvantaged as they have to buy their way into the support system.

**1.15** Besides this, support through market prices or based on historical production and/or farm size takes no account of farm household income or wealth. Some farmers are poor, just as many working in other sectors are, as are many without jobs. But taken as a group, farmers are not uniquely or predominantly the poorest in society. A Eurostat survey<sup>9</sup> found that agricultural households have average disposable incomes typically similar to (as in Germany, Spain and Sweden) or higher than (as in France, Belgium, Denmark, Finland and the Netherlands) the all-household average, and many farmers are also relatively wealthy.

**1.16** Furthermore, for most farming households, farming is not the only source of income: less than one quarter of EU15 farmers is full time.<sup>10</sup> Even in households where the main income is from farming, on average between a third and a half of income comes from outside farming.

<sup>7</sup> OECD (2003).

<sup>8</sup> Wichern (2004).

<sup>9</sup> Eurostat (2001).

<sup>10</sup> Eurostat (2001).



**Agriculture, trade and development**

**1.17** Much of agriculture in the EU is largely insulated from the world market. Even after recent reforms, the CAP keeps EU prices for many products well above world levels. Competition from cheaper suppliers in third countries is strictly regulated (nearly all the competing third country products that enter the EU only do so by virtue of reduced tariff quotas or other concessions, so high is the EU's frontier protection). Internal markets rarely operate freely, but excess production is removed from the market in various ways, with some exported to world markets on the back of a sizeable, albeit declining, export subsidy.

**Agricultural tariffs remain very high**

**1.18** Whereas trade barriers outside agriculture and food have gradually been reduced so that the average EU tariff applied to manufactured goods is only 4 per cent, this process has barely begun in agriculture, and the recent rounds of CAP reform have not significantly altered the situation. The average agricultural tariff is around 20 per cent with tariffs of 70 per cent or more not uncommon for core CAP commodities, as Table 1.1 illustrates. Tariffs for goods which are not produced in the EU, such as coffee, tea and spices are much lower.

**Table 1.1: Estimated EU Bound Tariff Equivalents for Selected Commodities<sup>11</sup>**

Durum wheat	78%	Pigmeat	30%
Low & Medium Quality Wheat	69%	Lamb	60%
Rye	65%	Poultrymeat	53%
Barley	79%	Skimmed milk powder	91%
Oats	62%	Butter	101%
Maize	71%	Cheese	68%
Sorghum	71%	Eggs	38%
Triticale	21%	Cocoa Paste	10%
Raw Sugar	66%	Tomatoes	58%
Beef*	100%	Apples*	38%

*Representative tariff line except \* (average from selected bundle of important tariff lines)*

Source: Defra calculations, based on unit values derived from EU trade data.

**1.19** The tariffs, export subsidies, production controls, direct subsidies, non-tariff barriers and other price support measures integral to today's CAP also distort international trade, affecting the lives of millions around the world.

**1.20** Developing countries suffer significantly from market price support in the EU, and other rich countries. Agriculture is extremely important to developing countries, especially the poorest, where it accounts for 40 per cent of GDP, 35 per cent of exports, and 50-70 per cent of total employment. Three quarters of the world's poorest people live in rural areas and are either wholly or partly dependent on agriculture. World prices are depressed, and many products are denied market access by high tariff and other

<sup>11</sup> The table shows bound tariffs (in other words the maximum tariffs that may be applied under the EU's existing WTO commitments). Specific tariffs have been converted to ad valorem equivalents using average unit values derived from recent EU trade within the relevant tariff lines. There is relatively little binding overhang in the EU tariff schedule: in most cases the Most Favoured Nation applied tariff is the same as the bound tariff, although there are exceptions in the cereals, rice and fruit and vegetables sectors.

non-tariff barriers. At the same time, developing countries face subsidised competition in their own domestic markets and those of third countries.

**1.21** The combination of EU tariffs and subsidies means that many developing countries are excluded to a significant extent from markets in which they would enjoy a comparative advantage in a less-distorted trading system. The EU is by no means alone amongst rich countries in providing support to its farmers, but nearly half of the OECD producer support, \$133 billion, went to EU producers, and the EU accounted for over 40 per cent of OECD market price support. Most studies do not split out the impact of EU reform from that of rich countries. One study<sup>12</sup> which does, finds that about half of the benefits to developing countries from agricultural reform by all industrialised countries would come from the EU, which is consistent with the EU's share of OECD support. It seems fair to conclude that CAP reform would remove a significant amount of distortion by itself but it is imperative that other OECD countries reform their agricultural subsidies too.

**1.22** Some developing countries will immediately gain from a liberalised agriculture market in the EU and other OECD countries. There are a large number of countries that will benefit in the longer term once they have built up the capacity they need to trade – economic infrastructure, human capital, institutions and social protection systems to safeguard people through change. Other countries may lose out in the short term because they will lose their trade preferences or face higher food import bills. However, these are not reasons for delaying EU and OECD agricultural reform. The broad conclusion of research on the effectiveness of preferences is that they have been of limited value, while at the same time they have encouraged countries to over-invest in areas in which they would not normally have a competitive advantage.

**1.23** Current protectionism is damaging developing countries and preventing their integration into the global economy. But it will be of fundamental importance that, side by side with efforts to open markets and phase out subsidies, developed countries make the necessary investments in the capacity of poor countries to trade as well as their ability to cope with the challenges they face in the short term. Chapter 4 provides a fuller examination of the impact of the CAP on developing countries.

### Environmental impact of the CAP

**1.24** There is a complex and evolving relationship between agriculture and the environment, which depends on local environmental and economic circumstances, movements in national and international markets, long-term structural adjustment and national and EU agricultural and economic policy.

**1.25** Agricultural production methods have changed markedly during the last few decades. Key developments have included the substitution of capital equipment for labour, the reduced level of on-farm recycling of plant and animal wastes, and the increased use of inputs and services purchased from beyond the farm.<sup>13</sup> Such intensification has had a negative effect on the environmental impact of agricultural production, affecting:

- levels of surface water pollution, due to increased levels of minerals, chemicals and organic material in water courses;

<sup>12</sup> International Food Policy Research Institute (2003).

<sup>13</sup> For example, in 2003, 60 per cent of Great Britain's cereal area was treated with pesticides four or more times. Source: Pesticides Usage Statistics, Central Science Laboratory.

- levels of groundwater pollution, affecting human water supplies – resulting from the leaching of minerals and chemicals used in the agricultural production process; and
- salinisation caused by irrigation and the over-use of aquifers (a particular problem in southern Europe).

**1.26** Recent reforms de-linking subsidy from production have begun to mitigate this. Governments have also made some progress through a wide range of measures in improving the environmental impact of agriculture. One of the most important tools has been the use of agri-environment schemes, introduced under Pillar II of the CAP. However, much of the CAP, and in particular high levels of market price support, has encouraged farmers to intensify agricultural production. This has exacerbated agriculture's contribution to diffuse water pollution and the negative impact of modern agriculture on bio-diversity and wildlife. For example, in the UK:

- cleaning up diffuse water pollution caused by agriculture is estimated to cost water companies (and so water consumers) £211 million a year.<sup>14</sup> Such figures do not include environmental damage that is less easy to quantify (damage to Sites of Special Scientific Interest, damage caused by eutrophication etc); and
- the farmland bird population declined by almost 50 per cent between 1977 and 2003.

## The policy structure for the new CAP

### Reform will mean changes in patterns of production

**1.27** In a less regulated and supported environment, the agricultural sector will utilise fewer resources, and the pattern of production across the EU will change. But it will not be an objective of the new CAP to maintain existing or specific levels or patterns of production, whether within individual Member States or across the EU as a whole. Rather, production should be allowed to find a more sustainable level, reflecting natural advantages (in terms of climate and terrain), competitive advantages (in terms of food quality and safety) and rational trading relationships in a more open market.

**1.28** This vision means the CAP will need to evolve and be coherent with the range of other EU policies in place over the next 10 to 15 years – in particular in respect of economic reform, cohesion and enlargement. Those policies will themselves evolve over the intervening period and the relative position of the CAP will also change. The economic prosperity of rural areas across the EU is likely to depend less on agricultural activity than is currently the case and the changing CAP will need to reflect this. By contrast, the health and maintenance of the rural environment will be of continually growing importance.

### The Challenge for the EU

**1.29** The challenge for the EU is to remove current distortions so that by the second half of the next decade EU agriculture is treated no differently from other sectors of the economy. Over the next 10 to 15 years, EU farmers should be moving towards a situation in which they make their business decisions on the basis of market judgements and consumer requirements alone, rather than in response to subsidy signals. This would be an environment in which production-linked support and the Single Farm Payment had effectively disappeared. This vision requires a transitional strategy to help the farming community manage change which will require financial

<sup>14</sup> Defra (2004a).

support to continue in this period but be phased out by the end of the period, enabling a very significant reduction in the CAP budget.

**1.30** A first, important step has already been taken in that direction. The decoupling of direct support from production is a central plank of the 2003 and 2004 reforms. This has created a new, transferable, Single Farm Payment that will be allocated to farmers in 2005 or 2006 and will significantly reduce the economic distortions associated with the production-linked direct payments that it will replace. Those reforms are, though, partial. First, a raft of market intervention and support measures remains in place: high tariffs, production quotas, set-aside, intervention purchase, export subsidies and other tools. Secondly, options remain for Member States to continue with coupled schemes for direct payments (albeit reduced in scale). We need to build on the decisions already taken to extend decoupling fully.

**1.31** EU agriculture does not exist in isolation but is part of a world market. Many other developed countries operate farm policies no less distorting than those of the EU. It will be important for the EU to take the opportunity of its own reforms to secure reductions in the trade-distorting support and protection policies of other developed countries in order to maximise the benefits for all.

**1.32** Against this background, a sustainable CAP would comprise:

- a free, fair and level playing field throughout the EU for farmers to produce and market their goods in a single market, as in other sectors of the economy;
- central to this, the integration of agriculture within EU competition policy on the same basis as for other sectors with rules set at the EU level;
- a clear framework, set at EU level, to define the goals of EU agricultural policy, focussing in particular on maintaining the environment and promoting sustainable rural development, particularly in the more environmentally sensitive regions of the Union;
- within this framework and in the long-term, targeted, non production-distorting measures defined and applied at Member State, regional and local levels to achieve these goals in accordance with local priorities and consistent with EU competition policy;
- import tariffs for all farm sectors progressively aligned with the much lower level prevailing in other sectors of the economy;
- no price support, export refunds or other production or consumption subsidies;
- social and welfare benefit support as determined by the Member States would be available to farmers on the same basis as other members of society but there would be no income or production support payments which treat agriculture differently from other sectors; and
- EU spending on agriculture would be based on the current Pillar II and would support these objectives as appropriate, allowing a considerable reduction in total spending by the EU on agriculture and bringing this into line with other sectors.

## TRANSITION TOWARDS THE VISION

### Gradual and carefully managed change towards the vision

**1.33** Radical change of the sort proposed in this paper has to be seen in the longer-term perspective. The vision in this paper is of gradual and carefully managed change to give clear signals and time for farmers to adjust their businesses, not an overnight upheaval; and change would take place against the backdrop of multilateral trade negotiations with our major trading partners, both developed and developing. Farmers will want time to plan and the ability to make most effective use of available resources, so that they can best manage the transition. So it will be important to give farmers a clear trajectory, and to consider the scope for support during the interim to be made more flexible. But government also has a role:

- efficient, well-functioning land markets are essential in order to assist the process of structural change, achieve economies of size, help diversification, maintain international competitiveness and secure credit. The way that governments regulate the agricultural land market may have a very substantial influence over the speed and ease with which the agricultural sector adjusts;
- the provision of training to farmers and farm labourers can help more successful adaptation to changed circumstances, and make it easier for those leaving the sector to find work in the wider employment market;
- time-limited payments to producers to compensate for income foregone, or to landowners to compensate for reduced asset values could be considered. In both cases, de-linking such payments from land would better facilitate adjustment; and
- early notice of reforms helps farmers to plan in advance. It is also the case that the way that the transition is managed will affect the conditions for the establishment and deepening of market mechanisms for the management of risk.

**1.34** The CAP has been a closely integrated series of measures, with changes in one set of policies necessitating changes in others. But recent reforms are loosening the relationships between them: for example, as farmer support is decoupled from production, so defence of specific price levels in the EU market becomes relatively less important; as internal prices move towards world levels, so border protection can be eased back. In short, the opportunity is now emerging for EU agriculture to be re-coupled with world markets.

**1.35** During the transitional period many of the more established policy levers will become increasingly redundant and can be progressively dispensed with: the EU has already committed itself to phasing out export refunds, as part of a WTO Doha Development Round deal that included parallel movement on all forms of export subsidy, for example. Intervention – even at safety net levels – is less used. Production quotas (as in sugar and dairy) and set-aside would become redundant. Import quotas could also expand and eventually disappear, as has already been the case for other sectors. The gradual alignment of EU and world market prices will additionally call for targeted policies that assist developing countries adversely affected by internal EU policy change to adjust during the transitional period. Entrepreneurial, customer-focused EU farmers, using modern risk management instruments and marketing techniques and environmentally sustainable production methods, would become the norm.

**1.36** A policy of this sort would be a radical further evolution of the CAP we now have: price support would gradually diminish as would other direct support to farmers; agricultural markets would progressively open up; and there would be a central rather than a peripheral role for rural development measures, including those targeted on protection and enhancement of the rural environment.

**1.37** There would continue to be a common European policy but one very different from that now in place. It would allow Member States a greater measure of discretion than at present – for example, in determining their agri-environmental priorities – but it would preclude unfair competition between Member States, and EU spending on the common policy would be significantly lower than now.

# 2

## IMPACT OF THE COMMON AGRICULTURAL POLICY IN THE EU

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**2.1** This chapter considers the impact of the CAP on the EU from three angles. First, it examines the economic and fiscal costs of the CAP as currently structured, with a particular focus on the efficiency with which the CAP supports farm incomes. Second, the CAP is considered from the social angle. To what extent does the CAP effect a transfer of income within EU society? And are such transfers consistent with notions of social equity? Finally, it considers the relationship between EU agriculture and the environment, and the influence of the CAP on that relationship.

### The CAP today

**2.2** The CAP has evolved markedly since its early days. Originally the focus was on keeping market prices high.<sup>1</sup> High levels of import protection kept foreign produce out, and internal prices were then regulated by setting minimum prices.<sup>2</sup> If prices fell below these levels, the European Commission would intervene, for example by buying up produce (leading in the 1980s to the infamous ‘mountains’ and ‘lakes’) or providing a subsidy to dispose of the surplus on world markets.

**2.3** 1992 saw the first significant reform of the CAP. Support prices were reduced and compensatory “direct payments” were introduced. These compensatory payments are still being made today – around €18 billion a year of direct payments date back to these first reforms.<sup>3</sup> Similar reforms occurred in 1999, but the next major step was taken in 2003 when the link between direct payments and production was broken. This reduced the negative economic impact of the payments, and made receipt dependent on meeting minimum standards of good agricultural and environmental condition.

**2.4** The OECD (2004) estimates that even following the reforms in 1992, 1999, and 2003, around half of the support provided to EU farmers is still in the form of market price support. Tariffs and other restrictions on imports are the most important component of this support, since without them it would not be possible to maintain high prices. The EU’s average agricultural tariff is around 20 per cent.<sup>4</sup> Tariffs are typically higher for core CAP commodities, with lower tariffs on agricultural products such as coffee, tea and spices not produced in the EU. Table 1.1 shows how high tariffs are in many key agricultural products. For comparison, the EU’s average tariff on non-agricultural goods is 4 per cent.

**2.5** A small but growing portion of the CAP budget (known as Pillar II of the CAP) is spent on wider, mainly farm-related goals, such as targeted programmes to reward farmers for providing agri-environmental benefits. A fuller description of the main CAP mechanisms is provided in Annex A.

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<sup>1</sup> For example in 1968-1969, the European Communities price of butter was five times the world price, and common wheat price was almost twice the world price (Ritson 1997).

<sup>2</sup> Self-sufficiency levels have grown over time, before falling back in recent years. Self-sufficiency in wheat averaged 90 per cent for 1956-60 (EC6), rising to 133 per cent for 1992-93 (EC12), falling back to 116 per cent in 2001-02 (EU15). Self-sufficiency in beef and veal for the same periods was 92, 108 and 109 per cent respectively.

<sup>3</sup> The first reforms have been criticised for over-compensating farmers, both because producer prices fell by much less than the intervention prices (for example, although the intervention price was cut by 35 per cent, wheat prices fell by only around 10 per cent) (Messerlin 2001), and because the detailed provisions appear to have allowed generous calculation of the compensation. Ackrill (1999) reports estimates that over the first four years EU farmers were over-compensated by a total of between €8.5 and €14.3 billion.

<sup>4</sup> Most favoured nation, applied, *ad valorem*, out of quota. Source: World Bank 2003.

## ECONOMIC AND FISCAL COSTS

**Static Costs 2.6** Although agriculture accounts for only around 2 per cent of EU25 GDP, the CAP has a perceptible impact on the UK's and the EU's economy. Its net economic costs arise from the economic distortions caused by higher agricultural prices and direct payments.

**2.7** During the 1980s and 1990s estimates of the welfare costs alone suggested that the CAP costs the EU as a whole between 0.1 per cent of GDP (Harrison et al 1995) and 2.7 per cent of GDP (Burniaux and Waelbroeck, 1985). Borrell and Hubbard (2000) estimate that welfare costs of the CAP amount to 0.9 per cent of GDP every year, whilst Philippidis and Hubbard (2001) estimated that the cost of the CAP was 0.2 per cent of GDP for the EU and 0.5 per cent of GDP for the UK.<sup>5</sup>

**2.8** Taking the most conservative of recent estimates, a cost of 0.2 per cent of GDP, this implies the CAP will leave the EU economy around €100 billion poorer over the period of the next financial perspective (2007-13) than it would otherwise have been.

**Dynamic Costs 2.9** The results from such modelling are likely to understate the welfare costs of the CAP because they do not take account of the true impact of the CAP over time. Such dynamic effects stem from greater capital accumulation and productivity gains that would be associated with CAP reform. Work by Stoeckel and Breckling (1989) suggests that ignoring such dynamic considerations could result in underestimates of welfare losses of 20 per cent or more.

**Total Costs to Consumers and Taxpayers 2.10** The costs set out above are the net economic costs to society as a whole. The total value of the transfers from consumers and taxpayers to producers are much higher. The OECD estimates the cost at around €100 billion a year: approximately €50 billion in consumer costs as a result of higher food prices, and approximately €50 billion in taxpayer costs.<sup>6</sup> This is an average cost to an EU family of four of around €950 a year (Table 2.1 gives a more detailed breakdown). Furthermore, this €100 billion cost represents nearly 100 per cent of the agricultural sector's net value added produced.<sup>7</sup>

**Price Levels 2.11** Ritson (1997) argues that 'the CAP is equivalent to a value added tax on food of about 15 per cent,' whilst in Ireland, the consumer cost of the CAP is equivalent to VAT on food at a rate of 20 per cent (Matthews 2000). Reform away from price support would bring a one-off step change in price levels. Messerlin (2001) estimates that full CAP reform would result in the average prices for agricultural products falling by 14-17 per cent. Oxford Economic Forecasting (2005), estimates that the effect of reducing market price support to zero on the consumer price index (CPI) would be that average prices fall everywhere, by between 0.7 per cent in Germany and 1.2 per cent in Ireland. The average for both the EU15 and the eurozone is a fall in the CPI of 0.9 per cent; a similar fall is estimated for the UK.

<sup>5</sup> Although these estimates pre-date the most recent reforms, it should be recalled that a large part of the economic cost of the CAP is due to tariffs and market price support, elements which were not significantly reformed in 2003.

<sup>6</sup> OECD (2004).

<sup>7</sup> Wichern (2004).



**Table 2.1: Breakdown of EU producer support, 2004<sup>8</sup>**

	Total for EU25 (€ billion)	Average per family of four (€)
Payments based on output <sup>9</sup>	4	
Payments based on area planted / animal numbers <sup>10</sup>	30	
Payments based on historic entitlements <sup>11</sup>	2	
Payments based on input use <sup>12</sup>	9	
Payments based on input constraints <sup>13</sup>	5	
<b>Total Payments</b>	<b>51</b>	<b>443</b>
– of which EU	38	
– of which environmental payments <sup>14</sup>	2	
– of which national	13	
<b>Market price support</b>	<b>57</b>	<b>501</b>
– of which export subsidies	4	
<b>Total support to producers</b>	<b>108</b>	<b>944</b>

Source: OECD (2005) and OECD PSE/CSE database. Figures may not always sum due to rounding.

<sup>8</sup> Provisional figures for the producer support estimate (PSE), which the OECD defines as ‘the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income. It includes market price support and budgetary payments, in other words gross transfers from taxpayers to agricultural producers arising from policy measures based on: current output, area planted/ animal numbers, historical entitlements, input use, input constraints, and overall farming income’. It does not include payments in respect of general services support such as taxpayers’ money spent on research and development, inspection services, marketing and promotion, and infrastructure.

<sup>9</sup> The main elements were payments for the production of olive oil (€2.3 billion), production aid for peas and field beans (€72 million), production aid for bananas (€233 million) and premiums for tobacco (€924 million). Following recent CAP reform, large elements of these payments will be reclassified as payments based on historical entitlements.

<sup>10</sup> Some of the main elements were per hectare aid for cereals (less maize and silage) of €10.8 billion, per hectare payments for oilseeds (€1.4 billion), payments for set-aside related to per hectare aid (€1.8 billion), suckler cow premium (€2.1 billion), special beef premiums (€1.9 billion), extensification premium (€1.1 billion), and ewe and goat premiums (€1.1 billion). Following the 2003 CAP reform, the majority of these payments are in the process of being merged into the single farm payment and will be reclassified as payments in respect of historical entitlements.

<sup>11</sup> Mainly the single area payment scheme (most New Member States), and national expenditures negotiated prior to accession for northern Sweden and Finland.

<sup>12</sup> Mainly national payments such as aid for setting up of young farmers, fuel tax rebates and water subsidies.

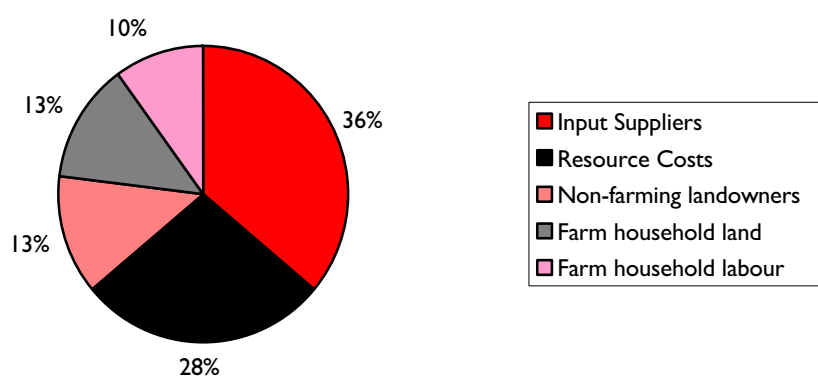
<sup>13</sup> Includes EU payments (for example, in respect of the environment, and slaughter premiums), and a range of national payments.

<sup>14</sup> If all such payments were 50 per cent co-financed by Member States, total environmental payments to farmers under the CAP in 2004 would have amounted to €4 billion – less than 4 per cent of the value of the total support to producers.

## Efficiency of the CAP

**Market Price Support** 2.12 The OECD (2003) has estimated that only around 10 per cent of the CAP's market price support actually reaches farmers, in their capacity as farmers (see Chart 2.1). 36 per cent benefits suppliers of inputs such as machinery, pesticides and fertilisers. 26 per cent goes to landowners, some of whom are farmers (see below), whilst a quarter is lost through economic inefficiencies (deadweight losses). Estimates by Blandford and Dewbre (1994) give similar results.

**Chart 2.1: Who benefits from market price support?**



Source: OECD (2003). Resource costs are opportunity costs are deadweight economic costs.

**Direct Payments** 2.13 Evidence suggests that while direct payments may initially increase incomes, the relative inelasticity of supply of farm inputs (especially land) means that the costs of agricultural inputs soon rise as well. The OECD (2003) has estimated that up to 90 per cent of the value of coupled area payments is rapidly capitalised into land prices so that the benefit accrues mainly to the landowner. With around 50 per cent of EU farmland owned by non-farmers, this means that only half of the value of such direct payments actually benefits farmers themselves. In some Member States, such as France, even more farmland is owned by non-farmers, so that according to European Commission calculations less than 20 per cent of coupled area payments reach French farmers.<sup>15</sup> Table 2.2 illustrates this and presents the results for other Member States.

<sup>15</sup> Wichern (2004). Who actually receives the support cheque is a minor consideration; it is the net effect that counts. It is misleading to focus on a €1,000 cheque received by a tenant farmer if €900 of this is being recouped by the landlord through the higher rent it is possible to charge.

**Table 2.2: Percentage of rented farm land and share of direct payments reaching farmers by Member State**

	Share of rented land (%)	Estimated net transfer of coupled area payment to farmer (%)
Belgium	75	24
Denmark	25	70
Germany	*69	30
Greece	*37	59
Spain	33	62
France	*81	19
Ireland	18	76
Italy	38	58
Luxembourg	49	48
Netherlands	*39	57
Austria	31	64
Portugal	30	65
Finland	33	63
Sweden	48	49
UK	*39	57
<b>EU15</b>	<b>*50</b>	<b>47</b>

Source: Wichern (2004), based on 2001 Farm Accountancy Data Network data (\*2000)

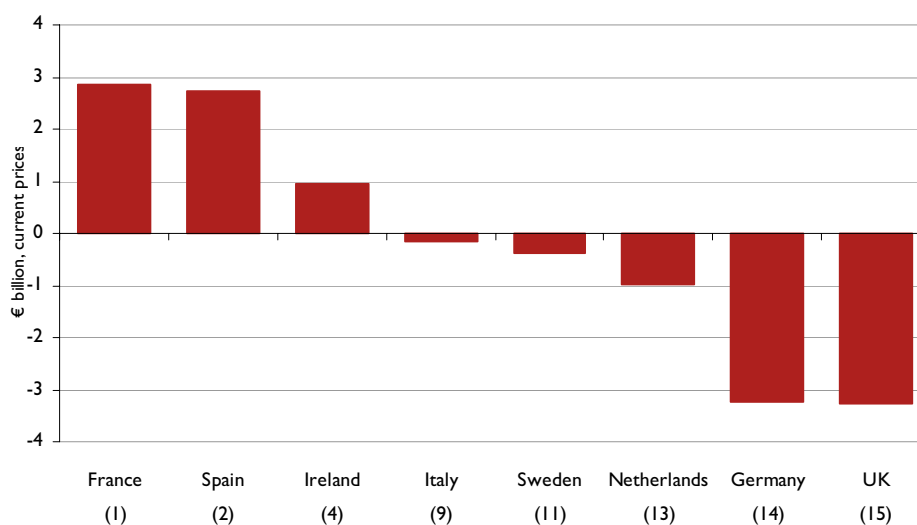
**Capitalisation 2.14** Furthermore, capitalisation severely limits the effectiveness of market price support and direct payments linked to land in providing ongoing support to farmers. The benefits accrue primarily to the initial landowners, quota-holders, entitlement holders and owners of other inputs used intensively in agriculture, whilst those wishing to enter farming subsequently and farmers who wish to expand their husbandry are disadvantaged as they have to buy their way into the support system.<sup>16</sup> This works against ‘farm entrepreneurs’ coming from other parts of the economy, resulting in losses in entrepreneurial capacity in the EU agricultural sector over the long run (Mahe and Ortalo-Magne 2001).

## Transfers between Member States

**2.15** A key characteristic of the CAP is that it is funded through the European Budget. The CAP has resulted in a substantial reallocation of resources between Member States. Chart 2.2 shows the net CAP receipts of selected Member States in the past five years (prior to net budgetary corrections); without reform, this pattern will remain unchanged over the next financial perspective (2007-13) despite the enlargement of the EU.

<sup>16</sup> See for example OECD (1998) and Harvey (1997).

**Chart 2.2: Annual average net CAP receipts and rank, 2000-2004, selected countries**

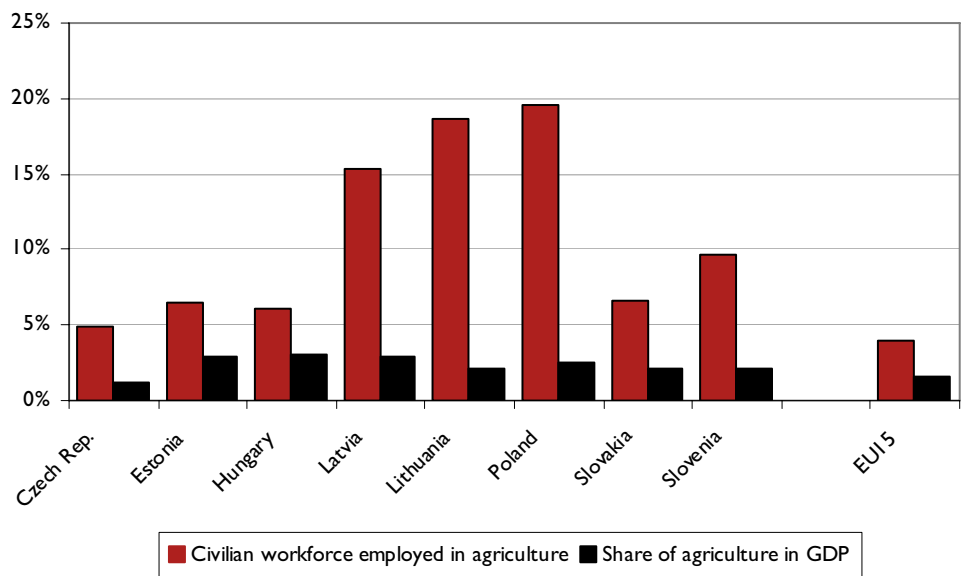


Source: Calculations based on European Commission data. Based on share in financing EU budget prior to budgetary corrections. Excludes rural development.

## New Member States

**2.16** Much of the research cited above was conducted before the recent EU enlargement, and was therefore based on an EU of 15 relatively wealthy Member States with a small proportion of their workforce employed in agriculture. But the CAP also sits uneasily with the needs of many of the new Member States, where there is a considerable gap between the share of the population working in agriculture and the share of agriculture in GDP (see Chart 2.3). Building more prosperous economies will entail providing incentives for agriculture to restructure and modernise and targeting resources at the development of rural infrastructure, services and the creation of diverse employment opportunities. Yet as it stands the CAP does not prioritise rural development and provides strong incentives against agricultural restructuring. These incentives have increased significantly compared to pre-accession arrangements for all the central European states except Slovenia (see Chart 2.4).

**Chart 2.3: Agricultural employment and share of agriculture in GDP in central European new Member States**



Source: European Commission (data for 2002).

**Chart 2.4: Support for farming prior to accession**



Source: OECD PSE/CSE database 2002 (data for 2001).

Ratio between gross farm receipts including support (from tariff protection, market intervention, budget transfers, etc) and gross farm receipts valued at border prices ("producer nominal assistance coefficient"), minus one.

## SOCIAL COSTS

**Consumer costs are regressive** **2.17** Social equity considerations should also form part of the policy assessment. Whilst the €50 billion annual cost to taxpayers is distributed according to the tax burden, the €50 billion annual cost to consumers arises from higher food prices and is borne disproportionately by the poorest in society, since these spend the greatest proportion of their income on food.

**2.18** The poorest 10 per cent of households in the UK spend 16 per cent of their income on food and non-alcoholic drinks, twice the proportion spent by the wealthiest decile<sup>17</sup>. The same holds true between Member States: in comparatively wealthy countries such as the UK, Netherlands and Ireland, less than 15 per cent of household consumption expenditure goes to food, beverages and tobacco; in Estonia, Latvia and Lithuania these take more than 30 per cent.<sup>18</sup> One year after Poland's accession to the EU, the impact of the CAP on food prices was evident, with significant year on year price increases for a number of items such as rice (45 per cent), sugar (45 per cent), bananas (37 per cent) and beef (38 per cent).

**The current position of farmers** **2.19** There is a perception that farm incomes are generally low. The need to support farm incomes is one of the reasons most frequently used to justify the CAP.

**2.20** In certain Member States, such as Portugal, agricultural households are, taken as a group, relatively poor. In some of the new Member States significant numbers of farmers operate at a semi-subsistence level, on very low incomes. Lifting those groups out of poverty requires targeted, long-term measures aimed at developing diverse employment opportunities and building rural infrastructure and services. But across the EU the situation is considerably more complex than official farm income figures suggest. The statistics usually used to capture income from farming are only a partial measure of the income of farming households, omitting income sources not related to farming.<sup>19</sup> These considerations are important since most EU farmers operate relatively small farms, are part-time and have non-farming sources of income (often the majority of their income), whilst many also own considerable assets. Blandford and Dewbre (1994) argue that in OECD countries, 'only by focusing on income from farming alone would the misleading conclusion be drawn that farmers are poor in comparison to other groups'.

**Farming structures** **2.21** Only 23 per cent of farmers in the EU15 are classified by Eurostat as full time. In Italy (11.5 per cent), Greece (12.5 per cent), Portugal (16.4 per cent) and Spain (19.8 per cent), the number of farmers classified as full time is particularly low. By comparison the same figure for the UK and the Netherlands, where there are comparatively few farmers, is 41 per cent and 61 per cent respectively.

**Most farming is undertaken by a few farmers** **2.22** In the UK and across much of the EU, a relatively small percentage of farmers accounts for the bulk of agricultural production. Over 80 per cent of UK food production now comes from just one quarter of all farms, with the largest 10 per cent of farms producing over half of total food output.<sup>20</sup>

**2.23** Most of the money paid to farmers as direct payments goes to a relatively small number of farmers. For example, in the UK in 2001, the latest year for which figures are

<sup>17</sup> National Statistics (2003 edition, revised 2004), survey data for 2002-03.

<sup>18</sup> European Commission (2005). Data for 2002.

<sup>19</sup> In the case of Net Farm Income, the measure is also net of deductions of imputed rents for farmer owned land and buildings.

<sup>20</sup> Curry Commission (2002).

available, 79 per cent of direct payments went to 20 per cent of recipients, with just over half of the payments going to 8 per cent of recipients. These relative shares are broadly mirrored in many other EU15 Member States.<sup>21</sup>

**2.24** A simple response would be to limit payments to individual recipients. But that would be to avoid more fundamental questions, such as the others raised in this paper and would create further inefficiencies in the agricultural sector as farmers avoided taking decisions which might otherwise be sensible or found ways to circumvent the rules. Farmers with large farms may have large incomes and be wealthy, but given the large number of part-time farmers it is not necessarily the case that farmers with smaller holdings are poor. We have to ask ourselves whether there is anything unique about farming which justifies its having its own system of support payments.<sup>22</sup>

### Farm household income

**2.25** The available data are not perfect, but Eurostat (2001) concludes that for most Member States agricultural households have average disposable incomes per household that are typically similar to or higher than, the all-household average. Across the EU, even in households where the main income of the reference person comes from farming, non-farming income is significant: between one third and one half of total household income comes from outside agriculture, although there are significant differences between Member States and between years.<sup>23</sup>

**2.26** Separately, Messerlin (2004) notes that ‘OECD farm households earn much higher incomes than non-farm households: Netherlands (250 per cent), Denmark (175 per cent), France (160 per cent), Belgium (127 per cent), Japan (120 per cent), US (110 per cent) and Poland (105 per cent). In wealth terms, the discrepancy is even wider’. Messerlin draws a comparison with the minimum wage in France: total domestic support to agriculture amounted to more than €17,000 per farmer in 1999 compared to the French minimum wage of €10,000. In England, farm household incomes are around 150 per cent of UK average household income.<sup>24</sup>

<sup>21</sup> European Commission (2005). For example, in Italy, 8 per cent of recipients got 59 per cent of payments whilst 72 per cent shared 15 per cent. In Germany, 10 per cent of recipients took 60 per cent of payments, whilst 56 per cent got 9 per cent. And in France, 40 per cent of recipients got only 5 per cent of direct payments, whilst in Spain 54 per cent of recipients shared 5 per cent of payments.

<sup>22</sup> In considering this question, we have to determine what the payments are for. If, true to their origins, they are compensation for past price cuts, then this distribution is to be expected. However, one would normally expect compensation to be time limited. If they are to pay for environmental benefits, then environmental issues should be considered. For example, do benefits generated by “cross-compliance”, costing farmers around 2 per cent of the value of the payments, justify direct payments? If they are to support farm household income, to what extent do farm household incomes need supporting, compared to the incomes of other sections of society?

<sup>23</sup> In many farming households, farm income makes only a small contribution to household income. In line with figures on part-time farming, a large proportion of households with an agricultural holding (for example 72 per cent in Denmark, 46 per cent in Greece) are not included in these figures because farming is not the main source of income. In some countries such households have relatively low income but in others these had income similar to or higher than the all-household average. But in the context of farm support, their relative prosperity is barely relevant: only a small proportion of the total income of such agricultural households comes from farming (Germany 5 per cent, Netherlands 8 per cent, Finland 11 per cent, Ireland 14 per cent, Greece 17 per cent, and 12 per cent in Denmark). Their position is much more sensitive to other factors.

<sup>24</sup> All the same, there are significant numbers of poor farmers: 15 per cent of English farming households have incomes that are below the Department for Work and Pensions low-income threshold. Nonetheless, farmers as a group are not uniquely or predominantly the poorest: in the UK, 22 per cent of households in the UK as a whole fell below the Department for Work and Pensions low income threshold. Source: Defra.

**Table 2.3: Disposable Household Income (farming households vs. non farming households)**

	Households where farming is the main source of income (All households = 100)
Denmark 1999	105
Germany 1983	101
Greece 1994	86
Ireland 1987	127
Netherlands 1988	267
Finland 1992	131
Sweden 1992	79
Belgium 1999	112
Spain 1993	101
Italy 1995	97
Luxembourg 1990	161
Portugal 1989	40

Source: Eurostat 2001.

**Farm household wealth**

**2.27** Household income tells only part of the story. Hill (2000) reports on the lack of evidence in the EU on balance sheets and net farm worth for agricultural households. Nevertheless following a survey of the available evidence he concludes that the available information is ‘sufficient to establish that farm households, as a group, hold significant amounts of assets outside the farm business and have relatively large net worth compared with other groups in society.’

**2.28** Detailed analysis is undertaken only rarely. A study in France, carried out by the Institut National de la Statistique et des Études (INSEE) in 1992, looked at the wealth of all types of household.<sup>25</sup> It found that in 1992 the average household headed by a farmer had gross assets double that of households headed by other self-employed and salaried people. The relationship between net worth was expected to be similar. The study found that 49 per cent of French farming households were among France’s most wealthy 20 per cent of households.

**2.29** In the UK, average net worth rises with farm size, with large farms enjoying an average net worth of £1.26 million in 2002-03. However, even the net worth of small farms may be considerable. The average net worth of small farms was £290,000 in 2002-03, which is greater than the UK mean net household wealth for all households of £207,000.

**2.30** In various ways the involvement in farming of households that are well capitalised and that have diversified sources of income is positive from a policy perspective. Such households would be relatively resilient in the face of further CAP reform, and relatively well placed to manage risk in a freer agricultural market (see

<sup>25</sup> Jegouzo et al (1998), Hill (2000).



Chapter 3). But at the same time, the relative wealth of those in the farming sector raises important questions about the use and targeting of large sums of taxpayers money.

**Lack of targeting** 2.31 Targeting support on actual production, historical production and/or farm size takes no account of income or wealth. The system also fails to take account of the secular trend for people to leave farming. Despite reform and fiscal controls which have seen the overall costs fall over the last fifteen years, the continuing trend for people to leave agriculture has resulted in support per full-time farmer equivalent nearly doubling from an average of around €9,000 a year in 1986-88 to around €17,000 a year for 2000-02.<sup>26</sup>

## ENVIRONMENTAL COSTS

**Environmental costs** 2.32 There is a complex and continually evolving relationship between agriculture and the environment. This depends on the inter-play between local environmental and economic circumstances, and more macro factors such as national and EU agricultural and economic policy, movements in national and international markets, and the ongoing process of long-term structural adjustment in agriculture.

2.33 The consensus appears to be that in many respects there is a growing tension between the economic pressures on farming and society's environmental expectations of agriculture. For example, in the UK, the Curry Policy Commission (2002) argued that 'agriculture was once environmentally benign, and a healthy and attractive countryside was a relatively cost-free by-product. The practices that delivered this benefit for society are often not now economic.'

2.34 Through a wide range of measures, Governments have made some progress in improving the environmental impact of agriculture. In the UK one of the most important tools has been the use of agri-environment schemes, introduced under Pillar II of the CAP. However, much of the CAP, and in particular high levels of market price support, has encouraged farmers to intensify agricultural production. This has exacerbated both agriculture's contribution to diffuse water pollution, and the negative impact of modern agriculture on bio-diversity and wildlife.

**Agricultural intensification** 2.35 Agricultural production methods have changed markedly during the last few decades. Some methods and technologies have merely been modified, whilst others have been completely displaced. Key developments have included the substitution of capital equipment for labour, the reduced level of on-farm recycling of plant and animal wastes, and the increased use of inputs and services purchased from beyond the farm.<sup>27</sup> Such intensification has had a very significant effect on the environmental impact of agricultural production, (Oskam and Stefanou, 1997, Lowe and Whitby, 1997) affecting:

- levels of surface water pollution, due to increased levels of minerals, chemicals and organic material in water courses;
- levels of groundwater pollution, affecting human water supplies – resulting from the leaching of minerals and chemicals used in the agricultural production process;

<sup>26</sup> Source: OECD data.

<sup>27</sup> For example, in 2003, 60 per cent of Great Britain's cereal area was treated with pesticides four or more times. Source: Pesticides Usage Statistics, Central Science Laboratory.

- salinisation caused by irrigation and the over-use of aquifers (a particular problem in southern Europe);
- the attractiveness of the landscape (both because of the impact on the composition and variety of the rural landscape); and
- the conservation of nature – either through impacts on the flora or wildlife habitats (with, for example, clear links back to the quality of surface water).

**Diffuse Water Pollution** **2.36** A number of factors (many of them location and time specific, such as prevailing weather conditions) complicate the relationship between levels of fertiliser and pesticide applications, and the level of surface water pollution from diffuse agricultural sources. Nevertheless, it is important to note that statistics show that there was a jump in nitrogen applications in the UK during the 1970s.<sup>28</sup> Indeed, available long-term data shows a substantial increase in nitrate concentrations in, for example, the Thames, at around the same time.<sup>29</sup>

**2.37** Cleaning up diffuse water pollution caused by agriculture is estimated to cost UK water companies (and so water consumers) £211 million a year.<sup>30</sup> Such figures do not include environmental damage that is less easy to quantify (damage to Sites of Special Scientific Interest, damage caused by eutrophication etc).

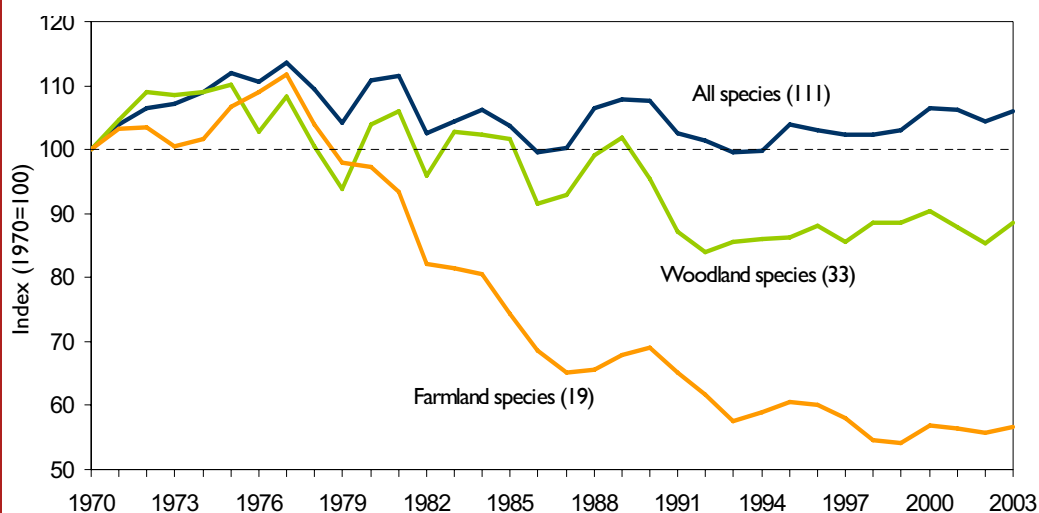
**Wildlife and bio-diversity** **2.38** Intensification has also had a negative impact on habitats and bio-diversity, both through the use of herbicides, pesticides and inorganic fertiliser, and because of the moves away from mixed farming. Farmland birds are regarded as a good indicator of the general state of biodiversity in the farmed environment because they are high in the ecological food chain. Numbers have been in steep decline in the EU and on a Pan-Europe level. For instance the UK's farmland bird population declined by almost 50 per cent between 1977 and 2003. Only now, are we beginning to see early signs in the UK that agri-environment schemes are having an effect in halting that decline (see Chart 2.5).

<sup>28</sup> The average rate of nitrogen application per hectare of arable crop almost doubled between the early 1970s and the early 1980s, since when it has been stable. Source: The British Survey of Fertiliser Practice, 2003.

<sup>29</sup> There are large regional difference in the degree to which lakes and rivers deviate from a 'natural/background' level, with less impacted sites predominating in less-agriculturally intensive (and less populated) landscapes, particularly Cumbria and the Scottish Highlands and Islands. The greatest ecological change is found in lowland regions in Northern Ireland and England where nutrient concentrations are often well in excess of background levels, (House of Commons 2003, 'Select Committee on Environment, Food and Rural Affairs Fourth Report).

<sup>30</sup> Defra (2004a).

**Chart 2.5: Population of wild birds: 1970-2003**



Source: DEFRA drawing on RSPB and BTO data.

Figures in brackets show the number of species included in each category.

**High nature value farmland**

**2.39** Diffuse water pollution from agriculture and the negative impact of modern farming methods on wildlife and bio-diversity are quite general across the EU (although varying in their importance depending on location). But it is worth highlighting the effect of these changing pressures on low input/low output farming systems, which are home to a high proportion of Europe’s high nature value farmland.

**2.40** High nature value farmland consists of areas of particular wildlife and biodiversity value (European Environment Agency, 2004). Its dependence on low intensity farming systems leaves it vulnerable to both pressure for intensification and decreased production. European Environment Agency estimates that between 15 per cent and 25 per cent of Europe’s countryside should be considered to be high nature value farmland, the majority of which is located in southern and eastern Europe.<sup>31</sup>

**2.41** A number of characteristics of extensive farming systems help to explain their survival in the face of the significant changes in agricultural methods over the last 20 to 30 years:

- constraints arising from prevailing soil and climatic conditions;
- distance from markets; and
- socio-economic factors such as the prevailing form of ownership.

<sup>31</sup> Bignal and McCracken identify large areas of the Iberian Peninsular, southern France, Italy and Greece (as well as much of Scotland, Ireland and Wales) that are classified as extensive (or low intensity) farming systems:

- Low intensity livestock raising in upland and mountain areas;
- Low intensity livestock raising in Mediterranean regions;
- Low intensity arable systems (mainly confined to Mediterranean regions); and
- Permanent Crop systems (olives, fruit and vines).

**2.42** Indeed, Lowe and Whitby (1997) emphasise that many extensive farming areas operate under traditional collective ownership and management arrangements. Such systems tend to inhibit the adoption of agricultural innovations. Nevertheless, they are vulnerable to periods of agricultural prosperity.<sup>32</sup> That said, low levels of productivity render such areas vulnerable to land abandonment in the face of agricultural downturns, and wider economic developments (such as rising off-farm wage levels).

**Impact of the CAP 2.43** To a significant extent, the technical change affecting the agricultural sector is a function of scientific progress outside of the agricultural sphere, but two aspects of the CAP have provided a significant stimulus for technical change in the agricultural sector (Oskam and Stefanou, 1997):

- high prices for agricultural products attract more inputs into the farming sector and render new technologies more profitable; and
- price stability helps encourage a higher input/output model of agriculture (Newbery and Stiglitz 1981).

**2.44** In England, the view of the Curry Commission (2002) was clear. ‘Farming practice and the familiar English countryside have diverged. The CAP has been widening that gap through raising commodity prices above those provided by world markets’. And a recent parliamentary report (Environment Food and Rural Affairs Committee, 2003) makes a clear link between the promotion of agricultural self-sufficiency and the intensification of agriculture (increased pollution of water resources, the draining of land, the conversion of grassland to arable crop production, and increased applications of fertilisers). Birdlife International concludes that the deep decline of EU farmland bird populations, is linked to increased yields driven, within the EU, by the Common Agriculture Policy’.<sup>33</sup>

**2.45** Lowe and Whitby (1997) conclude that ‘the empirical evidence confirms that high price supports under the CAP have been associated with big increases in the use of pesticides, inorganic fertilisers and surpluses of animal manures, though there are considerable variations between farms and regions’.<sup>34</sup>

**2.46** Such developments show up in their impact on the EU’s water resources, where the effects of the CAP are held to include (Strosser et al, 1999, and Herbke et al, 2005):

- the leaching of nitrates and pesticides into ground water and rivers;
- reduced levels of ground water and river flow, caused by water abstraction; and
- damage to natural resources as a result of dam construction and the diversion of water for irrigation.

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<sup>32</sup> This is because the reorganisation of tenure arrangements involves relatively high transaction costs that can only be justified by the parties involved by a substantial increase in agricultural returns. By the same token, low levels of agricultural productivity will tend to protect traditional farming systems.

<sup>33</sup> Source: Birdlife International (2004).

<sup>34</sup> The experience of countries in Central and Eastern Europe (CEE) demonstrates how agricultural subsidies can influence the use of inputs. Until the late 1980s rates of inorganic fertiliser use per hectare was very similar to rates in the EU15 (European Environment Agency 2004). But in the aftermath of political reform in the late 1980s, there was a significant reduction in agricultural subsidies, causing the use of agro-chemicals to drop by more than 50 per cent. For example, in 2001/02 the application rate of nitrogenous fertiliser in the EU15 averaged 63 kilograms per hectare, compared to 36 kilograms per hectare in the CEE countries.

**2.47** At the same time, there are aspects (or by-products) of Pillar I of the CAP that are regarded as being environmentally positive. Whilst such benefits are clearly of value, they are not delivered in the most efficient and targeted way:

- **cross-compliance.** Farmers in receipt of the new Single Farm Payment are obliged to comply with a number of pre-existing environmental, animal health and welfare directives and regulations. However, while these bring helpful additional safeguards, they do not bring about significant new benefits for the environment or animal welfare.<sup>35</sup> The main new requirement is that farmers maintain their land in 'Good Agricultural and Environmental Condition.' Defra estimates that the costs to English farmers of cross-compliance will be around £40 million in the first year and £20 million a year thereafter. This is less than 2 per cent of the value of direct payments made to English farmers under the CAP; and
- **set-aside.** Notwithstanding the move towards direct payments that are decoupled from production, EU farmers are still subject to set-aside requirements.<sup>36</sup> This has potential benefits in respect of diffuse water pollution reduction and habitat creation (that might otherwise have to be paid for through agri-environment schemes). However, such benefits are vulnerable to short term changes in set-aside rates determined by EU policy makers<sup>37</sup>;

**2.48** Agri-environment schemes allow specific environmental outcomes, such as those arising from set-aside and cross-compliance, to be secured at much reduced cost. In England, Higher Level Stewardship (HLS), and Government action in respect of Sites of Special Scientific Interest, aims to protect biodiversity rich areas, including High Nature Value areas. Already the general expectation in England is that Entry Level Stewardship (ELS) will cover two-thirds or more of English farmland within three or four years, at a cost (around £190 million a year by 2008/09) considerably below that of CAP direct payments.

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<sup>35</sup> Farmers are subject to such legal obligations irrespective of the existence of the single farm payment.

<sup>36</sup> Set-aside is a market management tool, used to restrict production. Farmers are required, subject to certain exemptions such as energy crop production, to withdraw a specified proportion of their land from agricultural production.

<sup>37</sup> Following the poor 2003 harvest, set-aside rates were reduced from 10 per cent to 5 per cent for the following production year.



# 3

## IMPLICATIONS OF FURTHER CAP REFORM

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**3.1** Chapter 1 set out a vision for agriculture, whilst chapter 2 explains the various problems caused by the CAP within the EU. But in practice, how realistic is it to suggest significant further reform? It is often argued that further reform would undermine the EU's agricultural production base, so damaging the rural economy, the EU's food security, as well as the international environment.

**3.2** This chapter looks at the scope for further reform of the CAP through a series of questions. The capacity of the agricultural sector to adjust in the face of policy reform is often underestimated and the chapter begins by considering the process of agricultural adjustment, giving real world examples where farmers have adapted following significant policy reform. The evidence suggests that the impact of CAP reform on EU agricultural production would be relatively modest, and that the biggest adjustment would be a reduction in the price of agricultural assets, such as land. The scope for farmers to manage price risk and increase efficiency, and the scope for government policy to facilitate adjustment, are all considered. The rest of the chapter examines the implications of further CAP reform for the rural economy, for the EU's food safety and food security, and the environment.

### CAN EU AGRICULTURE CAN ADAPT TO FURTHER CAP REFORM?

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**3.3** Agricultural adjustment is a continuous, though uneven process, driven by a number of factors. These include technical innovation and economic growth, through its impact on key variables such as the relative prices of labour and capital, the level of off-farm wages, and food consumption patterns. Whilst agricultural policy may affect the speed of any such adjustment, so will other factors, such as macro-economic policy, especially through its impact on exchange rates, interest rates and taxation, land ownership and tenure, and developments in overseas markets.

**3.4** Indeed, the structure of agriculture keeps on changing. For example, in the UK:

- for many decades, technical developments and rising off-farm wages have increased labour productivity in agriculture, so that the amount of land that individual farmers have been able to farm efficiently has gradually increased. The result has been the migration of labour out of agriculture into manufacturing and service sectors<sup>1</sup>;
- an increasing number of farmers (now over 50 per cent) are classified as part-time. This is consistent with a picture of a relatively small number of large commercial operations and a large number of small, often part-time, farms;
- only just over a third of farmland is currently rented, 37 per cent in 1995, as against 88 per cent in 1908, although some farmer representatives estimate that informal lets bring this figure up to around 45 per cent; and

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<sup>1</sup> For example, in 1960, the total agricultural labour force (full time equivalents) stood at 876,000. Source: Britton (1990). By 2003, the number of people employed in agriculture had fallen to 533,000 (of which 63,000 were seasonal or casual workers and 228,000 were classified as part-time).

- although farm-gate prices have typically fallen significantly over time in real terms, yields have also increased substantially.<sup>2</sup>

**3.5** However, it is also the case that agricultural labour and capital are relatively immobile. To the extent that marginal farmers find it difficult or are reluctant to leave agriculture, and to the extent that they accept relatively low agricultural returns or erode their balance sheet rather than leaving agriculture, then the process of structural adjustment in agriculture will tend to lag behind market developments. As a result, returns to labour and capital employed in agriculture often appear to be depressed relative to returns in the rest of the economy.<sup>3</sup>

### Short run adjustment processes

**3.6** Theory suggests that sustained increases in agricultural product prices will tend to encourage more intensive production on existing farmland and an expansion of farming onto otherwise marginal land. This process bids up the price of agricultural inputs, especially those, such as land and production quota, where supply is relatively fixed. Hence, although higher prices may initially boost returns from farming, this ‘benefit’ is soon eroded as agricultural costs are bid up.<sup>4</sup> The main beneficiaries of subsidy and protection are owners of agricultural land.<sup>5</sup> Indeed, UK agricultural land prices rose by 50 per cent in real terms after the UK joined the EEC as the value of future CAP support capitalised into the value of land.<sup>6</sup>

**3.7** Equally, a sustained reduction in agricultural prices may precipitate a cost-price squeeze until agricultural costs and asset prices are bid back down. Clearly, such downward adjustments are more difficult for the farming community than upward adjustments.

**3.8** The removal of agricultural subsidies and reductions in import protection would not lead to the collapse of European farming. Cutting prices and removing subsidy would lead to an initial squeeze on farm incomes but, as costs then fell, incomes would recover. Only a small amount of the most marginal land would go out of production altogether. Even so, as emphasised elsewhere in this paper such changes would need to be gradual and carefully managed, so that farmers have time to plan and the ability to make most effective use of available resources, so that they can best manage the transition.

## What can the EU learn from international experience?

**3.9** There is plenty of evidence that such adjustments occur in practice as well as in theory. When Sweden joined the EU in 1995, higher producer prices on certain commodities, and the introduction of arable area payments resulted in a rise in land rents.<sup>7</sup> The agricultural sectors of countries in eastern Europe that have recently joined the EU are currently adjusting to the higher agricultural prices that prevail under the CAP. Agricultural incomes have increased substantially (by an average of 53.8 per cent

<sup>2</sup> For example, between 1992/4 and 2003, in the UK, average milk yields per dairy cow rose by 26 per cent, wheat yields increased by 8 per cent, and the sugar content per hectare of beet production rose by 29 per cent. Source: Defra (2004b).

<sup>3</sup> However, as noted elsewhere in this paper, such low rates of return can mask relatively high standards of living for a significant number of agricultural households, with initiatives (such as increased levels of market price support) intended to boost returns to labour and capital in agriculture slowing down adjustment processes.

<sup>4</sup> Harvey (1997).

<sup>5</sup> See for example OECD (1998).

<sup>6</sup> Thurston (2002).

<sup>7</sup> OECD (1998).



across the new Member States),<sup>8</sup> but agricultural costs and asset prices are also increasing.

**3.10** Good examples of agriculture adjusting to lower levels of support can be found in Sweden, Australia, South Africa and Canada;

- in 1990, **Sweden** was outside the EU, and market price support, along with other subsidies, was worth 57 per cent of gross farm receipts. Although the level of border protection remained unchanged, export subsidies were ended, and the domestic agricultural market was deregulated<sup>9</sup> resulting in significant reductions in the value of price support. Between 1989 and 1993, producer prices fell by 30 per cent in real terms (and real food prices declined by 17 per cent). Agricultural production fell, but only modestly. The number of farms fell from 98,600 in 1989 to 91,500 in 1993, in accordance with the historical trend (3 per cent). Investment and pesticide use significantly decreased<sup>10</sup>;
- in **Australia**, support to the dairy sector was worth 33 per cent of gross farm receipts for milk production in 1986-88. Deregulation began in the mid 1980s and was fully implemented in July 2000. Harris and Rae report (2004) that between 1998-99 and 2002-03 the number of dairy farms fell by 19 per cent, but herd sizes increased, feed quality improved, and around a third of producers expanded the area they farmed. As a result production per farm increased by 25 per cent, and total milk production actually increased marginally (circa 1.5 per cent). Most farmers converted their restructuring grants to a lump sum payment which was either used to develop the farm or to reduce long term debt;
- in **South Africa**, the 1996 Marketing of Agricultural Products Act signalled the end of the control boards, with most closing during 1997. Import tariffs remained intact, but floor price schemes, stabilisation levies and export subsidies were terminated and export controls relaxed. Deregulation triggered a significant private sector response.<sup>11</sup> Real farm incomes were relatively stable following deregulation although real land prices continued their slide (falling 38 per cent between 1990-91 and 1997-98)<sup>12</sup>; and
- in **Canada**, the repeal of the Western Grain Transport Act in 1995 brought to a close an arrangement whereby agricultural rail freight rates had been regulated and subsidised. For example, in 1989-90 the value of the subsidy was \$720 million, covering around 70 per cent of farmers' freight costs,

<sup>8</sup> Some Member States were substantially above average. For example, the European Commission's provisional estimates for the increase in farm incomes during 2004 were 108 per cent for the Czech Republic, 73 per cent for Poland and 56 per cent in Estonia.

<sup>9</sup> In June 1990, the Swedish Parliament agreed to large reductions in guaranteed prices (40 per cent for grain in 4 years, 50 per cent for ovine meat in 2 years). It covered all the major products (including milk) and relied on transitory income support – with the strongest possible decoupling between farming activity and income/wealth stability. All internal market regulations were eliminated and semi-annual price reviews were terminated.

<sup>10</sup> Source: Messerlin (2001), Molander (1994) Rabinowicz (2004).

<sup>11</sup> There was an expansion in the number of companies exporting citrus and deciduous fruit; an acceleration in the establishment of new enterprises in the food and drink sector; and most importantly the emergence of a credible market in agricultural futures and options, allowing farmers to manage the considerable price volatility that quickly came to the fore in the maize market. Production patterns shifted (from yellow maize and wheat to white maize and oilseeds).

<sup>12</sup> Source: Bayley (2000).

leaving producers covering the other 30 per cent. Lower transport costs increased farm-gate grain prices, encouraging grain exports rather than local processing. Indeed, 'the repeal of the WGTA altered the structure of the agri-food sector, and transformed Canadian agricultural production, marketing, and exports of grains, oilseeds and livestock' (Doan et al, 2003). On the prairies, production shifted away from grain for export to livestock and speciality crops. Between 1995 and 2002, cattle breeding stock numbers rose by 10 per cent and the number of breeding sows by 43 per cent.

**New Zealand 3.11** But the most striking example comes from New Zealand during the 1980s.<sup>13</sup> The value of support provided to New Zealand agriculture as a share of gross farm receipts fell from 35 per cent in 1983 to 13 per cent by 1987, and 3 per cent by 1994. The biggest impact of reform was a downward adjustment in the returns to land. Falls in farm income were temporary, and a relatively modest amount of marginal land went out of agricultural production. By contrast, the real value of agricultural output remained relatively steady. It fell about 14 per cent between 1984 and 1987, but then grew 6 per cent between 1987 and 1994.

**3.12** In more detail, some of the main impacts were as follows:

- government expenditure on assistance to the agricultural sector fell dramatically from 9 per cent of total government expenditure in 1983 to 1 per cent by 1989;
- real farm incomes fell 48 per cent between 1984 and 1986 but had fully recovered by 1989;
- by 1989, real land values had fallen to 45 per cent of their 1982 level;
- total factor productivity growth in agriculture was 1.8 per cent a year in 1972-84 but 4 per cent a year for 1985-98;
- full time agricultural employment fell by 4.7 per cent (1984-88), but had more than recovered by 1993;
- production patterns changed. Sheep numbers fell 29 per cent, cattle numbers rose 35 per cent, deer numbers rose from 0.2 to 1.8 million (1984-2002); and
- land use changed – grassland to sheep and beef fell 1.9m hectare (16 per cent) between 1984 and 1994. Half of this changed to other grassland uses, vineyards, other horticulture and non agricultural uses – the rest went to commercial forestry or was retired as marginal land;

**3.13** It is sometimes argued that the New Zealand case is special or different, such that its relevance for the EU should be discounted. But as an OECD market based economy with a temperate climate, there are many similarities and parallels to be drawn between New Zealand and many parts of the EU. And even where there are differences, some of these may actually suggest that the adjustment for EU farmers should be easier than it was for their New Zealand counterparts. For example, New Zealand farmers are distant from many of their markets, whereas EU farmers operate within one of the world's biggest and wealthiest markets.

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<sup>13</sup> See for example Harris and Rae (2004), Johnson (2001), Johnston and Frengley (1994), Rae and Blandford (2004), Sandrey and Reynolds (1990), Valdes (1994).

## CAN AGRICULTURE PROSPER IN A FREE MARKET?

**3.14** When high levels of market price support prevail, farmers still compete with each other in both product markets and factor markets. For example, more profitable farmers can outbid other farmers in the land rental and production quota markets. It does not follow therefore that competitive pressures on farmers disappear when rates of market price support are high. A key difference between agricultural sectors where high levels of price support prevail and those where they do not is the level of price risk faced by producers.

**3.15** Theory and international experience suggest that significant liberalisation of agricultural marketing and trade in the EU would increase domestic price volatility, whilst reducing international price volatility. A recent report (Alizadeh and Nomikos 2005) finds that although the volatility of EU agricultural prices has not reached the levels seen on international markets, agricultural price volatility in the EU has increased since the MacSharry CAP reforms in 1992.

**Risk 3.16** Farmers can and do manage agricultural risk by using one or more of the following strategies:

- diversification of agricultural activities;
- diversification into non agricultural activities on-farm;
- the use of storage, forward contracts and credit markets;
- the use of futures and options markets;
- the use of sharecropping type arrangements with machinery contractors; and
- part-time farming.

**Diversification 3.17** Although the CAP has helped to encourage farmers to specialise, farmers are tending to diversify away from primary production. As discussed earlier, the majority of farmers are already part-time.

**Credit markets 3.18** Farmers who own some or all of the land they farm are well placed to manage temporary dips in income by borrowing money against their assets. In the UK, two-thirds of land is farmed by owner-occupiers, and the agricultural balance sheet is strong. Farming assets were valued at almost £112 billion in 2003, with liabilities of only 9 per cent of this figure.<sup>14</sup> Table 3.1 shows the average net worth of different categories of farm business.<sup>15</sup>

<sup>14</sup> Defra (2004b)

<sup>15</sup> Agricultural households have both non-agricultural liabilities and non-agricultural liabilities. Neither are taken into account by the figures in Table 4.1.

**Table 3.1: All English Farms: Summary of Closing Balance Sheets by Tenure, 2002/03**

	<b>Owner Occupied</b>	<b>Tenanted</b>	<b>Mixed Tenure</b>	<b>All Tenures</b>
Total Assets (£)	721,827	165,154	870,765	684,876
– of which fixed	647,665	99,290	748,119	594,069
– of which current	74,172	65,864	122,646	90,807
Total liabilities	81,308	51,704	135,717	96,618
<b>Net worth</b>	<b>640,519</b>	<b>113,449</b>	<b>735,048</b>	<b>588,258</b>

Sources: Farm Accounts in England 2002/03

**Forward Contracts 3.19** Forward contracts and hedging on the futures market allows farmers to fix a price for some or all of their expected crop. But such arrangements can be relatively inflexible. For example, if yields or quality are lower than expected, a farmer is still expected to deliver the quantity and quality specified in the contract. And whilst fixing prices in advance protects farmers against price drops, they are also deprived of the benefits of any subsequent price rises.

**3.20** There are four futures and options markets in the EU, although such markets do not currently exist for all commodities (see Table 3.2). However, the use of futures and options in the EU is relatively low amongst farmers. Only 11 per cent of UK grain producers are reported as managing their price risk with the help of futures and options, and this is reflected in the relatively low liquidity levels on EU markets compared to comparable markets in the US and South Africa. In part at least, this is due to continuing high levels of support available to farmers under the CAP. It is also possible that international traders are reluctant to hedge their international risk in the EU because EU exports are or could be managed administratively, so that administrative actions could undermine the quality of their hedge.<sup>16</sup>

**Options 3.21** The most flexible way of managing price risk is through the purchase of options. By purchasing ‘put’ options, farmers are effectively buying themselves a floor price for a particular quantity of product. If spot prices have fallen by harvest, the farmer is protected. But if prices rise, the farmer is able to sell at the best available spot price. There is a cost to purchasing options, and that cost will vary with the volatility of the underlying futures market, the time to expiry of the contract, and the level of the floor price relative to the prevailing spot price on the day of purchase.<sup>17</sup>

<sup>16</sup> In South Africa, the participation of international traders in the local market was critical to the increase in liquidity, although the real growth in liquidity only really took place once the Maize Board had withdrawn from its role of managing South Africa’s maize exports.

<sup>17</sup> A good analogy is with household insurance. People paying a monthly premium to insure their home recognise that the premium is the cost of reducing the risks they face. They do not expect to be repaid the premium, and hope that they do not have to make a claim, but if they experience a loss they are covered.

**Table 3.2: EU agricultural futures and options markets**

Exchange	Location and date of establishment	Agricultural products offered
Euronext.life	London, Paris, Amsterdam, Lisbon and Brussels; 2000	Cocoa, Robusta coffee, white sugar, feed wheat, milling wheat, rapeseed, corn, potatoes
Wareterminborse Hanover AG (WTB)	Hanover; 1998	Hogs, piglets, potatoes, wheat, brewing barley
Budapest Commodity Exchange	Budapest; 1989	Corn, wheat, feed barley, rapeseed, soybean, sunflower seed
Poznan Commodity Exchange	Poznan, Poland; 1991	Corn, wheat, sugar

Source: Alizadeh and Nomikos (2005)

### What part should farmers themselves play in this process of reform?

**3.22** Even taking into account the fact that farmers cannot achieve top returns in all activities all of the time (for example because of the existence of complementary activities and crop rotation) the available evidence for the UK is very striking and suggests that there is a wide range of performance within the domestic agricultural sector, with **the less competitive farmers having very significant scope for reducing costs** (relative to more efficient farmers) even before cost reductions as a result of reduced support levels begin to feed through.

**3.23** Recent figures, published by the English Beef and Lamb Executive, and summarized in Table 3.3, illustrate the disparity in performance between the top and bottom thirds of producers. For example, for 2003-04, net margins on extensive cattle finishing ranged from a positive average margin of £146 per animal for the top third of producers down to a negative average margin of £115 per animal for the bottom third.

**Table 3.3: Net margins<sup>18</sup> (£ per cow/ewe) of English livestock producers, 2003-04**

	Bottom third	Average	Top third
<b>LFA<sup>19</sup> suckler cows</b>	<b>-£6.57</b>	<b>£90.41</b>	<b>£189.98</b>
Average herd size (cows)	68	68	72
<b>Lowland suckler cow</b>	<b>-£53.29</b>	<b>£73.15</b>	<b>£180.04</b>
Average herd size	84	89	105
<b>Intensive cattle finishing</b>	<b>£9.03</b>	<b>£124.44</b>	<b>£241.70</b>
Average herd size	56	49	51
<b>Extensive cattle finishing</b>	<b>-£115.65</b>	<b>£8.72</b>	<b>£146</b>
Average herd size	84	91	68
<b>Lowland breeding sheep</b>	<b>-£11.37</b>	<b>£7.87</b>	<b>£29.26</b>
Average flock size (ewes)	442	534	410
<b>LFA breeding sheep</b>	<b>-£8.47</b>	<b>£9.67</b>	<b>£26.28</b>
Average flock size (ewes)	650	601	611

Source: English Beef and Lamb Executive

**3.24** Colman et al (2004) show that (weighted) average costs in the dairy sector, in 2002-03, ranged from 28.8 pence per litre (ppl) (for herds of 10 to 40 cows) and 20.33ppl (for herds of 40 – 70 cows) to 16.68ppl (for herds of more than 150 cows). Work by Cambridge University on wheat and sugar beet also show a range of performance between the best and the worst. For sugar beet, average production costs range from £15 per tonne to more than £30 per tonne, and for wheat farms marginal costs were estimated to range between £40 per tonne and more than £90 per tonne.<sup>20</sup>

**3.25** The vast range of performance between similar farming enterprises suggests that there is scope for improving efficiency. In arable and dairy there appears to be an issue of scale, but the figures in Table 3.3 show that this is not the major issue in beef and sheep enterprises. There is also only a weak statistical link between farm size and cost in sugar beet.

<sup>18</sup> Net margin equates to the value of output minus both variable and fixed costs and represents the net return to the enterprise. Average margins within each third are weighted by number of livestock.

<sup>19</sup> Less favoured area – typically in the uplands.

<sup>20</sup> University of Cambridge and the Royal Agricultural College (2004), and University of Cambridge (2003).

## What can government do to facilitate the transition?

**Policies to facilitate factor mobility** **3.26** According to the OECD, for agricultural policy reform to be successful, factors of production should be sufficiently mobile.<sup>21</sup> For example, labour immobility may be caused by impediments such as advanced age, few non-farm skills, low educational attainment, lack of alternative job opportunities and high cost of moving. Many farm specific assets may be too specific to find uses in other sectors. There may be rigidities in land markets due to regulations that restrict land holding or farm size, give special tax treatment to landholders or circumscribe economic activities in an area. Elimination of barriers to factor mobility should permit a better allocation of resources and thus contribute to an improved economic performance in rural areas.

**3.27** There are a number of ways in which government can assist farmers through a transition to lower levels of support:

- efficient land markets – well functioning land markets are critical to the process of structural change, to securing economies of size, to diversification, to maintaining international competitiveness and to securing credit. The way that governments regulate the agricultural land market (both rental and ownership) may have a very substantial influence over the speed, and ease with which the agricultural sector adjusts to significant policy reform;
- human capital – the provision of training to farmers and farm labourers can help those farmers remaining in the sector to adapt more successfully to changed circumstances, and make it easier for those leaving the sector to find work in the wider employment market;
- compensation – governments may consider time-limited payments to producers to compensate for income foregone, or to landowners to compensate for reduced asset values. In both cases, de-linking such payments from land and explicitly linking them to the persons being compensated would better facilitate adjustment; and
- policy management – early notice of reforms helps farmers to plan in advance, although where reform arises from macro-economic pressures (as in the case of New Zealand) long lead-ins are not always practical. It is also the case that adjustment is easier in the context of a growing economy. Furthermore, the way that the transition is managed will affect the conditions for the establishment and/or deepening of market mechanisms for the management of risk.

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<sup>21</sup> OECD (1998b).

### THE WIDER IMPACTS OF FURTHER CAP REFORM

**3.28** Of course the impact of further reform the CAP would be felt beyond EU agriculture. We consider some of the key impacts next.

#### How far does rural development in the EU depend on the current structure of the CAP?

**Definitions 3.29** The OECD defines rural development as ‘maintaining the socio-economic viability of rural communities over time.’<sup>22</sup> Whilst the proportion of rural land is similar across Member States, the total population living in rural areas varies starkly. This is shown in Table 3.4.

**Table 3.4: Rural population in selected Member States (2002)**

	Population by type of regions (2002)		
	Predominantly Rural <sup>23</sup>	Significantly Rural <sup>24</sup>	Predominantly Urban <sup>25</sup>
	As % of national population		
France	17.0%	54.5%	28.5%
Germany	13.3%	29.3%	57.4%
UK	3.6%	26.7%	69.7%
Czech Republic	5.1%	83.6%	11.4%
Poland	41.1%	35.9%	23.0%
<b>EU25</b>	<b>18.9%</b>	<b>37.4%</b>	<b>43.7%</b>

Source: European Commission (2005)

**Direct employment 3.30** For a selection of Member States, Table 3.5 shows the rate of agricultural employment for the whole labour force, and for predominately rural, significantly rural and predominately urban areas in 2001.

**3.31** An important point to note is that even in the most rural regions agricultural employment is by no means dominant: agriculture averaged just 14.9 per cent of employment in predominately rural regions across the EU. The highest EU agricultural employment rate in predominately rural regions is still only 33.8 per cent (Greece). The general conclusion from analysis of Table 3.5 is that agriculture is not the most important source of employment in rural areas, and therefore agriculture’s role in providing direct employment for rural development should not be overstated.

<sup>22</sup> OECD (1998).

<sup>23</sup> Predominantly rural regions are those where 50 per cent of the population lives in rural communities. A rural community is one with a threshold of 150 inhabitants per square kilometre.

<sup>24</sup> Significantly rural regions are regions in which between 15 and 50 per cent of the population lives in rural communities.

<sup>25</sup> Predominantly urban regions are regions in which less than 15 per cent of the population lives in rural communities.



**Table 3.5 Agricultural employment in selected Member States (2001)**

	Rate of agricultural employment by type of regions (2001)			
	National Average	Predominantly Rural	Significantly Rural	Predominantly Urban
	(% labour force working in agriculture, hunting, forestry and fisheries)			
France	3.70%	8.2%	4.1%	0.7%
Germany	2.4%	6.6%	4.2%	1.0%
Greece	16.8%	33.8%	18.4%	1.2%
Spain	6.6%	16.4%	7.9%	1.5%
Sweden	2.6%	3.4%	1.4%	:
UK	1.6%	7.2%	3.3%	0.7%
Czech Republic	4.8%	11.7%	5.2%	0.5%
Estonia	6.8%	17.0%	6.2%	2.7%
Lithuania	16.7%	25.5%	10.3%	:
Slovenia	11.3%	14.9%	6.1%	:
<b>EU25</b>	<b>5.9%</b>	<b>14.9%</b>	<b>7.5%</b>	<b>1.4%</b>

Source: European Commission (2005)

**3.32** Across the EU25 the highest share of employment in rural areas is in services, for both predominately (57 per cent) and significantly (63.1 per cent) rural regions. Manufacturing is the second largest employer in rural areas accounting for 29.9 per cent of employment in predominantly rural regions and 30.4 per cent of employment in significantly rural regions.<sup>26</sup>

**Upstream downstream linkages** **3.33** Agriculture has important downstream linkages (food transportation, processing, marketing) and upstream linkages (farm input suppliers). If agricultural production changes, employment in these sectors may also be affected.<sup>27</sup>

**3.34** The OECD cites a study of a region in England which suggests that approximately one-quarter of the people working in agriculturally related industries are working in rural areas. The figures also suggest that the numbers employed in farming and those working in auxiliary rural industries is approximately two to one. That said, the study concludes that agriculture does have strong links with other rural industries.

**3.35** However, the OECD notes that whilst farm employment has continued on a long term decline, available evidence suggests that employment in industries closely related to farming such as agricultural services, forestry, fishery, agricultural processing, marketing, and agricultural inputs has remained fairly stable or even increased in a

<sup>26</sup> These results come from European Commission (2004). The year of the data is not given, but it is post 2000.

<sup>27</sup> OECD (1998b).

number of Member States.<sup>28</sup> This observation has led some to argue that the employment implications of up/downstream linkages are not a major issue.<sup>29</sup>

**3.36** The background to any assessment of the impact of agricultural liberalisation on rural development is the strong trend over past decades of a shift of employment from agriculture to other industries. The OECD estimates that in the ten-year period between 1986 and 1996, the number of full-time farmers in the then EU of 12 Member States fell by roughly 25 per cent, and the number of farms declined by 20 per cent.<sup>30</sup> These substantial structural changes have occurred despite the protection afforded to EU agriculture through various types of subsidies and barriers to trade that have kept domestic prices higher than world prices. This trend has two implications. Firstly, rural economies have already adjusted to major changes, hence proving themselves capable of responding to further change in the future. Secondly, we should consider the magnitude of the anticipated effects of further liberalisation in the light of changes that are likely to occur in the future.

**3.37** Jensen et al (2003) model the economic development of Danish rural areas with and without liberalisation of trade in agricultural products. Their analysis indicates that total liberalisation of agricultural trade and production would enhance economic growth in the country as a whole. The researchers conclude that: “The results indicate that prospects for agricultural liberalisation may not need to raise general concern about economic development in Danish rural areas. Compared to the present situation, a future liberalised setting will imply changes in rural areas, but most of these changes will take place even in the absence of agricultural liberalisation. In general, rural areas will enjoy economic benefits from liberalisation (although to a lower extent than urban areas) – and only a few municipalities face economic losses in absolute terms as a consequence of liberalisation.”

### Could further CAP reform threaten food safety?

#### Role of domestic agricultural support

**3.38** Food safety is not dealt with directly by the CAP, but through technical measures such as the EU’s sanitary and phytosanitary (SPS) standards. Nevertheless, there may be a perception that domestic production is subject to more rigorous safety standards and traceability than applies in the case of imports from third countries, and thus that the CAP indirectly contributes to maintaining food safety standards in the EU by restricting the market for imports from non-EU countries, including those which may pose a health risk.

#### International Codex standards and EU regulation

**3.39** A key mechanism for ensuring food safety in the global context is the Codex Alimentarius, which is a collection of international food standards that cover all the main processed, semi-processed and raw foods. The main objectives of the Codex standards are to protect consumer health, ensure fairness within food trading and to promote international co-operation in respect of food safety. These objectives are achieved through a combination of standards, guidelines, and advisory codes of practice, relating to the hygiene and nutritional quality of food.<sup>31</sup> Although Codex standards have no regulatory force they are increasingly important given their use as reference texts by the WTO in any trade disputes.

<sup>28</sup> Ibid.

<sup>29</sup> Abler (2001).

<sup>30</sup> OECD (1998b).

<sup>31</sup> FAO & WHO (1999).

**3.40** Whilst involvement by the EU ensures that the Codex standards do not undermine EU standards, separate EU legislation reinforces the protection afforded by the Codex. For example, Regulation EC/178/2002 contains provisions for traceability of food and feed, which equally applies to EU produce as to imports into the EU. **This combination of EU regulation and international standards assists in protecting the EU from unsafe imports, and would ensure that increased food trade resulting from further CAP reform and trade liberalisation will not diminish these standards. However, it is important that standards are rigorously justified and not used as hidden barrier to trade.**<sup>32</sup>

### What would be the impact on food security?

**Food security defined** **3.41** Food security was defined by the World Food Summit in 1996 as the situation when “...all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”<sup>33</sup> Whilst there are numerous alternative definitions, the key common themes are food accessibility, stability, affordability and nutrition.

**3.42** The issue of food security is one that is normally associated with developing countries where low production, unaffordable imports and distributional issues mean that food supplies are uncertain or even inadequate.

**3.43** However, developed countries that can easily afford imports are also concerned about food security. Concerns are expressed that reducing agricultural domestic support levels will result in a decrease in both domestic production and production capacity, and hence a further reliance on imports. The argument is that such increased dependence on imports is a risky strategy, with developed countries concerned about disruption to imports resulting from price shocks and wars for example.<sup>34</sup>

**Food security versus self-sufficiency** **3.44** Analysis by Anderson et al (2005a) looks at the expected impacts of global agricultural liberalisation and suggests that this would result in a decrease in self-sufficiency of agriculture and food for high income countries from 98 per cent to 93 per cent. Therefore the impacts of further CAP reform and trade liberalisation on food security may not be significant. <sup>35</sup>

**3.45** Moreover, although food security is often considered to be synonymous with self-sufficiency, domestic production is neither a necessary nor sufficient condition for food security.

**3.46** As highlighted by Supachai Panitchpakdi,<sup>36</sup> the former Director-General of the World Trade Organisation (WTO), self-sufficiency is an illusion in today’s world, with production involving a wide range of inputs, many of which are sourced through international markets. For instance, evidence collected by the UK Government suggests

<sup>32</sup> Commission for Africa (2005).

<sup>33</sup> FAO (1996).

<sup>34</sup> Vanzetti & Wynen (2004).

<sup>35</sup> In 2003, the UK was 76.9 per cent self sufficient in respect of ‘indigenous type food and drink,’ and of the indigenous type food and drink imported into the UK, the other 24 members of the EU accounted for 72.9 per cent by value.

<sup>36</sup> FAO (2005)

that 69 per cent of pesticides and 63 per cent of primary oil energy used in the UK for agriculture in 2003 was imported.

**3.47** Aside from the imported inputs involved in domestic production, self-sufficiency also does not insulate a country from risks such as climate change, natural disasters, fluctuations in world markets, health crises. This is consistent with the analysis undertaken by Makki et al (2001), which suggests that trade is a key method for ensuring stable consumption in the face of unstable harvests.

**3.48** One motivation behind self-sufficiency is the concern over a country becoming dependent on another in terms of food supplies. However, low barriers to entry to commodity production in an open world market make the idea of individual countries possessing monopoly power unrealistic, since high prices would bring in new suppliers and encourage buyers to diversify their sources or switch to substitute products.

**3.49** Finally, efforts to increase self-sufficiency have significant costs in terms of efficiency. Where agricultural production is extended to less favourable areas and where infrastructure for expanding agricultural production is less developed, self-sufficiency is a costly option. Moreover, the use of agricultural support mechanisms to encourage domestic production will increase prices for domestic consumers as well as discouraging diversification by domestic farmers into what may be potentially more lucrative non-traditional exports.

### International food security

**3.50** Ingco et al (2004) explain how, whilst rarely discussed, international food security is perhaps the most important aspect of food security. Food security at the international level refers to the aggregate supply of food and its ability to meet global demand. The key determinants of international or global food security are the efficient use of global agricultural resources, investment in the agricultural industry and necessary institutions, and the incentive to develop and adopt new technology. Reform of domestic support will increase the efficient use of agricultural resources by ensuring that production of goods is based on a country's comparative advantage, as well as encouraging technological diffusion. Moreover, freer trade in agriculture should also increase price transmission in markets so that consumption and production respond quickly to market supply and demand excesses, thus helping to prevent prolonged price troughs. As a result, trade reform can be expected to have positive implications for food security at the international level. Therefore, since further reform of the CAP will result in a widening of trade opportunities, this may in fact strengthen food security by improving the distribution of food.

### Could CAP reform improve the impact of EU agriculture on the environment?

**3.51** Further CAP reform would not put the modernisation of agriculture into reverse, but the intensification pressures associated with the CAP would be alleviated. The environmental benefits would be enhanced if the coverage of agri-environment schemes is strengthened at the same time.

**3.52** High levels of market price support (and direct payments that, until recently, have been fully coupled to production) have, arguably, helped to maintain the viability of otherwise sub-marginal and environmentally beneficial farming systems. However, just as the CAP did not create these extensive farming systems, so it is that agricultural

liberalisation will not necessarily result in the loss of these systems. In fact, in some areas the CAP has been insufficient to maintain the viability of particular systems.<sup>37</sup>

**3.53** At the same time, in other areas, intensification associated with a combination of the CAP and other economic, technical and infrastructural developments (such as improved access to capital and water) has been damaging. Indeed, the European Environment Agency (2004) notes that input application rates just prior to accession were low in the new Member States, but expresses concern that ‘the new agro-economic framework after accession is expected to lead to some intensification in the new Member States’ from 2004.

**3.54** It is also the case that these areas vary in their environmental value, and neither market price support nor the Single Farm Payment (nor indeed Less Favoured Area payments made under Pillar II of the CAP) are targeted at achieving positive environmental outcomes in these areas.

**Food miles 3.55** The ‘food miles’ debate is concerned with the environmental and social costs associated with transporting food from where it is produced to where it is processed and then consumed. Research commissioned by Defra<sup>38</sup> demonstrates that food is travelling increasing distances from farm to fork. The external costs of greenhouse gas emissions, air pollution, noise, congestion, accidents and infrastructure associated with food miles are estimated at over £9 billion each year in the UK, though considerable uncertainty is attached to this value.

**3.56** However, there is a question about whether that constitutes an environmental case against agricultural liberalisation and an expansion in agricultural trade, given that:

- 82 per cent of food miles in the UK food supply chain are generated within the UK, and therefore do not reflect the international context of trade<sup>39</sup>; and
- the relationship between the distance travelled by food and the associated external costs is complex and often indirect. Such external costs vary widely depending on the mode, timing, and load efficiencies of food transport, as well as the precise route taken. For example, the Defra commissioned research cited above shows that well over 50 per cent of the total external costs associated with the transportation of food arise from domestic congestion. By contrast, the transportation of imported agricultural produce by sea accounts for only a fraction (1.5 per cent) of total external costs associated with food transport to and within the UK.

**3.57** The difficulties with the use of ‘food miles’ as an argument against agricultural trade liberalization are well illustrated by the case of sugar. If all UK sugar needs were met from imported cane sugar instead of sugar beet (due to reform of the EU sugar regime), sugar imports could increase by up to 50 per cent. But whilst cane sugar imports would represent a substantial increase in tonne-kilometres compared to locally grown sugar beet, overall vehicle-kilometres, and hence emissions, are likely to be lower. This is because fewer long journeys of large ships would replace many short journeys by HGVs, and because raw cane sugar has a very much higher sugar content

<sup>37</sup> For example, Beaufoy et al (1994).

<sup>38</sup> Smith et al (2005).

<sup>39</sup> Food transport to and within the UK accounted for 33 billion vehicle kilometres in 2002, of which 82 per cent occurred domestically. Vehicle kilometres are the sum of the distances travelled by each vehicle carrying food.

than sugar beet. Furthermore, sea freight is, tonne for tonne, the least polluting form of food transport.

**International environment 3.58** Another important issue to consider is the way in which changes to agricultural policy in Europe will affect the environment elsewhere in the world. There is an argument that if policy change displaces some production from Europe to other areas of the world, it could lead to additional pressure on habitats in those regions.

**3.59** But whilst movements in international commodity prices as a result of policy reform may have an environmental impact, so do a range of other factors, such as exchange rates, levels of infrastructural investment, the existence and enforcement of property rights legislation and poverty levels. In short, using high levels of agricultural support in OECD countries as an instrument of environmental protection is likely to be highly inefficient and ineffective.

**3.60** It is also the case that sustainability involves balancing the trade-offs between economic and social development and conservation, rather than totally negating or preventing environmental damage. To the extent that the land in question is not of global value, the value of any adverse environmental impacts (as with levels of Diffuse Water Pollution in the EU) would in the first instance appear to be a value judgement for the government of the country in question. Increased valuation of environmental amenities is typically associated with higher levels of national income. To the extent that richer third countries or external organisations value such loss, the challenge would be to create some form of market in which these preferences could be expressed. Moreover, avoiding such consequences from displacement is an important part of the capacity building and general economic development in the affected countries.

## MANAGING THE TRANSITION IN THE EU

**3.61** There are many ways in which governments can help the sector to manage a transition to lower levels of support. Well functioning land markets are critical to the process of structural change, to securing economies of size, to diversification, to maintaining international competitiveness and to securing credit. The way that governments regulate the agricultural land market (both rental and ownership) may have a very substantial influence over the speed and ease with which the agricultural sector adjusts to significant policy reform. Early notice of reforms helps farmers to plan in advance.

**3.62** At the same time, agriculture can generate environmental benefits. There are already programmes within Pillar II of the CAP which are specifically designed to encourage farmers to adopt environmentally beneficial land management practices and where there are early signs that progress is being made. Such targeted programmes would need to be continued, and perhaps strengthened with reform.

# 4

## INTERNATIONAL TRADE AND DEVELOPING COUNTRIES

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**4.1** The influence of the CAP extends well beyond the EU's borders. This chapter considers the impact of the CAP on agricultural trade and in particular on developing countries. It sets this within the context of the trade distorting activities of other parts of the world. The likely impact of agricultural trade reform on developing countries is also explored.

### INTERNATIONAL TRADE

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**EU gains from trade reform** **4.2** The European Commission has estimated that a World Trade Organisation (WTO) deal involving a 50 per cent across the board cut in global protection in all agricultural, industrial and services sectors, coupled with a modest reduction in trade costs from a WTO agreement on trade facilitation, would benefit the EU by nearly \$100 billion.<sup>1</sup> These gains would be a significant boost to the EU economy, particularly when the dynamic benefits of trade liberalisation are added.<sup>2</sup>

**International gains from trade reform** **4.3** Securing further trade reform in the WTO, particularly of agriculture, would also generate substantial benefits for the global economy and poverty reduction. The World Bank estimates that global income could increase by \$290 billion by 2015 if trade-distorting policies in merchandise trade including agriculture were eliminated.<sup>3</sup> Over half of the global gains would come from ending agricultural protectionism in rich countries. Furthermore, trade reform has the potential to lift significant numbers of people out of poverty. Recent World Bank estimates<sup>4</sup> suggest reform could lift 52 to 95 million people out of extreme poverty by 2015.

### DEVELOPING COUNTRIES

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**Importance of agriculture** **4.4** Agriculture is extremely important to developing countries, especially the poorest, where it accounts for 40 per cent of GDP, 35 per cent of exports, and 50-70 per cent of total employment. Three quarters of the world's poorest people live in rural areas, and are either wholly or partly dependent on agriculture, the proportion in the poorest countries being as high as 90 per cent. In contrast, agriculture represents barely 2-5 per cent of OECD GDP and employment.<sup>5</sup> Yet agriculture is the most protected and consequently the most trade-distorted sector of the global economy.

**Effects of EU protection** **4.5** Not all forms of agricultural support have the same effects on trade and developing countries. Of the EU's subsidies, market price support is the most distorting, particularly its reliance on tariffs to keep internal prices high by keeping foreign produce out. Market price support encourages overproduction, which in turn depresses world prices.

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<sup>1</sup> Nagarajan (1999).

<sup>2</sup> See further HM Treasury and DTI (2004).

<sup>3</sup> Anderson, Martin and van der Mensbrugghe (2005a).

<sup>4</sup> Anderson, Martin and van der Mensbrugghe (2005b). Figures cited are relative to the international poverty line of \$2/day.

<sup>5</sup> Messerlin (2004).

Many products from outside the EU are denied access to one of the richest and largest markets in the world by high tariff barriers, including tariff escalation on some processed products, with non-tariff barriers also playing a significant role.<sup>6</sup> Such barriers also depress world prices by reducing demand from the EU for imports from the rest of the world, an effect reinforced by export subsidies, which also increase world price volatility. At the same time, developing countries face subsidised competition in their own domestic markets and those of third countries, which make it difficult to compete. Examining rich country protectionism from an African perspective, the Commission for Africa (2005) found that the “barriers and subsidies are absolutely unacceptable; they are politically antiquated, economically illiterate, environmentally destructive, and ethically indefensible. They must go.”

**4.6** The combination of high tariff barriers and various forms of subsidy mean that many developing countries are excluded to a significant extent from markets in which they would enjoy a comparative advantage in a less-distorted trading system. Research suggests that improved market access is key to benefits for developing countries.<sup>7</sup> Potential aggregate gains for developing countries from the removal of agricultural tariffs are much greater than potential gains from reductions in domestic support or export subsidies.

**4.7** According to OECD estimates<sup>8</sup>, the total value of support to OECD agricultural producers was \$280 billion in 2004, of which \$167 billion was in the form of market price support.<sup>9</sup> The EU is by no means alone amongst rich countries in providing support to its farmers, as Table 4.1 shows: Japan provided \$49 billion and the United States \$47 billion of support to their farmers in 2004.<sup>10</sup> Nearly half of the OECD producer support, \$133 billion, went to EU producers, and the EU accounted for over 40 per cent of OECD market price support. Most studies do not split out the impact of EU reform from that of rich countries. One study<sup>11</sup> which does, finds that about half of the benefits to developing countries from agricultural reform by all industrialised countries would come from the EU, which is consistent with the EU’s share of OECD support. It seems fair to conclude that CAP reform would remove a significant amount of distortion by itself but it is imperative that other OECD countries reform their agricultural subsidies too.

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<sup>6</sup> Commission for Africa (2005), Stevens and Kennan (2004). Not all produce entering the EU faces these tariffs, but with the exception of the world’s 50 Least Developed Countries preferential access is generally limited, particularly for very heavily protected products. Non-tariff barriers also inhibit trade, with poor countries facing new barriers which are difficult and costly to implement (Commission for Africa, 2005). These take several forms including administrative procedures, customer fees, shipment inspections and the application of health and safety standards.

<sup>7</sup> Hertel and Keeney (2005), Tokarick (2003).

<sup>8</sup> OECD (2005).

<sup>9</sup> See further Chapter 3 and Annex A.

<sup>10</sup> The measure cited, the producer support estimate, includes gross transfers from consumers and taxpayers to agricultural producers. It excludes more general support to farming such as marketing and promotion and infrastructure. See notes to Table 2.1 for further details.

<sup>11</sup> International Food Policy Research Institute (2003).



**Table 4.1: Support to producers in selected OECD countries, 2004**

	Percentage of value of total gross farm receipts (%)	Total in billion US dollars (\$)
<b>Australia</b>	4	1.1
<b>Canada</b>	21	5.7
<b>EU25</b>	33	133.4
<b>Japan</b>	56	48.7
<b>New Zealand</b>	3	0.3
<b>USA</b>	18	46.5
<b>OECD Total</b>	30	279.5

Source: OECD (2005)

**4.8** It is true that the EU already takes a higher share of imports from low-income countries than do other major trading nations, including through the Everything But Arms Initiative, partly reflecting its temperate geographical position. Nonetheless, calculating an overall trade restrictiveness index (OTRI) the World Bank<sup>12</sup> finds that the EU is more restrictive than the US and Canada but less restrictive than Japan. The EU has an OTRI of 15 per cent for all low-income countries, compared to 6 per cent for the US, with similar ratios for Least Developed Countries and Sub-Saharan African nations.

### What would be the impact of CAP reform on developing countries?

#### Net gains but winners and losers

**4.9** At the aggregate level, the strong consensus of empirical research is that liberalisation of agriculture in developed countries would greatly benefit developing countries, and especially in the long term.<sup>13</sup> But the way that agricultural liberalisation impacts within a particular country depends on investment climate, infrastructure, labour mobility and regulation, asset ownership, product preferences between different groups, and many other factors. These in turn determine the poverty impact.

**4.10** There are potentially three broad groups of countries we can identify: those who are well placed to gain immediately from CAP reform; those which will gain in the longer term but for which in the short term capacity constraints are the overriding issue; and those who may lose out in the short term because of preference erosion, but whose economies are unlikely to develop if they remain trapped in distorted and non-competitive production resulting from preferences.

<sup>12</sup> World Bank (2005). The OTRI is an estimate of the tariff equivalent of overall merchandise trade policy, including non-tariff barriers and preferential arrangements such as the EU's Everything But Arms Initiative.

<sup>13</sup> Messerlin (2004), Ruffer and Imber (2003), UN (2004), Anderson, Martin and van der Mensbrugge (2005a).

**4.11** The developing countries best placed to take advantage of changed trading rules are likely to be those developing countries which are already relatively efficient and competitive agricultural producers and are more likely to have the capacity to respond to international price signals. They include countries such as Brazil, South Africa, other countries in sub-Saharan Africa, Thailand, Indonesia and a number of Latin and Central American countries.<sup>14</sup> These countries contain many of the world's poorest people. For example, just under 25 per cent of the population – some 40 million people – are engaged directly in agriculture in Brazil; the same number of Brazilians who live below the international poverty line of \$2 per day.<sup>15</sup>

**4.12** The second group of developing countries is potentially the largest. These are countries that stand to gain from liberalisation in agriculture in the longer term. Without agricultural reform they will remain disadvantaged. However these countries are more immediately constrained by supply-side constraints in their economy.<sup>16</sup> Therefore while agricultural liberalisation in developed countries is a necessary condition for these countries to be able to export more agricultural produce and benefit from greater trade, it will not be sufficient.<sup>17</sup> In the short term the impact of liberalisation in agriculture will be largely neutral as some or more of the basic building blocks for growth and trade are missing:

- economic infrastructure – transport, power, technology and information;
- human capital – the health and skills of a country's current and future workforce;
- institutions and governance– effective customs, standards bodies, enforcement of property rights; and
- social protection systems – to safeguard people in changing environments.

**4.13** For example, there are 25 developing countries that have an HIV prevalence higher than 5 per cent; 19 countries have less than 10 per cent of their road network paved; and there are 100 times as many computers per 1000 people in Austria and France as there are in Laos and Uganda<sup>18</sup>.

### Preference erosion

**4.14** In a third group are those who may be significantly affected in the short-term by preference erosion. There are a number of schemes through which the EU provides developing countries with preferential access to its highly protected agricultural market. A number of studies have demonstrated that a small number of products account for the majority of preferences in global terms. A recent study carried out by the Commonwealth Secretariat<sup>19</sup> estimates the annual value of OECD agricultural preferences for three of the most protected products, sugar, bananas and beef, at \$536 million, with estimated transfers from sugar alone ranging from 71-91 per cent of that total. The International Monetary Fund (IMF) estimate that 61 per cent of the

<sup>14</sup> Anderson (2004).

<sup>15</sup> World Development Indicators 2004.

<sup>16</sup> DTI (2004).

<sup>17</sup> However, existing producers in these countries stand to gain from increased prices, even if they are not able to respond quickly to increased production.

<sup>18</sup> World Development Indicators (2004).

<sup>19</sup> Commonwealth Secretariat (2004).

preference margin for middle-income developing countries is accounted for by sugar and bananas, with textiles and clothing accounting for another 12 per cent.<sup>20</sup>

**4.15** Evidence suggests that while preference erosion due to EU agricultural reform is likely to pose serious adjustment problems for a relatively small number of (mostly middle-income) preference-dependent or preference-sensitive countries,<sup>21</sup> it is unlikely to be a significant problem for the majority of countries. This is in line with research on the impact of preference erosion arising from broader multilateral trade liberalisation.<sup>22</sup>

**4.16** Preference erosion is particularly acute when the preferential access has been provided into markets which are so heavily protected that prices significantly exceed the world price, and where access is ring-fenced by quotas restricted to individual countries – as is the case with the EU’s sugar regime. The impact of changes already underway to the EU’s sugar and banana regimes is likely to account for a large part of the problem of preference erosion, not least since industries in many of the affected countries will become significantly less viable with the changes proposed.<sup>23</sup>

**4.17** The broad conclusion of research on the effectiveness of preferences is that they have been of limited value to developing countries – although they can be important for some groups of people within some countries.<sup>24</sup> Selective preferential access into protected EU markets has not assisted long-term development or increased the integration of poor countries into global markets. For example, despite preferences, Africa’s share of world trade has declined from 6 per cent to 2 per cent over the last twenty years.<sup>25</sup> Negative effects of preferences can include commodity dependency and a distorted and inefficient use of resources, with some countries trapped in non-competitive production. Moreover, preferences are inequitable and impose costs on those developing countries (the “unpreferred”) that do not receive them. Preferences are also an extremely inefficient method of transferring rent from importer to exporter.<sup>26</sup>

**Food affordability** **4.18** Some developing countries, and particular groups of consumers in them, may suffer as a result of a rise in world food prices and the end of cheap subsidised food imports. While it is difficult to identify exactly which countries are the most likely to face severe difficulties, not all net food importing developing countries are likely to experience problems.

**4.19** The likely extent of the problem will depend in part on what happens to world prices. It has been estimated that full liberalisation of all OECD farm policies, would boost the volume of agricultural trade by more than 50 per cent, but would cause real

<sup>20</sup> Alexandrai and Lankes (2004).

<sup>21</sup> Preference erosion will provide significant adjustment challenges for some countries. The IMF have predicted that following a 40 per cent cut in Most Favoured Nations (MFN) rates, there are five middle-income countries that would incur significant shocks due to the relatively high percentage of their export goods affected: Mauritius (11.5 per cent), St. Lucia (9.8 per cent), Belize (9.1 per cent), St Kitts and Nevis (8.9 per cent) and Fiji (7.8 per cent). Again, using the same liberalisation scenario, whilst the overall impact is not large for Least Developed Countries a number of (mostly small) Least Developed Countries are likely to be adversely affected: Malawi (6.6 per cent), Mauritania (4.8 per cent), Cambodia (4.1 per cent), Bangladesh (3.9 per cent), Maldives (3.5 per cent), Haiti (3.3 per cent) and Cape Verde (3.3 per cent).

<sup>22</sup> Alexandrai and Lankes (2004).

<sup>23</sup> LMC International and Oxford Policy Management (2003), Nera and Oxford Policy Management (2004).

<sup>24</sup> See for example United Nations (2004), Hoekman and Özden (2004).

<sup>25</sup> Commission for Africa (2005).

<sup>26</sup> For example, it is estimated that every \$1 to transferred to Caribbean banana producers costs EU consumers over \$13, and harms some other developing country exporters by \$1 (Borrell 1996). See also Borrell and Pearce (1999) and Levantis, Jotzo and Tulpulé (2003).

international food prices to rise by around 5 per cent on average.<sup>27</sup> In addition the dynamic impacts of higher prices stimulating agricultural production in developing countries for domestic consumption stand to benefit developing country farmers.

### **Managing the transition in developing countries**

**4.20** In order for the strong gains from trade liberalisation to be realised by developing countries, developed countries must support a comprehensive package to address capacity and adjustment needs:

- investment in the ‘infrastructure’ needed for trade – through meeting commitments to increase overseas development assistance and help developing countries invest in health, skills and economic infrastructure such as roads, ports, power and the enabling climate for the private sector. In recognition of the scale of the challenges, the Commission for Africa recommended that developed countries should provide an extra \$10 billion a year up to 2010 for investment in infrastructure in Africa;
- help with adjustment costs – through adequate financial support to cope with preference erosion, particularly for sugar;
- investment in trade-related infrastructure – through expanding the Integrated Framework in scope and resources, as well as bilateral pledges to support trade reform in-country. The UK has recently pledged £100 million per annum to support trade-specific capacity programmes; and
- No forced liberalisation – developing countries must have the flexibility to decide, plan and sequence their own trade reform in line with their country-owned development and poverty reduction strategies.

**4.21** It is clear that complementary policies and additional finance will be needed alongside agricultural and other trade reform. To help meet these needs the EU has made strong commitments to expand its development assistance and some Member States are also exploring innovative financing mechanisms such as the International Finance Facility or aviation ticket levies. As agricultural reform becomes a reality, further consideration will need to be given to what more the EU and its Member States can do to assist developing countries build up the capacity to trade and cope with adjustment. Trade reform, which enables poor countries to participate on equal terms in the global economy, is essential to complement and underpin our commitments on debt relief and additional aid.

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<sup>27</sup> Anderson (2004) , Messerlin (2004).

## Origins

**4.22** The Treaty of Rome established the European Economic Community in 1958 and specified that the Common Market should include agriculture and trade in agricultural products (Article 38) and that the Community should ‘be based upon a Customs Union’ (Article 9). Article 39 of the Treaty set out the objectives of the CAP as being:

- to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production in particular labour;
- thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture;
- to stabilise markets;
- to assure the availability of supplies; and
- to ensure that supplies reach consumers at reasonable prices.

**A.1** Such objectives cover important issues and find clear echoes in the agricultural policy objectives in many countries across the world. But, as Ritson (1997) notes, what is unusual about the CAP is the way in which one objective (the protection of agricultural standards of living) has dominated the implementation of the policy.

## Market price support

**4.23** Traditional market price support has three main components, illustrated in Figure A.1. The first and most important of these is border measures such as tariffs and import quotas, which keep cheaper imports out, permitting artificially high prices within the EU. This is the most trade-distorting element of the CAP, and in turn encourages EU farmers to produce more than they would at world prices. The World Bank anticipates that over 90 per cent of the gains from freeing global agricultural trade from barriers and subsidies would come from removing tariffs.<sup>2</sup>

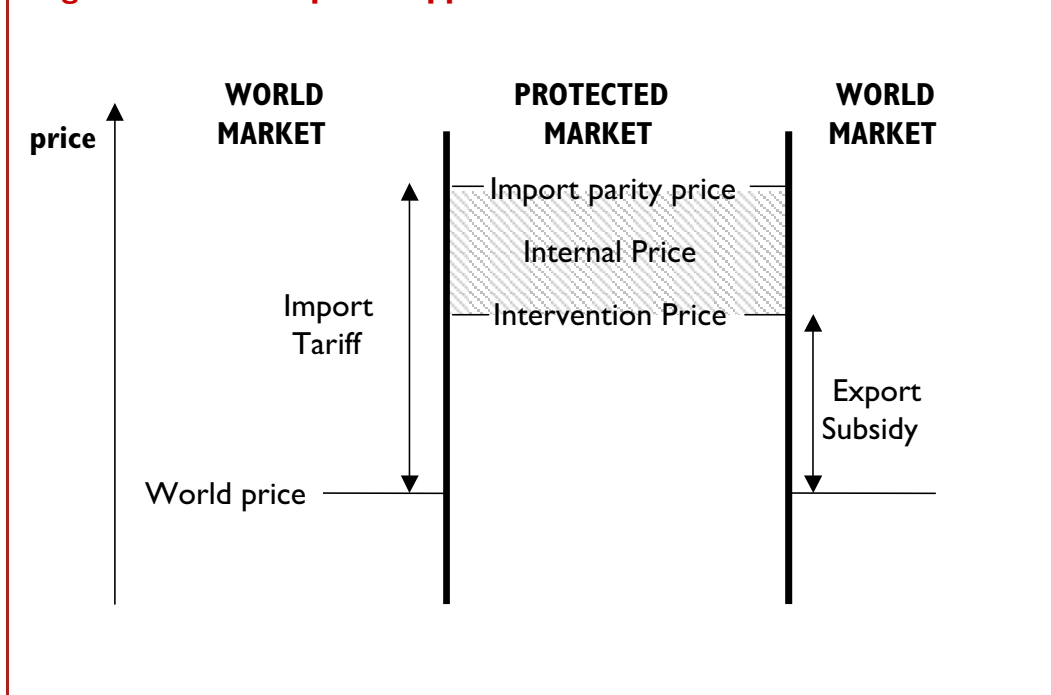
**A.2** With protection in place, mechanisms have to be found to prevent excess domestic production driving prices too low. Intervention and export subsidies are two classic tools for managing the market. Under the intervention mechanism the EU buys certain commodities from farmers at a guaranteed price, thus preventing lower market prices in the EU. Export subsidies are another way to help dispose of any surplus and avoid buying into intervention stocks. The EU compensates exporters by paying them the difference between high EU prices and the generally lower world price. Export subsidies have attracted much attention since they further drive down world prices and increase world price volatility.<sup>3</sup>

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<sup>1</sup> Subsequent treaties have led to articles being renumbered. The articles cited are Articles 32, 23 and 33 respectively of the current consolidated text of the Treaty establishing the European Community.

<sup>2</sup> Hertel and Keeney (2005).

<sup>3</sup> See further HM Treasury and DTI (2004).

**Figure A.1 Market price support**

**4.24** Not all mechanisms apply across all regimes: for example there has never been intervention for intensive livestock (such as pigs and poultry) or sheep, there are no export subsidies on sheep-meat, and there are different mechanisms in the horticulture sector. There is also an array of other market management tools, including production quotas (which limit dairy and sugar production), “set-aside” (introduced to limit cereals and oilseed production), wine planting rights, and processing/production aids in the fruit and vegetables, flax and hemp and sugar sectors.

**A.3** The policy of keeping internal prices high was a victim of its own success, and by the 1980s had created the infamous grain and butter mountain, as well as milk and wine lakes. Supply and demand were unbalanced and the system needed to be reformed to address this.

## Direct payments

**A.4** The bulk of the CAP budget, over €30 billion a year is spent on “direct payments”. The “MacSharry Reforms” of 1992 cut intervention prices for some products and allowed tariffs to be cut when required in the Uruguay Round of international trade talks. In compensation to farmers for lower intervention prices, “direct payments” were introduced: broadly speaking, if an intervention price of €100 a tonne was cut by €25 a tonne and a farmer was producing 100 tonnes, he would get €2,500 a year in direct payments from then on. Similar reforms followed in 1999 (“Agenda 2000”), but this time, in response to criticisms of overcompensation, the compensation rate for farmers for the new cuts was reduced from 100 per cent of the difference between the old and new intervention price to 50 per cent.

**A.5** Until now, direct payments have been linked to production. In 2003 there was a number of different schemes for direct payments made to EU farmers. For example, farmers received payments per (authorised) hectare of land planted to arable crops (the Arable Area Payment) and per head of livestock (for example the Suckler Cow Premium). In June 2003 and again in April 2004 the EU agreed reforms to break the link

between production and receipt of payments for many important products, a process known as “decoupling” – albeit with some scope to retain coupled payments even for these products. The reforms give Member States the flexibility to base the new single payment on the level of historic payments in reference period, or on the area farmed. These reforms also shifted around 5 per cent of the old payments towards Pillar II measures (see below) and introduced some new conditionality: receipt of direct payments is now conditional on keeping the land in ‘good environmental and agricultural condition’.

**A.6** These reforms are radical in that they fundamentally change the basis on which direct payments are made to farmers under the CAP. By removing the link to production, they are less trade distorting, and those direct payments that have been decoupled no longer offer an artificial incentive for intensive production, with the associated adverse environmental impacts. These changes are also of significance in the WTO. Decoupled direct payments are classified to the “green box” of measures considered non or minimally trade distorting (although the criteria are being reviewed and clarified as part of the current trade round).

**A.7** Not all direct payments have moved to the “green box.” Member States can choose to retain some element of coupling in a number of sectors (for example up to 25 per cent of arable payments, and up to 100 per cent of cattle slaughter premia). These coupled payments mean that a significant proportion (perhaps around 40 per cent once the 2003 reforms are fully implemented) of EU direct payments expenditure remains linked to production. Furthermore although these are radical changes to the nature of direct payments, the decoupling reforms of 2003 did not change the amount of money allocated to direct payments and did little to affect the level of market price support.

## Pillar II: Rural Development

**A.8** Some €7 billion a year of the EU Budget is currently used for so-called Pillar II (“rural development”) measures. These are “green box” in WTO terms. A number of different policies can be carried out with these funds under the following “axes”:

- improving the competitiveness of farming and forestry (for example training and advice services, investment in infrastructure, support for young farmers and in the new Member States, support for semi-subsistence farmers);
- environment and countryside (for example agri-environment measures, Natura 2000 payments, animal welfare measures);
- improving the quality of life and diversification of the rural economy (for example diversification by farmers to non agricultural activities, encouragement of tourism, village renewal); and
- a minimum of 5 per cent of national programme funding is reserved for the Leader programme: the implementation of bottom-up local development strategies of local action groups.

**A.9** In addition, as part of the 2003 reforms it was agreed to move some funds from Pillar I to Pillar II, a process called ‘modulation’. This is expected to increase Pillar II by around €1 billion a year by 2008. The UK has also chosen to undertake significant further modulation.





# B

## LIST OF ABBREVIATIONS

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CAP	Common Agricultural Policy
CPI	Consumer Price Index
DEFRA	Department for Environment, Food and Rural Affairs
DTI	Department for Trade and Industry
EC	European Community
EC6	6 Founding Member States of the European Community
EC12	12 Member States of the European Community from 1 <sup>st</sup> January 1973
EEC	European Economic Community
ELS	Entry-level Stewardship, part of the Environmental Stewardship Scheme
EU	European Union
EU15	15 Member States of the European Union, before 1 <sup>st</sup> May 2004
EU25	25 Member States of the European Union, following enlargement on 1 <sup>st</sup> May 2004
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HLS	Higher-level Stewardship, part of the Environmental Stewardship Scheme
IMF	International Monetary Fund
MFN	Most Favoured Nation
OECD	Organisation for Economic Co-operation and Development
PSE	Producer Support Estimate (see notes to Table 2.1)
UK	United Kingdom
UN	United Nations
USA	United States of America
VAT	Value Added Tax
WTO	World Trade Organisation



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