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**Agri-Environmental Policy and  
Market Developments in the  
European Union and their Potential  
Impact on New Zealand Trade**

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## **1. Introduction**

The developments in the European Union and its environmental policy have important implications for New Zealand. While the importance of the European Union as a market for New Zealand produce has diminished, it is still significant—accounting for 17 per cent of exports (6 per cent of which are to the United Kingdom)—especially as a high value market and in commodities such as sheepmeat, fruit and dairy. It is because of the importance of primary products in New Zealand's trade with the European Union (hereafter, EU) and the fact that much EU environmental policy intervention and market changes are in the primary products sector that this paper will concentrate upon EU environmental policy and its impact on agriculture.

The implications of changes in the EU on New Zealand are both indirect and direct. Indirect impacts include the influence the EU has in the outcome of World Trade Organization (WTO) negotiations, particularly in relation to agricultural trade, which of course is of vital importance for New Zealand. Policy and market changes in the EU also affect New Zealand indirectly by impacting on other potential New Zealand export markets. Direct impacts of changes in the EU include the rise in demand for produce produced in an environmental friendly manner (henceforth referred to as 'green' produce) particularly at the high value end of the market. Other important factors include the continuing access for New Zealand exports to the EU market especially under preferential arrangements.

## **2. CAP Policy and Reform**

The basic system of support in the EU's Common Agricultural Policy (CAP) was, and to some extent still is, based upon the fixing of target prices, that is, the ideal price for producers. From this the intervention and threshold prices are derived. The intervention price is effectively a minimum price at which supplies are removed from the market by Government agencies. The threshold price is the price at which imports are allowed into the domestic market and is maintained by a system of import levies. These common prices were, in the case of most commodities, set well above world market prices. This led to increases in production within the Union, aided by increases in productivity through technological change. Thus self-sufficiency increased and the EU became a major exporter of temperate zone products, disrupting world markets, especially for traditional food exporters like New Zealand.

This CAP policy led to a number of well documented problems, including the rising cost of the CAP, the deterioration of international relations, and environmental degradation. These pressures led to various reforms to the CAP, generally on a piece meal basis (especially over the 1980's), but the McSharry reforms in 1992 were more comprehensive. Whilst these left the basic price structure in place they reduced fixed prices to, or closer to, world market levels and compensated producers by direct payments based upon past production patterns.

The level of support given to agricultural commodities is still considerable, however, at NZ\$68.5 billion in 1997, or 44 per cent of the EU budget. In particular, the level of public exchequer support in the form of direct payments has risen since the CAP reforms. In the United Kingdom, for example, 72% of this expenditure in 1991/92 was on market support and 27% on headage/area payments (most of which were for sheep producers). In 1995/96, these percentages were reversed with only 20% for market support and 80% for headage/area payments (most of which was for arable area payments) (MAFF, 1996).

To show the impact of this (including the degree of agricultural support), Saunders (1996 and 1997) has calculated the financial/private returns, public exchequer cost, and social value of agricultural output for the United Kingdom. The social value of agricultural output is measured by removing the impact of intervention policies using an adaptation of Corden's Theory of Effective Protection, revaluing agricultural output at world market prices and deducting from this the world market value of the inputs (Corden, 1966). The results of this analysis for a selected number of commodities in the United Kingdom are reported in Table 1.

**Table 1**  
**Financial, Public Exchequer and Social Value of Livestock Output**  
**£ per Livestock Unit**

	Dairy	Beef, Single Suckler	Beef, 18 month	Beef, Intensive	Sheep	
					Hill	Lowland
Private Financial Cost	485.3	206	380	98	213	230
Social Opportunity Cost	-164.8	-95	-401	-558	153	155
Public Exchequer Cost	770	255	191	0	517	179

Source: Saunders (1996)

Table 1 shows that the level of support to UK agriculture is still large despite recent reforms. The reforms did at least start the process of moving away from support which distorted markets towards direct payments. However, Table 1 illustrates that under current market

conditions the dairy and beef sectors would certainly not survive without support in their current form in the United Kingdom. Given the objective of maintaining populations in rural areas, support would therefore have to continue in some form or another.

### 3. Agri-environmental policy

In parallel with, and additional to, these changes, and recognising the environmental and social problems with conventional agriculture, the EU has introduced measures to encourage the development and continuation of measures/policies to encourage low input (including organic) farming. These measures are specific to member states and generally relate to designated areas (Environmentally Sensitive Areas—ESA). They were first recognised in EU policy in 1987 with regulation 760/87 and were strengthened in 1992 as part of the McSharry reforms.

The extent of these measures is illustrated in Table 2.

**Table 2**  
**EU Low Input Farming Measure**

	<b>Percentage of Agricultural Area</b>	<b>Cost Million Ecu Per Year</b>
Belgium	4.6	7.75
Denmark	7.5	18.58
Germany	25.0	426
Spain	15	139.65
France	21	325.5
Ireland	8	69
Italy	8.4	10.4
Luxembourg	12	2.63
Netherlands	3.3	9.75
Austria	91	335.3
Portugal	19	47.5
UK	16	94.4

Source: Whitby, Ed (1996), Putter (1995)

As Table 2 shows, the area covered by the schemes varies across member state from 3.3% in the Netherlands to 25% in Germany, and to the exceptional 91% in Austria. It is significant that Germany's area under environmental schemes is high given Germany's influence in EU policy making.

The level of EU expenditure on these schemes is relatively small as a percentage of its budget on agriculture, but given that member states contribute a major proportion of spending, (typically 75 per cent), actual spending is much higher. This expenditure has risen from 0.76% of guarantee agricultural spending in 1994 to 4% in 1995, and in 1996 was proposed to be 4.4% in 1997 and 5.3 % in 1998 (Agra Europe, 1996).

**Table 3**  
**MAFF (UK) Expenditure on Agri-Environmental schemes (£,000)**

	<b>1995/96</b>	<b>1996/97</b>	<b>1997/98</b>	<b>1998/99</b>
ESA	39.5	40.4	45.7	50.4
Countryside Stewardship		16.9	21.5	27
Nitrate Sensitive Areas	5.4	6.9	8.9	9.9
Habitat scheme	1.7	2.2	3.8	3.8
Moorland Scheme	0.4	0.7	1.4	1.8
Organic Scheme	0.5	0.6	1.2	1.2
<b>Total</b>	<b>47.5</b>	<b>67.7</b>	<b>82.5</b>	<b>94.1</b>

Source: MAFF (1996)

In the United Kingdom the level of expenditure by scheme administered by MAFF is illustrated in Table 3. This shows the level of expenditure nearly doubling over the last few years. Add to this other conservation schemes in the United Kingdom which compensate farmers for low input farming, such as National Parks and the Sites of Special Scientific Interest (SSSI), the actual level of expenditure is higher.

#### **4. Generic Policy Developments**

In addition to the above there are general policy measures, both at the EU level and by member states, encouraging low-input farming. An example is the nitrate directive which limits the amount of nitrate run-off, and other measures have been adopted by member countries to reduce fertiliser and pesticide use. The Netherlands and Denmark, for example, have both undertaken to reduce pesticides by 50%.

The Netherlands target is to reduce pesticide use by 2000 and also to ensure that fertiliser application does not exceed the absorption capacity of the environment.

Denmark has introduced a number of action plans relating to agriculture and farming practice. In 1987 the plan on the aquatic environment set targets of reductions in discharges of nitrogen

by 50% and of phosphorous by 80%. This was reiterated in the action plan for agriculture in 1991 which aimed to reduce use of nitrogen and pesticides by 50% by 1997. Moreover, the Danish government has an organic action plan to have 7 per cent of the land farmed organically by 2000.

## **5. The European Market for 'Green' Produce**

Another factor of importance to New Zealand is the development of the EU market for 'green' produce—that is, for products produced to minimise chemical and other inputs for both food safety and environmental reasons. The rise in demand for 'green' produce is a result of changing consumer attitudes in the EU and rising awareness of the potential threat of intensive farming. Thus, for example, Europe is the world's largest consumer of organic produce, a considerable amount of which is imported (Lampkin and Padel, 1994). Current estimates of the present and forecasted size of the European organic industry are difficult to obtain. Lampkin and Padel (1994) estimated that in 1990 the market was approximately £900m, predicted to grow to £2,700m by 1995 and £8,200m by the year 2000. Growth is predicted to be especially strong for meat and dairy products. The organic meat market is estimated to be \$400 million in 1996 of which \$311 million is beef. In addition, it is predicted that meat and dairy products will grow by 190% between 1996-2002 to \$1 billion. The main reasons given for this are the BSE scare, and loss of confidence in hygiene standards (Saunders et al, 1997a and 1997b).

Price premiums do exist for green products although they vary considerably, with 20 per cent being the most common for organic produce. However, price premiums are being removed by major supermarket chains in the United Kingdom such as Tesco, presumably to increase market share. This is also seen in Denmark where the rise in consumption of organic milk has been stimulated via marketing campaigns and the removal of price premiums (Saunders et al, 1997a and 1997b).

This provides an opportunity for New Zealand to capitalise upon its clean green image and target higher value market niches. This has been seen with the rapid rise in the export sector of green produce over the last few years. Exports of organic produce in 1994 were estimated at NZ\$23.5 million and this is predicted to rise to NZ\$65 million by 2002 (OPEG, 1997). However there are areas where the trend towards environmentally friendly production systems



may threaten New Zealand producers. New Zealand has one of the OECD's highest application of phosphate fertilisers at 2.56 tonnes per square kilometre compared to 2.36 in Europe and 0.9 in the OECD; and whilst application of nitrogen fertilisers is low nationally compared with other OECD countries it varies considerably regionally (OECD, 1996). Application rates of both fertilisers are growing in New Zealand, with a threefold increase in the use of nitrogen from 1990/1 to 1995/6, (MOE, 1997). The use of chemicals in New Zealand is also significant at 0.43 tonnes per kilometre square of crop land compared to 0.22 in the OECD and 0.42 in Europe.

New Zealand producers may therefore have to alter production techniques to meet the new demand for 'green' products, as has already been seen in the development of integrated pest management programmes in New Zealand, particularly in the fruit sector.

## **6. Future Reforms of the CAP**

It is generally recognised that the 1992 McSharry reforms were just the first stage in the reform of the EU agricultural policy. Expectations are that the next reform round, coinciding with the next round of WTO negotiations, will lead to further radical change. The switch from market to headage/area payments initiated in the 1992 reforms (which are additional to the environmental schemes outlined above) is expected to increase. However, recent changes in United States policy mean that these payments as they currently stand will not be acceptable under the next WTO round of negotiations, since they are based on production. Therefore other criteria for their payment will have to be devised, the most likely of which will be environmental enhancement, as described in more detail below (Agra Europe, 1998).

The United States' Fair Act 1996 decoupled direct payments from production and thus removed them from the 'blue box' in to the 'green box'.<sup>1</sup> This is likely to put pressure on the EU in the next round of WTO negotiations to similarly decouple its direct payments to farmers. Under the Uruguay agreement the most likely justification for these, over the long-

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<sup>1</sup> Under the Uruguay round of trade negotiations, countries agreed to reduce agricultural subsidies that affected trade, such as export subsidies. Exempt from these reductions, however, were subsidies classed in the 'green' or 'blue' box. Green box subsidies are those which have minimal impact on trade, such as research and expenditure on government services. Blue box subsidies include direct subsidies to farmers which can include production limiting programmes, agricultural and rural development aid, such as the arable area and livestock headage payments in the EU. It is these subsidies which are likely to be under threat in the next round of WTO negotiations.

term, is direct payments for environmental reasons as defined in Annex 2 of the agreement. That is, payments to farmers will have to be based upon extra costs, or loss of income involved, as a result of using environmentally friendly farming methods, the current basis for payments under the ESA schemes. This would meet a number of EU policy objectives such as maintaining farm incomes at present levels, reducing environmental damage and increasing positive externalities from agriculture, as well as meeting international obligations.

In the EU, this could imply that the current agricultural budget on market support and area/headage payments of over 40 billion ecus could be diverted into headage/area payments based upon low-input and environmentally sensitive farming, which is a radical change when compared to the 2 billion ecus expenditure on these schemes in the EU at present (Agra Europe, 1997).

This could transform the output from EU agriculture. It would also have the benefit of reducing output—and therefore exports—thus reducing competition for New Zealand produce in international markets. However it is likely to increase the demand for ‘green’ products and could increase the threat of restrictions on imports of food based upon production and process methods.

The McSharry reforms have not been successful in meeting their objectives of reducing output and distortions to markets. The EU Commission has admitted not only that the intention of the arable area payments was a transitional arrangement while the cereal sector adjusted to lower prices, but also that these payments have failed. This is partly due to the fact that cereal prices in member states did not fall as much as expected and coupled with arable area payments mean that the EU Commission predicts that farmers were overcompensated by 8.5 billion ecu (Agra Europe, 1997; note that UK MAFF argues this was actually 14 billion ecu).

The scheme has not, as the commission expected, reduced output, nor improved the social and environmental acceptability of the CAP. The rise in output due to increased productivity is expected to continue with conservative estimates at 12 per cent between 1992 and 2000. The high costs of the regime (42 per cent of the guarantee budget in 1996) and the concentration of subsidies to the large farmers have also created pressures for further reform.

Because the GATT agreement limits the level of subsidised exports from the EU, disposal of any increase in cereal output will be difficult. This will be exasperated by the relaxation of the

set-aside rules preventing significant reduction in output due to lower arable area. Whilst the cereal sector is not of direct importance to NZ, it is important indirectly because it is the base of the CAP and will be crucial in the development of the next WTO reform round.

## **7. Further CAP Reform and the Next Round - Agenda 2000**

The EU, under Agenda 2000, has put forward initial proposals for further reform to the CAP. These are generally cautious and build on the McSharry reforms. Price cuts for cereals and beef are proposed, to be compensated by greater direct subsidies with a maximum ceiling. It is proposed to drop the cereal price by 20 per cent, from the current 119.19 ecu per tonnes to 95.35 ecus. Compensation would be 66 ecus per tonne (a rise from the current 54.34 ecu per tonne), converted into area payments using the 1992 regional reference yield. This is estimated to involve an average payment of around 370 ecu per hectare. However the proposed changes would be subject to review if cereal prices rose. Compulsory set-aside would be abolished, which would not help address the over-supply problems. Only half of the fall in cereal prices would be accounted for by the rise in arable area payments.

The prices in the beef regime would be cut by 30 per cent to 1950 ecu per tonne by 2003, from its current level of 2780 per tonne. This would be compensated for by higher premium payments, as illustrated in Table 4. These premium payments can be supplemented by member states up to a certain maximum.

In the case of dairy, the quota regime is proposed to be continued until 2006, but increased by 2 per cent in four stages. Prices will be cut by 15 per cent, with a new dairy premium to compensate for the price fall.

This does not seem to address the problems outlined above with the existing cereal regime. The ceiling may address the problem of the policy favouring large farms but in practice this will be hard to pass the EU Council of Ministers (which was the cause of the failure to reduce the support to larger farms in the original proposed 1992 reform package).

**Table 4**  
**Current and proposed prices and subsidies in**  
**the cereal, dairy, and beef regimes**

	<b>Current level</b>	<b>Proposed Level</b>
Cereal prices	119.19 ecu/t	95.35 ecu/t
Arable area payments	54.34 ecu/t	66 ecu/t
Beef prices	2780 ecu/t	1950 ecu/t
Suckler cow premium	145 ecu/ha	180 ecu/head
Special beef premium		
Bulls	135 ecu/ha	220 ecu/head
Steers	109 ecu/ha	170 ecu/head
Dairy cow premium		35 ecu/ head

Source: Agra Europe (1998)

As with the 1992 reform, the reforms will further increase the cost of the CAP, with savings in export refunds offset by rises in direct and other subsidies by an expected 6 billion ecus.

It is proposed to increase the agri-environmental measures with greater subsidies for organic farming, greater habitat protection as under the ESA scheme, and the linking of current payments in LFA to low-input systems. These changes alone are minimal and do not address many of the concerns with the current policy, especially in relation to agriculture and the environment.

However of potentially more importance is the proposal to allow member states to reduce direct payments by up to 20 per cent if national environmental requirements are not met. Further proposals allow member states to alter payments based upon yet to be determined employment criteria on farms.

However these reforms have not been well received, including by the French and German governments and by environmental groups. Moreover they do not address the problems likely to be encountered in the 1999 trade negotiations, with the likely removal of the blue box in which current direct payments fit.

## 8. CAP Reform and the Next WTO Round

The link between trade and the environment is set to play an increasing role in the next WTO round. In general, it is hypothesised that free trade is bad for the environment with production moving to areas with relatively low environmental controls. However liberalising agricultural trade may well have the opposite effect due to the distortionary policies in this sector. So liberalising agricultural trade may actually improve the environment.

There are indications, however, that environmental reasons may be used to restrict agricultural trade further. The EU has an interest in restricting trade on environmental grounds and the US has also restricted trade on environmental criteria.

Franz Fischler, for example, has commented that the EU should take a hard line approach to the coming round of negotiations and in particular should defend the model of EU agriculture and protections for food safety. The Austrian Minister of Agriculture argued that the next WTO round of negotiations should amend agreements to allow countries to use ecological and social standards in regulation of trade. He argued that there should be 'more flexibility in trade rules to account for consumers desire for higher environmental and animal welfare standards for farming' (Agra Europe, 1997).

Another proposal includes extending the existing product liability clause to making importers of farm goods (as well as farmers) responsible for any damage caused by unsafe products.

Under GATT/WTO rules at present, there are a number of clauses which could be used to restrict trade on environmental grounds—in particular, clauses b and g from article XX, as given below:-

- necessary to protect human, animal or plant life or health

and

- relating to the conservation of exhaustible natural resources if such measures are made in conjunction with restrictions on domestic consumption or production.

Application of these clauses allows exemption from the most favoured nation clause as well as the clause requiring countries give similar treatment to imports and products produced domestically.

These clauses were the basis of the agreements on Technical Barriers to Trade (TBT) and Phytosanitary Standards (SPS) in the Uruguay round. The TBT aims to establish international standards but where these would be ineffective or inappropriate it allows countries to have a more stringent environmental requirement. Under the SPS agreement, countries are allowed to enforce measures to protect human, animal or plant life and health so long as they are not discriminatory. However these restrictions on trade should be based upon scientific criteria.

Both TBT and SPS provide a new regime of multi-lateral trading which is not just restricted to the quality of the product itself but the way it has been produced.

However the interpretation of these clauses has caused, and continues to cause, considerable controversy. as currently seen with the ruling on beef produced with hormones in the US (which the EU wished to ban but failed to under ruling). It could be expected that these agreements will come under pressure in the next round of negotiations.

In addition to the SPS and TBT agreements environmental issues were significant in Uruguay round not least in the establishment of the WTO which states that the relations should allow 'for the optimal use of resources in accordance with sustainable development seeking both to protect and preserve the environment and enhance the means of doing so'. Moreover a special committee on trade and the environment (CTE) was established in 1995.

Relevant to this is the relationship between Multi-lateral Environmental Agreements (MEAs) and GATT/WTO rules. Around 20 MEAs contain trade restrictions which are potentially against the rules. These have not yet been challenged, but it is recognised that they need clarification.

Also the ISO14000, which established the Environmental Management System (EMS), provides a vehicle by which environmental factors can be included in trade mainly by the private sector.

Under current rules, however, the ability to restrict trade purely on production and process methods is limited. Thus a WTO member cannot unilaterally restrict trade because of the environmental effects of production in the exporting country. However some argue this is contrary to Principle 2 of the Rio declaration which is 'to ensure that activities within their jurisdiction do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction'.

## **9. Conclusion**

The support for agriculture in the EU has changed, switching from market based support to direct payments. However these payments are largely based on historical production patterns and have done little to reduce the output and market distortions caused by the policy. The next round is likely to ban such payments (currently in the blue box) unless they are decoupled from production.

The above estimates of the social value of agricultural output in the United Kingdom show that the change in support for cereals has removed much of the market distortion. Thus cereals have a positive social value in the UK. However both dairy and beef production have negative social value, with both sectors continuing to receive a high degree of protection both from the public exchequer and through the market. Sheep production has a positive opportunity cost of output which is similar whether produced on the hill or in the lowlands. Thus further removal of production based support systems in the UK will have the greatest impact on the dairy and beef sectors.

The next round of CAP reforms will further reduce market distortions. This will have the impact on New Zealand of freeing up both EU and international markets, although there may also be a negative effect on some sectors of reducing the quota rent currently earned from preferential access, a factor not discussed in this paper.

The total removal of agricultural support from the EU, however, is not politically feasible, and so direct payments are expected to increase further in importance. These direct payments are likely to be conditional on low-input farming schemes. The threat, or opportunity, to New Zealand is that these policies will be used as a basis for restricting trade in products not

produced under similar conditions. If so, New Zealand may have to alter its production methods as well to maintain continued access to EU markets.

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