Department of Economics and Marketing
Discussion Paper No.4

Subsidies Without Farming:
The Reform of the Cap:
Current & Future Pressures

Caroline Saunders

November 1994

Department of Economics and Marketing
PO Box 84
Lincoln University
CANTERBURY

Telephone No: (64) (3) 325 2811
Fax No: (64) (3) 325 3847

ISSN 1173-0854
ISBN 0-9583410-1-X

Abstract

The GATT agreement has been a major factor behind the current reforms of the CAP essentially providing an external constraint on policy developments. This has enabled a radical switch from unlimited support based upon price, to area/headage payments subject to limits. The EU Commission argue that these reforms, in general, will be sufficient to meet the obligations under the GATT agreement. However over the long term it is generally recognised that the current reforms are not sustainable and further reforms will be necessary. The direction these take are open to speculation but are likely to include greater emphasis upon the provision of public environmental goods and less on production.

Contents

List of Tables

List of Figures

1. INTRODUCTION

The recent changes in European agricultural policy are the most radical since the inception of the Common Agricultural Policy (CAP). The pressures for reform of the CAP have been building almost since it was designed, but have increased throughout the 1980's. The pressure for reform has been due mainly to the cost of the policy and international trading problems although environmental and social factors have been of concern. There have been various reforms to the CAP regimes generally on a piecemeal basis especially during the 1980's but it is the McSharry reforms in 1992 which have been the most comprehensive. However it is debatable whether these reforms meet the obligations of the General Agreement on Tariffs and Trade (GATT) agreement. Moreover it is generally accepted that these reforms are not sustainable and that further reforms will occur. It is the purpose of this paper therefore to summarise agricultural policy reforms for the main commodities in the European Union (EU)[1], outline the pressures for further reform and the direction this might take.

The first section of the paper therefore briefly reviews the CAP. This is followed by a more detailed account of the recent reforms to the CAP. Further pressures for reform are assessed, distinguishing between those in the short run such as the effect of the GATT agreement and those in the longer run.

2. THE COMMON AGRICULTURAL POLICY

The basis of the CAP was agreed in 1962 on the three policy cornerstones of; community preference; common prices; and financial solidarity. The first regimes were established in 1962 and included cereals and pigmeat, with regimes for beef and dairy being established the following year.

2.1 CAP Cereal Regime

The CAP was and still is based upon price support, with the cereal regime effectively forming the blueprint for other sectors. The policy involved the setting each year of institutional support prices, as follows: a target price, (the ideal price for producers); an intervention price, (the price at which supplies will be removed from the market); and a threshold price, (the price at which imports are allowed in the EU) usually set between the target and intervention price and maintained by import levies.

[1] The commodities included in this paper are cereals, beef, dairy and sheepmeat.

The community set these institutional or support prices relatively high compared to prices in the rest of the world, thereby encouraging rapid expansion of domestic production. This process was aided by continuing technological advances in, for example, new varieties and chemical inputs. As a result the community rapidly became self sufficient in cereals and the cost of the regime rose as surpluses were subsidised and exported onto the world market. Various attempts were made to reduce the cost of the regime with the introduction of a coresponsibility levy in 1986 (effectively reducing the support price) and voluntary set-aside in 1988 (attempting to reduce output) but it is this sector which has been most radically affected under the current reforms.

2.2. CAP Dairy regime

The dairy regime was similar to that for cereals with an intervention price and restrictions on imports. However in the dairy sector production expanded rapidly and the EU was soon self-sufficient in milk products and faced the problem of subsidising exports onto the world market. It is this which led to the dairy sector being the most costly regime under the CAP.

Various schemes were introduced in the 1970's to try to reduce production. These included subsidies to convert to beef and coresponsibility levies, but it was the introduction of milk quotas in 1984 which had the most profound effect. This had a predictable impact on beef production as the dairy herd was culled.

2.3 CAP Sheepmeat regime

The sheepmeat regime, introduced in 1980, was one of the last to be implemented under the CAP. The regime is based upon the fixing of an annual support price, the Basic Price. Although the over supply problems of other regimes did not appear in the sheep sector, budgetary pressure led to the imposition of a Budgetary Stabiliser in 1987. This effectively reduces the support price: in 1993 the proposed reduction is 7%.

Up to the end of 1991, two separate systems were operated to maintain the market price. The first of these, which operated in all member states with the exception of Great Britain, was the intervention system. The alternative operated in Great Britain was the variable premium scheme, similar to the deficiency payment scheme operating in Great Britain prior to the establishment of the common sheepmeat regime. To prevent the undermining of the market in other member states operating the intervention scheme, intra-EU exports from Great Britain were subject to a 'clawback', that is an intra-EU export tax. In addition to these market support systems, an annual ewe premium, calculated as the difference between the representative market price and basic price, was paid to producers to compensate for any loss in income caused by the establishment of the sheepmeat regime. In 1992, the variable premium system was phased out and the ewe premium is now the main support mechanism for sheep. This change represents a reduction in support to Great Britain, which had previously been the main beneficiary of the sheepmeat regime.

2.4 CAP Beef regime

The beef regime is also based upon an intervention system supported by import levies and export refunds. When, in 1973, there was a shortage on world markets, intervention prices were set high to encourage expansion of the beef sector. However, although world prices soon fell, the EU maintained institutional prices well above world price levels (for example, from 1974-77 prices rose by an average of 15% per year), thereby supporting continued expansion of the beef sector. As EU self-sufficiency rose, the cost of the regime increased and pressure for reform mounted. These pressures became most acute after dairy quotas were introduced. Some changes were introduced in 1986 to redress the imbalance but these were not effective. Subsequent changes in 1989 were more fundamental making intervention much more restrictive (Saunders 1994).

Compensation for these changes was offered to producers through a number of other schemes such as subsides for private storage, and premia for beef animals and suckler cows. These subsidies include the special beef premium scheme, a flat-rate payment per animal which was, until the current reforms, a payment once in its lifetime of 40 ecu. The suckler cow premia, a fixed amount per cow per year, was introduced in 1980/1 as support for beef producers without aiding dairy producers.

3. RECENT CAP REFORM

The main driving force behind current reform of the CAP was the rising cost of market support and international pressures under GATT. Pressure for reform was also being exerted on policy makers via concerns over declining relative farm incomes, and falling rural populations, and environmental issues, such as nitrate pollution, loss in biological diversity and landscape quality.

The reform package agreed in 1992, the so-called MacSharry proposals, marks a major shift in policy. Attention has focused on reducing support prices with farmers being compensated by payments based upon historic production patterns. The main sector affected by the reforms is the arable sector, particularly cereals.

3.1 Arable

The reform of the cereal regime entails a fall in the support prices closer to world market levels, as illustrated in table 1. Producers are compensated for the fall in cereal prices by arable area payments, given the condition that they set-aside 15% of arable land. Small farmers, producing less than 92 tonnes of cereals per year, are exempt from set-aside. The compensation farmers will receive is derived from the fixed tonnage payments, as illustrated in table 1, converted to hectarage payments on the basis of regional yields. The compensation for set-aside is linked to the price compensation (45 ecu per tonne) for cereals.

The compensation farmers will receive is derived from the fixed tonnage payments, as illustrated in table 1, converted to hectarage payments on the basis of regional yields. For example if the tonnage payment is 45 ecu and the regional yield 4.6 tonnes per hectare then the arable area payment is 207 ecu per hectare. The regions are to be defined by individual member states, (EC Commission 1992)

The compensation for set-aside is linked to the price compensation for cereals with no transitional period. The compensation is 45 ecu per tonne, rising to 57 ecu per tonne from 1994 onwards, and is converted into a per hectare payment using regional yields. There is no specification as to which crops are to be set-aside although there is a requirement for at least 10 per cent of oilseed area to be set-aside. Certain crops can be grown on set-aside land such as oilseeds for industrial use (Agra Europe 1993).

Table 1

Support price and compensation payments for cereals (ecu/tonne)

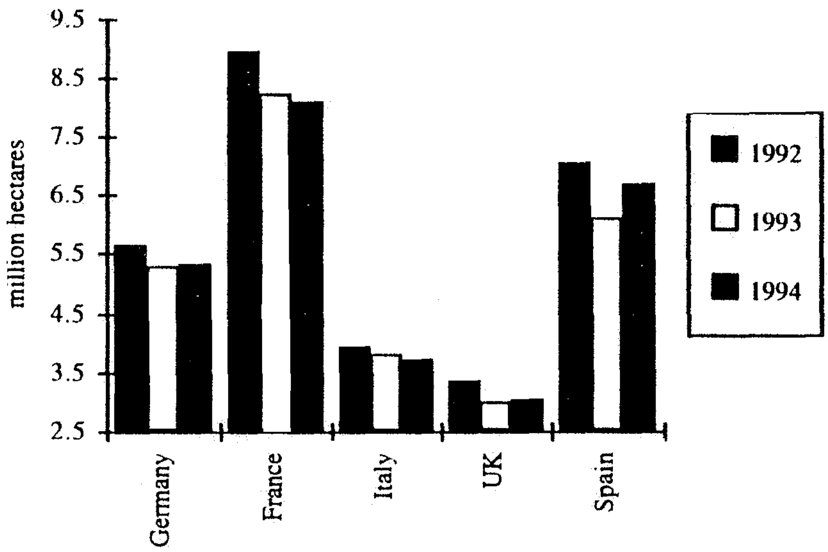
	1992/3	1993/4	1994/5	1995/6
Threshold	200	175	165	155
Target	155	130	120	110
Intervention	140	117	108	100

Source: Toepfer (1993)

In the arable sector the introduction of set-aside will obviously reduce production, but by how much? There are many indications that the reduction in output from cereals will be less than the 15% of land set-aside for a variety of reasons. Firstly, the number of small arable farmers in the community producing under 92 tonnes, and therefore exempt from set-aside, is considerable. Estimates of this suggest that more than 90% of holdings, and 40% of the cereal area, is exempt from set-aside (Allanson 1993). Thus cereal planting has fallen from 33.3 million hectares in 1992 to 30.5 in 1993 and to a predicted 30.8 in 1994, a fall of only 7.5 per cent (Agra Europe 1994).

Figure 1

Cereal area in selected EU countries



Source: Agra Europe (1994)

The change in the cereal regime has effectively fixed the area and location of cereal production, thus any incentive to switch back to grass based production, extensify, diversify or otherwise change farming practice has been removed. Lower cereal prices may encourage cereal based feeding of stock, for example intensive beef production, but this will be counteracted by changes to the beef regime outlined below. This has important implications for New Zealand in preventing a switch back to grass in some areas of the EU, which were encouraged into cereals due to the relative high prices offered under the CAP during the 1960's and 1970's.

3.2 Dairy

The milk regime has been left largely untouched, with the quota system to remain in place until the year 2000.

3.3 Beef

The changes to the beef regime include a 15% reduction in the intervention price over three years. Two-thirds of the price reduction is supposed to reflect the fall in input costs as cereal prices fall and the remaining third is to make beef more competitive. The ceiling on intervention is 750,000 tonnes in 1993 which will fall to 350,000 in 1997, with a new safety net of 60% of the intervention price.

Table 2
Changes to the Beef regime

	1993	1994	1995	1996	1997
Ceiling on intervention (000 tonnes)	750	650	550	400	350
Special Beef Premium (ecu per head)	60	75	90	90	90
Suckler Cow Premium * (ecu per head)	70	95	120	120	120
Stocking density (lu/hectare)**	3.5	3.0	2.5	2.0	2.0

* National government may pay an additional 25 ecu/head
** The special beef premia and the suckler cow premia are subject to a stocking density which includes other stock on the farm.

Source: Meat and Livestock Commission (1993)

To compensate farmers for these changes, headage payments on beef animals and suckler cows have been increased. The Special Beef Premium is not only raised, as illustrated in table 2, but is to be paid twice in the animals' lifetime, at the ages of 10 and 22 months. The payment is subject to a maximum of 90 animals per holding and a stocking restriction. There are, however, regional reference ceilings based upon claims in 1991, and the level for the UK is 1,418,000 (940,000 in England). Individual regions can set their own reference herds if they so wish. These changes are to compensate grass based beef systems which do not benefit from lower cereal prices. The two payments for the premia allow also for the encouragement of extensive systems.

The Suckler Cow Premium has also been increased, as illustrated in table 2. Under the reforms to the beef regime, the suckler cow premium is subject to a system of rights with producers' rights for premia limited to the number claimed in 1992, minus three percent for the national reserve. Eligibility can be transferred but a donation of 15% to the national pool must be made if the holding is not transferred. The national reserve is to be distributed to, among others, small producers and new entrants.

The beef and suckler cow premiums will, from 1993, be subject to a maximum stocking density of 3.5 (Livestock Units) LU per forage hectare falling over four years to 2 LU per forage hectare in 1996. In calculating the stocking density, all animals eligible for premium are included, that is ewes and suckler cows. There is an additional payment of 30 ecu per head if the stocking rate is below 1.4 per hectare. As stocking densities are calculated using forage area, intensive beef producers lose their right to premia beyond 1992 unless, of course, they have spare forage area.

3.4 Sheep

The main impact of the current reform of the sheep sector is the introduction of rights (sometimes referred to as quota) to ewe premia. The full ewe premium is payable on the first 1000 ewes in the Less Favoured Areas (LFA) and 500 in other areas, with 50% paid on any ewes above this number. A producer therefore claims the right to receive their annual ewe premia up to these maximum.

The first allocation of producer rights for premia under the reforms was based upon their claims for ewe premia in 1991. The second allocation of quota include producers who were in such schemes as the ESA or the pilot extensification scheme in 1991 or who had numbers reduced in 1991 through natural circumstances (among other reasons). The number of right allocations are expected to be 19.5 million head in 1993. Stocking rates do not apply to ewe premia, but ewes are considered in calculating stocking rates for beef premia.

Producers can transfer, or temporarily lease, their rights to ewe premia, when they sell their holding or pass it on to a successor. They can also sell their rights without transferring the holding but must pass some of these rights, up to a maximum of 15%, to the national reserve free of charge. Except under special circumstances rights are not allowed to be removed from LFA areas. Each nation has to create a national reserve of between 1 and 3% of the reference flock. In Great Britain this is 450,000 ewes; 320,000 in the lowland and 130,000 in the LFA.

4. IMPLICATIONS OF THE REFORMS

The main change in the current CAP reform is the movement away from market support to support based upon area or headage payments which, in theory, decouple income support from production levels[2]. As stated earlier, the reforms will tend to freeze current production patterns both through set-aside in the arable sector and through rights to premia for breeding stock in the livestock sector.

These changes therefore limit the adjustment EU producers can make in response to changing market conditions. For producers to switch out of arable into grassland based livestock production in response to falling real cereal prices, for example, would mean the loss of arable area payments without corresponding compensation in the form of premia for livestock as these are, with the exception of the beef special premium, based upon past stocking rates. In addition alterations to the system of production is limited, for example, introduction of livestock rotations with lower inputs also implies a reduction in subsidies. A factor which of course is not compatible with the environmental lobby objectives for more sustainable agriculture.

The reforms do make some attempt to encourage extensive production with stocking limits for payments of premia which will reduce the potential for subsidised increase in output.

These changes or reforms could be seen as more advantageous to New Zealand than free trade as they restrict the competition and expansion of livestock production in the community.

5. PRESSURES FOR FURTHER REFORM OF POLICY

In the short term, in order to meet GATT requirements and to relieve internal budgetary pressure, price reductions and increases in setaside areas seem likely, primarily because they fall within existing policy mechanisms.

---

[2]For example, direct subsides in 1993 accounted for 63 per cent of UK net farm income compared to 50 per cent in 1992 despite the fact that it was first year of implemetation of reforms.

The GATT agreement covered three areas of agricultural support, as follows:-

a) Domestic support

It was agreed under GATT to reduce domestic support by 20% over six years from the base period 1986-88. In the EU agricultural support was 79.299 billion ecu in the base period and therefore this must fall to 65.091 ecu by 2001. It is anticipated that CAP reform will actually reduce budget below this level (Agra Europe 1993) and therefore this is not expected to be a difficult GATT obligation to achieve. However, it does however provide some limit on future changes in agricultural policy.

b) Market Access

The agreement included the conversion of all import restrictions to tariffs and requires then to be reduced by, on average, 36% over six years (base period 1986-88); minimum access requirement is 3% of domestic consumption rising to 5% by end of the period; and that current access arrangements are to be maintained at the 1986-88 level. This includes special arrangements for New Zealand butter and lamb imports, and of special importance to New Zealand the removal of the restriction on chilled meat imports.

The impact of tarrification and subsequent reduction is not thought to have as great an impact on EU support. This is because in the base years world prices were exceptionally low and there have been cuts in EU support prices since then.

In general these changes are not anticipated to be an important influence on agricultural policy. The main areas affected are an increase in cheese imports (by 18,000 tonnes in the first year) egg and Skimmed Milk Powder (41,000 tonnes) imports initially and increases in wheat and meat imports by the end of the period.

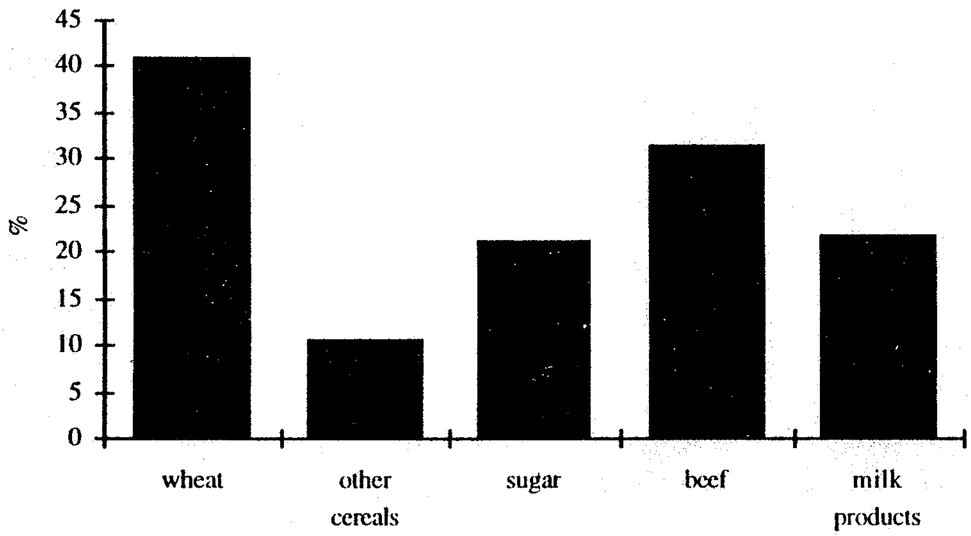
c) Export subsidies

Under the agreement the volume of subsidised exports have to be reduced by 21% over six years (base period 1986-88) and the budgetary expenditure on export subsidies have to be reduced by 36% over six years.

It is the restrictions on exporting which are expected to have greatest impact on EU agricultural policy as illustrated in figure 2, which shows the required percentage reduction in subsidised exports. In the case of cereals the EU Commission predicts that there will be no problem with the existing proposals for set-aside and price cuts being enough to meet the restrictions. However this is based upon doubtful assumptions firstly that yields will fall from a growth of 2 to one per cent per annum and that cereal consumption will grow by 12 million tonnes per annum due to increased demand from the white meat sector. There is little evidence to support the fact that cereal yields will grow at a slower rate, for example they increased by 25 per cent over the last ten years while the real price of cereals fell by 40 per cent (Agra Europe 1993).

Figure 2

Percentage reduction in EU subsidised exports required to meet GATT target



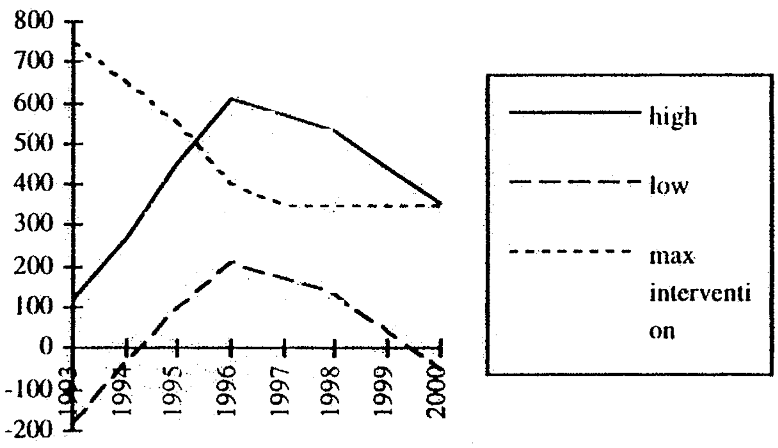
Source: Agra Europe (1993)

The estimated increase of 12 million tonnes in cereal demand due to the price cuts is likely to be optimistic. Most of this increase is expected to come from the reduction in use of cereal substitutes. However these products are themselves by-products and may have room for price reductions to maintain their competitiveness. In addition the overall demand for feed grains is not likely to rise as anticipated due to expected falls in dairy cow numbers as quotas will have to be cut. In any case although white meat production may rise, this will be offset by increases in feed conversion ratios. Estimates therefore of net exports range from the 25 million tonnes permissible to over 30 million tonnes. This makes further price cuts/ set-aside seem likely. Major changes are needed in the sugar sector which was excluded from the current CAP reform.

Cuts in milk quotas of around 2-4 per cent are estimated to meet the GATT commitment (NFU 1994). In the beef sector it is likely that as the dairy herd is culled further and suckler cow premia rights inhibit the expansion of the beef herd, beef production will rise over the 1990's causing problems, although production may fall back by the year 2000. Two estimates have been made of the likely balance which excludes intervention stocks and are illustrated in figure 3. This excludes existing intervention stocks which have fallen by a half over the last year to quarter a million tonnes at the end of June 1994. However this fall in stocks was not necessarily the result of reform but the retention of cattle to obtain premia rights. Therefore it is the beef sector in which further reforms are most likely.

Figure 3

Estimate of beef stocks assuming high and low production measured in thousand of tonnes



Source: NFU (1993)

Agricultural and environmental policy is entering a new phase of development. Although the current CAP reform package is radical in its coverage and movement towards decoupling support from production, there are indications that it is not sustainable either financially or politically. The European Commission itself predicts that costs of support will rise by an extra 40per cent (Agra Europe 1993) whilst public reaction to set-aside is uncertain. The liberalisation of eastern Europe and the enlargement of the EU both indicate that further reform will be necessary (Harvey and Saunders 1993). Moreover, policy makers are also conscious of increasing awareness of environmental issues illustrated recently by comments from Sir Leon Britain, EU External Trade Commissioner. He indicated the need for further reform and direct payments to maintain rural employment and care for the environment, stating that:-

"if the public prefer drystone walls to wire fences, the public must be ready to pay for their upkeep" (Agra Europe 1994)

The manner in which policies will respond to these pressures is open to debate. For example the EU Commission has stated that set aside should be linked to environmental criteria. Conversion of livestock headage payments to a per hectare basis may allow for transfer between sectors more readily than at present, allowing producers to respond to market conditions. This would also be welcome to the environmental lobby, (Saunders 1994).

A range of policy measures has been developed over recent years to provide for the conservation These have largely been at the initiative of individual governments. Examples of those in operation in the UK include the designation of Sites of Special Scientific Interest (SSSI), Countryside Stewardship, tax concessions for the management of "Heritage Landscapes", covenants and public purchase.

However these policies received EU support under article 19 of the EC regulation 797/85 in 1985 which authorises member states to establish national schemes in environmentally sensitive areas (ESA) (MAFF 1989). These schemes are intended to protect natural habitats whilst reducing production and providing adequate income for producers. In the UK ESAs are areas of landscape, conservation and/or archaeological interest within which farmers are offered financial incentives to comply with a package of management practices designed to secure conservation goals. Each ESA has a separate management package and a flat rate payment is paid, varying according to the severity of environmental constraint. Participation is voluntary. The "first round" of ESAs began in 1987 and, with recent reforms, they are anticipated to cover some 1.8 million hectares. (MAFF 1993)

These environmental policies were given further impetus under the current agri-environment package which was agreed in general at the same time as the CAP reforms. The package includes an extra payment of 30 ecu per head on Beef Special Premium claims if their density is below 1.4 LU per forage hectare. Other elements under this package have been left largely in the hands of the individual member states. In the case of the UK, this involved the introduction of seven new environmental measures announced in August 1993 (MAFF 1993). These are six new ESA: moorland scheme; habitat scheme; organic aid scheme; 30 new Nitrate sensitive areas; and two schemes to encourage access to set-aside and ESA land.

However it must be emphasised that the finance for this at the EU level accounts for only 2 per cent of the agricultural support budget (a predicted 0.8 billion ecu in 1995 compared to a predicted 36 billion ecu on market support (Agra Europe 1994)). Nevertheless it does indicate the direction in which agricultural support will develop. Firstly with increased emphasis on the provision of environmental goods as the justification for support. Secondly that increased contributions will be made from national governments. Although the EU only predicts to spend 0.8 billion ecu on environmental programmes in 1995 this only accounts for up to 25 per cent of the cost, implying that at least 2 billion ecu is being spent in the member states. In addition, funds are also being spent on national schemes .

Other more radical suggestions for CAP reform include the removal of all price support to be replaced by direct payments. These could take the form of an area payment tied to some form of environmental criteria as proposed in Cain et al (1994) and would be possible under existing policy changes. The impact on Management and Investment Income of complying with certain basic environmental criteria and operating at world market prices is illustrated in table 3 and could be offset by subsidy payments similar to those offered under the arable area payments scheme which are estimated to be £193 in 1994/5. This scheme would have the advantage of allowing the free market to operate and providing environmental goods in return for support. It would also reduce the cost of support with consumers able to purchase goods at world market prices.

Table 3

Impact on Management and Investment Income (MII) of replacing price support with direct per hectare payment tied to environmental criteria by farm type in the UK

	Loss in MII from operating at world prices	Loss in MII by complying with environmental criteria*	Total loss in MII
Dairy	171	32	203
Lowland livestock	155	41	196
Cropping	206	18	224
Hill and Upland	195	10	205
Weighted average	183	24	207

*The environmental criteria used included restrictions on agricultural chemical use, in particular inorganic nitrogen, and limits on cereal crops in arable rotations.

Source: Cain, Saunders and Wilcockson (1994)

Alternatively Tangermann, Thompson, Larssen and Petit have proposed a single capital, payment or annual direct payments per farm, regardless of size(Agra Europe 1994). This would imply a loss in income on larger farms that may be able to compete at world market prices in any case and therefore do not need support. Small farmers would however benefit and the policy would therefore help to achieve the maintenance of rural communities which is itself an objective of agricultural policy. It is also suggested that under this scheme national governments could supplement payments.

Following on from the above other commentators have argued that the CAP should be renationalised, that is, member states should take responsibility for policy (Munk 1994). Some have argued that this has to some extent taken place through the more direct involvement of national authorities in the implementation of the reformed market regimes and the environmental programmes (Kjeldahl, R. and Tracy, M. 1994). Whilst when the EU was established the CAP was seen as a cornerstone due to the importance of agriculture in the member states economies, however this is no longer the case and not a justification for its continuation.

6. CONCLUSION

The reform of the CAP has been long awaited and is radical not so much in its immediate impact but in the fact that the fundamental basis of support been challenged and the means for its removal made. The next round of CAP reform, just like the next round of GATT, can be expected to lead further away from production based support.

Subsidies without farming, as few New Zealanders will need reminding, is an inverse of the title Farming without Subsidies, a MAF publication outlining the impact of removing subsidies from New Zealand agriculture, (Sandray and Reynolds 1990). The reform of the CAP led some commentators and farmers to anticipate a similar removal of subsidies for European farmers. These fears have not been realised with the level of expenditure on subsidies remaining (and expected to remain) similar. However the support and subsidies to EU agriculture are being increasingly decoupled from production making farming for food not a prerequisite for support.

Subsidies without farming is therefore a step closer to reality. This is seen at its most transparent with policies such as set-aside. However it is the continuing development of agricultural policy to subsidise farmers for providing public goods such as access; wildlife, amenity and landscape rather than food which will most likely encourage Subsidies without Farming in the future.

References

Agra Europe London. Various Issues.

Agra Europe (1993): *The GATT Uruguay Round Agreement.* An Agra Europe special supplement. December 1993. London.

Allanson, P. (1993): The impact of the modularisation proposal in the MacSharry Plan for Reform of the cereals regime, *European Review of Agricultural Economics* v20, pp 99-109.

Cain, P., Saunders, C.M., and Wilcockson, S. (1994): The economics of low-input farming *Farm Management*. Forthcoming

EC Commission (1992): *The Development and Future of the Common Agricultural Policy.* Reflections paper of the Commission (COM(91) 100 final, Brussels, 1st February 1991)

Harvey, D.R. and Saunders, C.M. (1993): *European Grassland Farming: Future prospects.* Paper presented at the International Grassland Congress, Palmerston North, New Zealand, February 1993.

Kjeldahl, R. and Tracy, M. (1994): Renationalisation of the CAP? Institute of Agricultural Economics, Copenhagen/ Agricultural Policy Studies. Belgium.

MAFF: *Agriculture Statistics* various editions HMSO London.

MAFF (1989) *Environmentally Sensitive Areas: a report under Section 18(8) of the Agriculture Act 1986* Ministry of Agriculture, Fisheries and Food, HMSO: London

Marks, H.F. (1989): *A Hundred years of British Food and Farming. A Statistical Survey.* Ed Britton, D. Taylor and Francis. London.

Meat and Livestock Commission (1993): *Meat Market Review.* various issues. Milton Keynes.

Munk (1993):*The Economics of Community Public Finance* European Economy No 5 .

NFU (1994): *GATT settlement in agriculture.* NFU London.

Sandray, R. and Reyolds, R. (1990): Farming without Subsidies. MAF Wellington.

Saunders, C.M. (1994): *Agricultural Policy; up to date?.* Working paper, Centre for Rural Economy, Department of Agricultural Economics and Food Marketing, University, Newcastle upon Tyne.

Toepfer International (1993):*Grain and Feedstuffs Market Statistics.* 1992/93 edition.