# IRELAND, THE COMMON AGRICULTURAL POLICY AND THE LESS DEVELOPED COUNTRIES\*

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The price provisions of the Common Agricultural Policy (CAP) are designed to transfer income to European farmers and to maintain a secure supply of food for European consumers. The consequences of this policy for countries outside the European Community (EC) have become increasingly contentious now that the EC has passed the point of self sufficiency for many temperate zone food products and has become a major exporter, with the aid of export subsidies, to world markets. These consequences are of two kinds (a) CAP protection leads to lower prices on world markets for CAP products, though its effect on the prices of substitutes for CAP products (e.g. oilseeds) is less clear, (b) CAP protection increases the instability of world market prices

EC agricultural protection is usually seen as damaging to the interests of the less developed countries (Valdes and Zietz, 1980, Fitzpatrick, 1982), though more recently there is a growing realisation that many importing LDCs benefit from the availability of cheaper food supplies on the world market (Bale and Koester, 1984, Matthews, 1985) The impact of the CAP on LDCs is of special interest to Ireland, given the importance of the agricultural sector and the role of agricultural exports here

This paper presents the results of some new calculations of the impact of the CAP on LDCs, and discusses their implications for Irish development co operation policy

## Description of the Trade Model

The calculation of the impact of the CAP on LDCs has been made using a partial equilibrium model of the world food economy. The model is designed to measure the CAP's impact on world price levels, its effect on the stability of world prices is not captured. A reduction in CAP protection for a particular product is assumed to lead to a fall in production and an increase in consumption within the EC. At the existing level of

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world prices, there is then an excess demand on the world market for this product, and world prices will rise. This increase in world prices is assumed to be reflected in national markets for agricultural products, including that of the EC itself. The increase in national price levels will cause production both inside and outside the EC to increase and consumption to fall, leading to an increase in exports or a decrease in imports. These changes in trade flows affect the foreign exchange earnings and income levels of all countries producing or consuming the commodity. The model calculates these effects given the initial change in CAP protection and values for the domestic supply and demand elasticities of each country.

The effects of reducing EC agricultural support are considered for eleven separate commodities wheat, barley, maize, rice (cereals), beef, pork, mutton, poultry (meats), sugar, dairy products and oilseeds For computational purposes, milk is treated as the two commodities butter and milk powder, and oilseeds are treated as the two commodities vegetable oils and oilcake The analysis covers 191 countries, including the EC-9 as a single bloc

From the range of possibilities for CAP reform, the results of complete liberalisation of the CAP are reported here. This is not to imply that this is a prospective or even likely development in the CAP, it was chosen so as to highlight the costs and benefits, and conflicts, to which EC agricultural policy gives rise A reduction in protection by a smaller amount would have effects roughly proportional to those reported. In the case of sugar, CAP reform is assumed to take the form of reduction in the volume of EC production brought about by more restrictive quota arrangements. All the calculations refer to the year 1981 Averaging production, trade and consumption figures over a period of years to take account of the impact of cyclical fluctuations might be preferable, but in view of the inevitable uncertainty surrounding many of the other parameters of the study, it is felt that aggregating the results by major regions avoids any serious problems which might arise by focusing on a single year Because the study is intended to measure the consequences of a liberalisation of the CAP regulations for agricultural products, it focuses on trade in unprocessed agricultural products and products after first stage processing More highly processed foods do not receive protection from the CAP in principle, although they may face tariffs under the Common External Tariff, but the consequences of reducing these tariffs are not investigated

The measure of the rate of protection for agricultural production under the CAP is fraught with difficulties, and furthermore the rate itself varies from year to year. In this study the degree of protection is generally measured as the difference between average selling prices on EC markets and the price of a comparable imported product cif a European port. It is assumed that this "equivalent tariff" measure reflects all tariff and non-tariff barriers to trade. To overcome the problem of variability in the level of protection over time, an average of the equivalent traiff over a five year period, generally 1978-82, is used. Taking the average of actual selling prices on EC markets means that the effects of Monetary Compensatory Amounts in adding to or subtracting from the "common" EC level of protection are taken into account

The values used for the elasticity estimates in arriving at the quantitative size of trade liberalisation effects are very important. The largest effect on world prices occurs if EC

supply and demand responses are high (because this produces the largest volume effect on the world market) and if the supply and demand responses of countries outside the EC are low Even for the EC, where there has been a considerable effort in trying to estimate supply and demand elasticities for agricultural products, the published values are contro versial. For many, if not most, of the countries in this study, there are no estimates of any kind. What the model does is to explore the implications of assuming elasticities of different sizes.

The study focuses on the effects of a general reduction in the level of agricultural support under the CAP, rather than a reduction in protection for individual commodities considered separately Relatively low elasticity estimates are appropriate where a generalised trade liberalisation is undertaken, in order to take account of the interdependencies between commodities For a reduction in protection for an individual commodity, somewhat higher elasticity estimates will be appropriate (see Valdes and Zietz, pp 24 25 for a discussion)

The quantitative estimation of the impact of the CAP on LDCs depends on the assumptions made regarding the values of national supply and demand elasticities and the reactions of other countries to the EC policy change The main assumptions made in the "standard run" are as follows

- (a) the calculations are based on the assumption of a general removal of protection from all EC temperate zone production at the same time, rather than from individual commodities in isolation. The level of protection for each commodity is assumed equal to its average level for the period 1978 82 (Table 1)
- (b) the value of national demand elasticities is set equal to -0.4, and of national supply elasticities to 0.4, for each of the 191 countries involved. For wheat and coarse grains, the EC demand elasticity was assumed equal to zero. The assumption here -a very approximate one -a is that the decline in livestock production within the EC which would follow a general reduction in CAP support would have a negative effect on the demand for wheat and coarse grains, which would just offset the positive effect on demand of lower cereal prices.

This interaction between the grain and livestock markets also makes it difficult to predict the effects of removing EC protection from meat production. The protection levels assumed for pigmeat and poultrymeat are for the activities of raising pigs and poultry. They are invariant to changes in grain protection rates, and thus the standard supply elasticity of 0.4 has been used for EC production. A supply elasticity of 0.4 has also been maintained for beef. The supply of beef will be largely determined by what happens to the size of the dairy herd following liberalis ation of the EC milk market. It is assumed that the fall in the number of dairy cows will offset the lower price of grain in its impact on the Community's beef production.

In the case of sugar, it is assumed that CAP reform takes the form of a reduction of 3 5 million tonnes in the volume of sugar production permitted under quota arrange ments. In the case of oilseeds, the biggest effects on world prices would be the

indirect ones resulting from a change in protection for complementary and substitute products. It has been assumed that the indirect effect of CAP liberalisation would reduce EC demand for oilcake by one third, and raise the world price of vegetable oils by 5 per cent in the standard run

- (c) the centrally planned economies are assumed to react to the change in world market prices in the same manner as market economies
- (d) countries outside the EC are assumed not to change their policy stance towards their agricultural sectors, which implies that changes in world prices resulting from CAP reform are fully reflected on the national markets of these countries

### The Impact on LDCs under the Standard Run Assumptions

Table 1 summarises the levels of EC protection assumed in the study, and the effect on world prices of removing this. The impact on world prices is relatively minor for most commodities, in the range 1 to 6 per cent. Dairy products are the exception, where the impact is much greater, both because of the high rates of EC protection in the dairy sector and the important role of the EC in the world dairy market. The price effects for individual commodities would be greater if the reduction in protection was confined to a single commodity rather than undertaken in the context of a general liberalisation of the CAP.

Table 1 Impact of CAP Reform on World Price Levels, Standard Run Assumptions

Commodity	EC Nominal Protection Rate	Effect on World Prices	
	Nate	111005	
	%		
Wheat	16	07	
Barley	27	2 9	
Maıze	34	0 5	
Rice	36	0 1	
Sugar	(1)	60	
Beef	35	3 9	
Pork	30	4 0	
Mutton	72	5 0	
Poultry	30	3 2	
Butter	70	10 5	
Skim powder	43	7 5	
Dilcake	(2)	- 79	
/egetable oils	(3)	5 0	

Notes (1) Production reduction of 3 5m tonnes assumed

<sup>(2)</sup> Consumption reduction of 7 0m tonnes assumed

<sup>(3)</sup> World price increase of 5 per cent in standard run assumed Source Author's calculations

The effects on other countries of eliminating support for EC agriculture under the standard run assumptions are shown in Table 2. Two features of this and subsequent tables should be remembered. The first is that the table shows the results of a generalised reduction in CAP protection. The gains and losses shown for individual commodity groups would be larger if protection was removed from that commodity group alone. Second, the totals represent the sum of results for individual commodity groups which are based in part on a rather arbitrary assessment of what the removal of CAP protection would mean for certain commodities, particularly with respect to sugar, oilseeds and the interaction of the livestock and feedgrain markets. The calculations should be taken as representing the order of magnitude of the impact of CAP liberalisation rather than precise numbers.

Less developed countries would be disadvantaged by a reform of the CAP under these assumptions. They would lose from higher world prices for cereals, dairy products and most meats and from the lower world prices for oilseed protein. They are shown to gain from higher prices for pigmeat and for vegetable oils. The former result is dependent on a predicted major expansion of Chinese pork exports, the realism of which may be questioned. Less developed countries would also benefit from higher world market sugar prices, but the possible loss of the Sugar Protocol benefits offsets the gain in the standard run.

Table 2 Summary of Effects of CAP Reform on other Country Income, Standard Run Assumptions, \$ Million

	Ccrcals	Sugar	Ments	Dany	Oilseeds	Fotal
NF1 FXPORIERS						
Developed countries Less developed	186	106	278	177	- 342	405
countries	19	745	210	12	- 87	701
NET IMPORTERS						
Developed countries	- 121	- 424	- 193	1	234	- 503
Less developed countries	- 143	- 345	238	- 228	- 69	- 1 023
NIT BALANCE						
Developed countries Less developed	65	- 318	86	177	- 10g	- 99
countries less sugar and	- 123	200	27	- 215	- 156	- 323
beef transfers		- 191	- 20			- 211
Less developed countries	- 123	9	- 47	- 215	- 156	- 542

Source Author's calculations

As well as the total impact on LDCs, it is of interest to know the distribution of gains and losses among LDCs from eliminating EC agricultural protection. When the effects are broken down by continent, the major winner is Latin America (Table 3) With only 11 per cent of the Third World's population it takes about half the gains to net exporters,

but only its proportionate share (in relation to population) of the losses. Its net gain is calculated at around \$230m. Africa is the continent which proportionately would be hardest hit by CAP reform. It would hardly share at all in the benefits of higher world prices for temperate zone products, but it would bear 30 per cent of the total income losses, giving it a net loss of around \$240m. Asia's net loss would be around \$310m.

Table 3 Breakdown of LDC Gains and Losses by Continent

Continent	Net Balance	Share total LDC CDP		Shac net importers losses	Shurc LDC population	
	\$m	%	%	%	7%	
Af ica	- 212	12	8	29	14	
Latin America	227	36	53	14	11	
Asıı	- 308	53	10	57	75	

Source Author's calculations UNCTAD Handbook of International Statistics New York 1984

Both Africa and Asia contain some relatively high income countries (for example, the North African and Middle Eastern countries, respectively) as well as many low income countries. A breakdown of gains and losses from CAP reform by income group is shown in Table 4. This table shows that all LDC income groups are made worse off by liberalising the CAP, but the bulk of the losses are borne by the low and high income LDCs, low income countries in particular share a very small proportion of the net exporters' gains

Table 4 Breakdown of LDC Gains and Losses by Income Class

Income	Nc Balance	Share to ed LDC CDP	expencis	Share net importers losses	Shar 1 DC population
group	\$m	%	Ç 1111	%	population %
Low income	- 183	29	1)	28	74
Middle income	- 13	16	30	22	13
High income	- 127	56	5)	50	14

Source Author's alculations UNCTAD op cit

Table 5 shows the distribution of gains and losses from CAP reform distinguishing between major LDC oil exporters and non oil LDCs. The major oil exporters gain virtually nothing from higher world market prices for temperate zone foods, but account for almost half the total losses to LDCs. The consequences for non oil LDCs of EC agricultural trade liberalisation are more finely balanced, and they more or less break even after the loss of Sugar Protocol and Lome Convention transfers are accounted for It might be argued that oil producting LDCs should be in a position to pay the higher cost of food imports following CAP reform, and that attention should be focused on the non

oil LDCs However, the category of major LDC oil producers is a very mixed one It includes large, populous LDCs such as Indonesia and Nigeria and low income LDCs such as Congo and Angola, as well as the capital surplus Middle Eastern countries. It would be very arbitrary to exclude the former two groups from the LDC category, and the contribution of the capital surplus Middle Eastern countries (Saudi Arabia, Libya, Kuwait, and the United Arab Emirates) to the LDCs' import deficit on temperate zone foods, while significant, is still limited by their relatively small populations.

Table 5 Breakdown of LDC Gains and Losses by Oil and Non-Oil Exporters, \$ Million

	Cereals	Sugar	Meats	Dairy	Oilsecds	Total
NI I LXPORTLRS						
Oil exporters	0	2	6	0	4	12
Non oil LDCs	19	543	205	12	- 90	689
NI Γ IMPORTERS						
Oil exporters	- 55	- 200	- 127	- 112	3	- 491
Non oil LDCs	- 88	- 145	- 110	- 116	- 73	- 532
NLT BALANCE						
Oil exporters	- 54	- 198	- 121	- 112	7	- 479
Non oil LDCs	- 69	398	94	- 103	- 163	157
less sugar and						
heef transfers		- 191	- 20			- 211
Non oil LDCs	- 69	207	74	- 103	- 163	- 54

Source Author's calculations

These results are subject to many qualifications which are discussed in the larger study. The size of the agricultural sector in many LDCs has been artificially depressed by the discriminatory agricultural policies which their governments have pursued. The LDC agricultural sector would be larger under an incentive farm policy, and many LDCs which are now importers of temperate zone food might become net exporters, thus changing the balance of advantage from CAP liberalisation for LDCs as a group

Another issue concerns the relative valuation of producers' and consumers' interests arising from higher food prices. In these calculations, it was assumed that a change of one unit in producer income was equivalent to a similar change in consumer income. There may be reasons to weight changes in the income of the two groups differently. If producers and consumers are drawn predominantly from different strata in the country's income distribution, then on equity grounds one might want to give a greater weight to changes in the income of the poorer group. If the savings propensities of the two groups or the multiplier effects of their spending are different, there may be a case for differential weighting on growth grounds. Or if unemployment results from the policy change, then the valuation of costs and benefits will be quite different to what it would be in a full employment society.

European Community agricultural protection makes employment creation in agriculture more difficult for LDCs, and thus intensifies their need to create employment in the non agricultural sectors. If, as a result of the CAP, LDCs import more food than they would otherwise do, this places an even greater onus on the EC to keep its markets open to manufactured goods imports from LDCs. Agricultural protection results in higher food prices and lower prices for manufactured goods in the EC than would otherwise be the case. Some may argue that this schizophrenic trade policy is not sustainable in the longer run.

Despite these qualifications, the results show that higher world food prices following CAP liberalisation would disadvantage the majority of LDCs, at least in the short run It may be that adjustments in the longer run would change, even reverse, this conclusion — though much more empirical evidence must be assembled to show this But the long run will be too long for many of the people affected by the change, and policy recommen dations based on short run impacts are not irrelevant

## Conflicting Interests in CAP Reform

The conclusion that a majority of LDCs would be disadvantaged by reduced CAP protection does not imply that the CAP should not be reformed. Nor is it legitimate to argue that, because CAP reform confers more losses than gains on LDCs, even higher CAP protection should be sought by them. It is one thing to recognise that beneifts and liabilities have been established by the existing policy. It is quite another to argue that this policy should be maintained or even strengthened. This requires a comparison between the relative merits of the existing policy and other options designed to achieve the same objective.

Lower world prices as a consequence of the CAP benefit poor consumers in LDCs It has not been argued that high protection to European agriculture is the best way of assisting this group. Indeed, the CAP is very much a second best policy in this regard. The CAP does damage producers while providing some aid to low income consumers. Many of the benefits of low farm prices do leak away to relatively well off consumers or benefit relatively well off countries. Most important, the CAP is the cause of income losses and distributional controversies within the EC itself which are a continuing source of uncertainty. For all these reasons a continuation or an increase in CAP protection is not being advocated here. What is being pressed is that reform of the CAP would damage a potentially vulnerable group in LDCs, and that claims to the contrary lead to their interests being overlooked.

From this perspective, three policy issues appear relevant

- how best to safeguard the interests of LDCs and those consumers within LDCs adversely affected by CAP reform,
- how best to protect and promote the interests of LDCs disadvantaged by remaining CAP protection,
- whether LDCs have any preferences regarding the mechanisms of CAP reform

On the first issue, higher world food prices might be offset for some countries by increased deliveries of food aid, or by the operation of a "concessional sales" window in

a new International Wheat Agreement The difficulties and dangers of food aid are well known, but if it is accepted that food aid is intended to substitute for commercial imports which would have been undertaken in any case, and if it is linked to the imple mentation of "food strategies" which give a higher priority to agricultural growth in LDCs, it can have a useful role to play

The compensation of temperate zone food exporting LDCs in the event of a continuation of CAP protection could take a variety of forms. In the case of sugar, where LDCs have a clear comparative advantage over EC beet production, a reduction in EC sugar production quotas together with the maintenance of the Sugar Protocol would confer positive benefits on LDCs, though 80 per cent of the gains from higher world sugar prices go to only five countries (Cuba, Brazil, the Philippines, the Dominican Republic and Thailand). In the case of other products (beef, grains, other meats) the levy rebate arrangements in force for certain beef exports from some ACP countries might be extended to other low income exporters, though there are few potential beneficiaries in this category at the present

For middle income LDCs, particularly the Latin American countries which bear the brunt of the cost of CAP protection at the moment, and which are rapidly developing an industrial capacity, compensation might be sought in the industrial sector through improved import arrangements. The Commission has already proposed that compensation of the Mediterranean countries adversely affected by the second enlargement should take the form of Sugar Protocol type arrangements (Tunisian olive oil) and increased aid for industrial investment.

With respect to the preferred route to CAP reform the importance of reducing price instability on world markets to enhance the food security of LDCs must be emphasised. The form of protection provided by the CAP (variable import levies and export refunds) makes the maximum contribution to destabilising the world market. The CAP mechanisms prevent any adjustment of production and consumption within the EC to periods of high or low prices on world markets. This places the burden of adjusting to these situations disporportionately on the other participants in the world market, particularly the low income countries.

One route to reform would be to maintain the average level of protection to EC agriculture, but to do this by means of a constant tariff, so that fluctuations in world market prices were reflected in EC markets. This enlargement of the world market would, of course, help to dampen those fluctuations which do occur. Farmers could no longer depend on a guaranteed minimum price for their produce, while consumers would find food prices, particularly of meats, much more variable. In the absence of global stock holding arrangements, greater food security for one part of the world can only be achieved at the expense of greater food insecurity for the other.

The implications for Irish development co-operation policy follow from the above Ireland should recognise that CAP reform will adversely affect many LDCs, particularly in Africa and Asia, and should support compensation in the form of food aid or cash aid for nutrition programmes in these cases. It should recognise the need for improved arrange ments for LDC temperate food exporters, by supporting EC membership of the Inter-

national Sugar Agreement with a negligible export quota and by supporting the extension of the levy rebate arrangement to other low income exporters. It should recognise that liberal import arrangements for manufactures from LDCs are a quid pro quo for agricultural protection. Finally, it should seek ways to make the EC market more responsible to world market trends in order to enhance the food security of food importing LDCs. Many of these proposals run counter to the short term interests of particular groups—farmers, consumers, and workers—in Irish society. A debate should be started now on how the burdens should be shared.

#### References

- BALE, M and U KOESTER, 1984 The Common Agricultural Policy and the Less Developed Countries World Bank Staff Working Paper Washington
- FITZPATRICK, J (Ed ), 1982 Ireland, the Common Agricultural Policy and Developing Countries Dublin, Gorta
- MATTHEWS, A, 1985 "The Consequences of the CAP for the less Developed Countries A Review of the Evidence", in Stevens, C ed, *Pressure Groups, Policies and Development* London Overseas Development Institute/Institute for Development Studies
- VALDES, A and J ZIETZ, 1980 Agricultural Protection in OECD Countries Its Costs to Less Developed Countries Washington International Food Policy Research Institute