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The Impact of CAP reform on oilseed rape production at the farm level

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INTRODUCTION

Since the oilseed rape crop began to develop after the inception of EC oilseeds schemes, it has been financially aided to allow EC growers to receive a «reasonable return» from its production. Initially, return was guaranteed by a complex calculation which paid aid to crushers on a tonnage basis. During the mid-1970s , the first quality standards, which required growers to produce only low erucic acid containing varieities, were introduced, then during the 1980s, and continuing today, standards for low erucic acid/low glucosinolate containing rapeseeds were introduced. Aid, with some corrections for quality, was basically tonnage related. The incentive for the rapeseed grower was therefore to produce maximum tonnage of rapeseed.

Since the GATT agreement and Soya panel findings CAP aid payments have been substantially reviewed. Basically, the proposals from Commissioner MacSharry, which are now in operation, were to reduce surpluses by introducing a set-aside requirement related to areas of cereals, oilseeds or pulses grown and to base aid on area grown, not tonnage produced.

GATT AND EC/US oilseeds agreement

Under the Blair House agreement the elements were :

EC/US Oilseeds Deal

Elements

- CAP reform for oilseeds aceepted. No restrictions on EC tonnage or area which may be planted with oilseeds.

- A new "stabiliser". A Separate Base Area (SBA) equal to 5.128 million hectares for EC minus EC Set-Aside (minimum 10%). Phased in over 1994 and 1995.

- If, in any year, EC oilsed area exceeds stabiliser area, then oilseed aid decreases (1% for 1%).

- Oilseeds for non-food use of set-aside land exempt from stabiliser, but feed by-products must not exceed equivalent of 1 mt soyameal (implies maximum of about 20% of EC set-aside area).

Whilst regulations in the spirit of this agreeemnt are aldready operational through area aid payments on oilseeds, the full agreement is not yet ratified in EC12, EC Farm Commissioner, Rene Steichen is reported to have informed the US Agriculture Secretary that ratification would take place very soon.

The ramifications of the proposals tested above are self-evident, but the major change at the farm level to date has been one of product end price : produce now sells at world price, a substantially lower level than that achieved before CAP Reform and EC/US Oilseeds Agreement and GATT.

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Rapeseed production at the farm level

Initial projections in UK, following the oilseeds agreement and CAP reform were that rapeseed should have a value of approximately £ 110/ tonne. However, a combination of market forces and the withdrawal of sterling from ERM have caused a considerably higher price to be realised. Currently, harvest projections for 1993 are for a price of approximately £ 150/tonne to be achieved. This presumes the current exchange rate ECU : £ to be stable. Any changes there will have direct effects on returns for both the crop and the area aid payments for it.

Rapeseed is also grown upon set-aside land. These crops are for non-food use and do not qualify for production aid on an area basis but do, subject to a number of caveats, qualify for set-aside area payments. These latter have just been increased by 25% for the 1994/95 crop year. The financial implications of this are to increase set-aside payment in England from £ 256 to £ 323/ha.

Areas of rapeseed in EC12

Area sown to rapeseed appears from statistics to fall each time there is a change in political approach to the crop in EC. The current fall in area has been exacerbated by difficult establishment conditions for the crop and in the author's view is likely to be reversed over the next 1 or 2 seasons.

Data are shown at Table 1.

In addition, an unknown but undoubtedly smaller area of rapeseed is being produced for industrial use on set-aside land. Uses include biodiesel (RME; diester) and production of erucic acid.

Table 1 : Rapeseed area in principale EC growing regions ('000 ha)

	1989*	1990*	1991	1992	1993e
Germany	429	570	950	1001	981
France	657	689	739	672	529
UK	321	390	445	426	381
Denmark	231	271	280	191	185
Other	41	61	46	33	21
EC total	1679	1981	2460	2323	2097

Notes: * Germany as constituted before October 3 1990;
e = estimated
Source: ZMP based on national statistics and Eurostat

Production Inputs for Rapeseed

Classically, variable inputs to modern crop production are calculated then applied on a cost : benefit basis. Hence, the shift of support from a tonnage to an area basis would be expected to have large effects although it is important to note in rapeseed production in UK that there has been a general critical reappraisal of production costs concurrent with CAP reform -driven changes.

a) Variable costs

i. a realignment of nitrogenous fertiliser input upon a normal cost : benefit. This has reduced nitrogen fertiliser input by 60-80 kg/ha.

ii. a reappraisal of herbicide practice. Until 1992, there was only a small area of spring rapeseed, which needed little herbicide, whilst the winter rapeseed crop received herbicide programmes costing up to £ 70 /ha. ADAS experiments over many years have shown very poor responses to broad-leaved weed removal as a generality and the industry now appears to be reducing its herbide input in broader agreement with cost, benefit.

iii. Fungicide use. Hitherto experiments have shown combined autumn and spring applied fungicide programmes (eg. with prochloraz) to give greatest benefit. However, at world price for rapeseed, such inputs are now being reduced.

iv. Insecticide use is little changed since insecticides themselves are relatively inexpensive. Additionally, because of trends related to fixed costs, the increase in spring rapeseed area could involve an overall increase in insecticide use.

b) Fixed Costs

The consensus view in UK, and probably throughout larger farming units in EC, following CAP reform has been to reappraise fixed costs and search for improvements (i.e. reductions). One such improvement has been to spread work peaks by introducing spring crops. In rapeseed in UK, this has meant a fall in winter rapeseed area to approximately 70% of area and up to 30% of total area being sown to spring oilseed rape. These data are approximate since one further ramification of general cost cutting has been the increased use of home-saved oilseed rape seed for further sowing ; the tonnage used or area produced from home-saved seed has undoubtedly increased substantially but is not precisely quantified.

Profitability of rapeseed production

Evidence from France suggests the following gross margins for 1992 harvest (i.e. 1992-93 marketing year).

a. **Dèpartment de l'aube**

Yield (q/ha)		32
Variable costs (FFr)		
seed	250	
fertiliser	1390	
crop protection	1140	
		2780
Gross margin (FFr/ha)		3960
incl. area aid		

(Source: CETIOM-OCERA)

b. **Department du cher**

Yield (q/ha)		35
Variable costs (FFr)		
seed	240	
fertiliser	910	
crop protection	670	
		1820
Gross margin (FFr/ha)		5350
incl. area aid		

(Source: CETIOM-OCERA)

Estimates of gross margins for rapeseed crops in UK are :

a. Winter 00 oilseed rape

Yield t/ha		3.2
Gross return (£)		480
Variable costs (£)		
Seed	36	
Fertiliser	80	
Herbicide (x)	40	
Insecticide (x)	10	
Fungicide (x)	20	
Other	35	
		221
Gross margin (£/ha) (excl area aid)		259

x = estimated average cost

b. Spring '00' oilseed rape

Yield t/ha		2.2
Gross returns (£)		330
Variable costs (£)		
Seed	40	
Fertiliser (x)	63	
Pesticides (x)	20	
		123
Gross margin (£/ha) (excl area aid)		207

x = estimated average

Estimates of rapeseed profitability/costings for set-aside land (at 1992 costs) are shown below

	Set Aside Only	Spring Oilseed Rape on Set-Aside Double low @ £80/tonne	Winter Oilseed Rape on Set-Aside HEAR @ £95/tonne
Output			
Seed		200	285
Set-Aside Payment	234	234	234
	234	434	519
Variable Costs	12	139	210
Set-Aside Cost Saved	—	-12	-12
Gross Margin	222	307	321

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The Ramifications of Change

1. The trend to increased spring rapeseed production instead of winter rapeseed production will reduce production in the short term at least. However, should the overall rapeseed production area increase as is anticipated there is every likelihood that the 5,128 million ha of oilseeds ceiling in the EC/US Oilseeds Agreement will be breached. Some estimates suggest 2,1 million ha oilseed rape, 2,7 million ha sunflower and 0,4 million ha soya in 1993. That would cause further price cuts for growers who may then move into continuous wheat production.

2. The reductions in inputs to the winter rapeseed crop and the trend to spring rapeseed will have a number of effects.

i. There will be an overall fall in agrochemical use and a disincentive for industry to develop crop protection products for use in rapeseed.

ii. There will be less N pollution into water courses and aquifer due to the reduced application of nitrogenous fertiliser to rapeseed. Oil percentage in rapeseeds will increase.

iii. An increase in home-saved seed will act as a brake on breeder's profits and that will be a disincentive to breed new and improved rapeseed varieties. However, the new quality proposals tabled by Canola Council of Canada are likely to constrain use of home-saved rapeseed in EC.

3. The development of industrial rapeseed production on set-aside land offers potential to diversify production, but will need to be monitored for profitability since there has been a tendency by industry at large to discount set-aside produced rapeseed prices to the extent of the set-aside payment. Overall production may trigger GATT-limits on meal.

4. Zoning to separate different rapeseed types may become necessary.

CONCLUSIONS

Whilst growers are adapting readily to the EC regime currently available for oilseed rape, it seems likely that production ceilings for rapeseed/oilseeds could easily be breached. The downward trend in inputs to production will have a number of major ramifications in ancillary industries but in UK, the devaluation of the £ has prevented this being fully exposed at present.

A balanced, monitored development of industrial rapeseed seems desirable.