eurostat

RAPID REPORTS

Agriculture, forestry and fisheries

1994 □ 12

ISSN 1017-5776

THE ECONOMIC ASPECTS OF CEREAL PRODUCTION IN THE EC

This Rapid Report highlights the purpose and the main results of a study, written by Dr B. Hill and E. Cook, on "The Economic Aspects of Cereal Production in the EC"[1]

Introduction

The main objective of this study was to bring to a wider audience, especially at a turning point in the development of the Common Agricultural Policy, analysis of and information concerning some of the vast array of statistical data that exist for the Commission to formulate and manage policy. The set of agricultural commodities chosen for this study was cereals.

There were many reasons for choosing cereals as the example, the most important of which are given here. *First*, cereals are an important agricultural commodity in the European Community in terms of their contribution to aggregate agricultural output and as an input to livestock production. *Second*, half of the farms in the EC produce some cereals. *Third*, production of cereals has expanded greatly, largely from increased yields, and since the mid-1970s the Community has changed from a net importer to a major exporter. The consequence of this for the pattern of trade, and the cost of the CAP's cereals regime (in 1992 it absorbed 18% of the entire EAGGF guarantee expenditure) has placed cereals at the centre of attention in the process of policy reform.

The study deals with various economic aspects of this major crop by drawing on statistics from the various databases available to Eurostat. There are six chapters, where analysis is concentrated on the development of production (dealing with both yields and area), the changes in the structure of cereal holdings, the development of institutional and market prices, the development of cereal costs and Gross Value Added, and the development of incomes. It is a historical perspective which is mainly concerned with the situation as at 1989-1991 and the changes experienced since the mid-1970s.

1 "Economic Aspects of Cereal Production in the EC", Theme 5, Series D, ISBN: 92-826-8122

Manuscript completed on = 22.07.1994

For further information please contact: E.Cook
Eurostat, L-2920 Luxembourg, tel. 4301-37321 Fax: 4301-37317

Price (excl. VAT) in Luxembourg: Subscription ECU 227 Catalogue number: CA-NN-94-012-EN-C

The main results

Chapter 1: Cereal Production at the Community level

The cereals area decreased by 5% between "1976"[1] and "1990", but still covered some 34 mio ha, accounting for 28% of the Community's Utilized Agricultural Area (UAA). Despite this reduction in area, the production of cereals rose markedly (+42% to 164 mio t in "1990"), because average yields for total cereals increased by 50% over the same period at the Community level (EUR 12), at an annual average rate of 3%. Output growth over the full period was particularly strong for wheat (up 81%). In contrast to this growth in cereal production over the reference period, the utilization of cereals declined, particularly from the 143 mio t in "1985" to 135 mio t in "1990". This divergence between production and utilization has only come to prominence since 1984; in 1983/1984 the Community was only 98% self-sufficient in total cereals, but by 1988/1989 this had risen to 120%, a level that has been maintained. As a result, intervention stocks have built up, imports from outside the Community declined and exports risen strongly; exports to outside the Community absorbed 15% of production in "1990".

Chapter 2: Cereal Production at Member State level

In "1990", most of the cereals area (87%) and production (86%) was concentrated in only five Member States (France, Germany, United Kingdom, Spain and Italy), with France and Spain containing almost half of the total area and production. Among the five principal cereal producing Member States, cereals covered between 40% of the agricultural area in Germany, some way above the Community average, and 24% in the United Kingdom in "1990".

Between "1976" and "1990" each of the Member States experienced an overall increase in yields. Countries with yields for total cereals below the EUR 12 average were concentrated in the south of the Community. The rate of increase in yields over the reference period was also lowest in the two principal cereal producers of the southern Member States (Spain and Italy).

Among the EUR 12 Member States, the balance between internal production and utilization in "1990" varied from 30% in the Netherlands to 221% in France.

Chapter 3: Structural aspects of cereal production

Half of the agricultural holdings (50%) in the Community grew some cereals in 1987. Of the principal cereal producing Member States, the proportions of holdings growing some cereals were beneath the Community average in the United Kingdom (35%), Italy (44%) and Spain (46%). In contrast the proportions in France (64%) and Germany (76%) were well above the Community average. However, all Member States had a smaller share of holdings with some cereals in 1987 than in 1975.

The proportion of all holdings growing some cereals that qualified as "specialist"[2] cereal holdings was only 16% in 1987. However, their share of the cereals area was much higher; specialist cereal farms used 10.7 mio ha for cereal production, some 30% of the Community's cereal area. Nevertheless, this means that over two-thirds of the Community's cereal area was found on farms that were **not** cereal specialists. The structural characteristics of specialist cereal holdings vary widely

2 The arithmetic average of 1975, 1976 and 1977.

3 A specialist cereal holding is defined under the Farm Structure Survey as a holding for which more than two-thirds of the Standard Gross Margin is derived from cereal production.

between Member States. The Community picture is dominated by the large number of small specialist cereal holdings in Italy, where elderly holders dominate, mainly without another gainful activity. The United Kingdom specialist cereal farms tended to be large compared to the Community average.

Chapter 4: The development of output and input prices in the cereal sector

Producers in all Member States have seen a major fall in the real prices they receive for cereals, to a slightly greater extent than for agricultural goods in total. Nevertheless, from the results given here, it can be inferred that the Community's internal market price has still been higher than the world price for cereals, as indicated by the Cif Rotterdam price, for much of the period. Potential cereal imports into the Community have a further obstacle to overcome in that levies are imposed, raising the price to the threshold price level: for example, though the internal market price was only an approximate 60% above the world price in 1988, the price of soft wheat from outside the EC more than doubled (150%) before gaining access to the Community market.

However, whilst output prices for cereals have been falling, real input prices have also been declining. By way of some comparison, although the support price indices (intervention or equivalent) for cereals decreased 40% between "1981" and "1990", the real price of fertilizers was estimated to have declined by 34%, the real price of energy by 28% and that of plant protection products by 12%.

Chapter 5: Development in the aggregate value of cereal production, the costs of production and Gross Value Added at market prices.

Between "1976" and "1990", the aggregate value of the gross production of total cereals declined by 20% in real terms, although this development was in two distinct parts: a small rise until the peak of "1983" followed by a steady 26% fall. In contrast, there has been a general rise in the average costs of growing one hectare of cereals, though because of the large increase in yields, costs per tonne have fallen. There were large differences in the costs per tonne of cereals between Member States, though they have been converging since "1983".

Gross Value Added (GVA) at market prices can be taken as an indicator of changing economic performance. On this basis, it appears that cereal production has been on a marked downward trend. This is shown in both the results on a per tonne and per hectare basis. Between "1976" and "1990" the average GVA at market prices per tonne of cereals was estimated to have halved, with the comparative results per hectare declining by a quarter. The development in the GVA per tonne since "1983" has been particularly homogenous in four of the five principal cereal producing Member States, Germany being the exception.

Chapter 6: Cereal farms in the Farm Accountancy Data Network

The Community's Farm Accountancy Data Network (FADN) was drawn on for information about specialist cereal farms. The results from the accounts of these are a useful proxy for the economics of cereal production. When farms were grouped by their economic size, the larger businesses not only had greater areas, they also used their land and their labour more intensively and generated higher incomes in total and per unit of family labour. Cereal farms have seen a decline in their income position relative to the all-farm average since 1983/1984. Among the four Member States with the largest number of cereal farms, with the exception of a single year, incomes per unit have been consistently highest in France and lowest in Greece.