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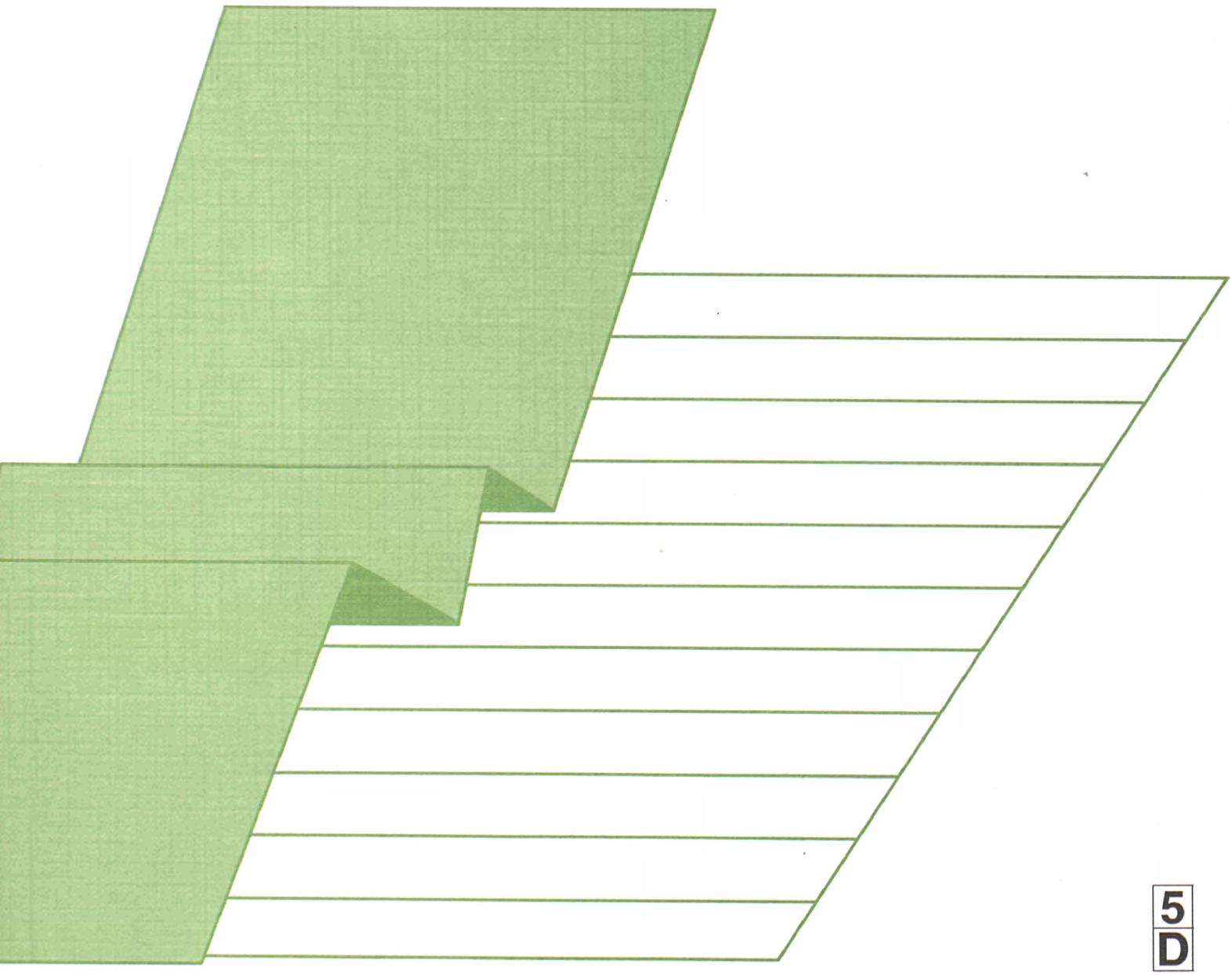
AGRICULTURAL INCOME
1993



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Y. Franchet
Directeur général

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The data for the Federal Republic of Germany relate to the following territorial situation :

- the present situation (chapters 2 and 3)

- before 3rd October 1990 (chapters 4, 5, 6, 7 and 8)

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CONTENTS

1 INTRODUCTION

In 1994 - as in previous years - Eurostat has undertaken to publish the results of estimates of recent changes in agricultural income in the Member States and in the Community as a whole. The calculations are based on data provided by the appropriate national authorities. Users of this publication will find information on and analyses of the income situation in agriculture and how this is changing. As the findings are of great importance for a better understanding of the Community's agriculture, Eurostat endeavours to improve and extend the analysis procedure each year.

This publication focuses on changes in agricultural income in the Member States and in the Community as a whole for 1993 compared with 1992, as well as analyses and comments. These analyses chart the effect of the different factors on changes in incomes in 1993 (Chapters 2 to 4), place recent results in the context of changes in agriculture within the Community and Member States since 1980 (Chapters 5 and 6), and allow comparisons of absolute levels of agricultural income between Member States (Chapter 7).

The figures are based on the last available estimates (January - February 1994) produced by the national departments regarding probable changes in prices, quantities and values for products and charges which determine income in the agriculture sector. The methodology applied is that of the Economic Accounts for Agriculture (EAA)[1]

Three Indicators have been derived from the EAA to show unit income trends in agriculture.

The **net value added at factor cost in agriculture** is computed from the value of final agricultural production, deducting intermediate consumption, depreciation and taxes linked to production, and adding subsidies[2]. This figure deflated by the implicit price index of gross domestic product at market prices[3], and divided by the total labour input in agriculture[4] provides **Indicator 1**.

Net income from agricultural activity of total labour input is computed by subtracting rents and interest payments from net value added at factor cost. This figure, deflated by the same price index referred to above and divided by total labour input in agriculture, gives **Indicator 2**.

Net income from agricultural activity of family labour input is computed by deducting compensation of employees from the net income from agricultural activity of total labour input. This figure is deflated like the two previous ones and then divided by family labour input only (holder and members of his family working on the holding) to give **Indicator 3**.

To calculate Indicators 2 and 3, more information is needed than for calculating Indicator 1: data on rents and interest for Indicator 2, and on compensation of employees and the breakdown into family and non-family (paid) labour input for Indicator 3. Full harmonization has yet to be achieved in the Member States on these variables. For this reason, the analysis centres on Indicator 1, which is more reliable and has better comparability than the other two.

Changes in agricultural income in 1993 in the Community as a whole are presented and analysed in Chapter 2 of this report and then broken down by Member State in Chapter 3. The data for Germany (and hence for EUR 12) for the first time, refer to a unified Germany.

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1 cf. Eurostat "Manual on Economic Accounts for Agriculture and Forestry", Theme 5, Series E, Luxembourg 1989 (and Addendum, 1992).

2 cf. "Methodological Note A.1" on the calculation of agricultural aggregates.

3 cf. "Methodological Note A.4" on the calculation of the deflated series, especially for the Community as a whole.

4 cf. "Methodological Note A.2" on the definition and measurement of the agricultural labour input.

In order to present information on the liquidity position of the agricultural production sector, a **cash flow Indicator** has been defined and is analysed in Chapter 4. It differs from agricultural income Indicator 3 in that it does not include changes in stock, own account gross fixed capital formation or depreciation. This year, the cash-flow Indicator was made available for six countries (B, F, L, NL, P, UK).

Changes in agricultural income over a longer term are the subject of a more detailed analysis in this report than in previous editions, the Community as a whole being dealt with in Chapter 5 and the individual Member States in Chapter 6. The period under consideration runs from 1980 to 1993, which enables Portugal (for which the relevant data series are available only from 1980 onwards) to be included in the analysis. As for the Chapters dealing with short-term changes, there is a detailed analysis of the factors determining changes in the three income indicators. The period chosen is divided into three sub-periods, limited by the "years" calculated as averages of three years in order to lessen the impact of sharp short-term fluctuations. Since the economic accounts for agriculture are not as yet available for 1992 and 1993 with a unified Germany, the figures for Germany and the Community (EUR 12) in Chapter 5, 6, 7 and 8 refer to Germany in the territorial situation prior to the 3rd October 1990.

As last year, the analyses and comments on the changes of agricultural income presented in Chapters 2-4 (short-term changes) and 5-6 (long-term changes) of this report are mainly related to changes in real terms (deflated). In effect, while studying nominal changes can be of some interest in a national context, it is much less relevant when calculating Community aggregates or when establishing comparisons between countries with very different inflation rates.

Although annual changes in income remain the central element for analysis, **absolute agricultural income levels** by Annual Work Unit in each Member State are compared in Chapter 7, in spite of considerable methodological and statistical reservations. With a view to maximum comparability, the income figures are converted on the basis of both the ECU and purchasing power standards (PPS)[5]. A comparison is also made of trends in the absolute level of income in agriculture per Annual Work Unit between the Member States.

It should be noted that the agricultural income concerned in the Chapters mentioned so far is based on **macro-economic and national data**. The figures therefore reflect the average changes in agricultural income without any possibility of differentiating between regions and types of holdings. The actual level of income in some cases may deviate substantially from the averages given in this report.

Furthermore, indicators relate to the agricultural **branch**. When interpreting results, it should be remembered that to obtain the disposable income of agricultural holders, income from non-agricultural sources (other activities, remuneration, welfare benefits, property income) should be added and personal taxes and welfare payments deducted.

Although it is currently not possible to present harmonized data on the **total income of agricultural households** for the Member States, Eurostat published in the summer of 1992 the first report[6] of this type, presenting and commenting on the results available for eleven Member States (except Belgium), but without any comparison between them or aggregation to Community level. A new edition of this report will be published in 1994 with the latest available data from the twelve Member States. Chapter 8 of this report shows not only the latest methodological changes concerning the definition of an agricultural household ("narrow" and "broad" definitions) and the choice of socio-professional groups which will be the basis of comparison between households, but also the latest figures, differentiated by the definition used.

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5 For a definition see Eurostat: "Purchasing power standards and gross domestic product in real terms, results 1985", Theme 2, series C, Luxembourg 1988.

6 Eurostat: Total Income of Agricultural Households - 1992 Report, Theme C, Series C, Luxembourg.

2 CHANGES IN AGRICULTURAL INCOME IN THE COMMUNITY IN 1993 OVER 1992

2.1 Summary of the main results

Member States' estimates available in January-February 1994 show a fall of -1.2% in agricultural income as measured by real net value added at factor cost per Annual Work Unit (**Indicator 1**)[1], for the Community as a whole (including the unified Germany). The fall in real net income from agricultural activity of total labour input per AWU (**Indicator 2**) is expected to be -0.9%. The calculation of real net income per AWU of family labour input (**Indicator 3**) has not been made (the forecast of the compensation of employees for Germany was not possible on a comparable basis with those in other Member States).

As the Economic Accounts for Agriculture are not yet available for the unified Germany before 1992, it is not possible to compare the development in Indicators 1 and 2 of agricultural income in 1993 with the trend in these same indicators during previous years. Nevertheless, in order to have an idea of this trend in the Community over the last few years, and as is done in Chapters 5 and 6 for analysing long-term trends, the three indicators of agricultural income have been calculated by considering Germany in its territorial situation before 3 October 1990 (estimate of December 1993). Under these terms, Indicator 1 fell by -1.3% in 1993, after having fallen severely (-5.4%) in 1992 (revised figure). The stabilisation of agricultural income in 1990 and 1991 at a fairly high level after the steep rise of 1989 was thus supplanted by a clear deterioration in 1992. The fall in agricultural income in that year turned out to be even greater than first estimated (-3.5% in January-February 1993); the figures for some countries have been corrected sharply downwards (Germany and Greece). Indicators 2 and 3 of agricultural income fell by -1.0% and -2.2% respectively in 1993, following results of -6.4% and -10.2% in 1992 and +0.7% and -0.3% in 1991.

The development in agricultural income was very different depending on the Member State, though a number of factors affecting the overall situation in 1993 can be identified:

- the introduction of the reform of the Common Agricultural Policy (CAP) which, for certain products, resulted in lower support prices, measures designed to control production and the granting of new direct compensatory payments and upgrading of some existing aid;
- devaluations of green currencies following monetary realignments which have occured since September 1992 and which, as a consequence, in certain Member States have led to a raising of agricultural prices expressed in national currencies;
- inclement weather which affected the production of certain crops (fresh fruit and wine);
- major imbalances in certain sectors (pigs and wine).

These phenomena led to:

- a severe fall in the volume of crop production (-4.1%) particularly for wine (-12.1%), fresh fruit (-11.2%) and fresh vegetables (-4.1%) (these three products representing almost 45% of final crop production in 1992 and more than 20% of final agricultural production);
- a fall in the real prices of final agricultural production (-6.3%, principally due to real cereal prices which were -14.0% down and the real price of pig production which fell by -24.0%);

[1] Cf. *"Note on Methodology A.3"* on the method of calculating short-term changes for EUR12.

- a steep rise in subsidies which went up by +43.9% in real terms, thanks to the compensatory measures resulting from the reform of the CAP (and despite only 86% of these being taken into account within the agricultural income calculation for 1993).

Important note

For the first time, the unified Germany is taken into account

The estimated agricultural accounts for 1993 use, for the first time, data for the whole of Germany (referred to in the following as D16). These aggregated results for EUR 12 thus refer to the entire European Community. Nevertheless, data for unified Germany are, at the moment, only available for the years 1992 and 1993. Consequently, no comparison has been made between the development of Indicators 1 and 2 for the Community as a whole in 1993 with that of the same indicators for previous years. In addition, because of the special situation of agriculture in the five new Länder, it has not been possible to calculate compensation of employees on a comparable basis with that of the other Member States. For these reasons, income Indicator 3 has not been aggregated for the Community. As mentioned in Chapter 1, Chapters 2 and 3 on short-term analyses apply to the unified Germany. Nevertheless, in those chapters which present and analyse the data from a medium and long-term prespective, i.e. Chapters 5 and 6 analysing long-term trends, Chapters 7 and 8 on agricultural income levels and the total income of agricultural households as well as the tables in A1, A2 and A8 to A35, the agricultural accounts refer to Germany in its territorial situation before 3 October 1990 (referred to in the following as D11).

Introduction of the reform of the Common Agricultural Policy

The year 1993 was marked by the reform of the Common Agricultural Policy (CAP), which was decided upon in the Spring of 1992 and which entered into force for the 1993/94 marketing year (with the exception of oilseeds for which the new common organization of the market took effect was in the 1992/1993 crop year). The main objective of the CAP reform is to adjust agricultural production to internal and external demand.

The main measures adopted under this reform centre on the following three elements:

- a fall in the prices of agricultural products;
- measures designed to control production (limitation of the means of production and continuation of milk quotas);
- the granting of direct compensatory payments to producers (new direct compensatory aid and/or upgrading of some existing aid).

The reform of the CAP is essentially characterised by a change from price support policy to a policy based on direct income support. This new orientation of the CAP has led to major changes in the analysis of agricultural accounts: the fall in prices and production volumes has resulted in a clear decline in final production and gross value added at market prices. Nevertheless, the large sums paid as direct compensatory payments and by way of upgrading existing types of aid have resulted in a considerable increase under the subsidies heading. This increase in subsidies reflects the modified system of support to agriculture and not a change in the level of support to this economic sector. Given the new importance of subsidies as a component of agricultural income, it should be stressed they are included only insofar as they have actually been paid, as opposed to merely being payable. Thus only those subsidies actually paid during the 1993 calendar year are therefore taken into account in calculating agricultural income in 1993. Certain types of aid granted in respect of the 1993/94 crop year may not have been actually paid in 1993 and are therefore not included in the calculation of agricultural income in 1993. When the "subsidies" item was examined, and in order to make the analysis of agricultural income clear, the percentage of the total amount of aid under the reformed CAP recorded in agricultural income in 1993 is mentioned for each Member State and for the Community as a whole.

Table 2.1 **Changes in the three agricultural income indicators in the Community and Member States, 1991/1990, 1992/1991 and 1993/1992 (in %)**

Member State	Indicator 1			Indicator 2			Indicator 3		
	1991	1992	1993	1991	1992	1993	1991	1992	1993
B	0.1	-9.0	-0.7	-3.0	-11.6	-3.9	-4.3	-9.4	-5.3
DK	-8.3	-13.0	6.5	-23.0	-34.9	19.4	-34.6	-64.4	63.3
D	-	-	-14.8	-	-	-21.2	-	-	-
GR	36.4	-17.1	-0.1	36.6	-17.7	-0.2	38.8	-18.7	-0.4
E	4.3	-11.7	22.5	2.3	-15.2	27.5	-0.4	-17.3	35.3
F	-6.6	0.1	-3.4	-7.7	-0.1	-4.0	-10.4	-1.4	-6.5
IRL	-5.7	19.7	3.3	-5.9	23.1	5.8	-7.4	24.7	6.1
I	7.4	-6.2	-7.1	9.6	-7.2	-6.5	19.8	-20.9	-12.7
L	-13.1	-4.8	-6.2	-16.7	-6.9	-8.5	-16.0	-9.2	-8.0
NL	-0.6	-13.4	-11.7	-1.8	-15.9	-14.0	-1.2	-21.5	-20.5
P	-9.6	-13.9	-10.7	-11.4	-18.0	-12.0	-15.4	-22.1	-18.1
UK	-5.5	5.8	15.1	-2.0	11.2	23.6	-5.1	19.6	37.8
EUR 12	-	-	-1.2	-	-	-0.9	-	-	-

Expressed in nominal terms, the value of **total final agricultural production** fell considerably in 1993 (-4.7%, this breaking down into -2.7% for nominal prices and -2.1% for production volume). The nominal value of **crop production** declined by -6.8% owing to a fall in production volume (-4.1%, this affecting a large number of products, paricularly wine, fresh fruit, oilseeds, potatoes and fresh vegetables) and lower nominal prices (-2.9%, this being due to wine and particularly cereals, since nominal prices for most of the major products actually increased or at least stayed stable). The nominal value of **animal production** fell by -2.7%, because of lower nominal prices (-2.6%), production volume having stabilised (-0.1%, with a steep fall in cattle production and, to a lesser degree, a fall in sheep production together with a stabilisation of milk and poultry production and a renewed rise in pig production). The development in the nominal prices of animal production was also slightly uneven: the nominal prices of all animal products increased with the exception of pig prices which plummeted by -21.4%.

While the value of crop production rose regularly from "1981" representing in the end slightly more than half that of total final production, it only made up around 48% in 1993.

If the effects of inflation[2] are taken into account, the value of final production fell in real terms by -8.3% under the effect of **lower real prices** (-6.3%) and a lower volume of production (-2.1%). The fall in the real value is a little less pronounced for animal production (-6.1%, with a major decline in real prices of -6.0%), but more marked for crop production (-10.5%) under the joint effect of smaller volumes and price falls which were -6.7% on average in real terms.

Although the use of intermediate consumption items declined by -1.4% in volume, the value remained stable in nominal terms owing to price increases (+1.4%). For the fourth year in succession, these price increases led to a clear deterioration in the "price scissors"[3] in Community agriculture (-4.1%); the apparent productivity of intermediate consumption[4] fell only slightly (-0.7%). The rise in the price of intermediate consumption was nevertheless below inflation and its value did in fact decline by -3.5% in real terms.

The developments in intermediate consumption and final agricultural production led to a significant fall in **gross value added at market prices (GVAmp)** of -8.5% in nominal terms or -12.1% in real terms. The

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2 Cf. *"Note on Methodology A.4"* on the method of calculating data in real "deflated" terms for EUR 12. The rates of inflation used for 1993 in the Member States are given in Table 2.2.

3 The "price scissors" (the term "terms of trade" is also used) in agriculture is a measure of the relationship between the index of nominal prices of total final production and the index of nominal prices of intermediate consumption.

4 The productivity of intermediate consumption is measured by the ratio between the index of total final production volume and the index of the volume of intermediate consumption.

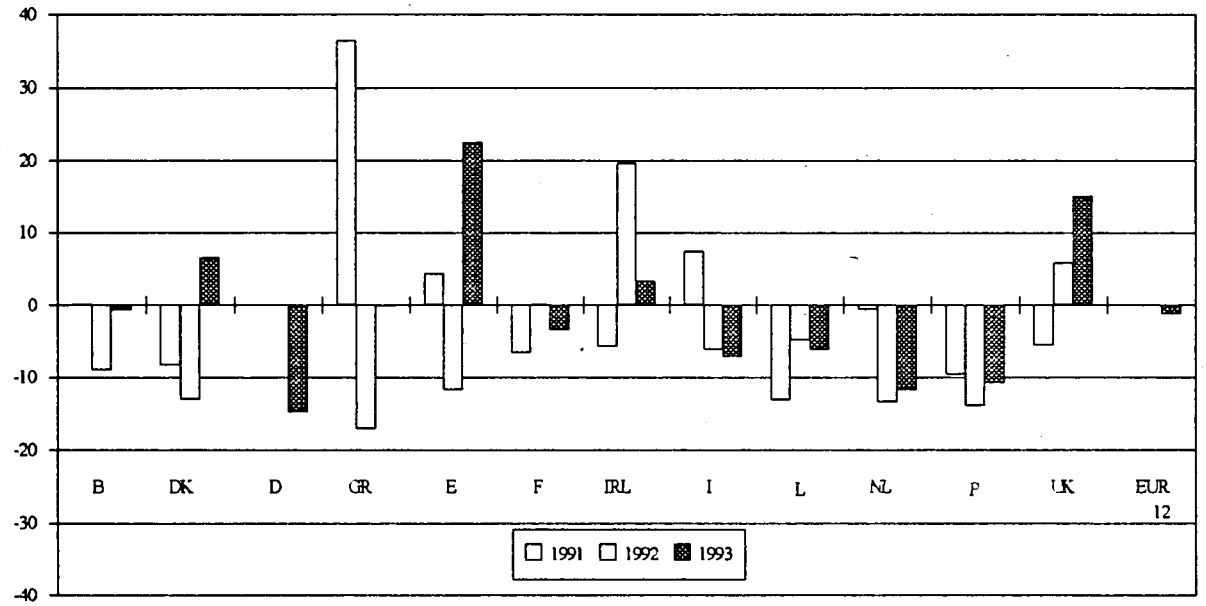
considerable rise in subsidies[5], which went up by +49.9% in nominal terms for EUR 12 (or +43.9% in real terms) corresponds mainly to the introduction and reinforcement of measures to compensate for the reduction in price and market support in line with the CAP reform. By adding subsidies and deducting **taxes linked to production**, which fell by -14.0% in nominal terms (or -17.3% in real terms), **gross value added at factor cost (GVAfc)** is obtained, which was down -0.6% in nominal terms (and -4.5% in real terms).

Similarly, by deducting **depreciation** (+1.2% in nominal terms and -2.4% in real terms) from GVAfc, **net value added at factor cost (NVAfc)** is obtained which was down -1.2% in nominal terms for EUR 12 and -5.2% in real terms.

The reduction of -4.0% in the **total agricultural labour input** expressed in annual work units attenuated the impact of this fall in value added on Indicator 1, which nevertheless fell by -1.2%.

The moderate change in expenditure on **rent** and particularly the considerable fall in **interest** payments (+1.4% and -4.2% respectively in nominal terms; the falls in real terms are -2.6% and -7.6%, which is much greater than the reduction in NVAfc) explains in part the decline in **Indicator 2** (-0.9%) being slightly below that of Indicator 1. **Total net income**, the basis of Indicator 2 did in fact fall by -0.8% in nominal terms (as opposed to -1.2% for NVAfc) and by -4.9% in real terms (compared with -5.2% for NVAfc).

Figure 2.1 **Changes in agricultural income Indicator 1 in the Community and Member States between 1991 and 1993 (in %)**



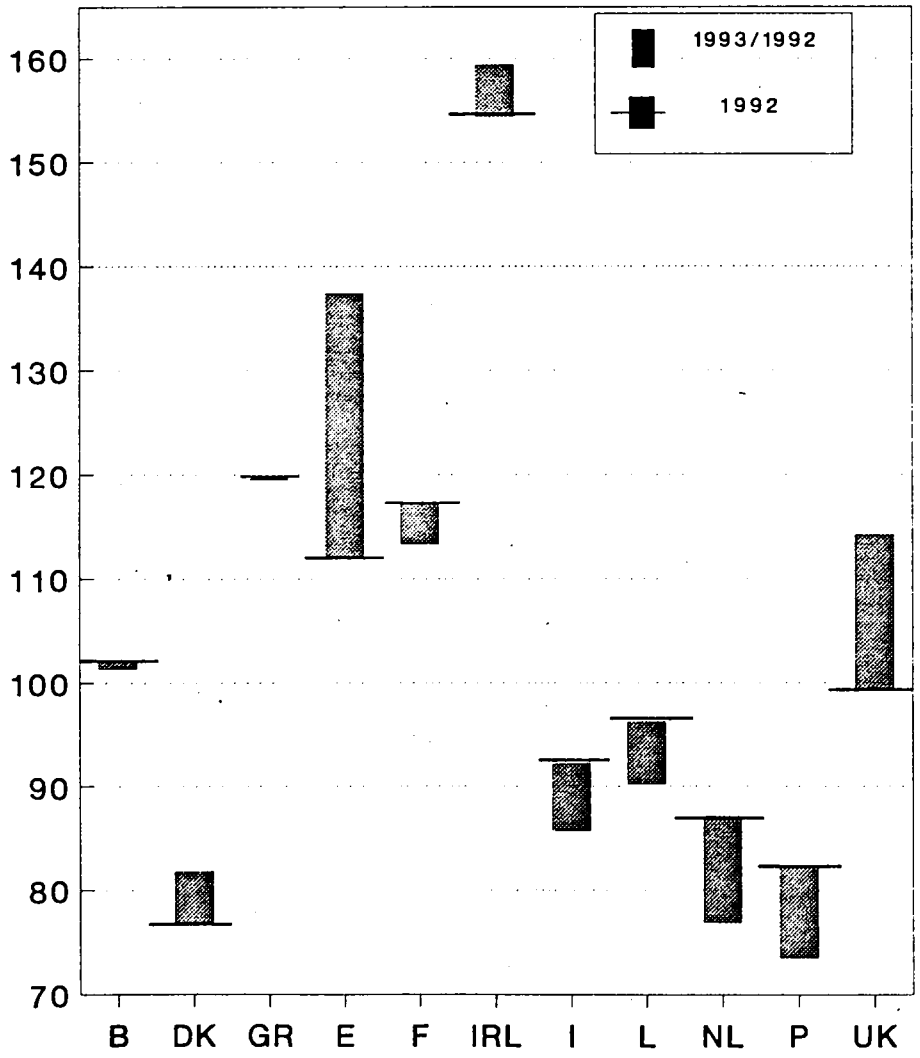
As comparable data are not available for Germany, it was not possible to calculate the change in the item **compensation of employees** for the Community as a whole, or for the changes in the resulting income aggregates, i.e. net family income and Indicator 3 of agricultural income. It can be said, nevertheless, that for the other 11 Member States as a whole, the compensation of employees stabilised in nominal terms (0.0%), which represents a fall in real terms (-3.5%), leading to an increase in **net family income** of +3.8% (or -0.7% in real terms). With a fall of -2.6% in the **family labour input, Indicator 3** of agricultural income increased

[5] As recorded in the Economic Accounts for Agriculture, subsidies comprise only direct current transfers to agriculture, excluding in particular price support (the effect of which appears in producer prices themselves), investment aids and aids paid to the agri-foodstuffs industry, even if these are designed to support agricultural production. The trend in subsidies is thus not fully representative of the trend in overall support for Community agriculture.

by +1.9% on average for the 11 Member States (EUR 12 excluding Germany)[6] It is clear from this result that the severe decline in agricultural income in Germany in 1993 had a considerable effect on the trend in agricultural income in the Community overall (the same applies for Indicators 1 and 2).

Agricultural income varied between **Member States** in 1993, firstly because of differences at the outset generated by developments in previous years and secondly because of the diversity of structures and agro-economic trends in the Community. Income as measured by Indicator 1 fell by more than -10% in 1993 in Portugal, the Netherlands and Germany (the greatest fall in 1993). There were clear declines in Italy and Luxembourg and, to a lesser degree, in France. Agricultural income remained stable in Greece and Belgium and only increased in 1993 in four Member States: Ireland and Denmark (for the latter country, the 1993 rise was relatively slight, with the cumulative trend over two years being negative), the United Kingdom and Spain (the greatest rises in 1993). Whereas Ireland and the United Kingdom are the only countries to have two consecutive upward years, three Member States (Luxembourg, the Netherlands and Portugal) saw their third successive year of decline (the same phenomenon can be seen in Belgium if Indicators 2 and 3 are considered).

Figure 2.2 **Indicator 1 in the Community and Member States, indices for 1992 (base 1984-1986 = 100) and changes in 1993**



[6] Although they are not directly comparable in 1993, the fluctuations in Indicator 3 are usually stronger (both upward and downward) than in Indicator 2 though the latter are stronger than those in Indicator 1 since the same absolute variations (particularly production value) apply to a smaller residual aggregate; in "1992" for example, net family income (the basis of Indicator 3) for EUR 12 made up only 50% of gross value added at market prices as opposed to 71% for total net income (basis of Indicator 2) and 87% for net value added at factor cost (the basis of Indicator 1).

Figure 2.2 puts the changes in agricultural income in 1993 into a **medium-term** perspective.

The index of net value added at factor cost in real terms and by Annual Work Unit (Indicator 1) is calculated from a base=100 for the average of the three years 1984 to 1986 ("1985"); the graph takes the value of this index in 1992 as its departure point and indicates its change in 1993, as well as the new level of the index for 1993 in the Member States.

To interpret the index values shown on Figure 2.2, account must be taken of the fact that income levels cannot be compared between Member States, but only to compare the development since the middle of the 1980s.

In 1992, the highest indices with respect to "1985") were those of Ireland, Greece, France and Spain which were more than +10% higher than their base level in "1985". Luxembourg, Italy, the Netherlands and particularly Portugal and Denmark (nearly -20%) saw their agricultural income fall in this period, the other two Member States (Belgium and the United Kingdom) were fairly close to their "1985" level. Germany, not represented on Figure 2.2, was at a level fairly close to that of the base year if D11 is considered.

Adding the changes in 1993, Ireland is seen as the country in which agricultural income has gone up most since "1985" (+59.4%), other favourable trends (of the order of +15% and more) being obtained in Spain, Greece, the United Kingdom and France. The agricultural income situation continues to worsen in Luxembourg, Italy, the Netherlands and Portugal but has improved slightly in Denmark. There was a severe drop in agricultural income (almost -20% since "1985") in Germany (D11).

2.2 Final agricultural production

The fall in total final agricultural production in volume terms in 1993 (-2.1%) is the most significant since 1980. Nevertheless, there are major differences depending on the product (described in detail below) and Member State (see Table 2.2). The three steepest declines (Luxembourg, France and Portugal), from -3.9% to -8.6%, are due largely to crop production (from -7.2% to -23.9%). With the exception of Denmark and Greece in particular, crop production had a negative impact on the devlopment in the volume of final production. The increases in final production volume in three Member States (Netherlands, Belgium and Denmark from +1.0% to +7.2%) reflect positive results for average crop and animal production. The volume of production stabilised in Greece in 1993. The falls in five Member States (Spain, Ireland, Germany, Italy and the United Kingdom), ranging from -1.2% to -2.9%, result from lower crop and animal production (with the exception of Italy where the volume of animal production increased).

In nominal terms, the prices and values of total final production declined on average (by -2.7% and -4.7% respectively), but inflation differences render inter-country comparisons somewhat meaningless. In real terms, agricultural prices fell on average by -6.3% for the Commuity, leading to a decline in the real value of production of -8.3% (the trend since 1980 is of the order of -2.3% per annum). This decline in real prices is due to both the real prices of crop production (-6.7%) and those of animal production (-6.0%). The average prices of final production fell in real terms in all Member States (except in Ireland and the United Kingdom where the increase in the real prices of animal production offset the fall in the real prices of crop production) and fairly evenly around the Community average (the declines range from around -4% to -11%, with the exception of Ireland and the United Kingdom as mentioned above, and Spain).

The real value of production stayed stable in Ireland, fell slightly in Spain and the United Kingdom, declined at rates close to the Community average in most Member States (Belgium, Denmark, Greece, Italy, Luxembourg and the Netherlands) and plummeted by more than -10% in France, Germany and Portugal. It should be pointed out that these trends mostly determine those of real net value added at factor cost and hence Indicator 1 of agricultural income. This remained true in 1993, though to a lesser degree. In fact, although subsidies had a strong influence on agricultural income, the groupings of countries obtained by classification according to

the rate of change in the real value of agricultural production and by the change in Indicator 1 are similar to each other (with the exception of Denmark and France).

The inflation rates (measured by the implicit price index of gross domestic product at market prices), which served to calculate prices and values in real terms for 1993 (see Table 2.2), developed differently depending on Member State although the general trend was only a slight decrease over the rate in 1992. The inflation rate over 1992 went up in two Member States only (France and Ireland) whereas it fell clearly in two others (Portugal and Spain) and more moderately in the other seven (Belgium, Denmark, Greece, Italy, Luxembourg, the Netherlands and the United Kingdom). The highest rates were found in three Member States from the south of the Community and in Germany (between +4.0% and +13.5%), whereas Denmark and the Netherlands had the most modest rates (below +2%), those of the other Member States being between +2.7% and +3.9%.

Table 2.2 **Changes in volumes, prices and values of final agricultural production in the Community and Member States in 1993 by comparison with 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Volume	3.0	7.2	-2.9	0.0	-1.2	-4.0	-2.2	-2.9	-3.9	1.0	-8.6	-2.9	-2.1
Nominal price	-5.7	-10.5	-7.0	7.1	3.6	-6.6	5.0	-0.8	-0.8	-6.2	-1.9	3.1	-2.7
Nominal value	-2.8	-4.0	-9.7	7.1	2.3	-10.4	2.7	-3.7	-4.7	-5.3	-10.3	0.1	-4.7
Real price	-8.3	-11.5	-11.1	-5.6	-0.3	-9.1	2.2	-4.6	-3.9	-7.8	-8.3	0.2	-6.3
Real value	-5.5	-5.1	-13.7	-5.7	-1.5	-12.8	0.0	-7.4	-7.7	-6.9	-16.2	-2.7	-8.3
Price index GDPmp	2.8	1.1	4.6	13.5	3.9	2.8	2.7	4.0	3.2	1.7	7.0	2.9	-

The following brief commentaries cover the five main products or groups of products in Community agriculture, whose individual shares (as measured in current ECU for "1992") vary between 1.3% (oilseeds) and 16.7% (milk) of final production and which as a whole comprise 92.6% (no other product exceeding 1%). In all (i.e. including the products which are not commented on), crop production accounted for 49.2% and animal production for 50.4%[7].

2.2.1 Crop production: overall, major declines in harvests and real prices

Taken as a whole, crop production in the Community fell by -6.8% in nominal value in 1993, which runs counter to the long-term trend of +3.2%. This considerable decline is due to a lower production volume (-4.1%) and lower nominal prices (-2.9%). In real terms, producer prices fell by -6.7% and the value of crop production by -10.5% which would indicate, together with 1992 when the real value of crop production fell sharply, a clear break with the trend since 1980 (which was -3.7% and -1.7% per annum respectively).

The trends in the crop sector are clearly very different from one product to another, particularly because of differing crop sensitivity to climatic variations and the diversity of market situations; in addition, the changes observed in 1993 depend on the production levels and prices obtained in 1992. This diversity of trends even in respect of the same product led to considerable discrepancies in the overall development of crop production between Member States

In real values, crop production rose in 1993 only in Denmark (+7.2%). It fell in all the other Member States and particularly in four of them: Germany and France where real prices declined by more than -10% and in Portugal and Luxembourg where production volume plummeted by almost -20% (see Table 2.3).

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[7] The difference (0.4% of final production) corresponds to "contract work at the agricultural producer stage" (basically new plantings of fruit trees and vines; the figure can be negative for certain Member States) and a very small adjustment item for Italy.

Table 2.3 **Changes in volumes, prices and values of final crop production in the Community and Member States in 1993 over 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Volume	0.4	20.4	-4.9	0.3	-1.8	-7.2	-12.8	-5.3	-23.9	0.4	-18.3	-4.5	-4.1
Nominal price	2.0	-10.0	-6.7	6.3	4.8	-8.5	0.6	-3.7	1.0	-0.3	2.7	-2.3	-2.9
Nominal value	2.4	8.4	-11.3	6.6	2.9	-15.1	-12.3	-8.8	-21.8	0.1	-16.1	-6.7	-6.8
Real price	-0.8	-11.0	-10.8	-6.4	0.9	-10.9	-2.1	-7.4	-2.1	-2.0	-4.0	-5.1	-6.7
Real value	-0.4	7.2	-15.2	-6.1	-0.9	-17.4	-14.6	-12.3	-24.2	-1.6	-21.6	-9.3	-10.5

An examination of the changes for the main groups of products (see Table 2.4) shows that harvests were widely down over 1992 for fresh fruit, grape must and wine, fresh vegetables, potatoes and oilseeds. The development in real prices for the whole of crop production, generally downwards, did not compensate for the lower volume and therefore the real value of production declined (with the exception of oilseeds). These price falls either result from markets in structural or economic imbalance (the case of numerous products) or from a change in the common organisation of the market (cereals and protein crops). One should note that the reduction in the cereals harvest may seem small in view of the restrictive measures of the CAP reform (especially set-aside). Nevertheless, the result may reflect the severe reduction of the 1992 harvest in certain countries (Germany, Spain, United Kingdom).

The quantity of **cereals** produced (10.4% of the final agricultural production of EUR 12 in "1992") was lower in 1993 (-1.4% for EUR 12, the only notable rises being in Denmark, Germany and Spain). This result must be seen in connection with the measures contingent upon the CAP reform: reduction of institutional prices and obligatory set-aside of 15% of all the areas devoted to cereals, oilseeds and protein crops (with the exception of small scale producers) in order to benefit from direct compensatory aid. It would seem that the clear increase in yield limited the impact of the smaller area under cereals on production volume. Although this fall in production volume was considerable in France and the United Kingdom (-10.8% and -11.2% respectively), certain countries registered substantial increases (Germany and Spain in particular, but also Belgium, Denmark and Greece). Nevertheless, these Member States experienced difficult climatic conditions (drought) in 1992 which led to production shortfalls, and this reflected their increases in 1993. Real prices fell by -14.0%, pulled by the reduction in institutional prices. This major decline in real prices is found in most Member States though to differing degrees. The devaluation of several currencies limited the impact of reduced institutional prices on prices expressed in national currency in some Member States (this applies in particular, amongst the main producers of cereals, to the United Kingdom, Italy and Spain). The fall in the real value of cereals was -15.2%, there being a severe drop in France (-33.0%).

Table 2.4 **Changes in the volumes, prices and values of the main items of crop production in the Community in 1993 over 1992 (in %)**

	Volume	Nominal price	Nominal value	Real price	Real value
Cereals	-1.4	-10.7	-12.0	-14.0	-15.2
Potatoes	-11.6	3.5	-8.5	-0.4	-11.9
Sugar beet	1.0	0.2	1.2	-3.4	-2.4
Oilseeds	-8.6	24.6	13.9	20.5	10.1
Fresh vegetables	-4.1	-1.0	-5.1	-4.8	-8.8
Fresh fruit (*)	-11.2	-2.7	-13.5	-7.0	-17.4
Grape must and wine	-12.1	-4.9	-16.4	-8.2	-19.3
Olive oil	9.7	4.4	14.5	-1.5	8.1
Flowers and ornamentals	0.8	3.2	4.0	0.0	0.8
Crop output	-4.1	-2.9	-6.8	-6.7	-10.5

(*) Including citrus fruit and grapes.

The harvest of **fresh fruit**[8] (6.5% of the final agricultural production of EUR 12 in "1992"), which had risen steeply in 1992, fell once again. This applied in particular to Germany, France, Italy, Portugal and Luxembourg and to a lesser degree Spain. The changes in real prices (-7.0% for EUR 12) often simply accentuated the negative impact of poor harvests on the real value of production, except in France and Luxembourg. Thus for example, with the exception of France and the Benelux countries, the real value fell in all Member States.

As for fresh fruit, the production of **grape must and wine** (5.3% of the final agricultural production of EUR 12 in "1992") decreased considerably in volume terms in 1993 (-12.1%) following the significant rise in 1992. Although it was common to all Member States, this decline in production was moderate in Greece, of the order of -10% in Italy, France and Germany and more than -20% in Spain, Luxembourg and Portugal. Despite the lower production, the scale of stocks as well as the fall in direct human consumption weighed on real prices, which declined in most producer countries (-8.2% for EUR 12). Thus, whereas in 1992 this item was one of the few types of crop production for which the real value increased, wine underwent the greatest fall in real value in 1993 (-19.3%).

The slightly larger volume of **sugar beet** (2.4% of final agricultural production in EUR 12 in "1992") at Community level (+1.0%) results from contrasting developments; the increases in Germany and Spain offset the falls in Italy and the United Kingdom, production being stable in France. The fall in real prices continued, though at a slower rate (-3.4%). It was not, however, completely offset by the trend in volume, the real value of production declining by -2.4%. The production of **potatoes** (2.0% of final agricultural production in EUR 12 in "1992") plummeted in 1993 by -11.6%. This result is common to all Member States with the exception of the Netherlands. This poor harvest led to much higher real prices in some countries, although, taking the Community as a whole, real prices stagnated on average (-0.4%), leading to a decline in real value of -11.9%.

For the second year in succession, the production of **oilseeds** (1.3% of final agricultural production in EUR 12 in "1992") decreased in volume terms. This fall (of -8.6%) in 1993 for the Community was felt in most of the Member States with the notable exception of Germany and, to a lesser degree, Denmark. It would seem that the new system of obligatory set-aside of land has been implemented at the expense of oilseeds. The situation varied widely from country to country, however (clear falls in France, Italy and Spain but stability in the United Kingdom and a rise in Germany). Real prices had fallen steeply in 1992 following the establishment of a new common market organisation. Benefiting in 1993 from sustained demand on the world market and a firm dollar, they rose in real terms by +20.5%.

After the severe fall in the volume of **olive oil** in the previous year (2.1% of final agricultural production of EUR 12 in "1992") and because of considerable annual fluctuations connected with climatic and agronomic factors, production volume rose by +9.7% (with a notable increase in Italy and, to a lesser degree, in Spain but despite a clear fall in Portugal). The decline in real prices (-1.5%, mainly due to plummeting prices in Italy) limited the rise in real value to an average of +8.1%.

For **fresh vegetables** and **flowers and ornamental plants** (9.7% and 4.2% respectively of final agricultural production of EUR 12 in "1992"), the changes in volume at Community level in 1993 (-4.1% and +0.8% respectively) are the result of fairly homogeneous national trends. Fresh vegetable harvests were lower almost everywhere, the exception being in the United Kingdom, varying between -1.3% and -6.9% for most Member States, with production plummeting by -10.0% in Italy. The production volume of flowers varied little in most Member States, the changes ranging from -0.6% in Denmark (the only fall) to +1.8% in Italy.

The real prices of fresh vegetables were either slightly down or remained stable in a large number of Member States. Italy and Greece had a more pronounced setback of the order of -10%. These developments led to a

[8] Fresh fruit as used in this report comprises citrus fruit, tropical fruit and dessert grapes.

deterioration in the real value of fresh vegetables of -8.8% - a mediocre result in relation to the long-term trend. The prices of flowers was higher in nominal terms (+3.2%) but remained stable in real terms (0.0%), despite a clear fall in Greece and a firm upward trend in Spain.

2.2.2 Animal production: fairly general stagnation in quantities produced and clear deterioration in real prices

The most significant development in the animal production sector in 1993 was the persistent crisis in the pig sector. This sector was subject to a major structural imbalance on the Community market; despite the fact that supply was far greater than demand, production continued to increased. In addition, the worrying veterinary situation in certain Member States hampered trade since the Spring of 1993. The results of pig production affected the average for all animal production, the real prices and value of which went down by -6.0% and -6.1% respectively.

The changes in the animal sector are much more even between countries than in the crop sector; this applies both to volumes and prices in real terms (nominal prices differ mainly because of inflation - see Table 2.5). Climatic fluctuations have no direct influence and the markets are generally more unified, the impact of the common organisation of the market being fairly rigid for the main product (milk), and the product structures are fairly similar from one country to another: the first three types of animal production (milk, cattle and pigs) are the same in 11 of the Member States.

The real value of animal production increased in three Member States (Italy, United Kingdom and Ireland), mainly because of a clear upswing in real prices (Ireland and the United Kingdom) or in volume (Italy). In the nine other Member States, the changes in real value were generally negative. These changes generally followed price movements since volumes changed little, in comparison to prices, over 1992 in these nine countries (with the exception of Belgium).

Table 2.5 **Changes in the volumes, prices and values of final animal production in the Community and Member States in 1993 over 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Volume	4.8	2.2	-1.4	-0.7	-0.5	-0.3	-0.6	0.9	2.0	1.4	-0.3	-1.8	-0.1
Nominal price	-10.0	-10.8	-7.5	9.1	2.0	-4.8	5.6	3.6	-1.2	-10.4	-5.2	6.5	-2.6
Nominal value	-5.7	-8.8	-8.8	8.3	1.5	-5.1	5.1	4.5	0.8	-9.1	-5.4	4.5	-2.7
Real price	-12.5	-11.7	-11.5	-3.9	-1.8	-7.4	2.9	-0.4	-4.3	-11.9	-11.4	3.5	-6.0
Real value	-8.3	-9.8	-12.8	-4.6	-2.3	-7.7	2.3	0.5	-2.4	-10.6	-11.6	1.6	-6.1

Examining the changes by product (see Table 2.6) shows that production volumes again rose for pigs, stabilized for milk and poultry and decreased for cattle, sheep/goats/ and eggs. Real prices for pigs declined substantially (-24.0%, the only type of production to have a fall in nominal prices) and, less so, for milk and poultry. On average for the Community, real values declined for all products, within a bracket of -1.2% to -3.0%, with the exception of pigs whose real value plummeted by -20.2%.

The development in the volume of production of beef cattle (including calves) (11.9% of the final agricultural production of EUR 12 in "1992") was fairly consistent throughout the Community, since it declined in ten Member States and rose only in Belgium and Italy. The reduction in Community production is mainly due to its cyclic nature, accentuated by a certain retention of female animals on the part of the producers in 1992, in connection with the system of aid for suckler cows. The decline in institutional prices, the result of the reformed CAP, had little incidence on real prices which rose by +3.4% thanks to the reduced supply. As the percentage fall in volume was greater, the real value of cattle production fell by -1.2%.

Pig production (10.8% of the final agricultural production of EUR 12 in "1992") once more increased in volume terms (+5.0%). This rise was fairly even in the Community, since only two Member States recorded a fall (Germany and Greece). Nevertheless, owing to a major imbalance in the market and health related problems, real prices collapsed (-24.0%), leading to a decline in the real value of the final production of pigs of -20.2%.

Table 2.6 **Changes in the volumes, prices and values of the main types of animal production in the Community in 1993 over 1992 (in %)**

	Volume	Nominal price	Nominal value	Real price	Real value
Cattle (including calves)	-4.4	7.0	2.2	3.4	-1.2
Pigs	5.0	-21.4	-17.5	-24.0	-20.2
Sheep and goats	-3.3	5.3	1.8	0.3	-3.0
Poultry	0.7	0.9	1.7	-2.6	-1.9
Milk	0.2	1.2	1.4	-2.3	-2.1
Eggs	-3.0	5.2	2.1	1.2	-1.8
Animal output	-0.1	-2.6	-2.7	-6.0	-6.1

Following the rises in production recorded in 1991 and 1992, Community production of **sheep and goats** (2.0% of the final agricultural production of EUR 12 in "1992") went down by -3.3% in 1993. The fall is apparent in all Member States with the exception of Ireland, Germany and Denmark where production stabilised. Real prices were steady (+0.3%) thanks to the balance of upward movements in the United Kingdom and Spain and steep falls in France and Greece.

The production of **poultry** (4.8% of the final agricultural production of EUR 12 in "1992") stabilised in 1993 (+0.7%), having undergone sustained increases during the past few years. The development of real prices was relatively varied since they rose in three of the main producer countries (Italy, United Kingdom and Spain) but fell considerably in Germany and particularly in France. On average, real prices and hence real value fell by -2.6% and -1.9% respectively.

The production of **eggs** (2.5% of the final agricultural production of EUR 12 in "1992") on average declined by -3.0% in volume terms, following falls in two of the main producer countries (Germany and Spain), production being stable in the other countries. In the face of reduced supply, prices stabilised in real terms (+1.2%) which led, in conjunction with the reduced volume, to a real value of production which was -1.8% lower than 1992.

Finally, the collection of **milk**, the major agricultural product at Community level (16.7% of the final agricultural production of EUR 12 in "1992") remained constant on average in 1993 (+0.2%), the changes being fairly homogeneous (though there was a steeper fall in Portugal and considerable growth in Greece). Milk quotas were kept at their 1992 level in 1993 in most of the Member States. Benefiting from the stability of production and the fall in intervention stocks of butter and skimmed milk, prices rose slightly in nominal terms by +1.2%. Nevertheless, they fell, in real terms, in most countries and by -2.3% on average, the result being a clear decline in real production value (-2.1% for EUR 12).

2.3 Intermediate consumption and gross value added at market prices

The nominal value of the intermediate consumption of agriculture in the Community is estimated to have remained quite stable in 1993, with a volume fall of -1.4% compensated by nominal prices increasing +1.4%. This rise in nominal prices was nevertheless lower on average than inflation, so that the value of intermediate consumption would have fallen in real terms by -3.5%, following an average decline in real prices of -2.1% for

EUR 12. It is worth noting that the variations in price and value are higher than those observed during the last ten years at the Community level.

Table 2.7 **Changes in the volumes, prices and values of intermediate consumption, and changes in its productivity and in the "price scissors" in the Community and Member States in 1993 over 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Volume	1.8	-0.3	-4.5	-0.7	-3.3	0.1	2.1	-1.1	-0.6	0.4	-9.5	0.0	-1.4
Nominal price	-0.4	-0.3	0.4	12.5	2.8	-1.1	0.0	7.1	-3.8	-3.0	2.4	3.5	1.4
Nominal value	1.4	-0.6	-4.1	11.7	-0.6	-1.0	2.1	5.9	-4.3	-2.6	-7.3	3.5	0.0
Real price	-3.1	-1.4	-4.0	-0.9	-1.1	-3.8	-2.6	3.0	-6.8	-4.6	-4.3	0.6	-2.1
Real value	-1.3	-1.7	-8.3	-1.6	-4.3	-3.7	-0.6	1.8	-7.3	-4.2	-13.4	0.6	-3.5
"Productivity"	1.1	7.6	1.6	0.7	2.1	-4.1	-4.2	-1.9	-3.3	0.6	1.0	-2.9	-0.7
"Price scissors"	-5.3	-10.2	-7.4	-4.8	0.8	-5.6	5.0	-7.4	3.0	-3.4	-4.2	-0.4	-4.1

The change in the **volume** of intermediate consumption is fairly even among the Member States (see Table 2.7), since it lies between -1.1% and +2.1% in nine of them (there is less than 1 percentage point difference for six of them). As in 1991 and 1992, there was a clear fall in Portugal (-9.5%). Germany and Spain also recorded a significant decline in the volume of intermediate consumption. The development in **prices** of intermediate consumption in real terms (comparisons in nominal terms are not very meaningful because of inflation differences) were divided between the Member States in a similar way to volumes; they were very close to each other for nine countries (between -0.9% and -4.6%), though they are extremely negative in Luxembourg (-6.8%) and positive in the United Kingdom and Italy (+0.6% and +3.0% respectively).

The changes in the **real value** of intermediate consumption were fairly close to the Community average (-3.5%) in seven Member States (between -0.6% and -4.3%), but positive for the United Kingdom and Italy (+0.6% and +1.8% respectively) and clearly negative for Luxembourg, Germany and Portugal (-7.3%, -8.3% and -13.4% respectively).

Comparing the changes in intermediate consumption with those in final production provides a measure of the change in productivity of the two (ratio of volumes) and in the "price scissors" for agriculture (ratio of nominal prices). As the decline in production in 1993 is fairly high in relation to the long-term trend and that intermediate consumption is normally not particularly variable, it is normal to find that the productivity of this item has declined to some extent.

The **productivity of intermediate consumption** thus fell on average by -0.7% in the Community though there are still major differences depending on the Member State. Five Member States had a significant deterioration (from -2.9% to -4.2%), whereas it improved in seven others, though less steeply on average and in absolute terms (from +0.6% to +7.6%). Portugal is atypical once again, as the use of intermediate consumption went down considerably leading to an improvement in productivity (+1.0%) despite the clear reduction in production.

The **"price scissors"** deteriorated considerably (-4.1% for EUR 12) and more uniformly since it was found to be lower in nine Member States (between -0.4% in the United Kingdom and -10.2% in Denmark). However, it improved in Spain, Luxembourg and Ireland, these being Member States in which the nominal prices of final production rose or remained level.

In all the Member States, **animal feedingstuffs** constituted the main component of intermediate consumption (their share for EUR 12 in "1992" being 39.3%). This is also the only group of intermediate consumption items which were used more in 1993 in volume terms (+0.5% on average, though figures were down in Italy,

Spain, Greece, Luxembourg and Germany; the medium-term trend for EUR 12 is +0.7% per annum). This results probably from the fall in average prices in real terms (-3.2%) but particularly from the strong rise in pig production. In real values, the reduction in the consumption of feedingstuffs was -2.7% for EUR 12.

Table 2.8 **Changes in volumes, prices and values of the main components of intermediate consumption in the Community in 1993 over 1992 (in %)**

	Volume	Nominal price	Nominal value	Real price	Real value
Energy and lubricants	-1.5	6.0	4.3	1.7	0.2
Fertilizers and soil improvers	-7.0	-3.3	-10.0	-6.6	-13.1
Feedingstuffs	0.5	0.2	0.7	-3.2	-2.7
Material, tools and repairs	-1.6	3.8	2.1	0.2	-1.5
Intermediate consumption	-1.4	1.4	0.0	-2.1	-3.5

The use of **fertilizers and soil improvers** (9.0% of intermediate consumption for EUR 12 in "1992") fell considerably in 1993 (-7.0%, down in all Member States except Ireland), accentuating a trend which has been apparent for six years now and which appears to indicate a lasting change in farmer behaviour. This is equally likely with the obligatory set-aside for arable crops. The real prices of fertilizers fell on average by -6.6% in the Community. This reduction was more or less common to all the Member States except Italy where it remained stable. In real values, the reduction reached -13.1% as a Community average.

The volume of **energy and lubricants** purchased by Community agriculture (10.7% of intermediate consumption for EUR 12 in "1992") fell by -1.5% in 1993 (with changes fairly close to the Community average for most Member States with the exception of Germany, Greece and particularly Portugal where the decline was greater), which is far below the medium-term trend. Prices went up by +1.7% in real terms but the real value remained stable (+0.2%).

The purchases of **equipment and small tools and maintenance and repair costs** (12.4% of intermediate consumption for EUR 12 in "1992") declined in volume terms by -1.6% (with slight changes in all Member States except Germany, which had a steep fall, Spain, with a significant rise and Portugal with a severe reduction). Despite an increase of +3.8% in nominal terms, prices stabilised in real terms (+0.2%) and the real value fell by -1.5%.

The stabilisation of the nominal value of intermediate consumption (0.0%), together with the major fall in the nominal value of final production (-4.7%) led to a reduction in **gross value added at market prices (GVAmp)** of -8.5% as a Community average. In real terms, the reduction in the value of intermediate consumption (-3.5%) was less steep than that of final production (-8.3%), leading to a clear decline of -12.1% in GVAmp. It will be seen that this development, which is clearly more negative than in the long-term (-2.5% as an annual average since 1980), is the result of mediocre production results (owing to declining real prices and volumes), whereas intermediate consumption followed a more regular trend.

The development in gross value added at market prices differs according to the Member State (cf. Table 2.9). It depends essentially on the changes in final production and intermediate consumption but it is also affected by the relative importance of the latter item. The share of intermediate consumption can in fact differ from one Member State to the other depending on the dominant types of production and the degree of farming intensity. In "1992" for example, the proportion of intermediate consumption in final production value was lower than 30% in Greece and Italy but above 50% in Belgium, Germany, Portugal and the United Kingdom. In the other Member States (Denmark, Spain, France, Ireland, Luxembourg and the Netherlands), the proportion of intermediate consumption in final production value was between 40% and 50% (the average for EUR 12 being 44.9%).

Gross value added at market prices rose in real terms in 1993 in only two Member States, Spain and Ireland. These two countries had respectively the least severe fall and the only stabilization of the real value of total

final agricultural production in the Community. Severe reductions (close to -20%) were observed in France, Germany and Portugal, countries in which the real value of production also declined most. The seven other Member States (Belgium, Italy, the Netherlands, Denmark, Luxembourg, Greece and the United Kingdom, from -6.5% to -11.3%) were in an intermediate situation and similar to each other in that the GVAmp fell in real terms more steeply than the value of final production.

Table 2.9 **Changes in gross value added at market prices, and in its volume and price indices, in the Community and Member States in 1993 over 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Volume	4.6	16.6	-1.2	0.2	0.8	-7.4	-5.2	-3.6	-6.4	1.6	-7.6	-6.3	-2.6
Nominal price	-12.9	-21.3	-14.6	5.3	4.3	-11.7	8.6	-3.9	1.5	-9.6	-6.6	2.6	-6.1
Nominal GVAmp	-8.9	-8.3	-15.7	5.5	5.1	-18.2	3.0	-7.3	-5.0	-8.1	-13.7	-3.8	-8.5
Real price	-15.3	-22.2	-18.4	-7.2	0.4	-14.1	5.8	-7.6	-1.6	-11.1	-12.7	-0.3	-9.7
Real GVA mp	-11.3	-9.3	-19.4	-7.0	1.2	-20.4	0.3	-10.9	-8.0	-9.6	-19.3	-6.5	-12.1

2.4 Distributive transactions in Community farming

The nominal value of **operating subsidies** received by Community agriculture[9] as a whole increased in 1993 by +49.9% (see Table 2.10). This corresponds to a real increase of +43.9%, which is well above the trend since 1980 (+8.0% per annum). This increase had a significant effect on Community income indicators, since the share of subsidies in gross value added at market prices in "1992" was 16%.

The amount of subsidies paid in 1993 does not readily lend itself to comparison with the figure for 1992. The significant increase in subsidies mainly reflects the change in the agricultural support system adopted as part of the reform of the Common Agricultural Policy, under which price support has been partially replaced by direct aid. The implementation of the CAP reform involves direct compensatory aid to make up for reduced price support and for limits on the use of certain means of production, and the upgrading of some existing forms of aid.

Accounting for subsidies

It should be borne in mind that Eurostat's Economic Accounts for Agriculture recognize subsidies only insofar as they have actually been paid, as opposed to merely being payable. It should therefore be remembered that the accounting year is the year of payment, which does not necessarily correspond to the period for which the subsidy is payable. Given the new importance of subsidies as a component of agricultural income under the reformed CAP, an understanding of how subsidies are accounted for is essential for analysing trends in agricultural income and making comparisons with previous years. It has been calculated that, in the Community as a whole, nearly 86% of aid (both new and upgraded) payable under the CAP reform was included in the calculation of agricultural income in 1993. The percentage varies between Member States (see Table 2.11), but is in a range between 85% and 100% in all but three countries (E, GR and L).

The item Subsidies shows widely varying trends in the different Member States; four Member States (D, IRL, NL and L) recorded fairly low increases (up to +10%) compared with the Community average, whereas increases of more than +100% were recorded in three others (F, UK and DK). The stagnation, in real terms, of subsidies in Germany is the result of a big reduction in some forms of national aid (in particular,

[9] See note 5 in this chapter, on the definition of subsidies in the Economic Accounts for Agriculture. The data on subsidies published here include estimates of over-compensation of VAT in countries which operate a flat-rate compensation scheme.

socio-structural aid), and in Ireland and the Netherlands reflects the small nature of the cereals sector in particular.

Taxes linked to agricultural production in the Community again declined in 1993, by -14.0% in nominal terms and -17.3% in real terms. This was mainly due to the dismantling of the co-responsibility levy for cereals (for the 1992/93 crop year) and milk (for 1993/94). However, this steep decline (the trend since 1980 is -0.6% in real terms), had only a modest impact on agricultural income, since taxes linked to production represented only 2.1% of GVAmp in EUR 12 in "1992".

The differences between the rates of change in the Member States were again considerable, but in some Member States, particularly in three southern European countries (E, I and P) this was where taxes linked to production are almost negligible. Taxes linked to production were down in most Member States, the exceptions being Germany, Greece and Italy.

The balance of "net subsidies" (subsidies less taxes linked to production) was positive in all Member States except the Netherlands (where it declined). Denmark recorded a positive balance in 1993, following a negative one the year before. Changes in subsidies and taxes linked to production caused a smaller decline in **gross value added at factor cost** (GVAfc) of -4.5% in real terms than the -12.1% for GVAmp.

Table 2.10 **Nominal and real changes in subsidies, taxes linked to production, depreciation, rents, interest payments and compensation of employees in the Community and in individual Member States in 1993 over 1992 (in %)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
Subsidies, nominal (*)	55.6	199.2	5.5	49.9	96.6	109.9	4.1	23.7	13.4	6.1	30.0	113.4	49.9
Subsidies, real (*)	51.4	196.0	0.9	32.1	89.2	104.2	1.4	19.0	9.9	4.3	21.5	107.4	43.9
Taxes l.p., nominal	-90.5	-22.6	5.2	41.3	-29.0	-29.0	-3.1	4.4	-0.6	-3.9	-10.3	-47.0	-14.0
Taxes l.p., real	-90.7	-23.4	0.6	24.5	-31.7	-30.9	-5.6	0.4	-3.7	-5.5	-16.1	-48.5	-17.3
Depreciation, nominal	2.5	0.0	1.5	11.0	-17.1	1.0	-0.3	4.0	4.9	3.0	5.7	-2.6	1.2
Depreciation, real	-0.3	-1.1	-2.9	-2.2	-20.2	-1.8	-2.9	0.0	1.6	1.3	-1.2	-5.4	-2.4
Rents, nominal	9.0	0.0	5.5	10.0	-4.0	0.7	0.0	-7.5	4.8	-0.5	-2.5	3.3	1.4
Rents, real	6.0	-1.1	0.8	-3.1	-7.6	-2.1	-2.6	-11.1	1.6	-2.2	-8.9	0.4	-2.6
Interest, nominal	6.0	0.0	-0.2	13.6	8.5	-4.7	-15.5	-11.5	1.7	-5.0	-2.8	-32.0	-4.2
Interest, real	3.1	-1.1	-4.6	0.1	4.4	-7.3	-17.7	-14.9	-1.4	-6.6	-9.2	-33.9	-7.6
Compensation, nominal	4.0	0.3	-	10.0	-3.2	2.3	3.4	-1.8	16.8	3.5	3.8	2.1	-
Compensation, real	1.2	-0.8	-	-3.1	-6.8	-0.5	0.7	-5.6	13.2	1.8	-3.0	-0.7	-

(*) Including VAT over compensation.

Nominal changes in the value of **depreciation** (+1.2%) were reflected by a decline of -2.4% in real terms. This change was slightly less marked than that of previous years, when the average nominal increase was closed to the level of general price inflation, and is explained by the third consecutive steep annual fall in Spain (-20.2%) and a significant decline in the UK (-5.4%). In contrast, there were slight increases in the Netherlands and Luxembourg, and no change in Italy, but in the other Member States, the declines were close to the Community average in real terms (between -0.3% and -2.9%). In "1992", depreciation was equal to 23.5% of GVAfc, but changes in depreciation had only a moderate impact on agricultural income (**net value added at factor cost - NVAfc** - fell by -5.2%, as against -4.5% for GVAfc). However, the impact of these changes varied between Member States, depending on the rate of change and the relative importance of depreciation: in 1993, the impact on income was negative in the majority Member States (except DK, GR, E, IRL and the UK), as it was for EUR 12.

Rents tend not to be a major factor in the Community (4.6% of NVAfc on average in "1992"). In nominal terms, they increased by an average of +1.4%, which corresponds to a decrease of -2.6% in real terms. This downward trend, which was recorded in most Member States, (except B, D, L and the UK), was particularly marked in Spain, Portugal and, above all, Italy. However, these changes had only a very minor effect on agricultural income.

Table 2.11 **The amount of aid linked to the reform of the CAP accounted for in the calculation of agricultural income for 1993 as a % of the total due payable for the 1993/94 marketing year**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12*
Amount accounted for in 1993 as a % of the total due payable for the 1993/94 marketing year	100.0	100.0	85.4	63.1	62.0	100.0	88.7	-	62.6	84.6	-	94.9	86.1

* EUR12 (without Italy and Portugal)

Interest payments are of much greater importance, accounting for 13.8% of NVAfc in EUR 12 in "1992". In 1993, they declined by an average of -4.2% in nominal terms and -7.6% in real terms (compared with the trend of -0.8% per annum since 1980). As the rate of decline in interest payments in 1993 was greater than the fall in net value added, it contributed, albeit modestly, to smaller decrease in total real net income (-4.9%, compared with -5.2% for NVAfc). This positive impact was greater in those Member States where interest payments fell steeply in real terms (e.g. the UK) or those where they account for a large share of NVAfc (e.g. Denmark). The decline in interest payments was principally the result of lower interest rates in the Community.

The last item in the calculation of agricultural income is the **compensation of employees**, whose share in net value added at factor cost reached 23.6% for EUR 12 in "1991" (with much higher percentages in Italy and the UK), and therefore is of considerable importance for Indicator 3. As no relevant data for Germany were available on a comparable basis with those in other Member States, it was not possible to calculate changes in the compensation of employees for the Community as a whole in "1992", or the changes in net family income deriving from it. At Member State level, however, the influence of the change in the compensation of employees on that of net family income clearly had a positive effect on income in Denmark, Spain and the UK (because of the effect of the slight fall, in real terms, in the compensation of employees on the relatively small residual figure). Finally, it is worth noting that for eleven Member States (EUR 12, except Germany), the cost of the compensation of employees has stabilized in nominal terms (0.0%), producing a real decline of -3.5%. This caused **net family income** to increase by +3.8% (-0.7% in real terms).

2.5 The three indicators of agricultural income in the Community in 1993

2.5.1. Real net value added in agriculture at factor cost, per annual work unit (Indicator 1)

Nominal **net value added at factor cost (NVAfc)** fell by -1.2% in 1993 for the Community as a whole, which corresponds to a sharper decline in real terms of -5.2%. As has already been explained, this change, which was well below the long-term trend (-2.1% per annum in real terms), was mainly the result of a sharp decline in real prices and volumes, which the sharp rise in subsidies (especially direct compensatory aid) (cf. section 2.4) was unable to make up for.

There were of course wide variations between Member States. Real NVAfc, for example, increased in Ireland, Denmark, the United Kingdom and Spain (by +1.2%, +4.3%, +14.3% and +16.7% respectively) (cf. Table

2.12). All the other countries recorded a decline ranging from -6.0% to -21.5% except for Greece, whose decline in real NVAfc was lower than the Community average.

In order to calculate Indicator 1 of agricultural income, it is necessary to refer these changes in real net value added at factor cost to changes in the **total agricultural labour input**, expressed in AWU, which declined throughout the Community (by -4.0% on average) in 1993 (which is a greater decline than the trend observed since 1980 of -3.0%). The reduction in labour input was relatively evenly distributed in the Community, the sharpest declines occurring in Germany (-7.8%), Belgium (-5.3%) and France (-5.0%), allowing these countries to mitigate the fall in NVAfc. In the other Member States the declines ranged between -4.8% and -0.7%.

At Community level, 1993 was marked by a deterioration of -1.2% in the level of agricultural income as measured by **Indicator 1 of agricultural income** (real net value added at factor cost per Annual Work Unit). Since the Economic Accounts for Agriculture are not available for unified Germany except for 1992 and 1993 it has not been possible to compare the trend in agricultural income in 1993 with that of previous years.

The average change in agricultural income at Community level was the result of contrasting developments in the Member States. Whilst eight states recorded declines of -0.1 to -14.8%, the four others (Ireland, Denmark, United Kingdom and Spain) had increases of up to +22.5%.

Table 2.12 **Changes in net agricultural income of total labour input, and calculation of Indicator 2 of agricultural income in 1993 and 1992, in the Community and the Member States (in %)**

Member State	NVAfc nominal		Deflator (GDP price)		NVAfc real		Total labour input (in AWU)		Indicator 1 (real NVA/AWU)	
	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92
B	-8.8	-3.4	3.4	2.8	-11.8	-6.0	-3.1	-5.3	-9.0	-0.7
DK	-14.0	5.5	1.9	1.1	-15.6	4.3	-3.0	-2.0	-13.0	6.5
D	-	-17.9	-	4.6	-	-21.5	-	-7.8	-	-14.8
GR	0.0	10.8	14.9	13.5	-13.0	-2.4	- 5.0	-2.3	-17.1	-0.1
E	-10.6	21.2	6.5	3.9	-16.1	16.7	-4.9	-4.8	-11.7	22.5
F	-1.4	-5.6	2.1	2.8	-3.4	-8.2	-3.5	-5.0	0.1	-3.4
IRL	17.8	3.9	1.1	2.7	16.6	1.2	-2.6	-2.0	19.7	3.3
I	-6.1	-7.1	4.7	4.0	-10.3	-10.7	-4.4	-3.8	-6.2	-7.1
L	1.0	-4.8	4.5	3.2	-3.4	-7.7	1.5	-1.6	-4.8	-6.2
NL	-10.5	-11.6	2.5	1.7	-12.7	-13.1	0.9	-1.5	-13.4	-11.7
P	-8.4	-6.9	13.4	7.0	-19.2	-13.0	-6.2	-2.6	-13.9	-10.7
UK	8.8	17.6	4.4	2.9	4.2	14.3	-1.5	-0.7	5.8	15.1
EUR 12	-	-1.2			-	-5.2	-	-4.0	-	-1.2

In the following six Member States, the declines in Indicator 1 were more pronounced than the average for the Community as a whole:

- **Germany** (-14.8%), as a result of a slump in the real value of final agricultural production of -13.7% (the combined effect of a sharp fall in real prices of crop products and animal production and the decline in production volume, especially of fresh fruit, wine and cattle), made worse by a constant level of subsidies (due to the decline in national subsidies) and despite a substantial reduction in the agricultural labour input;
- the **Netherlands** (-11.7%, after -13.4% in 1992), with substantial reductions in the real prices of animal production (especially pigs), slightly increasing production volumes (sharp increase for pigs but reduction for cattle), a smaller decline in intermediate consumption, relatively mild increase in subsidies and slight decline in the agricultural labour input;

- **Portugal** (-10.7%, after -13.9% in 1992), following poor harvests (fresh fruit, wine, fresh vegetables, olive oil) and reductions in real prices (especially animal production and pigs and milk in particular), and despite a sharp reduction in the real value of intermediate consumption and the increase in subsidies;
- **Italy** (-7.1%, after -6.2% in 1992), a sharp decline in the real value of crop production (due to the drastic fall in the volume and real prices of potatoes, oilseeds, fresh vegetables, fresh fruit and wine) which could only be partly offset by the stability of the real value of animal production (for which trends varied considerably, depending on the type of production). The increase in intermediate consumption (mainly due to increases in animal feedingstuffs and energy) caused a fall in the real net value added at factor cost;
- **Luxembourg** (-6.2%, after -4.8% in 1992), because of declines in real prices (especially pigs but also milk) and production volumes (a steep decline for wine, but an increase for pigs and milk), the real value of final production fell sharply and could not be made up for by the considerable reduction in the real value of intermediate consumption (fertilizers and animal feedingstuffs) and increase in subsidies, thus resulting in a substantial decline in real net value added at factor cost;
- **France** (-3.4%, after +0.1% in 1992), the real value of final agricultural production fell sharply as a result of a decrease in volume (cereals, fresh fruit, wine and cattle) and a fall in real prices (cereals, wine and pigs); the very steep rise in subsidies and substantial fall in the volume of agricultural labour input, however, allowed the real net value added at factor cost and income Indicator 1 to record a more moderate decline.

By contrast, the development of Indicator 1 was more favourable than the Community average in the following six Member States, and for Ireland and Spain it even set a new record in 1993:

- **Belgium** (-0.7%, after -9.0% in 1992), the real value of final production only declined because of decreases in the real prices of animal production (especially pigs); the smaller decrease in intermediate consumption, the sharp increase in subsidies and the steep decline in agricultural labour input, however, limited the decline in income Indicator 1;
- **Greece** (-0.1%, after -17.1% in 1992), production volumes remained stable on average, whereas real prices fell (especially for cereals, fresh fruit, fresh vegetables and pigs). The real value of intermediate consumption fell only slightly but the sharp increase in subsidies allowed the fall in the real net value added at factor cost to be limited;
- **Ireland** (+3.3%, after +19.7% in 1992), the real value of final agricultural production remained stable, with volumes declining slightly (because of crop production, whilst animal production remained relatively stable) and real prices rising by +2.2% (especially animal production, milk and cattle); the slight increase in real gross value added at market prices combined with the small increase in subsidies resulted in an increase of +1.2% in the real net value added at factor cost;
- **Denmark** (+6.5%, after -13.0% in 1992), the reduction in the real value of agricultural production resulting from the fall in real prices of certain types of animal production (pigs and milk) despite the increase in production volume (crop, pig and milk production), was largely offset by the very substantial increase in subsidies;
- **United Kingdom** (+15.1%, after +5.8% in 1992), a fall in the volume of final production (cattle and crop products: cereals, potatoes and sugar beet) and the stability of real prices (especially animal production except for pigs), which, combined with the constant real value of intermediate consumption led to a decline in the real gross value added at market prices which was more than made up for by the very sharp increase in subsidies and decline in depreciation;
- **Spain** (+22.5%, after -11.7% in 1992), because of the slight fall in the volume of production (despite an increase for cereals and pigs), the stability of real prices (-0.3%) and the sharper decline in the real value of intermediate consumption, the real gross value added at market prices remained unchanged from the year before and this combined with the surge in subsidies and the sudden drop in depreciation resulted in a rise in the real net value added at factor cost of +16.7%.

2.5.2 Real net income from agricultural activity of the total labour input per annual work unit (Indicator 2)

In 1993, the **net income of the total labour input** in the Community fell slightly by -0.8% in nominal terms, which is equivalent to a fall of -4.9% in real terms. This was a steeper decrease than the trend since 1980 (-2.4% per annum in real terms), but it is less marked than that of the NVAfc, which is mainly due, as already mentioned (cf. section 2.4), to the steeper decline, in real terms, in interest payments.

As in the case of NVAfc, only Ireland, Denmark, Spain and the United Kingdom recorded positive rates of change for the real net income of the total labour input (between +3.6% and +22.7%) (cf. Table 2.13). The decrease was close to the Community average in Greece (-2.5%) and much more negative in all the other countries (from -8.8% to -27.3%).

Table 2.13 **Changes in net agricultural income of total labour input, and calculation of Indicator 2 of agricultural income in 1993 and 1992, in the Community and the Member States (in %)**

Member State	Nominal net total income		Deflator (GDP price)		Real net total income		Total labour input (in AWU)		Indicator 2 (real NTI/AWU)	
	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92
B	-11.4	-6.5	3.4	2.8	-14.4	-9.0	-3.1	-5.3	-11.6	-3.9
DK	-35.6	18.4	1.9	1.1	-36.9	17.1	-3.0	-2.0	-34.9	19.4
D	-	-24.0	-	4.6	-	-27.3	-	-7.8	-	-21.2
GR	-0.6	10.6	14.9	13.5	-13.5	-2.5	5.0	-2.3	-17.7	-0.2
E	-14.1	26.1	6.5	3.9	-19.4	21.4	-4.9	-4.8	-15.2	27.5
F	-1.5	-6.2	2.1	2.8	-3.6	-8.8	-3.5	-5.0	-0.1	-4.0
IRL	21.1	6.4	1.1	2.7	19.8	3.6	-2.6	-2.0	23.1	5.8
I	-7.1	-6.5	4.7	4.0	-11.3	-10.1	-4.4	-3.8	-7.2	-6.5
L	-1.2	-7.1	4.5	3.2	-5.5	-10.0	1.5	-1.6	-6.9	-8.5
NL	-13.1	-13.8	2.5	1.7	-15.2	-15.3	0.9	-1.5	-15.9	-14.0
P	-12.8	-8.3	13.4	7.0	-23.1	-14.3	-6.2	-2.6	-18.0	-12.0
UK	14.4	26.3	4.4	2.9	9.6	22.7	-1.5	-0.7	11.2	23.6
EUR 12	-	-0.8			-	-4.9	-	-4.0	-	-0.9

Indicator 2 of agricultural income is obtained by relating the changes in real net income to the changes in total labour input, measured in AWU (cf. section 2.5.1). For the Community as a whole, Indicator 2 fell slightly in 1993, by -0.9%, which is a slightly smaller reduction than that of Indicator 1.

In 1993, the changes in Indicator 2 in the Member States were fairly similar to those already examined for Indicator 1, and were, as in previous years, in the same direction but somewhat more pronounced (cf. Note 6 above). There is one exception, however: in Italy, Indicator 2 (-6.5%) showed a less marked decline than Indicator 1 (-7.1%) as a result of the sharp decrease in interest payments and real rents (-14.9% and -11.1% respectively). It should be noted that the difference between the two indicators is particularly large in Denmark (+19.4% compared with +6.5%) because of the considerable weight of interest payments in agricultural income, and to a lesser degree in the United Kingdom (+23.6% compared with +15.1%), and in Germany (-21.2% compared with -14.8%) because interest payments greatly differed from that of NVAfc (a much stronger fall and a particularly limited decrease respectively).

2.5.3 Real net income from agricultural activity of family labour input, per annual work unit (Indicator 3)

As already mentioned in sections 2.1 and 2.4, it has not been possible to calculate the **net income of family labour input** for the Community as a whole.

As for the other two income aggregates, the only upward movements in real terms in 1993 were recorded in Ireland, Spain, the United Kingdom and Denmark (+4.0%, +31.6%, +36.8% and +60.1% respectively). The declining trends vary substantially between the Member States (from -2.5% to -22.4%).

Whilst the first two indicators reflect the income of all persons employed in agriculture, Indicator 3 relates exclusively to **family labour** (the holder and members of his family working on the holding), since the compensation of employees has been deducted. Family labour input, measured in AWU, declined in 1993 in all Member States. Substantial decreases were recorded in Germany (-5.9%), Belgium (-5.3%) and France (-5.0%). The changes observed in the other countries ranged between -0.5% and -3.9%.

A comparison of the Indicators in the Member States reveals that changes in Indicator 3 were generally even greater than those in Indicator 2, and that, as a consequence, the disparities between Member States widened even further (from +63.3% to -20.5%). Indeed, the changes are in the same direction but more marked compared with those of Indicator 2 in ten Member States, the differences being particularly marked in Denmark and in the United Kingdom (with Indicator 3 declining at a slightly slower rate than Indicator 2 in Luxembourg).

Table 2.14 **Changes in the net agricultural income of family labour input, and calculation of Indicator 3 of agricultural income in the Community and the Member States in 1993 and 1992 (in %)**

Member State	Nominal net family income		Deflator (GDP price)		Real net family income		Family labour input (in AWU)		Indicator 3 (real NFI/AWU)	
	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92	92/91	93/92
B	-13.0	-7.8	3.4	2.8	-15.9	-10.3	-7.1	-5.3	-9.4	-5.3
DK	-65.1	61.8	1.9	1.1	-65.8	60.1	-3.9	-2.0	-64.4	63.3
D	-	-	-	4.6	-	-	-	-5.9	-	-
GR	-1.4	10.7	14.9	13.5	-14.2	-2.5	5.6	-2.1	-18.7	-0.4
E	-16.3	36.8	6.5	3.9	-21.4	31.6	-4.9	-2.7	-17.3	35.3
F	-2.8	-8.7	2.1	2.8	-4.8	-11.2	-3.5	-5.0	-1.4	-6.5
IRL	22.8	6.8	1.1	2.7	21.5	4.0	-2.6	-2.0	24.7	6.1
I	-23.0	-11.4	4.7	4.0	-26.4	-14.9	-7.0	-2.5	-20.9	-12.7
L	-1.7	-8.8	4.5	3.2	-6.0	-11.6	3.5	-3.9	-9.2	-8.0
NL	-19.4	-21.1	2.5	1.7	-21.3	-22.4	0.2	-2.4	-21.5	-20.5
P	-18.0	-12.8	13.4	7.0	-27.7	-18.5	-7.2	-0.5	-22.1	-18.1
UK	24.2	40.8	4.4	2.9	18.9	36.8	-0.6	-0.7	19.6	37.8
EUR 12	-	-			-	-	-3.9	-2.9	-	-

3 CHANGES IN AGRICULTURAL INCOME IN THE MEMBER STATES IN 1993 OVER 1992

3.1 Belgium

Agricultural income in Belgium is estimated to have declined slightly (-0.7%) in terms of Indicator 1, and by -3.9% according to Indicator 2, which takes account of the development of rents and interest. This development was above all due to the following factors:

- a fall in the prices of pigs of -29.9% in real terms;
- constant crop production value (-0.4% in real terms);
- a sharp increase in subsidies (+51.4% in real terms) together with a drastic decline in taxes linked to production (-90.7% in real terms), and
- high increases in payments for rents (+6.0%) and interest (+3.1%) in real terms.

Table 3.1 Changes in major items of the income calculation for agriculture in Belgium, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**0.4**	**2.0**	**-0.8**	**2.4**	**-0.4**
Potatoes	-8.2	60.0	55.6	46.8	42.8
Sugar beet	7.9	-1.6	-4.3	6.2	3.3
Fresh vegetables	-1.8	2.8	0.0	1.0	-1.7
Fresh fruit (**)	-1.7	5.1	2.2	3.2	0.4
Final animal output	**4.8**	**-10.0**	**-12.5**	**-5.7**	**-8.3**
Cattle	4.0	3.0	- 0.2	7.1	4.2
Pigs	6.0	-27.9	-29.9	-23.6	-25.7
Milk	2.0	0.8	-2.0	2.8	0.0
Final output	**3.0**	**-5.7**	**-8.3**	**-2.8**	**-5.5**
Intermediate consumption	**1.8**	**-0.4**	**-3.1**	**1.4**	**-1.3**
Gross value added at m.p.	**4.6**	**-12.9**	**-15.3**	**-8.9**	**-11.3**
Subsidies				55.6	51.4
Taxes linked to production				-90.5	-90.7
Depreciation				2.5	-0.3
Net value added at f.c.				**-3.4**	**-6.0**
Rent				9.0	6.0
Interest				6.0	3.1
Net income of total labour				**-6.5**	**-9.0**
Compensation of employees				4.0	1.2
Net income of family labour				**-7.8**	**-10.3**

(*) The deflator is the implicit price index of GDP at market prices, + 2.8%.
(**) Including grapes.

The real value of final animal production, which represents about two-thirds of final production, declined by -8.3%. This was especially due to the drop in pig prices of -29.9% in real terms, which together with a growth in volume of +6.0%, typified the market imbalance prevalent throughout the Community. The production value of cattle, the second most important product in animal production, rose by +4.2% in real terms, which on the basis of constant real prices (+0.2%) corresponded more or less to the growth in volume. The

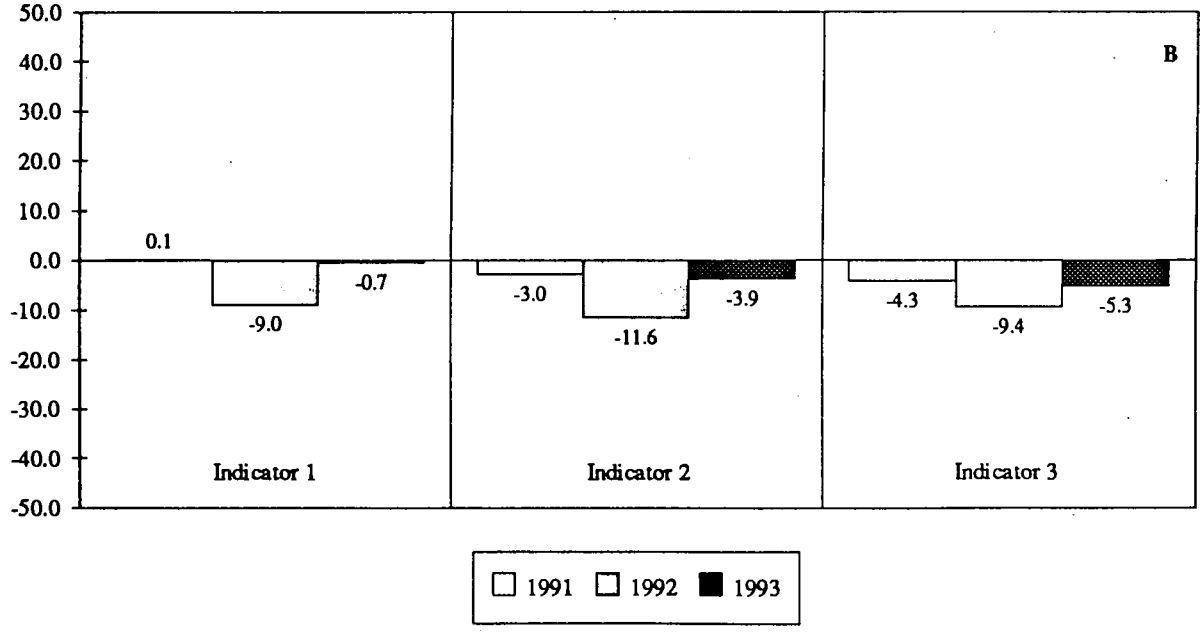
production value for milk also remained constant since the increase in quantity of +2.0% balanced the decline in the real price.

In crop production, the figures for fresh vegetables, which represent a third of the crop production value, suggest a slight decline in real value (-1.7%), based on a similar fall in volume since prices remained stable. The production volume of fresh fruit declined (-1.7%) at similar rate to that of fresh vegetables, whilst prices rose in real terms by +2.2%; the production value remained approximately constant in real terms (+0.4%). For flowers and ornamental plants, another important product group, real prices and values fell by -2.0% with the volume of production remaining unchanged from the year before. An increase in the volume of potato production of +30.0% in 1992 was followed by a decline of -8.2% in 1993. Following a decline of -58.6% in 1992, the real price of potatoes increased by +55.6% in 1993, leading to a significant rise in the real value (+42.8%).

The decline in the real value of final output in Belgium of -5.5% was accompanied by a fall in the real value of intermediate consumption of -1.3%. This decrease resulted from a lower real price for intermediate consumption (-3.1% down on 1992), combined with a greater volume of sales (+1.8%). This, in part, led to an improvement in the apparent productivity of intermediate consumption (+1.1%) but a net worsening of the price scissors (-5.3%). As in many other Member States, the decline in the value of intermediate consumption was due partly to falls in the real prices of fertilisers (-4.7%) and feedingstuffs (-6.0%). There was, however, a decline in real value of feedingstuffs (-1.3%), which represents over 40% of the value of intermediate consumption, despite an increase in the volume sold (+5.0%), which corresponded to the increase in the volume of animal production of (+4.8%).

In the wake of the CAP reform, subsidies increased sharply (real value: +51.4%), and there was a drastic fall in taxes linked to production (-90.7% in real terms). More particularly, subsidies linked to crop production increased thirteen fold and are now at about the same level as subsidies linked to animal production. There was a slight fall in the value of depreciation of -0.3% in real terms, and in view of the already mentioned trends in production value, intermediate consumption, subsidies as well as taxes linked to production, there was a change in the net value added at factor cost in real terms of -6.0%, which was similar to the decline in labour input of -5.3%.

Graph 3.1 **Evolution of the three income indicators for Belgium in 1991, 1992 and 1993 (Changes in %)**



Rent and Interest payments rose above 1992 levels by +6.0% and +3.1% in real terms respectively, resulting in the net income from agricultural activity falling in real terms by -9.0%. Following the increase in real terms of the compensation of employees by +1.2%, net income from agricultural activity of family workers declined by -10.3% in real terms. This resulted in the following changes to the three indicators, taking after also taking into account the decline in the labour force (-5.3% for family and -5.5% for non-family labour input):

Indicator 1: -0.7% (1992: -9.0%)

Indicator 2: -3.9% (1992: -11.6%)

Indicator 3: -5.3% (1992: -9.4%)

3.2 Denmark

Following decreases in the level of Indicator 1 in the three previous years totalling -23.5%, the agricultural income level for 1993 is estimated to have risen by +6.5% in Denmark. Only three other Member States also had rises in the level of income for the agricultural branch. Despite this increase, the Indicator 1 index for Denmark is still -18.2% down on the base year ("1985")[1].

The main reason that there was an increase in income in 1993 was due to some significant increases in production, most notably for pigs, cereals and sugar beet. Another huge rise in the level of real subsidies (+196.0%) compensated for severe drops in real prices.

Table 3.2 Changes in major items of the income calculation for agriculture in Denmark, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**20.4**	**-10.0**	**-11.0**	**8.4**	**7.2**
Cereals	48.2	-15.3	-16.2	24.4	23.0
Oilseeds	0.0	-0.3	-1.4	-0.3	-1.4
Flowers	-0.6	-1.8	-2.9	-2.4	-3.5
Final animal output	**2.2**	**-10.8**	**-11.7**	**-8.8**	**-9.8**
Cattle	-6.7	2.1	1.0	-4.7	-5.7
Pigs	10.0	-23.9	-24.8	-16.3	-17.2
Milk	2.2	-3.1	-4.2	-2.3	-3.4
Final output	**7.2**	**-10.5**	**-11.5**	**-4.0**	**-5.1**
Intermediate consumption	**-0.3**	**-0.3**	**-1.4**	**-0.6**	**-1.7**
Gross value added at m.p.	**16.6**	**-21.3**	**-22.2**	**-8.3**	**-9.3**
Subsidies				199.2	196.0
Taxes linked to production				-22.6	-23.4
Depreciation				0.0	-1.1
Net value added at f.c.				**5.5**	**4.3**
Rent				0.0	-1.1
Interest				0.0	-1.1
Net income of total labour				**18.4**	**17.1**
Compensation of employees				0.3	-0.8
Net income of family labour				**61.8**	**60.1**

(*) The deflator is the implicit price index of GDP at market prices, + 1.1%.

[1] In the case of Denmark, the three years associated with the "1985" base had no "smoothing" effect, since all three years were exceptional.

The value of total final output is derived from about two-thirds final animal output and one-third crop output. Changes to the value of animal output are particularly significant. Therefore, the decline in the real value of animal output by -9.8% was the principal cause in the decrease in total final output value (-5.1% in real terms). More particularly, the value of pig production alone accounts for about one-third of the value of final production and the decline of -17.2% in real value was the prime source of the aggregate fall. Despite the considerable European pigmeat surplus, expansion in Denmark continued apace with production volume surging +10.0%. Under the strain, prices throughout the Member States tumbled, and in Denmark by -24.8% in real terms. Accounting for a further fifth of the value of final production is milk. The real value of milk decreased -3.4%, with the slide in real prices (-4.2%) outweighing the +2.2% higher output. As with a number of other Member States, the volume of cattle production declined (-6.7%) and because real prices only rose slightly (+1.0%), the real value fell (-5.7%).

After the severe summer drought of the year before final crop production volume returned to 1991 levels with a rise of +20.4%. As a direct result of greater output but also the effects of the CAP reform, real prices decreased (-11.0%). Nevertheless, there was a rise in the real value of final crop production (+7.2%). The much higher production volumes of almost all cereals broadly mirrored the falls in the year before. Most significantly, the sales value of wheat rose +39.5% and barley +83.5%. Likewise the volume of sugarbeet climbed (+33.6%), and with many other Member States having lower harvests, the real price only fell -3.3%.

The volume of intermediate consumption remained almost unchanged from the year before (-0.3%), although there was an increase in the use of feedingstuffs (+3.0%). The greater volume of feedingstuffs was quite probably linked to the expanding pig herd rather than increased demand for lower priced cereals, which many pig farmers still considered to be comparatively high especially with the addition costs of the salmonella bacteria eradication programme. As with recent years there was a reduction in the quantity of fertilizers used (-10.0%), due to set-aside and the increased use of animal manure and slurry instead, and in the volume of plant protection products (-10.0%). Lower prices for fertilizers (-4.1%) and feedingstuffs (-3.1%) in real terms were partly counterbalanced with higher real prices for materials and small tools (+1.9%) and services (+0.9%); the real price of intermediate consumption declined slightly (-1.4%). The change in the productivity of intermediate consumption perhaps makes more sense over several years, since the change in 1993 reflects the depth of the drought in 1992. Nevertheless, the productivity of intermediate consumption increased +7.6% in 1993. The "price scissors" deteriorated considerably (-10.2%) because of the general fall in price support.

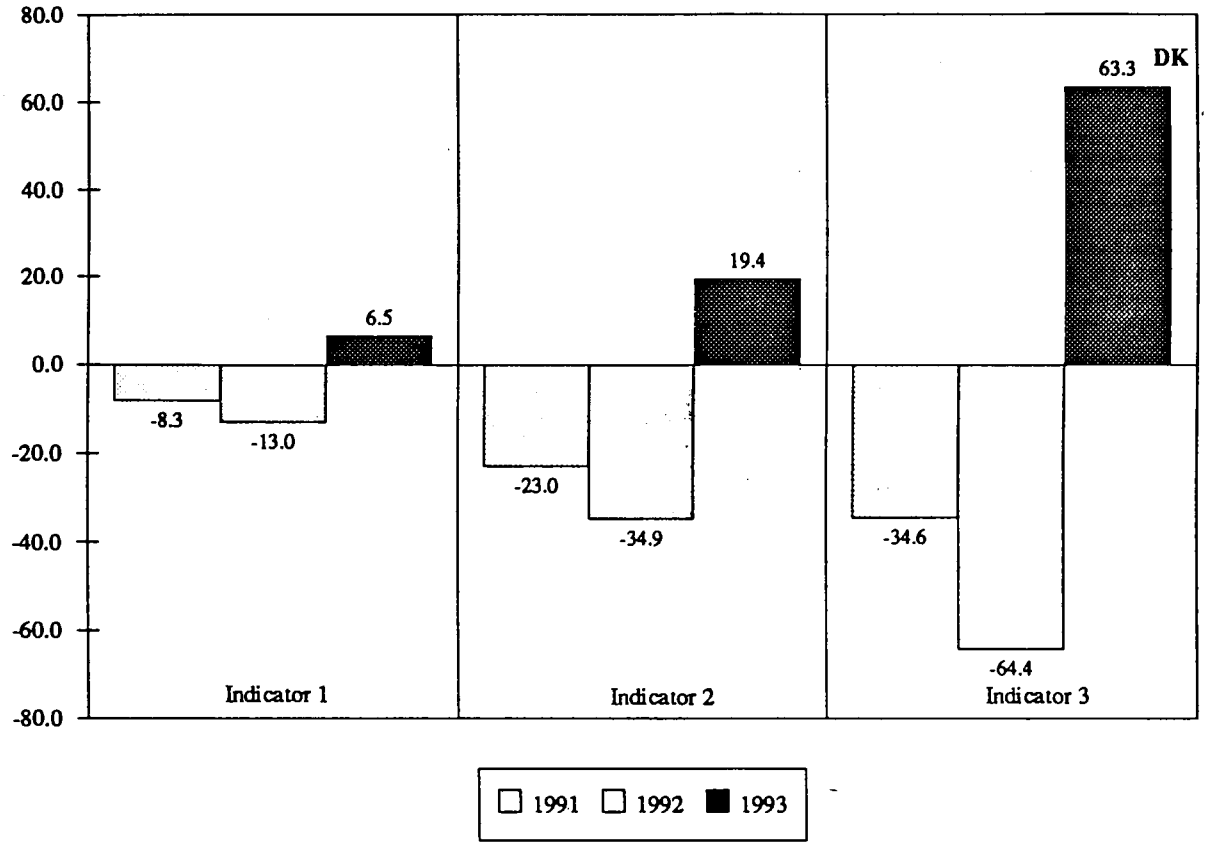
New CAP reform subsidies due for the 1993/1994 crop year were all accounted for in 1993, representing a large majority of all subsidies. As a whole the level of subsidies increased by +196.0% in real terms. They did not however include any more payments for oilseeds, the main source of the previous year's increase. Accompanying the change in the level of subsidies was a reduction in taxes (-23.4% in real terms). The change in real gross value added at factor cost was positive (+2.7%) only because of these subsidy and tax changes, since real gross value added at market prices was considerably down (-9.3%) on 1992. The real value of depreciation, rents, interest charges and compensation of employees all essentially fell by a rate similar to that of inflation. After considering the -2.0% fall in the level of family and total labour input, the following change in the income indicators for 1993 over 1992 were calculated :

Indicator 1:	+6.5%	(1992:	-13.0%)
Indicator 2:	+19.4%	(1992:	-34.9%)
Indicator 3:	+63.3%	(1992:	-64.4%)

The significantly greater rise in the annual change of Indicator 2 relative to Indicator 1 was not really due to changes in interest payments or rent. It was predominantly the effect of the changes in net value added at factor cost from which interest payments, which are of an inherently high absolute level in comparison to net value added at factor cost, are subtracted to calculate Indicator 2. The same principle occurred in the difference between Indicators 2 and 3, on the removal of a relatively constant (in comparison to the previous

year) yet relatively high absolute figure for compensation of employees, compared to the residual figure for net income of family labour.

Graph 3.2 **Evolution of the three income indicators for Denmark in 1991, 1992 and 1993 (Changes in %)**



3.3 Germany

For the first time, a forecast is available for Germany including the "new Länder", after the publication last year included a "Comment" about them. There are distinct differences between the agricultural sectors of the old and new Länder, e.g. in the holding size distribution and type of ownership, and therefore the figures given for the whole of Germany in many cases summarise highly divergent developments. This is especially true in view of the considerable speed at which structural adaptation processes in the "new Länder" are continuing to take place, as shown by the development of the workforce, for example.

In 1993, Germany had the largest fall in agricultural income as measured by Indicator 1 (-14.8%) amongst all Member States. This development was caused above all by the influence of the following factors:

- strong decreases in the values of final crop and final animal output (-15.2% and -12.8% in real terms respectively), mainly due to a fall in the administered prices for cereals, a slump both in fruit volumes and prices and continuing market imbalances for pigmeat;
- a slower decline in the real value of intermediate consumption (-8.3%), than in the value of production;
- a low growth rate for subsidies of +0.9% in real terms compared with other Member States caused by cutbacks in some national subsidy programmes, and
- a clear decline in labour input of -7.8%, characteristic of a continuing sharp structural change in the "new Länder", where the drop in labour input was -16.3%.

The estimated fall in the real value of crop production of -15.2% was due in particular to substantially lower values for cereals (-16.5% in real terms) and fresh fruit (-45.7% in real terms), which together accounted for about half of the crop production value. The price of cereals fell by -20.9% in real terms due to a reduction in price support in the context of CAP reform whilst volume increased by +5.5%. With a high proportion of the cereal area set-aside, the increases in cereals volume reflect on the one hand the better weather in 1993 after the drought of 1992, but also growing productivity in the "new Länder". In the case of fresh fruit, the poor harvest (-37.8%) combined a fall in real prices (-12.7%) led to the decline in the real value of production. Similarly, the real production value of potatoes (-30.2%) and wine (-17.4%) fell, whereas the real value of oilseed production increased by +24.0% as a result of a rise in the real price (+18.5%).

Table 3.3 **Changes in major items of the income calculation for agriculture in Germany, % change in 1993 over 1992**

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-4.9**	**-6.7**	**-10.8**	**-11.3**	**-15.2**
Cereals	5.5	-17.3	-20.9	-12.7	-16.5
Potatoes	-5.3	-22.9	-26.3	-27.0	-30.2
Sugar beet	8.6	-3.5	-7.7	4.8	0.2
Oilseeds	4.6	24.0	18.5	29.7	24.0
Fresh fruit	-37.8	-8.7	-12.7	-43.2	-45.7
Wine	-13.6	0.0	-4.4	-13.6	-17.4
Final animal output	**-1.4**	**-7.5**	**-11.5**	**-8.8**	**-12.8**
Cattle	-6.4	1.8	-2.7	-4.7	-8.9
Milk	1.3	-2.0	-6.3	-0.8	-5.1
Final output	**-2.9**	**-7.0**	**-11.1**	**-9.7**	**-13.7**
Intermediate consumption	**-4.5**	**0.4**	**-4.0**	**-4.1**	**-8.3**
Gross value added at m.p.	**-1.2**	**-14.6**	**-18.4**	**-15.7**	**-19.4**
Subsidies				5.5	0.9
Taxes linked to production				5.2	0.6
Depreciation				1.5	-2.9
Net value added at f.c.				**-17.9**	**-21.5**
Rent				5.5	0.8
Interest				-0.2	-4.6
Net income of total labour				**-24.0**	**-27.3**
Compensation of employees				-	-
Net income of family labour				-	-

(*) The deflator is the implicit price index of GDP at market prices, +4.6%.

The single biggest influence behind in the -12.8% decline in the real value of animal production was pigmeat production, for which there was a decrease in real prices of -28.5%, whilst the volume remained almost constant. This points to a substantial market imbalance within the Community. Like pig production, cattle production accounts for about a quarter to a fifth of the value of animal production. In the case of cattle, the real value fell by -8.9% since the real price and volume fell by -2.7% and -6.4% respectively. The real value of milk, which accounts for 40% of animal production value, decreased (-5.1%), although at a lower rate than those for cattle and pig production, since the volume grew by +1.3% and real prices fell by -6.3%.

The real value of intermediate consumption fell by -8.3%, with the volumes of almost all items declining by about -5%. The prices for seeds, fertilizers and feedingstuffs all fell in real terms (by between -6.6% and -8.8%), promoting the overall decline in the real price of intermediate consumption (-4.0%). Despite the large reduction in the real value of intermediate consumption, it was less than the fall in the value of final output

(-13.7%) and indeed for either final crop or animal production. As such, gross value added at market prices fell a stronger -19.4% in real terms.

In contrast to the overall Community development, there was only a slight increase in subsidies in Germany of +0.9% in real terms, due to a cut-back in special national measures, such as social structure income support and compensation for reducing milk production (also financed by the EC).

Despite the decline in depreciation of -2.9% in real terms, net value added at factor cost was an even stronger -21.5% lower than 1992. Rental payments rose by +0.8% but interest payments were -4.6% down on 1992. Net income from agricultural activity of total labour input was considerably beneath the 1992 level (-27.3%).

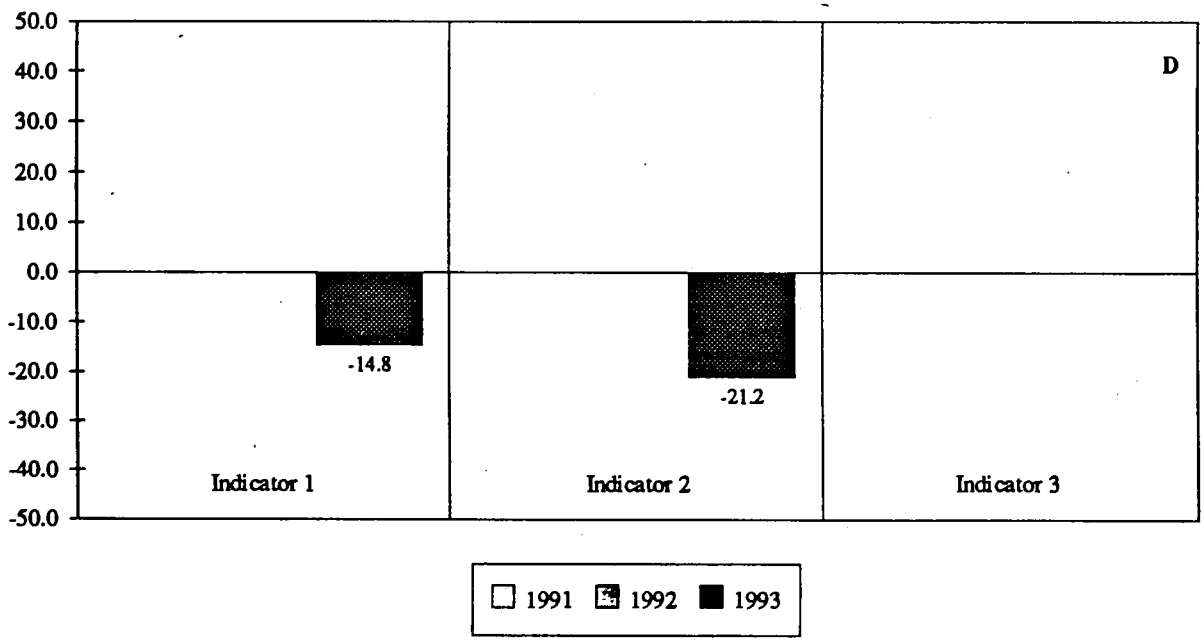
Because of the continuing structural changes in the "new Länder", labour input in Germany's agriculture fell sharply again: by -5.9% for family labour input and -13.0% for non-family labour input. As a result, the trends for the income indicators are as follows:

Indicator 1: -14.8%

Indicator 2: -21.2%.

Indicator 3 (net income of family workers in agriculture) is not given for Germany in this report. Because of the large proportion of holdings organised into co-operatives or corporates legal entities in the "new Länder", a breakdown by family and non-family labour input would not provide very meaningful information. Unlike family holdings, some of the compensation of employees is in fact remuneration for the labour input of co-operative members, i.e. the owners. Moreover, whilst on family holdings the remuneration for running the holding is often contained in the profit, in co-operatives employing managers, such remuneration is included in compensation of employees.

Graph 3.3 Evolution of the three income indicators for Germany in 1991, 1992 and 1993 (Changes in %)



3.4 Greece

After a large decline in agricultural income in 1992 (-17.1%), Indicator 1 is expected to have remained virtually unchanged (-0.1%) in Greece in 1993. This would mean that the cumulative increase in Indicator 1 since the base year would also have remained almost unchanged at +19.5%, one of only four countries to have higher incomes than in "1985".

The principal reasons for the static level of income in 1993, were that;

- the aggregate production volumes of crop, animal and therefore final output, together with intermediate consumption, remained unchanged, and
- higher subsidies, particularly as new CAP reform subsidies, largely balanced the loss of market support reflected in lower real prices for final crop and final animal output.

Table 3.4 Changes in major items of the income calculation for agriculture in Greece, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**0.3**	**6.3**	**-6.4**	**6.6**	**-6.1**
Cereals	2.7	3.8	-8.6	6.5	-6.1
Fibre plants	22.9	9.0	-3.9	34.0	18.1
Tobacco	-25.1	8.2	-4.6	-18.9	-28.6
Fresh vegetables	-2.0	2.6	-9.6	0.6	-11.4
Fresh fruit (**)	2.0	4.4	-8.0	6.4	-6.2
Olive oil	-0.1	8.9	-4.1	8.8	-4.1
Final animal output	**-0.7**	**9.1**	**-3.9**	**8.3**	**-4.6**
Sheep and goats	-2.5	3.4	-8.9	0.8	-11.2
Milk	5.2	20.8	6.4	27.1	12.0
Final output	**0.0**	**7.1**	**-5.6**	**7.1**	**-5.7**
Intermediate consumption	**-0.7**	**12.5**	**-0.9**	**11.7**	**-1.6**
Gross value added at m.p.	**0.2**	**5.3**	**-7.2**	**5.5**	**-7.0**
Subsidies				49.9	32.1
Taxes linked to production				41.3	24.5
Depreciation				11.0	-2.2
Net value added at f.c.				**10.8**	**-2.4**
Rent				10.0	-3.1
Interest				13.6	0.1
Net income of total labour				**10.6**	**-2.5**
Compensation of employees				10.0	-3.1
Net income of family labour				**10.7**	**-2.5**

(*) The deflator is the implicit price index of GDP at market prices, + 13.5 %.
(**) Including citrus fruit and grapes.

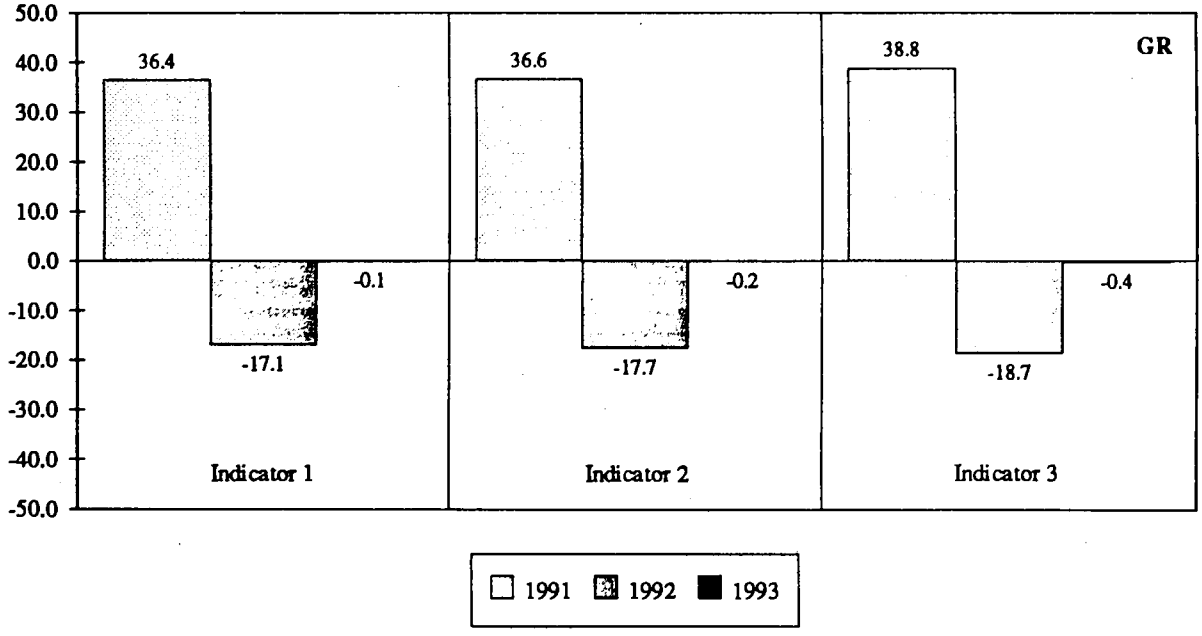
The real value of crop production decreased by -6.1%, after a similar fall in real prices (-6.4%) and an unchanged volume (+0.3%). The value of crop products accounted for nearly 70% of final output value in 1993, which means that changes to the principal crops were particularly significant in the overall income result. Fibre plants had the highest value of any single product category in 1993, after rising +18.1% in real terms. A substantial expansion in the cultivated area, due on the one hand to the high returns received in recent years and on the other due to producer efforts to compensate for drought-affected lower yields in the previous five years, led to a large jump of +22.9% in fibre plant production volume. In contrast, there was a considerable decline in the volume of unmanufactured tobacco produced (-25.1%), because of the imposition of quotas in the context of CAP reform which particularly affected the Virginia variety. At the same time real

prices declined by -4.6%. The nominal price increase for fresh vegetables (+2.6%) was similar to the fall in volume (-2.0%), but in real terms the value decreased by -11.4%. By the nature of olive oil production there are noticeable fluctuations in prices and volumes, but there was relative stability in the olive oil market in 1993 with an unchanged volume and price rises in nominal terms (+8.9%). Similarly, the production of fresh fruit (excluding citrus fruit and grapes) was constant (-0.8%) and the real price slightly declined (-2.5%).

The changes observed in the price, volume and value of final crop output were remarkably similar for final animal output. Final animal output value decreased by -4.6% in real terms, as a result of a constant volume (-0.7%) and falling real prices (-3.9%). However, like crop products there were quite different results even amongst the principal products. In 1993, the values of milk , sheep and goats accounted for 60% of the value of final animal output. Nevertheless, the results for milk were somewhat of an anomaly in the context of results for final animal output. The volume of milk increased by +5.2%, the greatest rate of increase in the Community, and the real price also rose (+6.4%), particularly for goat milk, reflecting increased demand from the dairy industry. The real value of milk production in Greece was +12.0% higher than in 1992. In contrast, the real values for sheep and goats and pigs decreased markedly (-11.2% and -20.9% respectively), chiefly because of falling real prices (-8.9% and -17.6% respectively). The fall in prices for pigs reflected lower demand for domestically produced pigmeat due to the availability of cheaper imports.

The nominal price for intermediate consumption rose (+12.5%) broadly in line with inflation (+13.5%), so that real prices remained relatively unchanged from 1992 (-0.9%). With the volume of intermediate consumption also remaining fairly constant (-0.7%), the real value was only slightly down (-1.6%). The change in the real price for intermediate consumption hides quite different price movements for some inputs. The real price of energy increased +10.4% following the tax levied on fuels in the summer of 1992. The price of fertilizers remained more or less constant in nominal terms after the considerable rises in the previous two years following market liberalization, but fell -11.4% in real terms. The real price for seeds, most notably cereal seeds, also dropped (-19.9%). The ratios of nominal prices for intermediate consumption against final output and likewise for volumes, reveal that the "price scissors" worsened once more (-4.8%) and the productivity of intermediate consumption remained all but the same (+0.7%) in 1993.

Graph 3.4 **Evolution of the three income indicators for Greece in 1991, 1992 and 1993 (Changes in %)**



As with other Member States, there was a large rise in the level of subsidies (+32.1% in real terms) paid to farmers, in Greece in 1993, most notably as compensatory payments for arable crops and greater support for olive oil. About 60% of the new CAP subsidies available for the crop year 1993/1994 were paid out in the 1993 calendar year along with the outstanding amount for oilseeds from 1992/1993 crop year. After a methodological revision that now includes VAT under compensation in taxes rather than in intermediate consumption, the level of subsidies is approximately five times the value of taxes. This must be borne in mind when considering the considerable hike in the level of taxes linked to production (+24.5% in real terms). As with the previous year this was due to much higher insurance contributions by farmers to the government against the damages to their crops and livestock by extreme climatic conditions. Real gross value added at market prices was -7.0% lower than 1992. When the changes for subsidies and taxes were considered, real gross value added at factor cost was only -2.4% lower than the previous year.

The nominal value rises in depreciation, rent, interest and compensation of employees were all equal to or greater than +10%, but only interest charges kept pace with inflation. The following income indicators were derived after accounting for the moderate reductions in family labour input and total agricultural labour input (-2.1% and -2.4% respectively) :

Indicator 1:	-0.1%	(1992:	-17.1%)
Indicator 2:	-0.2%	(1992:	-17.7%)
Indicator 3:	-0.4%	(1992:	-18.7%)

3.5 Spain

Agricultural income in Spain as measured by Indicator 1 had the highest increase in the Community (+22.5%). This result, following the steep decline of 1992 (-11.7%), represents a cumulative increase of over +37% since the base year "1985", and stems from a combination of several factors:

- a fall in the volume of crop production (-1.8%) due to difficult climatic conditions and to CAP reform, which reduced the area under cereals;
- the stabilisation of real prices (-0.3%) for final output, the cutback in price support following the application of the CAP reform being offset by the devaluation of the "green" Spanish peseta;
- a very steep rise in subsidies (+89.2% in real terms) with the massive transfer of direct compensatory aid to agricultural producers under the CAP reform;
- a reduction in the agricultural workforce which is still very high, despite difficult economic conditions in the rest of the economy, though slightly lower than the trend of the last few years and levelling off.

The value of crop production rose by +2.9% in nominal terms, but fell by -0.9% in real terms as a result of the GDP price index rising by +3.9%. This corresponded to a slight decline in volume (-1.8%) and a stabilisation of real prices (+0.9%). The fall in the volume of crop production mainly resulted from the development in fresh vegetables and fresh fruit [2] production, the volumes of which fell by -2.6% and -4.1% respectively. Fresh vegetable production, which is the most important crop production sector in terms of value in Spain, thus recorded another lowering of production volume. Real prices, which had deteriorated considerably in 1992, seem to have stabilised (-0.1%). Fresh fruit production was relatively high in 1993 and the decline compared with 1992 was simply the result of the excellent 1992 harvest.

2 Including citrus fruit, tropical fruit and table grapes.

Table 3.5 **Changes in major items of the income calculation for agriculture in Spain, % change in 1993 over 1992**

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-1.8**	**4.8**	**0.9**	**2.9**	**-0.9**
Cereals	28.6	0.4	-3.4	29.2	24.3
Fresh vegetables	-2.6	3.8	-0.1	1.1	-2.7
Fresh fruit (**)	-4.1	-3.2	-6.8	-7.1	-10.6
Final animal output	**-0.5**	**2.0**	**-1.8**	**1.5**	**-2.3**
Cattle	-9.2	23.6	19.0	12.2	8.0
Pigs	9.2	-13.2	-16.5	-5.2	-8.8
Milk	0.0	5.7	1.7	5.7	1.7
Final output	**-1.2**	**3.6**	**-0.3**	**2.3**	**-1.5**
Intermediate consumption	**-3.3**	**2.8**	**-1.1**	**-0.6**	**-4.3**
Gross value added at m.p.	**0.8**	**4.3**	**0.4**	**5.1**	**1.2**
Subsidies				96.6	89.2
Taxes linked to production				-29.0	-31.7
Depreciation				-17.1	-20.2
Net value added at f.c.				**21.2**	**16.7**
Rent				-4.0	-7.6
Interest				8.5	4.4
Net income of total labour				**26.1**	**21.4**
Compensation of employees				-3.2	-6.8
Net income of family labour				**36.8**	**31.6**

(*) The deflator is the implicit price index of GDP at market prices, +3.9%.
**) Including citrus fruit, tropical fruit and table grapes.

The CAP reform, bringing with it compulsory set-aside, caused a decline in area under winter cereals. However, compared with 1992, when there was a sharp fall in cereal production (especially barley and soft wheat), cereal production increased by +28.6% in 1993. Sunflower production was enhanced by the period of drought, but yields were still not high and oilseed production fell by -12.6% in volume.

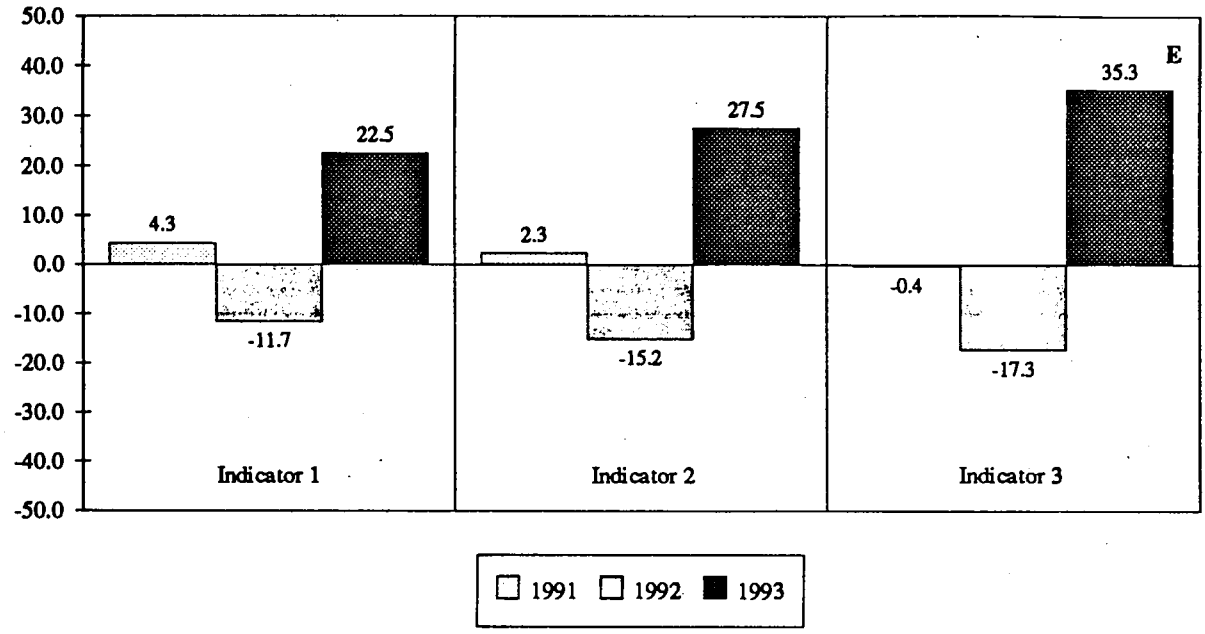
After the decline in 1992, the real value of olive oil production rose by +14.1% as a result of an increase in volume of +5.1% and in real prices of +8.6%. Difficult weather conditions (heavy rain) at the time of the harvest affected wine production (-23.6% in volume), whilst real prices also fell by -7.2%.

The real value of animal production fell by -2.3%. Whilst production volumes were unchanged on average (-0.5%), real prices fell by -1.8%. As in other Community countries, the pig sector suffered from over-production, with volumes rising by +9.2%, but real prices falling sharply (-16.5%). The volume of cattle and sheep production fell sharply (-9.2% and -6.4% respectively) owing to the drought of 1992 and the first few months of 1993. Nevertheless, real prices for cattle increased considerably (+19.0%). The decline in the volume of production of animal products is due to the fall in egg production (-11.2%), since milk production remained stable.

For the use of intermediate consumption, the trend in volume (-3.3%) and real prices (-1.1%) led to an improvement in their productivity (+2.1%) and in the "price scissors" (+0.8%), which partly explains the increase in real gross value added at market prices of +1.2%. As in most other Member States, the volume of purchases of agrochemical products (fertilisers and plant protection products) fell by -21.3% and -9.2% in the wake of a policy of keeping production costs under control and following the poor economic results of 1992. The fall in volume of use of animal feedingstuffs is the result of lower demand (lower cattle production) and an improvement in weather conditions which benefited grassland and pasture production. The +5.4% increase in

the volume of maintenance and repair charges is indicative of the ageing of equipment as a result of a slow-down in investment.

Graph 3.5 **Evolution of the three income indicators for Spain in 1991, 1992 and 1993 (Changes in %)**



The sharp rise in the real value of subsidies (+89.2%) stems from the implementation of the CAP reform. Direct aid to field crop producers as compensation for falling prices and compulsory set-aside, and the upgrading of cattle and sheep production aid resulted in a substantial rise in subsidies in 1993. However, it should be noted that only 60% of the amount of subsidies provided by the CAP reform and due for the 1993/1994 crop year is included in the agricultural income estimate for 1993. The amount corresponds in fact to the total subsidies actually paid in 1993, the balance being due for inclusion in the 1994 accounts. The fall in taxes linked to production (-31.7%) mainly corresponds to the phasing-out of the cereals corresponsibility levy. The fall in fixed capital investment in Spanish agriculture once more caused a sharp fall in the real value of depreciation (-20.2%, the sharpest fall in the Community). The real net value added at factor cost, on which Indicator 1 is based, thus rose by +16.7% (the highest rise in the Community).

The fall in rents and the increase in interest payments in real terms (-7.6% and +4.4% respectively) as well as the decline in compensation of employees (-6.8% in real terms) further explain why the real net income for total labour and real net income for family workers rose by +21.4% and +31.6% respectively.

The decline in agricultural employment in Spain is still very marked since in 1993 reductions of -4.8% and -2.7% were recorded for total labour and family workers respectively. This decline in labour input is definitely less sharp than the trend of the last few years. The difficult situation on the job market in 1993 appears to have slowed down the structural process of agricultural workers moving to non-agricultural jobs. The considerable reduction in the agricultural workforce intensified the increase in real net value added at factor cost and real net income per AWU in the calculation of the farm income indicators:

Indicator 1: +22.5% (1992: -11.7%)

Indicator 2: +27.5% (1992: -15.2%)

Indicator 3: +35.3% (1992: -17.3%)

3.6 France

Agricultural income, measured according to Indicator 1, fell by -3.4% in 1993 after stabilising in 1992 (+0.1%: revised figure). It thus reached its lowest level since 1988. However, as a result of the positive trends of 1989 and 1990 it is +13.3% higher than in the base year "1985".

The decline in income for 1993 was caused by a combination of several factors:

- the implementation of the CAP reform, mainly involving a fall in prices and production volumes in the cereals and protein crop sectors, as well as a very steep rise in direct compensation;
- the sharp decline in the real value of wine production resulting from a fall in final production and prices;
- the over-production crisis on the French and Community pig production markets;
- declines in the volume of production of fresh fruit, fresh vegetables and cattle.

The value of total final agricultural production fell by -10.4% in nominal terms, which corresponds to a decline of -12.8% in real terms as a result of a GDP price index of +2.8%. Crop production's share of total agricultural production fell, and prices and volumes fell more sharply than for animal production.

Table 3.6 Changes in major items of the income calculation for agriculture in France, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-7.2**	**-8.5**	**-10.9**	**-15.1**	**-17.4**
Cereals	-10.8	-22.8	-24.9	-31.1	-33.0
Oilseeds	-14.1	36.4	32.7	17.2	14.0
Fresh vegetables	-1.3	1.1	-1.7	-0.2	-2.9
Fresh fruit (**)	-10.0	19.6	-16.4	7.7	4.8
Wine	-10.6	-6.8	-9.3	-16.7	-19.0
Final animal output	**-0.3**	**-4.8**	**-7.4**	**-5.1**	**-7.7**
Cattle	-5.9	2.2	-0.6	-3.8	-6.4
Pigs	11.2	-26.5	-28.5	-18.3	-20.5
Milk	-1.2	0.4	-2.3	-0.8	-3.5
Final output	**-4.0**	**-6.6**	**-9.1**	**-10.4**	**-12.8**
Intermediate consumption	**0.1**	**-1.1**	**-3.8**	**-1.0**	**-3.7**
Gross value added at m.p.	**-7.4**	**-11.7**	**-14.1**	**-18.2**	**-20.4**
Subsidies				109.9	104.2
Taxes linked to production				-29.0	-30.9
Depreciation				1.0	-1.8
Net value added at f.c.				**-5.6**	**-8.2**
Rent				0.7	-2.1
Interest				-4.7	-7.3
Net income of total labour				**-6.2**	**-8.8**
Compensation of employees				2.3	-0.5
Net income of family labour				**-8.7**	**-11.2**

(*) The deflator is the implicit price index of GDP at market prices, + 2.8%.
(**) Including citrus fruit and table grapes.

1993 was marked by the implementation of CAP reform, which above all affected the field crop sector with a decline in institutional prices and control of quantities through the application of set-aside. There was a fall in

the real prices of cereals and protein crops (of -24.9% and -47.7% respectively). Similarly, the volume of cereals production fell by -10.8% mainly because of the need to set aside 15% of the total area under cereals, oilseed and protein crops. The reduction of the area under cereals was about -8% (with a particularly sharp reduction for durum wheat of -45%, and a slight reduction for maize of -4%). The reduction of price support and compulsory set-aside, however, were offset by direct payments.

Oilseed cultivation was the main loser from the application of the compulsory set-aside scheme, with sharp declines in area. The volume of oilseed production (especially sunflower production) fell sharply, by -14.1%. Following a steep decline in 1992 in the wake of their alignment with world prices, real oilseed prices rose by +32.7%, benefiting from sustained demand and a firm dollar rate.

After several years of growth, fresh vegetable production declined in volume (-1.3%). This development, which affected almost all fresh vegetables except tomatoes, can be explained by a reduction in production area for some vegetables and a shortfall in production at the beginning of the year (salad and artichokes). Real prices fell slightly (-1.7%) despite a fairly disparate trend from product to product.

Fresh fruit[3] production fell sharply in 1993 (-10.0%) in the wake of an average harvest following an exceptional one in 1992. The difficult weather conditions at the different stages of production (ripening and harvest) affected yields. Only strawberry, melon and grape production increased. Final production prices rose sharply (+16.4% in real terms) whereas selling prices fell for the second year running.

The volume of wine production fell significantly in 1993 (-10.6%) compared with the excellent harvest of 1992. However, sales improved and stocks were reduced substantially. A recovery in the consumption of quality wines was staged by reducing prices. The increase in ordinary wine sales only applies to wines for distilling (intervention distilling or cognac production), since table wines suffered from competition from Italy, Spain and Eastern Europe as well as falling consumption. The slump in real prices of final wine production was -9.3%.

The real value of animal production also fell by -7.7% because of the fall in real prices (-7.4%), whilst the production volume was maintained (-0.3%). For the first time since 1989 the volume of cattle production declined sharply (-5.9%). Cows and heifers in particular were affected, apparently due to withholding of stocks following changes to the system of aid for suckler cows. Real cattle prices stabilised (-0.6%) because of limited supplies and despite the 5% fall in the intervention price decided under the CAP reform.

Pig production continued to grow quickly with a production volume that rose by +11.2% in 1993. As in the other Member States, the sharp increase in pig population over the previous year led to considerable overproduction. This surplus supply and competition from the other Member States (Denmark and the Netherlands in particular) brought about a drastic slump in real prices (-28.5%). Poultry production stabilised in volume (+0.9%) but decline in real value (-6.0%). In actual fact, the decline in demand following the substantial growth of the last few years had an effect on prices, which remained at relatively low levels.

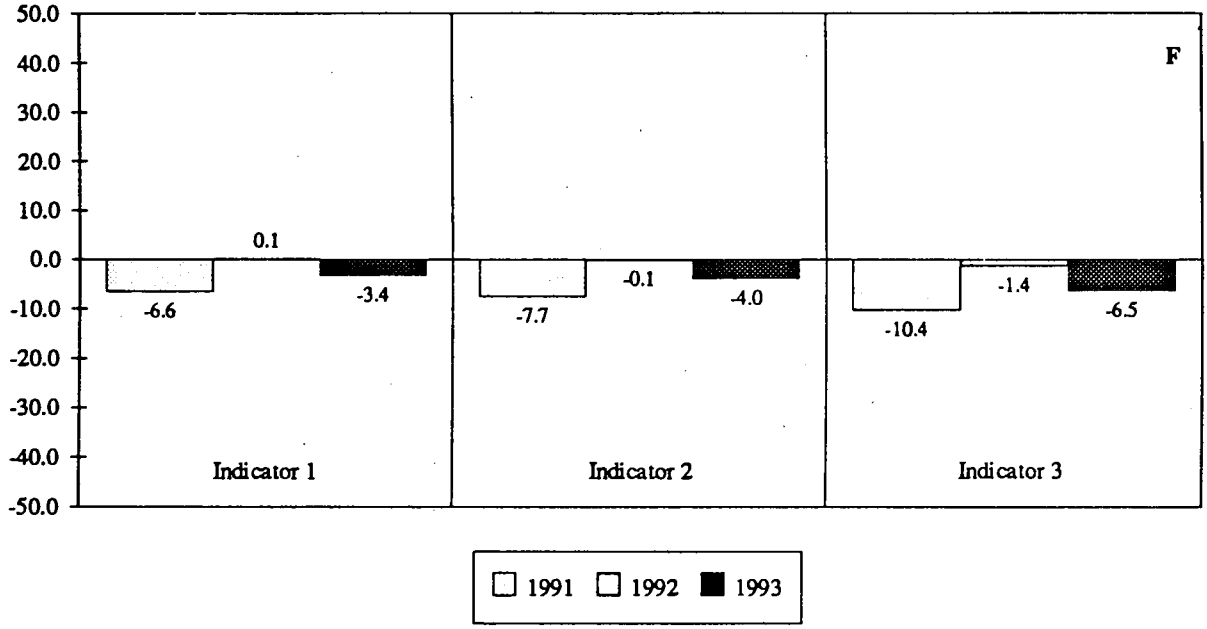
Milk production declined by -1.2% in volume in 1993, especially in the first half of the year. The steeper decline in production quantities made up for the increase in fat level. Adapting to supply allowed prices to settle down somewhat, stabilising in nominal terms (+0.4%) but falling by -2.3% in real terms. The value of milk production thus fell by -3.5% in real terms.

The real value of intermediate consumption fell by -3.7% following a stagnation in volume (+0.1%) and a fall in real prices (-3.8%). Combined with changes to final output this has implicitly caused a sharp decline in the productivity of intermediate consumption (-4.1%) and in the "price scissors" (-5.6%). As in 1991 and 1992, the trend in volume contrasts sharply with the long-term trend and confirms a slow-down in the use of

[3] Including citrus fruit and table grapes.

intermediate consumption. Indeed, the consumption of agrochemical products (fertilizers and plant protection products) fell for the third year running in volume terms (by -4.5% and -10.0% respectively). This decline in purchases could be explained by the fall in requirements in the wake of compulsory set-aside but also by a policy of reducing operating costs (decline in consumption according to area under crops). The volume of animal feedingstuffs rose by +3,5% as a result of the growth in pig production. Real prices of intermediate consumption fell by -3.8% owing to the decline in the real prices of seeds, fertilizers and animal feedingstuffs.

Graph 3.6 **Evolution of the three income indicators for France in 1991, 1992 and 1993 (Changes in %)**



Subsidies grew by +104.2% in real terms. This very sharp increase was due for the most part to the subsidies paid under the CAP reform. They mainly comprise compensation payments to producers of cereals, protein crops and oilseeds to offset price slumps and losses due to set-aside (which became obligatory in 1993), as well as new or reassessed aid for cattle or sheep production. The amount of new and reassessed aid under the CAP reform which comes under the 1993 subsidies heading corresponds to the total amount due for the 1993/1994 crop year. The sharp decline, in real terms, of taxes linked to production of (-30.9%) mainly stems from cutbacks in cereals and milk corresponsibility levies.

The fall in real gross value added at factor cost (-7.1%), combined with that of depreciation (-1.8%), caused a decline in the real net value added at factor cost of -8.2%. The reduction in real terms of rents (-2.1%) and interest payments (-7.3% reduction in the rates and amounts of loans) led to a fall in real net income from agricultural activity for the overall workforce of -8.8%. The similar amount of compensation of employees (-0.5% in real terms) to the level in 1992 resulted in an even greater decline in real net income from agricultural activity for family workers (-11.2%). The reduction in agricultural labour input which was accentuated in 1993 (-5.0% following aid measures for early retirement implemented in 1992) mitigated the decline in income indicators as follows:

Indicator 1:	-3.4%	(1992:	+0.1%)
Indicator 2:	-4.0%	(1992:	-0.1%)
Indicator 3:	-6.5%	(1992:	-1.4%)

3.7 Ireland

Following the considerable rise in the income to the branch of agriculture in 1992, there is expected to have been a further, although much smaller, increase in 1993. In terms of Indicator 1, the level of income in 1993 was +3.3% higher than 1992, which in turn was +19.7% greater than the level in 1991. These rises have occurred against a background of falling incomes in many other Member States. There has been a fairly steady rise in the income Indicator 1 index for Ireland since the base year, and the cumulative increase (one of only four among Member States) is now estimated at +59.4% since the base year of "1985".

The main reason for the slightly higher income level in 1993 was that:

- in many instances, the devaluation of the Irish pound often counterbalanced the fall of price support in the context of CAP reform. In the case of cattle and milk in particular, because they account for about seventy percent of the value of total final output, prices in real terms even increased (by +4.9% and +3.9% respectively). With only small reductions in production volume (-1.4% and -0.5%), the real production value of both cattle and milk rose by +3.4%; that of total final production being stable (+0.0%).

Table 3.7 Changes in major items of the income calculation for agriculture in Ireland, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-12.8**	**0.6**	**-2.1**	**-12.3**	**-14.6**
Cereals	-21.7	-2.7	-5.2	-23.8	-25.8
Final animal output	**-0.6**	**5.6**	**2.9**	**5.1**	**2.3**
Cattle	-1.4	7.6	4.9	6.2	3.4
Pigs	5.4	-16.6	-18.9	-12.2	-14.5
Sheep	1.3	15.5	12.5	17.0	13.9
Milk	-0.5	6.7	3.9	6.2	3.4
Final output	**-2.2**	**5.0**	**2.2**	**2.7**	**0.0**
Intermediate consumption	**2.1**	**0.0**	**-2.6**	**2.1**	**-0.6**
Gross value added at m.p.	**-5.2**	**8.6**	**5.8**	**3.0**	**0.3**
Subsidies				4.1	1.4
Taxes linked to production				-3.1	-5.6
Depreciation				-0.3	-2.9
Net value added at f.c.				**3.9**	**1.2**
Rent				0.0	-2.6
Interest				-15.5	-17.7
Net income of total labour				**6.4**	**3.6**
Compensation of employees				3.4	0.7
Net income of family labour				**6.8**	**4.0**

(*) The deflator is the implicit price index of GDP at market prices, + 2.7 %.

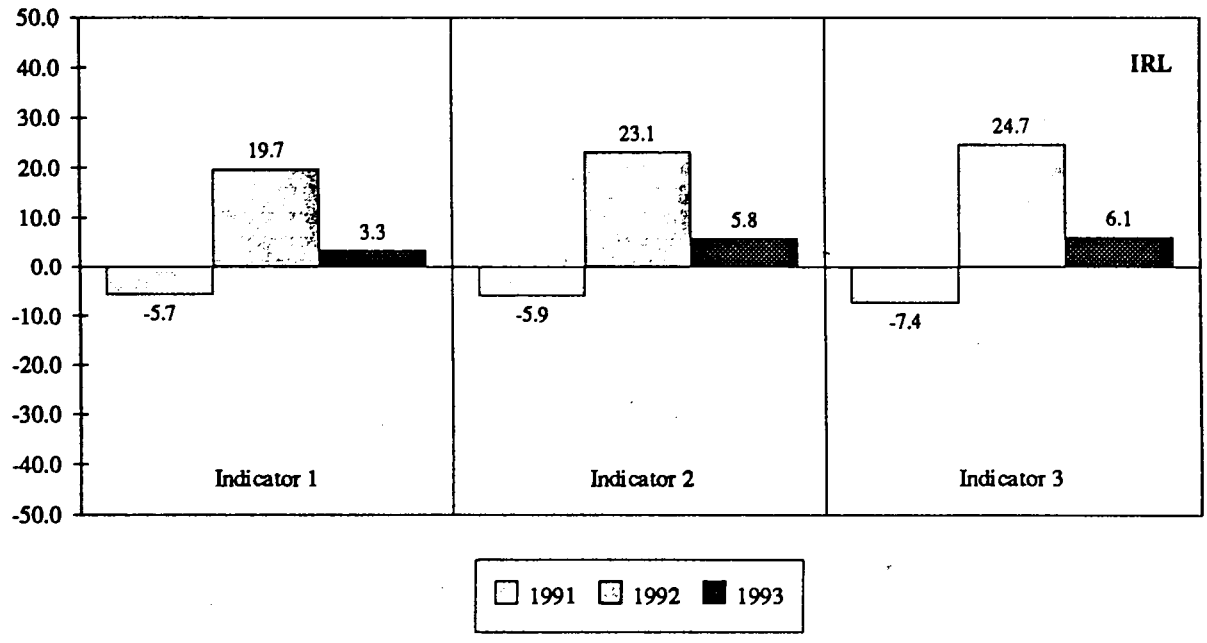
The effects of the devaluation were most pronounced through the principal export markets. There were some significant developments in the cattle industry in 1993. A much larger proportion of slaughtered steers were sold onto commercial markets; a much smaller proportion were sold into intervention, particularly in the second half of the year. There was further expansion in third country markets, particularly those in the Middle East and Northern Africa, for live exports (Egypt and Libya) but also for greater carcass beef sales (Iran and Israel). Beef sales to the United Kingdom, the largest export market for Irish beef, continued to expand. The production volume of milk was slightly down on 1992 (-0.5%), particularly due to lower deliveries to dairies in the first half of the year. Like many other Member States, there was an increase in pig production volume (+5.4%) against a background of surpluses that were depressing prices (down by -18.9% in real terms in

Ireland). In contrast, the real price for sheep was much higher than the 1992 level (+12.5%) even though production volume increased slightly (+1.3%). The devaluation of the Irish pound helped the strong export demand from Mediterranean countries in particular for live lambs and super-light carcasses.

Crop production value only accounts for about 13% of total final output value, and most of this concerns cereals, potatoes and fresh vegetables. In line with the CAP reform, the production volume of cereals fell (-21.7%), particularly as some land previously in cereals in 1992 was set-aside. The corresponding loss of price support was not so evident as the devaluation of the Irish pound limited the fall in prices; in real terms the price of total cereals declined by -5.2% over 1992 prices (as compared to -14.0% for EUR 12).

The real value of intermediate consumption fell very slightly (-0.6%) in 1993. The rise in the volume of intermediate consumption purchased (+2.1%) had much to do with greater purchases of feedingstuffs (+4.7%) and fertilizers (+4.6%). Lower prices of feedingstuffs in real terms (-2.5%) and the expansion of pig output were the main reasons behind these greater purchases. Although purchases of total intermediate consumption were higher than 1992 levels, the volume of final output decreased (-2.2%). As a result the productivity of intermediate consumption fell by -4.2%. The nominal price of total intermediate consumption was unchanged from the previous year, but the devaluation of the Irish pound helped nominal prices of total final output rise by +5.0%. In 1993, the "price scissors" therefore improved, also by +5.0%.

Graph 3.7 **Evolution of the three income indicators for Ireland in 1991, 1992 and 1993 (Changes in %)**



The real value of subsidies increased again in 1993, although only by +1.4%. Most of the new CAP reform subsidies are linked to arable crop production and since arable crop production is on a small scale in Ireland in terms of absolute value, the impact on the total subsidy level was minor. Nearly ninety percent of the new CAP reform subsidies available for the 1993/1994 marketing year were paid in 1993. In addition, there was a further fall in the level of taxes (-5.6%) in real terms, although it must be noted that taxes are only about one-tenth of the level of subsidies. Depreciation in real terms was down (-2.9%) roughly in line with the deflator. There was a substantial reduction in the level of interest payments (-17.7%) as interest rates declined. Figures on the change (-2.0%) in family and non-family labour input in 1993 were estimated by Eurostat. The following changes to the level of Indicator 1 were estimated:

Indicator 1: +3.3% (1992: +19.7%)

Indicator 2: +5.8% (1992: +23.1%)

Indicator 3: +6.1% (1992: +24.7%)

3.8 Italy

Agricultural income in Italy is expected to have decreased in 1993 and at a similar rate to the previous year. In terms of Indicator 1, the decline is measured at -7.1% (compared with -6.2% in 1992). The cumulative index of Indicator 1 shows that with these estimates for 1993, there has been a reduction of income to the branch of agriculture of -14.3% since the base year alone ("1985"). The principal reason for the decline in 1993 was:

- a marked reduction in the real value of crop products (-12.3%). More specifically, there were considerably lower production volumes and real prices for fresh vegetables, fresh fruit, and wine.

In addition, the rise in the real value of intermediate consumption (+1.8%) only exaggerated the downward pressure on gross value added at market prices.

Table 3.8 Changes in major items of the income calculation for agriculture in Italy, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-5.3**	**-3.7**	**-7.4**	**-8.8**	**-12.3**
Cereals	-1.7	7.9	3.7	6.1	2.0
Fresh vegetables	-10.0	-9.0	-12.5	-18.1	-21.2
Fresh fruit (**)	-8.0	-9.1	-12.6	-16.4	-19.6
Wine	-9.4	-5.5	-9.2	-14.4	-17.7
Olive oil	25.0	-4.0	-7.7	20.0	15.4
Final animal output	**0.9**	**3.6**	**-0.4**	**4.5**	**0.5**
Cattle	2.0	15.0	10.6	17.3	12.8
Pigs	0.8	-7.0	-10.6	-6.3	-9.9
Milk	-1.5	0.8	-3.1	-0.7	-4.5
Final output	**-2.9**	**-0.8**	**-4.6**	**-3.7**	**-7.4**
Intermediate consumption	**-1.1**	**7.1**	**3.0**	**5.9**	**1.8**
Gross value added at m.p.	**-3.6**	**-3.9**	**-7.6**	**-7.3**	**-10.9**
Subsidies				23.7	19.0
Taxes linked to production				4.4	0.4
Depreciation				4.0	0.0
Net value added at f.c.				**-7.1**	**-10.7**
Rent				-7.5	-11.1
Interest				-11.5	-14.9
Net income of total labour				**-6.5**	**-10.1**
Compensation of employees				-1.8	-5.6
Net income of family labour				**-11.4**	**-14.9**

(*) The deflator is the implicit price index of GDP at market prices, + 4.0 %.
(**) Including citrus fruit, tropical fruit and grapes.

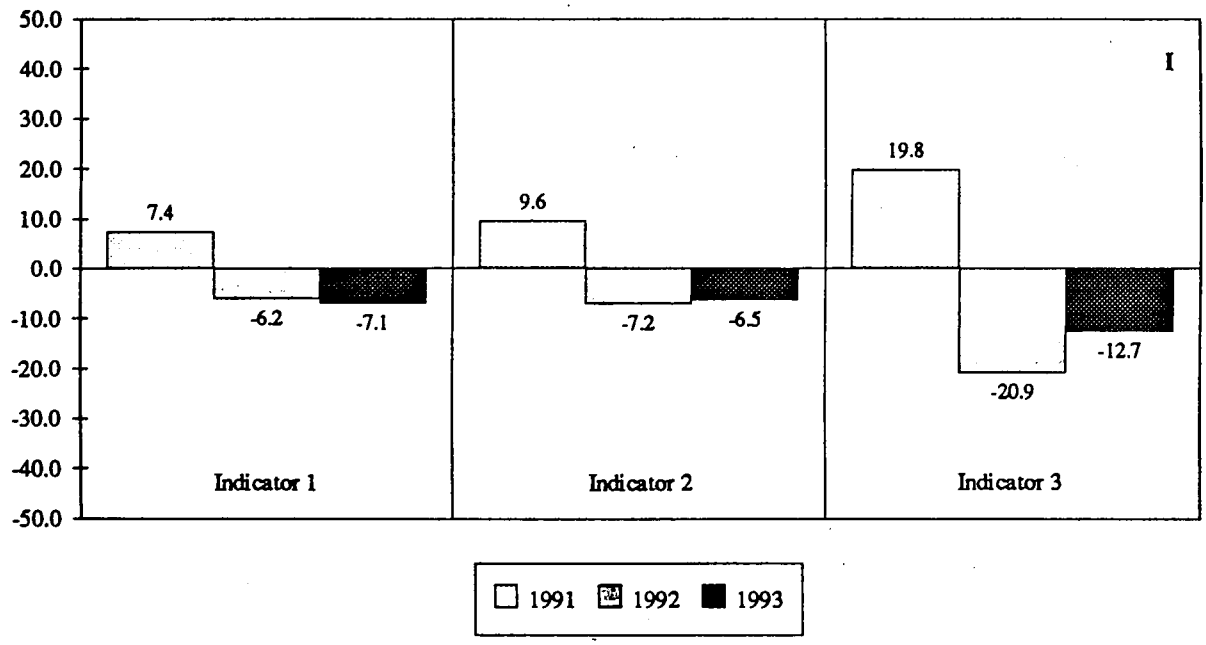
Fresh vegetables, fresh fruit and wine accounted for just over half of the value of final crop production in 1992. Production volumes for all three crops were about -10% lower in 1993 than in 1992, but real prices declined nevertheless (by -12.5%, -12.6% and -9.2% respectively). The changes in the production volumes partly mirrored the high level of production in 1992 but also in the case of wine, heavy rainfall prior to and during harvest. The production volume of cereals fell only moderately (-1.7%) because the volume of maize produced increased by +6.0%. This was linked to a considerable switch away from soya production into

maize. The production volumes of all other cereals declined due in particular to increased set-aside. In many instances the cut in price support in the context of CAP reform was concealed by the devaluation of the lire; Italy was the only Member State where the real price of cereals actually increased (+3.7%). There was a substantial rise in the volume of olive oil production in 1993 (+25.0%) after steep falls in 1992, which highlights the production nature of this crop. The real price fell by -7.7%, but the real value of olive oil rose by +15.4%.

The value of final animal production represents about forty percent of total output. The aggregate change in the real value of final animal output (+0.5%) suggests that there was relative stability in the market. There were only slight changes to the production volume (+0.9%) and real price (-0.4%) in 1993. However, there were considerable differences between the main animal products. The real value of cattle was +12.8% higher than the previous year, whereas the real value of milk (-4.5%) and pigs (-9.9%) were lower. As with other Member States, the chronic European surplus in pig production reduced real prices, although the decline of -10.6% in Italy was the smallest fall in the Community. The real value of milk production decreased by little more than the deflator, with a small reduction in output (-1.5%) and real prices that were -3.1% lower than 1992.

The real value of intermediate consumption in Italy was +1.8% higher than in 1992. This was due to the real price of feedingstuffs increasing +2.5% (feedingstuffs represent about half the value of total intermediate consumption) and the real price of energy jumping +15.4%. All other real prices and volumes were lower in 1993 than 1992. There was a slightly lower volume of intermediate consumption purchased (-1.1%) in 1993, but with the volume of final output decreasing by more (-2.9%), the productivity of intermediate consumption deteriorated (-1.9%). The considerably higher nominal price for intermediate consumption (+7.1%) in 1993 compared to 1992 coupled with a small fall in the nominal price of final output (-0.8%), resulted in a substantial decline in the "price scissors" (-7.4%).

Graph 3.8 **Evolution of the three income indicators for Italy in 1991, 1992 and 1993 (Changes in %)**



Like all other Member States, there was a rise in the level of subsidies under the latest CAP reform. In Italy the increase was estimated at +19.0% in real terms over the level in 1992. The absolute level of taxes linked to production, which is about one-tenth the value of subsidies, remained almost unchanged in real terms. Together, these factors helped limit the fall in real gross value added at factor cost to -7.5%. Depreciation,

which accounts for the equivalent of a quarter of the value of final agricultural production in Italy only increased in line with the deflator in 1993. There was a significant fall in the level of interest payments (-14.9% in real terms) as interest rates declined, as there was for the compensation of employees (-5.6% in real terms) since the total non-family labour input decreased greatly (-6.6%). With total family labour input also declining (-2.5%), the following changes in the income Indicator levels were observed for 1993 :

Indicator 1:	-7.1%	(1992:	-6.2%)
Indicator 2:	-6.5%	(1992:	-7.2%)
Indicator 3:	-12.7%	(1992:	-20.9%)

3.9 Luxembourg

Agricultural income in Luxembourg, measured by Indicator 1, is calculated to have fallen by -6.2% in 1993 after falling by -4.8% in 1992. Since the period of rising incomes in the late 1980's, there have now been four consecutive declines in annual income in Luxembourg. The Indicator 1 index is now at its lowest level since 1981 and the cumulative fall in the index since the base year "1985" is -9.8%. The development in 1993 is mainly due to the following factors:

- a fall in wine volume of -37.6% and in cereal prices (in real terms -19.0%) and volumes (-3.9%);
- a sharp decline in the real value of pig production of -13.9%, from falling real prices (-25.6%) and an increase in production volume (+15.8%) ,
- a sharp fall in the real value of intermediate consumption (-7.3%) especially as a result of falls in real prices (-18.6%) and volumes (-38.4%) of imported animals;
- an increase in subsidies in real terms of +9.9%; however, it should be borne in mind that about a third of new CAP reform subsidies available for the financial year 1993/1994 will not be paid out until 1994 and therefore are not included in the 1993 EAA.

The real value of animal production, accounting for about three-quarters of final agricultural production, is calculated to have fallen by -2.4% in real terms. For milk, the main product, accounting for over half of the value of animal production, the real value remained relatively more stable (-1.1%) because the +2.9% expansion of production almost made up for the fall in prices. For cattle, which accounts for another third of the value of animal production, the opposite was true in that the +2.9% rise in real prices was almost able to make up for the -3.8% fall in volume. The value of pig production, which accounts for about a further tenth of the real value of animal production, fell by -13.9% in the wake of disparate developments for volume (+15.8%) and real prices (-25.6%).

The sharp decline in the real value of crop production of -24.2% was mainly due to a fall in the volume of wine production -37.6%. In spite of the real increase in prices of +5.3% the real value of wine production thus fell by -34.3%. The value of wine, accounts for about 50% of the crop production value, and is followed by cereals, accounting for 25% of it. It was with cereals, that CAP reform was most felt: volume sank by -3.9% and prices by -19.0% in real terms. The resulting decline in the real value of cereal production of -22.2%, however, must be interpreted in the context of the compensatory payments provided by the CAP reform. Oilseed production volume almost doubled (+95.8%) and coupled with a real price increase of +38.1% this resulted in a rise in real production value of +170.3%. The value of this sector reached half of that of fresh vegetables, the volume and real prices of which fell by -3.5% and -7.7% respectively. A decline in fresh fruit production of -31.0% was more than offset by a rise of +69.8% in real prices. The value of fresh fruit production accordingly rose by +17.2% in real terms.

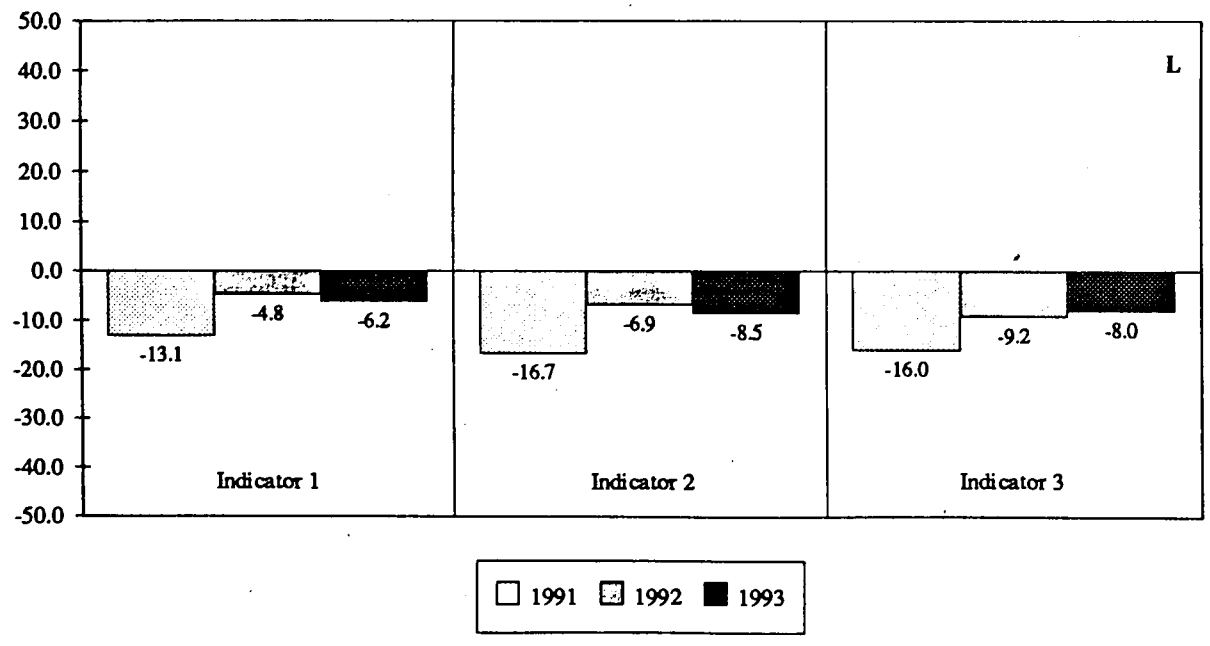
Table 3.9 Changes in major items of the income calculation for agriculture in Luxembourg, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-23.9**	**1.0**	**-2.1**	**-21.8**	**-24.2**
Cereals	-3.9	-16.4	-19.0	-19.7	-22.2
Wine	-37.6	8.7	5.3	-32.2	-34.3
Final animal output	**2.0**	**-1.2**	**-4.3**	**0.8**	**-2.4**
Cattle	-3.8	6.2	2.9	2.2	-1.0
Pigs	15.8	-23.2	-25.6	-11.1	-13.9
Milk	2.9	-0.8	-3.9	2.1	-1.1
Final output	**-3.9**	**-0.8**	**-3.9**	**-4.7**	**-7.7**
Intermediate consumption	**-0.6**	**-3.8**	**-6.8**	**-4.3**	**-7.3**
Gross value added at m.p.	**-6.4**	**1.5**	**-1.6**	**-5.0**	**-8.0**
Subsidies				13.4	9.9
Taxes linked to production				-0.6	-3.7
Depreciation				4.9	1.6
Net value added at f.c.				**-4.8**	**-7.7**
Rent				4.8	1.6
Interest				1.7	-1.4
Net income of total labour				**-7.1**	**-10.0**
Compensation of employees				16.8	13.2
Net income of family labour				**-8.8**	**-11.6**

(*) The deflator is the implicit price index of GDP at market prices, + 3.2%.

The real value of intermediate consumption fell by -7.3%, mainly due to a decline in the volume and real prices of imported animals (-38.4% and -18.6% respectively) and fertilizers (-3,2% and -9.0% respectively) as well as feedingstuffs (-4.2% and -4.1% respectively).

Graph 3.9 Evolution of the three income indicators for Luxembourg in 1991, 1992 and 1993 (Changes in %)



Depreciation increased by +1.6% in real terms, thus dampening the effect of increased subsidies (+9.9%). In this connection it should be noted that about a third of payments due for the financial year 1993/1994 from the CAP reform will not be made until 1994. The net value added at factor cost thus fell by -7.7% in real terms.

As a result, taking into account the decrease in the overall agricultural labour input of -1.6% and a decline in family labour of -3.9%, the three income indicators show the following rates of change:

Indicator 1:	-6.2%	(1992:	-4.8%)
Indicator 2:	-8.5%	(1992:	-6.9%)
Indicator 3:	-8.0%	(1992:	-9.2%)

3.10 The Netherlands

For the second successive year there is expected to have been a significant fall in the level of income of the agricultural branch. The annual change in the level of income Indicator 1 is estimated to have been -11.7% in 1993, after -13.4% in the previous year. These falls have been considerably more than the average in the Community, and the Indicator 1 income index level for the Netherlands was -23.1% lower than the base year ("1985") in 1993.

The main reasons behind the severity of the fall in the agricultural branch level of income in 1993 were principally:

- the plummeting real price for pigs. Pig production accounted for about one-fifth of the value of final output in 1992, and the substantial drop in the real price of -31.2% had a profound effect on the aggregate results;
- the real value of fresh vegetables that accounts for about a further sixth of the value of final output also declined, although less strongly (-5.5%).

The price of pigmeat has been decreasing since mid-1992, after a long period of high prices, due to the imbalance of not only the Dutch market but also the European market in which the Netherlands as a major exporter plays a large role. The greater level of slaughterings in the rise of the production volume (+5.0%) has only increased the pressure on prices. The value of pig production decreased -27.7% in real terms as a result. Although higher yields helped push milk production +1.5% higher, real price declines of -2.6% led to a lower value for milk in real terms. Less slaughtering of cattle was reflected in a lower production volume (-1.8%) and fewer exports contributed to a -3.7% decline in the real price of cattle. The volume of poultrymeat production was much the same as the year before (-0.5%), although chick placings were estimated to be more noticeably down, but poultry prices fell -6.6 % in real terms. When all the results for animals and animal products were amalgamated, the real value of final animal output was -10.6% lower in 1993 than 1992, after a -11.9% fall in real prices that far outweighed the small rise in production volume.

The real value of final crop output also declined (-1.6%), although not at the level observed for final animal output (-10.6%). Flowers, ornamental plants and fresh vegetables are the principal crop products with a 60% share in the total value of crop products. The real value of vegetables decreased -5.5% due to falling prices (-4.1%) and production volume (-1.5%). There was very little change in the volume, real price and value of flowers (the latter being +1.3% in real terms). On a smaller scale the value of potatoes was +15.2% higher in 1993 than 1992, with real prices increasing by +14.1% in 1993 after tumbling by much more in the previous year. Cereals' value fell -18.7% in real terms because the reduction of price support in the CAP reform led to the real price decreasing -24.1%. The volume of cereals rose by +7.1%, principally due to improved yields. In particular, although the area sown to wheat declined (-7%) as a response to the new set-aside arrangements, greater yields boosted output by +2.0%.

The real value of intermediate consumption fell moderately (-4.2%) which somewhat compensated for the lower final output value. The volume of intermediate consumption rose slightly (+0.4%) principally due to more use (+1.5%) of lower priced feedingstuffs (-6.6% in real terms as a reaction to lower priced cereals) for the greater volume of animal production. The real price of intermediate consumption as a whole fell by -4.6%, with other significant real price decreases noted for fertilizers (-8.5%) and seeds (-11.5%). The environmental policy and set-aside affected the use of fertilizers (-4.0%) and plant protection products (-3.0%), and over capacity in the fertilizer industry led to the aforementioned lower price. There was a slight improvement in intermediate consumption productivity (+0.6%) but the "price scissors" deteriorated -3.4%.

The level of total subsidies increased (by +4.3%), but at a much lower rate than other Member States. This reflects the structure of Dutch agriculture with concern to the new CAP subsidies in particular. Therefore, although real subsidies linked to crop production rose by +153.2% with the latest reform of the CAP, this was still relatively small in terms of absolute value. Subsidies linked to animal production decreased by -32.9% because of lower compensation for suspended milk quota. Most of the new subsidies (about 85%) for the marketing year 1993/1994 were paid in 1993. Taxes linked to production fell by -5.5% in real terms because taxes linked to animal production declined by -38.5%. Despite these annual changes, the absolute level of taxes remains about twice that of subsidies.

Table 3.10 Changes in major items of the income calculation for agriculture in Netherlands, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**0.4**	**-0.3**	**-2.0**	**0.1**	**-1.6**
Potatoes	1.0	16.0	14.1	17.2	15.2
Fresh vegetables	-1.5	-2.5	-4.1	-3.9	-5.5
Flowers	0.5	2.5	0.8	3.0	1.3
Final animal output	**1.4**	**-10.4**	**-11.9**	**-9.1**	**-10.6**
Cattle	-1.8	-2.1	-3.7	-3.8	-5.4
Pigs	5.0	-30.0	-31.2	-26.5	-27.7
Poultry	-0.5	-5.0	-6.6	-5.5	-7.1
Milk	1.5	-1.0	-2.6	0.5	-1.2
Eggs	-3.5	2.0	0.3	-1.6	-3.2
Final output	**1.0**	**-6.2**	**-7.8**	**-5.3**	**-6.9**
Intermediate consumption	**0.4**	**-3.0**	**-4.6**	**-2.6**	**-4.2**
Gross value added at m.p.	**1.6**	**-9.6**	**-11.1**	**-8.1**	**-9.6**
Subsidies				6.1	4.3
Taxes linked to production				-3.9	-5.5
Depreciation				3.0	1.3
Net value added at f.c.				**-11.6**	**-13.1**
Rent				-0.5	-2.2
Interest				-5.0	-6.6
Net income of total labour				**-13.8**	**-15.3**
Compensation of employees				3.5	1.8
Net income of family labour				**-21.1**	**-22.4**

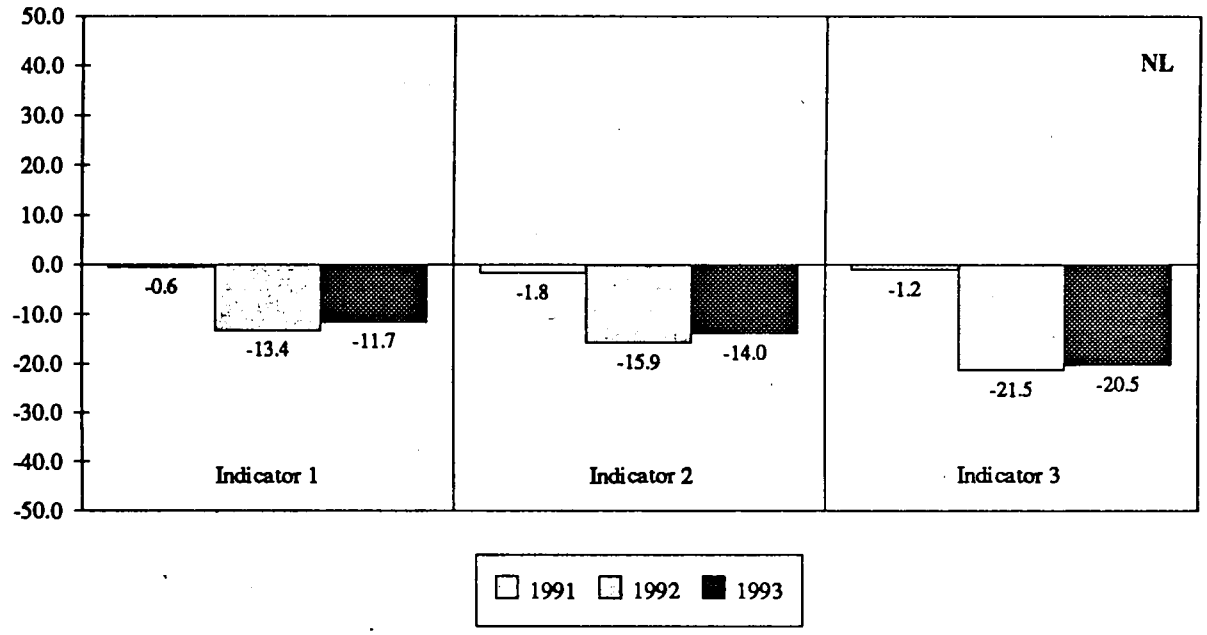
(*) The deflator is the implicit price index of GDP at market prices, + 1.7 %.

There was a slight rise in the level of depreciation in real terms (+1.3%) as were more investments in horticulture and dairy farming (quota). Rental payments declined by -2.2% in real terms and interest payments also fell (-6.6%), partly because of lower interest rates. The increase in the compensation of employees (+1.8% in real terms) resulted from a +0.8% rise in the non-family labour input and a wage rise per worker that was twice the level of inflation. In contrast to the increase in the non-family labour input, family labour

input was -2.4% less in 1993 than 1992, and the total labour input was down -1.5%. All these factors contributed to the change in the following Indicator levels :

Indicator 1:	-11.7%	(1992:	-13.4%)
Indicator 2:	-14.0%	(1992:	-15.9%)
Indicator 3:	-20.5%	(1992:	-21.5%)

Graph 3.10 **Evolution of the three income indicators for Netherlands in 1991, 1992 and 1993 (Changes in %)**



3.11 Portugal

Income to the branch of agriculture in Portugal, measured according to Indicator 1, fell by -10.7% in 1993, after declines of -9.6% and -13.9% in 1991 and 1992 respectively. This latest reduction in agricultural income has led to a cumulative fall of just over -25% since the base year ("1985"), which is the greatest decline within the Community and means that agricultural income in Portugal is now even lower than the level of 1980. The result for 1993 is a combination of the following factors :

- a significant reduction in real prices (-8.3% for final output), for final crop and final animal output;
- a considerable fall in the volume of crop production (-18.3%),
- a fall in the real value of intermediate consumption of -13.4%, mainly due to a fall in the volume of sales (-9.5%), and
- only a slight drop, with respect to the long-term development, in total labour input of -2.6% and -0.5% for family labour input.

The real value of crop production is calculated to have declined (-21.6%) as a result of a downward trend in the real production value of almost all the main products, including wine (-23.6%), fresh fruit[4] (-27.9%), olive oil (-37.3%) and potatoes (-36.2%). Outside wine, for which the real price increased (+29.9%), volumes and

[4] Including citrus fruit, tropical fruit and table grapes.

prices for the other three products decreased. The volumes of production were substantially lower than 1992 for wine (-41.2%), olive oil (-28.6%), potatoes (-26.0%) and for fresh fruit (-17.1%).

The real price of fresh vegetables remained largely unchanged from the previous year (+0.7%), in spite of a fall in production volume (-6.9%) and a sharp reduction in prices in 1992. After the strong decline recorded in 1992, the volume of cereals increased more moderately (+7.4%), although the real price tumbled -14.2%. Despite large fluctuations, it appears that the share of crop production in final output has significantly diminished in the last few years ; in 1993 it stood at less than 40%.

Table 3.11 Changes in major items of the income calculation for agriculture in Portugal, % change in 1993 over 1992

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-18.3**	**2.7**	**-4.0**	**-16.1**	**-21.6**
Cereals	7.4	-8.2	-14.2	-1.3	-7.8
Fresh vegetables	-6.9	7.7	0.7	0.3	-6.3
Wine	-41.2	39.0	29.9	-18.2	-23.6
Final animal output	**-0.3**	**-5.2**	**-11.4**	**-5.4**	**-11.6**
Cattle	-3.0	7.1	0.1	3.9	-2.9
Pigs	10.0	-27.0	-31.8	-19.7	-25.0
Milk	-7.8	-6.6	-12.7	-13.9	-19.5
Final output	**-8.6**	**-1.9**	**-8.3**	**-10.3**	**-16.2**
Intermediate consumption	**-9.5**	**2.4**	**-4.3**	**-7.3**	**-13.4**
Gross value added at m.p.	**-7.6**	**-6.6**	**-12.7**	**-13.7**	**-19.3**
Subsidies				30.0	21.5
Taxes linked to production				-10.3	-16.1
Depreciation				5.7	-1.2
Net value added at f.c.				**-6.9**	**-13.0**
Rent				-2.5	-8.9
Interest				-2.8	-9.2
Net income of total labour				**-8.3**	**-14.3**
Compensation of employees				3.8	-3.0
Net income of family labour				**-12.8**	**-18.5**

(*) The deflator is the implicit price index of GDP at market prices, +7.0%.

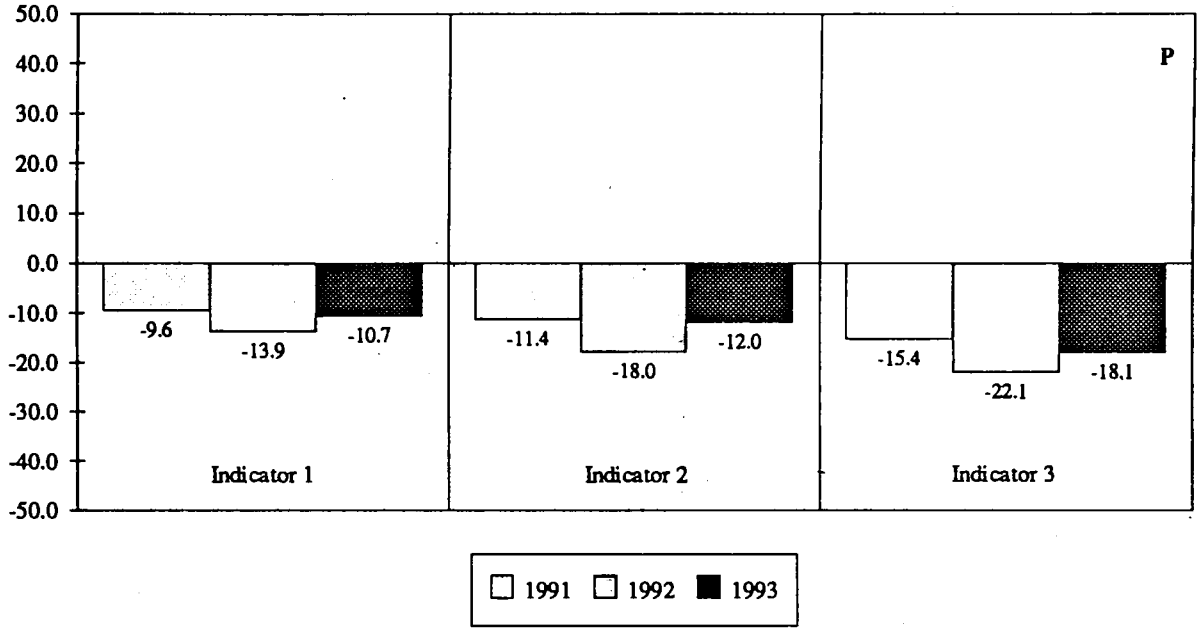
The value of final animal output (-11.6% in real terms) was affected especially by a drop in the price for pigs (-31.8% in real terms), echoing a trend throughout the Community caused by drastic market imbalances, the real price for milk (-12.7%) as well as cuts in the production volume of milk (-7.8%) and cattle (-3.0%). In contrast, the volume of pig production rose (+10.0%) and the other animal and animal products remained similar to the levels of the previous year.

Falls in production volumes especially for crop production resulted in a reduction in the volumes of intermediate consumption (overall -9.5%), and especially of plant protection products (-29.9%), energy and lubricants (-18.3%) as well as material, tools and repairs (-18.6%). Apart from feedingstuffs, for which the price fell by -7.7% in real terms (accompanied by a constant volume), the prices for intermediate consumption goods rose in nominal terms but fell by -4.3% in real terms. In consequence, the value of intermediate consumption fell in real terms by -13.4%. As a result of these changes, there was a slight rise in the productivity of intermediate consumption (+1.0%) but a significant deterioration in the "price scissors" (-4.2%).

In consequence of the reform of the CAP, subsidies rose sharply (+21.5% in real terms). In parallel with the fall in intermediate consumption and a -1.2% decline in depreciation, real net value added at factor cost fell by -13.0%. Declines in rent and interest payments of about -9.2% in real terms helped to prevent the net income of agriculture from falling even more sharply (although still -14.3% in real terms). If the moderate decrease in labour input is included (-2.6% overall and -0.5% for family labour) the following trends for the income indicators result:

Indicator 1:	-10.7%	(1992: -13.9%)
Indicator 2:	-12.0%	(1992: -18.0%)
Indicator 3:	-18.1%	(1992: -22.1%)

Graph 3.11 **Evolution of the three income indicators for Portugal in 1991, 1992 and 1993 (Changes in %)**



3.12 United Kingdom

There is expected to have been a considerable increase in agricultural income, as measured in terms of Indicator 1, for the United Kingdom in 1993 (+15.1%). This contrasts markedly with the situation for the Community as a whole (-1.2%), as was the case in 1992 (+5.8% compared with -5.4% respectively). With the latest annual results, the cumulative Indicator 1 index is +14.2% higher than the base year ("1985").

However, the increase in income was neither the result of a rise in the value of final output, nor any decrease in the value of intermediate consumption. The value of final output decreased by -2.7% in real terms over the previous year and the real value of intermediate consumption increased very slightly (+0.6%). The main reason for the increase in income Indicator I was :

- the devaluation of the green pound sterling. By often leading to price rises in national currency terms, it has greatly affected the impact of the CAP reform, which aims at replacing some price support by direct income support. Prices remained stable for final output (+0.2% in real terms) as compared to -6.3% for EUR 12, whilst subsidies rose by +107.4%.

and additionally for income Indicator 2

- there was a further large fall in overall interest charges (-33.9%), as interest rates fell to their lowest level for more than twenty years.

The downward change in the real value of final output was a combination of a static real price (+0.2%) and a lower volume (-2.9%). These results reflect changes for both animal and crop products, and each of these is looked at in more detail here.

There was a slight increase in the real value of animal production in 1993 (+1.6%), with a higher real price (+3.5%) offsetting a lower production volume (-1.8%). Price rises were evident for both milk (+3.9%) and cattle (+12.2%), which together accounted for nearly 40% of the value of final agricultural output in 1993. Strong demand particularly from France and the Netherlands for UK veal calves was a major reason behind higher cattle prices. This price change compensated for the fall in the production volume (-9.8%). There was also strong export demand from France in particular for both sheepmeat and live lambs. Although the price for sheep was relatively unchanged in ECU terms from the year before, the devaluation of the pound sterling increased real prices in national currency terms by +13.6%. With the volume of sheep production declining by -3.5%, the real value of sheep increased by +9.6%. Higher real prices for poultry coupled with a slight rise in poultry output resulted in the real value of poultry increasing +3.3%. In contrast to other animal products, the real price for pigs fell considerably (-14.0%) back to the low level of 1991, reflecting the chronic European pigmeat surplus. Despite the state of the market, pigmeat production continued to rise in a number of Member States including the UK +3.3%.

Table 3.12 Changes in major items of the income calculation for agriculture in United Kingdom, % change in 1993 over 1992

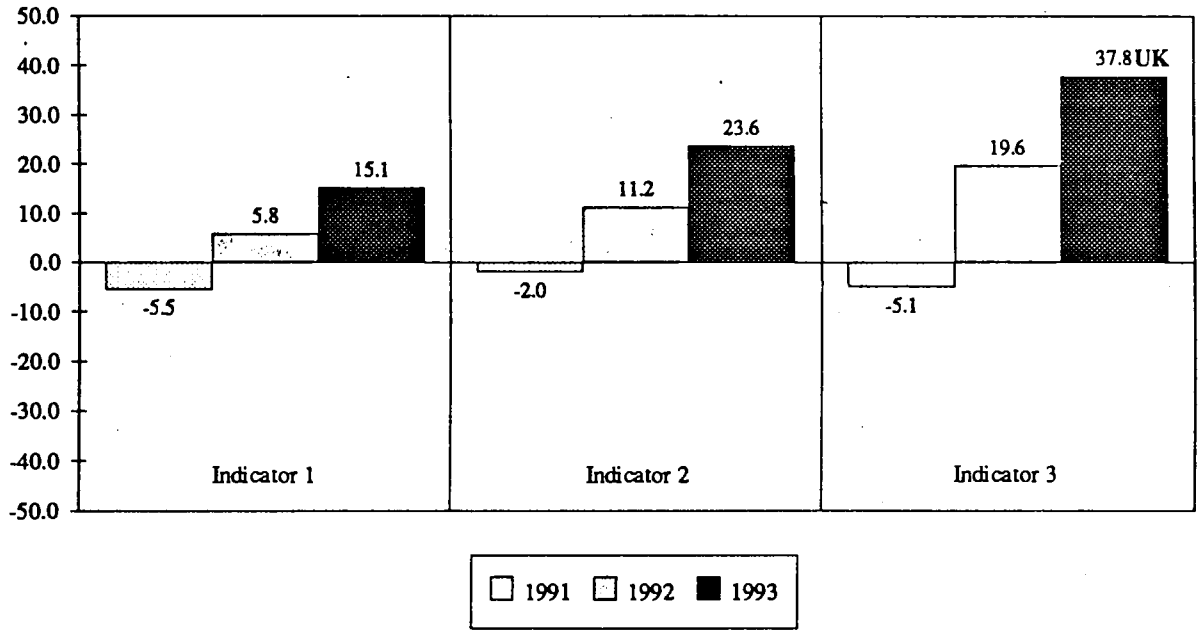
	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)
Final crop output	**-4.5**	**-2.3**	**-5.1**	**-6.7**	**-9.3**
Cereals	-11.2	-0.1	-2.9	-11.3	-13.8
Fresh vegetables	2.8	2.3	-0.6	5.2	2.2
Final animal output	**-1.8**	**6.5**	**3.5**	**4.5**	**1.6**
Cattle	-9.8	15.5	12.2	4.2	1.2
Pigs	3.3	-11.5	-14.0	-8.6	-11.2
Sheep	-3.5	16.9	13.6	12.8	9.6
Poultry	0.8	5.5	2.5	6.3	3.3
Milk	0.5	6.9	3.9	7.4	4.4
Final output	**-2.9**	**3.1**	**0.2**	**0.1**	**-2.7**
Intermediate consumption	**0.0**	**3.5**	**0.6**	**3.5**	**0.6**
Gross value added at m.p.	**-6.3**	**2.6**	**-0.3**	**-3.8**	**-6.5**
Subsidies				113.4	107.4
Taxes linked to production				-47.0	-48.5
Depreciation				-2.6	-5.4
Net value added at f.c.				**17.6**	**14.3**
Rent				3.3	0.4
Interest				-32.0	-33.9
Net income of total labour				**26.3**	**22.7**
Compensation of employees				2.1	-0.7
Net income of family labour				**40.8**	**36.8**

(*) The deflator is the implicit price index of GDP at market prices, + 2.9 %.

The real value of crop products decreased by -9.3% in 1993, resulting from both a lower production volume (-4.5%) and a lower real price (-5.1%). In keeping with this, there were substantial declines for many crop products, although for varying reasons. With the introduction of new set-aside arrangements, the area sown to cereals fell considerably and despite improved yields so did production (-11.2%). The real price of cereals also decreased (-2.9%), resulting in the real value of cereals falling by -13.8%. With the production volumes of both potatoes and sugarbeet falling from the high levels of 1992 and prices also decreasing, the real value of root crops declined substantially (-17.3%). Among the crop products, only fresh vegetables had a higher real value than the previous year (+2.2%).

The volume of intermediate consumption as a whole remained unchanged from the year before, although this was simply balancing significant reductions in the volume of fertilizers (-4.7%), materials and small tools (-3.3%) and energy (-3.0%) with greater use of plant protection products (+5.8%) and feedingstuffs (+2.8%). In the case of fertilizers, the reduction in volume concerned smaller areas of certain crops to which they are applied (as a result of the new set-aside scheme), and in many instances lower application rates. Although the volume of intermediate consumption remained unchanged as a whole from the year before, the volume of final output fell by -2.9%. Therefore, the productivity of intermediate consumption also decreased by -2.9% in 1993. The nominal price for intermediate consumption rose by +3.5%, not much higher than inflation but more than the nominal price increase for final output. As a result the "price scissors" deteriorated very slightly (-0.4%).

Graph 3.12 **Evolution of the three income indicators for United Kingdom in 1991, 1992 and 1993 (Changes in %)**



Total subsidies increased massively (+107.4%) after an injection of new subsidies in 1993 and the payment of the remaining half of the new subsidies for oilseeds due to the crop year 1992/1993. The new subsidies for the 1993/1994 crop year concerned mostly compensatory payments for arable crops, the beef premium, the ewe premium and support for set-aside. Almost all of these new CAP reform subsidies (95%) were paid in the 1993 calendar year. Ewe premiums represented almost a quarter of total (old and new) subsidies, with the new arable area payments a close second with 19%. In parallel with the increase in subsidies, there were also lower real taxes linked to production (-48.5%), principally from lower co-responsibility levies on cereals and milk. The double effect of higher subsidies and lower taxes resulted in real gross value added at factor cost increasing +9.7%, despite real gross value added at market prices declining by -6.5% in real terms .

Big reductions in real depreciation (-5.4%) and especially interest charges (-33.9%) further helped the rises in income. The slowdown in the reduction of labour input continued with only small falls for family and non-family labour (both -0.7%). When all these results were considered, the following branch income indicator levels were reached:

Indicator 1:	+15.1%	(1992:	+5.8%)
Indicator 2:	+23.6%	(1992:	+11.2%)
Indicator 3:	+37.8%	(1992:	+19.6%)

4 CASH FLOW IN AGRICULTURE

4.1 Introduction

As in previous years, in addition to the normal income calculation, an analysis of the cash flow in agriculture has been carried out to describe the liquidity situation in the agricultural sector. This year analysis is limited to the six Member States which provided Eurostat with the necessary information. Figures for Germany and Ireland were not included this year, either because the data was incomplete or unavailable at the time of print.

The income indicators used in this report are calculated on the basis of the Economic Accounts for Agriculture. The generation of the income account is drawn up according to a method agreed by the whole Community[1]. It includes items that do not give rise to any direct payment flow, such as changes in stocks of products[2] and fixed capital goods produced on own account (livestock and new plantings) or on the expenditure side changes in the stocks of intermediate consumption goods and depreciation of fixed capital. The income aggregates resulting from this account do not, therefore, adequately represent the variation in payment flows in agriculture.

In the cash flow account, which is compared with the generation of income account in Figure 4.1, the items mentioned above are not taken into account, as they do not give rise directly to either receipts or expenditure during the year under consideration. The account shows, for the agricultural branch, the financial resources derived from agricultural production and available for investment, repayment of loans and personal withdrawals of cash (for consumption or savings by agricultural households). In principle, the cash flow can be measured before or after the deduction of gross fixed capital formation (corrected for investment aid); the results given here are based on the first method.

The cash flow indicator covers exactly the same population as income Indicator 3 (i.e. family labour). In order to be able to compare the two, the rates of change of cash flow are also deflated by the implicit price index of gross domestic product and related to the family labour input measured in Annual Work Units (AWU) (c.f. Table 4.1).

1) Full details have been published in the Manual on the Economic Accounts for Agriculture and Forestry, published by Eurostat in Theme 5, Series E, ISBN 92-826-3739-5.

2) The change in stocks can be calculated as the difference between closing and opening stocks in the reference year, or as the difference between incoming and outgoing stocks during the reference year. In any case, the stocks of agricultural products which exist in the branch (i.e. in the producer's possession) are included. One might add that this relates to crop products which are harvested, wine must and wine, olive oil and livestock, i.e. changes in numbers (with the exception of animals forming part of fixed capital).

Figure 4.1 **Comparison of the construction of the cash flow account and the income account in agriculture**

Income account	Cash flow account
Final production of which: - sales - own consumption - processing by producers - fixed capital goods produced on own account -changes in stocks	Receipts from production of which: - sales -own consumption -processing by producers - -
- Value of intermediate consumption	- Expenditure on intermediate consumption
+ Subsidies	+ Subsidies
- Taxes linked to production	- Taxes linked to production
- Deprecation	
- Net rent and interest	- Net rent and interest[1)]
- Compensation of employees	- Compensation of employees
= Net income of family labour input	**= Cash flow**
divided by family labour input in AWU and deflated by the implicit price index of the Gross Domestic Product	divided by family labour input in AWU and deflated by the implicit price index of the Gross Domestic Product
= Income Indicator 3	**= Cash flow indicator**

1) plus the landlord's depreciation on buildings and works (in practice this concerns only the United Kingdom)

4.2 Results of the cash flow in agriculture for six Member States

The cash flow aggregate is generally subject to annual fluctuations which are less marked than those of net family income (cf. Table 4.1). The conclusion to be drawn is that liquidity in agriculture is subject to less variation than the development of income Indictor 3 would suggest. The differences in the rates of change in the cash flow are mainly attributable to changes in stocks and depreciation, which are not included in the cash flow account but are in the generation of income account.

In the case of crop production, **changes in stocks** may at least partly offset fluctuations in production. In years when the harvest is good, stocks are built up, with the result that receipts (basically from sales) will rise to a lesser extent than the increase in production value. On the other hand, if production value falls, a reduction in stocks may balance out or attenuate any loss of receipts. The situation as regards animal production is more complex than that of crop production concerning the relative stability of the cash flow. This is mainly due to the following factors:

- changes in livestock numbers occur relatively slowly and are linked to slaughter rates;
- price trends for cattle and pigs considerably affect production decisions;
- quantities of the two main products, beef and milk, depend greatly on each other and this interdependence is reinforced by the Common Agricultural Policy.

Depreciation generally develops more evenly than aggregates which are subject to the severe short-term fluctuations inherent in agriculture (particularly production aggregates or receipts linked to production, but also subsidies and other items). Annual changes of virtually the same amplitude in absolute terms may lead to unusually high and consequently different annual rates of change if there is a small residual such as the net agricultural income of family labour. The level of depreciation and consequently its effect on the level of net income varies considerably between the Member States. In France, for instance, depreciation accounts for about 20% of gross value added at market prices, with the result that the 1993 cash flow was only about 40% higher than net income of family labour, whereas in Germany in 1992, where depreciation accounted for over 40% of gross value added at market prices, cash flow was more than double net income.

In summary, the 1993 cash flow indicator fell in five of the six Member States (Belgium, France, Luxembourg, the Netherlands and Portugal). Indicator 3 developed along the same lines as the cash flow in all the Member States, although contrary to the general trend the cash flow indicator for 1993 fell by more than Indicator 3 in Belgium. The only increase in the cash flow was for the United Kingdom, where the rate of change in the cash flow indicator was lower than that of the corresponding income indicator.

The absolute value of the 1993 cash flow continued to be higher than the net income of family labour in all the Member States included in the analysis. Comments are given below on the cash flow account for those Member States which sent data for 1993: Belgium, France, Luxembourg, the Netherlands, Portugal and the United Kingdom.

For the fourth consecutive year, the cash flow, like net income to family labour, is estimated to have fallen in real terms in **Belgium**. The cash flow is estimated to have fallen in real terms (-14.2%) at a stronger rate than net income to family labour (-10.3%). Much of this is of course due to the methodological differences between the two regarding depreciation, which remained almost unchanged in real terms (-0.3%). However, there were some changes to the value of stocks for principal products. Since crop stocks in Belgium were not recorded, no comments can be made on the effect of changes to crop receipts on the cash flow. However, receipts related to animal production decreased (-11.4%) by more than production value (-8.3%), which might suggest that a certain amount of stocking occurred (if the prices are the same in both types of account).

This development would be mainly due to increasing cattle and pig numbers. In the case of cattle, receipts were down -1.3% in real terms on 1992, although the real production value increased by +4.2%. Any increase

in cattle numbers would be set against a background of large decreases in 1991 and 1992. For pigs, the annual decline in receipts (-30.2%) was greater than the production value (-25.7%). Most of the other items of income from animal production followed the same pattern as production values. There was a considerable fall in family labour input in 1993 (-5.3% on the level in 1992). This helped limit the fall in the cash flow indicator to -9.4% and that of Indicator 3 to -5.3%.

Despite real depreciation falling (-1.8%) in **France**, the decline in net income of family labour (-11.2%) is estimated to have fallen by more than the cash flow (-8.6%), where deprecation is not taken into account. This is because the annual percentage decline in depreciation was less than the percentage decrease in gross value added at factor cost. With total receipts from final output being only 0.1 of a percentage point different from the real value of final production, depreciation was, therefore, the main cause behind the difference between the rates of change for the cash flow and net income of family labour. Nevertheless, there were some significant variances between the receipts and values for certain products, which generally balanced out. After the large build-up in wine stocks following the abundant 1992 harvest, there was a general run-down of these stocks during 1993. The volume of production decreased by -10.6% in 1993, but the run-down of stocks led to an increase in the volume of sales (+4.6%). Nevertheless, receipts for wine and wine must still fell in real terms by -9.8% over the level in 1992, although this was considerably less than the slide in real production value (-19.0%). In contrast, there was a greater value of stocks of oilseeds and oleaginous fruit, with receipts rising (+1.4%) by a smaller amount than the production value (+14.0%) in real terms. This was due to a considerable difference in the real price (+19.3% in the cash flow and +32.7% in the production account) rather than changes in the level of stocks. In the animal sector, results suggest that there was a continued increase in cattle numbers. The volume of production decreased by -5.9%, but the volume of sales fell by a stronger -8.5%, suggesting an increase in numbers. After considering the decrease in family labour input (-5.0%), the cash flow indicator was estimated to have decreased by -3.8% which compares with an Indicator 3 level that was -6.5% down on 1992.

Both the cash flow and net income of family labour in **Luxembourg** are estimated to have fallen in real terms (-4.7% and -11.6% respectively). Like Belgium, Luxembourg does not record changes in stocks for crop products. Therefore, the differences between the two can only be ascribed to changes in depreciation and changes to the value of animal and animal products' stocks. There appear only to have been changes to the value of cattle stocks. The production value of cattle, which represents about a quarter of final output value, decreased by -1.0% in real terms whereas receipts were +4.3% higher than 1992 levels. This would imply (ceterus paribus) that the cattle herd has been reduced, in contrast to the replenishment of 1992 after high slaughtering levels in 1991. Family labour input in agriculture is expected to have fallen by -3.9%, which enables a cash flow indicator figure of -0.9% and an Indicator 3 figure of -8.0% to be calculated.

The decline in the real cash flow (-12.3%) in the **Netherlands** was not as pronounced as the reduction in the real net income of family labour (-22.4%), but this was almost entirely due to the methodological difference between the two regarding real depreciation (+1.3% in real terms). Total production-based receipts and real values decreased by the essentially the same amount (-6.8% and -6.9% respectively). There were only three recorded differences between the two concepts among all products and the largest of these was for flowers and ornamental plants (+0.5% in terms of real receipts and +1.3% in terms of real value). After taking account of the decline in family labour input (-2.4%), the cash flow indicator was estimated to have declined by -10.1%, which compares with an annual decrease in the level of Indicator 3 of -20.5%.

The cash flow for **Portugal**, expressed in real terms, fell by an estimated -12.7% in 1993, which although considerable was less than the percentage decrease in real net income of family labour (-18.5%). This latest decline follows particularly large falls in the real cash flow in 1990 (-41.2%) and 1992 (-21.5%). Some of the difference between the rates of change for the cash flow and net income of family labour can be attributed to the absence of depreciation (-1.2%) in the calculation of the former. In addition, some can be explained by changes to the value of stocks.

The value of final output in real terms was -16.2% lower in 1993 than 1992, but receipts for final output were down a smaller, although still considerable, -11.7%. This would suggest that there has been a general reduction in the value of stocks for agricultural products as a whole. Indeed, this development has been particularly noticeable for major products such as wine and wine must, and potatoes, as it has in other recent years. The value of wine production dropped -23.6% in real terms in 1993, after the volume of production had plummeted once more, and although real receipts were also down (-9.6%) it seems that a continued run-down of stocks limited the fall. In the case of potatoes, the fall in receipts (-13.6% in real terms) was also significantly less than rate of change of production value (-36.2%). There was only a slight decrease in the family labour input, which did little to limit either the fall in the cash flow indicator (-12.2%) or Indicator 3 (-18.1%).

The cash flow for the **United Kingdom** rose by +25.7% in real terms, which was less than the +36.8% rate recorded for net income of family labour. Almost all of the difference between the two can be explained by the methodological difference regarding depreciation costs (-5.4% in real terms), since there was very little variation between the receipts and production values of most products. Nevertheless, there were some minor exceptions for a couple of crop products. The receipts for potatoes declined by -8.6% in real terms, whereas the real production value fell by a stronger -18.4%, which probably reflected a considerable run-down of stocks following high levels from the 1992 bumper harvest. However, there was likely to have been a sizeable increase in oats' stocks (receipts were down -11.2% in contrast to an increase in production value of +2.4%). After considering the annual change in the family labour input (-0.7%), the cash flow indicator was +26.6% higher than the 1992 figure, which compares with an +37.8% increase in the Indicator 3 level.

Table 4.1 **Comparison of cash flow with net income for the family labour in eight Member States from 1989 to 1993, expressed as an annual percentage change, and comparison of the cash flow indicator and Indicator 3, expressed as an annual percentage change and as an absolute level.**

		Net family income (as % change per year)			Cash-Flow (as % change per year)			Cash-Flow indicator /Indicator 3	Deflator (GDP price index) (as % change per year)	Family labour input (as % change per year)
		Total nominal	Total real	Indicator 3	Total nominal	Total real	Indicator cash-Flow			
B	1989	36.3	30.4	33.8	26.8	21.3	24.4	1.2	4.6	-2.5
	1990	-12.7	-15.3	-12.9	-9.5	-12.2	-9.7	1.2	3.1	-2.7
	1991	-4.6	-7.2	-4.3	1.9	-0.8	2.3	1.3	2.7	-3.0
	1992	-13.0	-15.9	-9.4	-9.8	-12.8	-6.1	1.3	3.4	-7.1
	1993	-7.8	-10.3	-5.3	-11.8	-14.2	-9.4	1.2	2.8	-5.3
D	1989	26.8	23.8	31.7	10.6	8.0	14.8	1.7	2.4	-6.0
	1990	-18.6	-21.1	-19.6	-5.8	-8.7	-6.9	1.9	3.1	-1.9
	1991	-17.1	-20.3	-16.1	-0.9	-4.6	0.4	2.3	3.9	-5.0
	1992	-6.6	-11.3	-7.2	1.3	-3.1	1.3	2.5	5.3	-4.4
	1993	-	-	-	-	-	-	-	-	-
F	1989	24.8	20.5	26.5	8.7	5.0	10.2	1.2	3.5	-4.7
	1990	5.7	2.5	7.6	8.8	5.5	10.7	1.3	3.1	-4.7
	1991	-11.0	-13.6	-10.4	-0.3	-3.2	0.3	1.4	3.0	-3.5
	1992	-2.8	-4.8	-1.4	-8.6	-10.5	-7.2	1.4	2.1	-3.5
	1993	-8.7	-11.2	-6.5	-6.0	-8.6	-3.8	1.3	2.8	-5.0
IRL	1989	2.5	-1.9	0.6	-2.9	-7.1	-4.7	1.1	4.6	-2.5
	1990	-4.6	-3.0	-0.9	3.1	4.8	7.1	1.2	-1.7	-2.1
	1991	-9.5	-10.4	-7.4	-5.0	-5.9	-2.8	1.2	0.9	-3.2
	1992	22.8	21.5	24.7	16.8	15.5	18.6	1.2	1.1	-2.6
	1993	6.8	4.0	6.1	-	-	-	-	2.7	-2.0
L	1989	20.8	14.0	18.1	19.0	12.3	16.3	1.3	6.0	-3.4
	1990	-11.8	-14.3	-11.1	-16.8	-19.2	-16.2	1.2	2.9	-3.6
	1991	-18.3	-20.7	-16.0	7.2	4.1	10.2	1.6	3.0	-5.6
	1992	-1.7	-6.0	-9.2	-6.4	-10.4	-13.5	1.5	4.5	3.5
	1993	-8.8	-11.6	-8.0	-1.7	-4.7	-0.9	1.4	3.2	-3.9
NL	1989	24.8	23.3	25.2	21.4	20.0	21.8	1.4	1.2	-1.5
	1990	-8.9	-11.0	-9.4	-3.7	-5.9	-4.2	1.4	2.3	-1.7
	1991	0.1	-2.7	-1.2	2.5	-0.3	1.3	1.5	2.8	-1.5
	1992	-19.4	-21.3	-21.5	-12.4	-14.5	-14.7	1.6	2.5	0.2
	1993	-21.1	-22.4	-20.5	-10.8	-12.3	-10.1	1.4	1.7	-2.4
P	1989	32.5	19.0	25.2	39.0	24.8	31.3	1.5	11.4	-5.0
	1990	10.8	-5.6	2.3	-31.0	-41.2	-36.3	0.9	17.3	-7.7
	1991	-2.2	-15.0	-15.4	9.7	-4.7	-5.1	1.0	15.1	0.4
	1992	-18.0	-27.7	-22.1	-11.0	-21.5	-15.4	1.1	13.4	-7.2
	1993	-12.8	-18.5	-18.1	-6.6	-12.7	-12.2	0.9	7.0	-0.5
UK	1989	22.9	14.7	17.7	22.5	14.3	17.2	1.8	7.1	-2.5
	1990	3.5	-2.8	0.0	-0.9	-6.9	-4.2	1.8	6.4	-2.8
	1991	-0.8	-6.8	-5.1	2.6	-3.6	-1.9	1.8	6.5	-1.8
	1992	24.2	18.9	19.6	4.0	-0.4	0.2	1.5	4.4	-0.6
	1993	40.8	36.8	37.8	29.3	25.7	26.6	1.9	2.9	-0.7
EUR 8	1989	24.3	20.0	25.6	13.1	9.1	14.2	1.4	-	-4.9
	1990	-2.5	-6.0	-1.8	0.2	-3.3	1.0	1.5	-	-3.8
	1991	-9.3	-12.5	-10.1	0.3	-3.3	-0.6	1.6	-	-3.3
	1992	-1.6	-4.9	-0.8	-3.4	-7.1	-3.1	1.6	-	-3.9
	1993	-	-	-	-	-	-	-	-	-

5 LONG-TERM-TRENDS IN AGRICULTURAL INCOME IN THE COMMUNITY FROM 1980 TO 1993

The purpose of this chapter is to analyse the changes in agricultural income, measured in real terms, throughout the Community over the last thirteen years, in order to identify the main trends and illustrate how the preliminary estimates of agricultural income in 1993 fit into this overall picture.

The chapter will first examine the salient long-term trends in agricultural income between "1981" and "1992"(1), before describing the changes in the three Indicators of agricultural income in the Community. There then follows an analysis of the factors determining changes in agricultural income in the period 1980-93, against the backdrop of changes to the Common Agricultural Policy (CAP), the economic environment and the overall agricultural situation (production, markets and consumption). Finally, the components of the income Indicators are examined in section 5.4.

5.1 Summary of main results

Agricultural income in the Community, measured by Indicator 1, grew by an annual average of +0.9%(2) between "1981" and "1992" (+0.7% and +0.3% measured by Indicators 2 and 3 respectively). This growth can be explained in the light of several factors:

- **higher agricultural productivity** thanks to technical progress and a certain intensification of agricultural production, which led to an increase in the volume of final production, averaging +1.3% per annum;
- an **imbalance in agricultural markets**, caused by the above-mentioned increase in final production, and characterized by a structural deterioration in the balance between supply and demand (the latter displaying very little income elasticity). This was reflected in a decline in real producer prices of -3.6% per annum and an annual reduction of -2.3% in the real value of final agricultural production;
- major adjustments were made to the **CAP** during the reference period with a view to keeping agricultural production and budgetary expenditure under control. This was first reflected principally in a restrictive price policy and, in the case of milk products, in a system of quotas, which finally resulted in a much more radical revision of the market mechanisms as part of the reform of the CAP decided in 1992 and put into operation from 1993 for a certain number of products.
- a slight **deterioration in the "price scissors"**(3) caused by development of the price of intermediate consumption in parallel with the development in the price of final output. When other cost items in the calculation of income are taken into account, real net value added at factor cost declined by -2.1% per annum, the real net income of total labour input by -2.4% per annum and the real net income of family labour input by -2.8% per annum.
- the **decline in agricultural labour input** continued, albeit at a slower pace in the period under review (by an annual average of -3.0% for total labour input and -3.2% for family labour input) compared with the preceding two decades, giving rise to a slight increase in agricultural revenue as expressed by annual work units (AWUs).

(1) "1981"= (1980+1981+1982)/3; "1992"= (1991+1992+1993)/3.

(2) All averages are calculated as geometric means.

(3) The "price scissors" is the ratio between the price index for agricultural products and the price index for intermediate consumption, in nominal terms.

Changes in income fall into **three sub-periods**:

- "1981"/"1984": after falling in 1979 and 1980 to its lowest level since 1975, agricultural income as measured by Indicator 1 rose by an annual average of +1.2% in the period from "1981" to "1984". An outstanding year was 1982, in which income grew by +10.5%.
- "1984"/"1987": agricultural income in this sub-period was less favourable since Indicator 1 fell slightly (-0.4% per annum), with only minor fluctuations.
- "1987"/"1992": the stabilization of incomes came to an end in this sub-period. Thanks to increases in 1988 and, more particularly, 1989, which was an exceptional year (+12.5%), and despite a significant fall in 1992, incomes grew by an annual average of +1.5%.

5.2 Presentation of long-term income trends in the Community

Net value added at factor cost (NVAcf) in real terms, measured in AWUs (i.e. income Indicator 1 of the Community's agricultural branch) grew by an annual average of +0.9% between "1981" and "1992" (see table 5.1), which represents a cumulative growth of +10.5% over the whole of the period.

Table 5.1 Indicators 1, 2 and 3 of agricultural income in the Community from 1980 to 1993

	INDICATOR 1		INDICATOR 2		INDICATOR 3	
YEAR	Index	Annual variation (%)	Index	Annual variation (%)	Index	Annual variation (%)
1980	91.9	:	93.5	:	91.8	:
1981	93.6	1.8	94.0	0.6	92.4	0.6
1982	103.4	10.5	105.3	12.1	107.7	16.6
1983	99.2	-4.0	99.9	-5.2	99.7	-7.5
1984	102.2	2.9	103.0	3.1	104.4	4.7
1985	98.4	-3.7	97.7	-5.1	96.6	-7.4
1986	99.5	1.1	99.3	1.6	99.0	2.5
1987	96.8	-2.7	96.3	-3.0	94.8	-4.3
1988	99.5	2.8	99.0	2.7	97.6	3.0
1989	111.9	12.5	112.0	13.2	113.4	16.3
1990	109.7	-2.0	108.9	-2.7	108.6	-4.2
1991	110.5	0.8	109.7	0.7	108.2	-0.4
1992	105.1	-4.9	103.5	-5.6	98.4	-9.1
1993	103.6	-1.4	102.4	-1.0	96.0	-2.4
"81"/"92"		0.9		0.7		0.3

Indicators 2 (net income from agricultural activity of total labour input in real terms, by AWU) and 3 (net income from agricultural activity of family labour input in real terms, by AWU) underwent relatively similar developments to Indicator 1, despite their wider fluctuations (see graph 5.1). Agricultural income as expressed by Indicators 2 and 3 grew by annual averages of +0.7% and +0.3% respectively between "1981" and "1992". These Indicators are by definition subject to wider annual fluctuations than Indicator 1. Fluctuations in production volumes and prices are the main factors affecting income aggregates. Net agricultural income, the basis for Indicators 2 and 3, is low in absolute terms and is therefore more susceptible to such fluctuations.

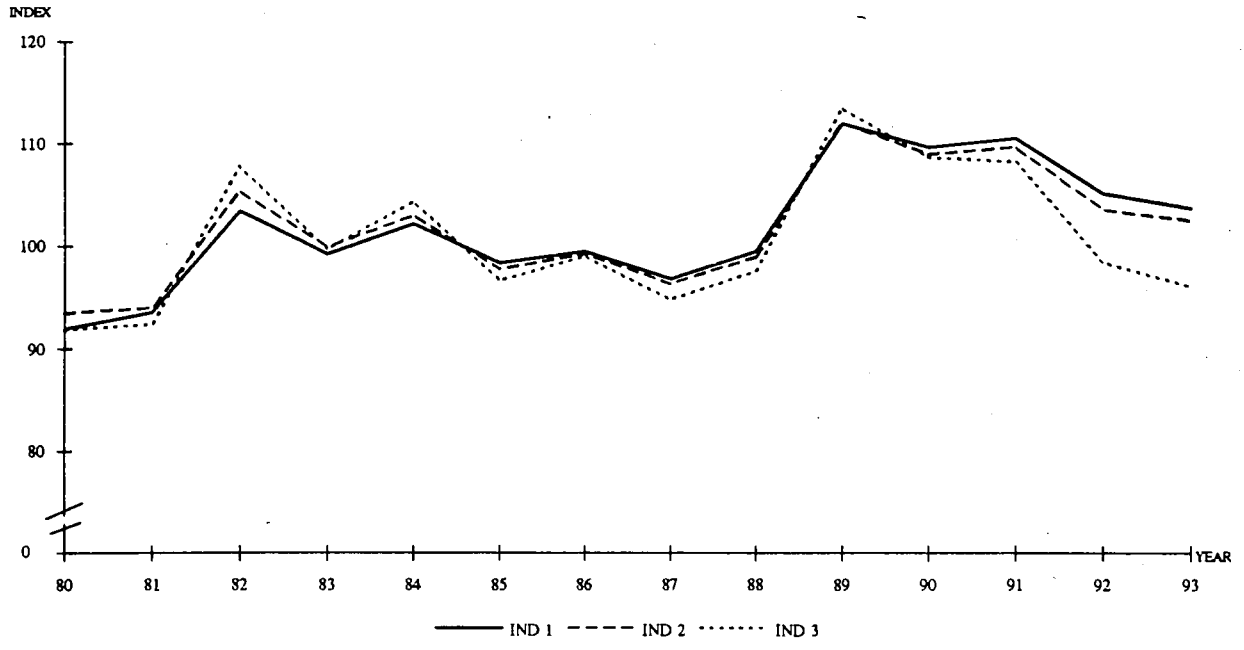
Moreover, the items which distinguish these income aggregates from NVAfc are subject to fairly steady variations which tend to occur independently of short-term trends in the farming economy.

In the subsequent analysis, agricultural income is measured by Indicator 1 since the three Indicators display fairly similar trends (see graph 5.1). Also, Indicator 1 is the most reliable macro-economic indicator for statistical purposes. Notwithstanding this, section 5.4.3 examines the trends in Indicators 2 and 3 in relation to the supplementary cost items attributable to them.

The period "1981"/"1992" has been divided into three sub-periods to match the three distinct phases in the development of agricultural income. The strong growth in income in sub-period 1 was partly the result of a slight tailing-off of the fall in real prices and the "price scissors" and partly of the rapid expansion in production. Sub-period 2 can be characterized by imbalances in numerous agricultural markets. These triggered an explosion of Community expenditure which led to some major changes in the CAP. These modifications involved principally the lowering of real institutional prices and the introduction of a system of stabilizers and quotas.

This deterioration in the agricultural situation was interrupted in 1988. The reorganization of European agricultural markets, which took place against the background of a restrictive Community policy and a temporary upturn in the world markets (characterized by destocking and price rises) was conducive to a recovery in agricultural income in 1988 and 1989. This short-term improvement, which was mainly due to major price rises (particularly those of animals and animal products) was, however, partly offset by price decreases in 1990, 1991 and particularly 1992 (crop products), which led to renewed falls in income, although not completely to the level of "1985". The fall in prices and volumes registered for 1993, on the one hand result from currently unfavourable elements in certain sectors, and on the other from the modification of the common organization of the market (cereals, protein plants and cattle) put into operation in the context of CAP reform.

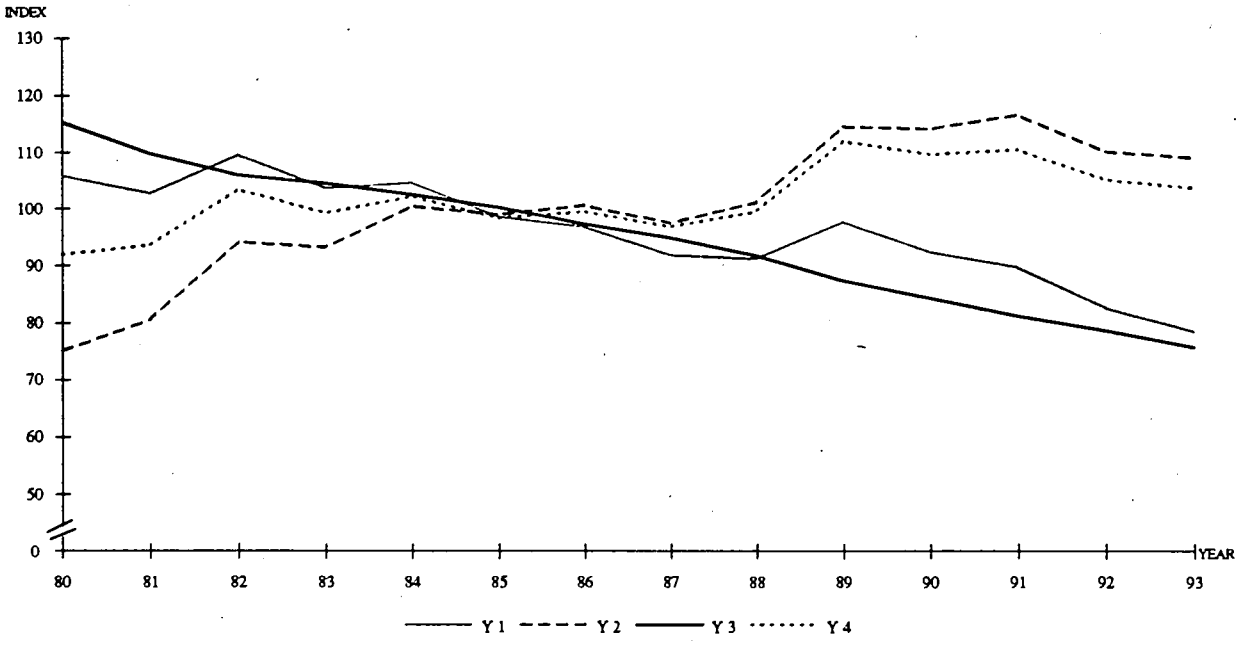
Graph 5.1 **Income Indicators 1, 2 and 3 for the Community from 1980 to 1993 ("1985" =100)**



Changes in the main components of Indicator 1, namely nominal and real NVAfc and total labour input, are set out in graph 5.2. It is evident that:

- nominal NVAfc increased over the whole period, on average. The increases were, however, generally below the level of inflation (average inflation in the Member States, weighted according to the value of each product or aggregate, expressed in national currencies and converted into ecus at 1985 rates(4)), with the result that real NVAfc declined.
- in the period under review, real NVAfc increased only in 1982, 1989 and, to a lesser extent, 1984. These years were marked either by exceptional harvests (1982 and 1984) or by major price rises (1989). The growth in real NVAfc during the 1982 and 1984 seasons corresponded to a significant growth in production volume, to a high level, whereas the large increase in 1989 resulted mainly from short-term economic (higher prices in the Community and the world markets, particularly for animals and animal products) and structural factors (large increase in the balance of "subsidies - taxes linked to production").
- the upward trend of Indicator 1 since 1980 was thus solely due to the continuing decline in agricultural labour input. Indeed, the number of AWUs fell more rapidly in real terms than agricultural net value added (-3.0% and -2.1% respectively per annum between "1981" and "1992"), thus causing Indicator 1 to rise slightly. Annual fluctuations in Indicator 1 were dictated exclusively by variations in agricultural net value added at factor cost in real terms, since the decline in the number of AWUs in agriculture was steady.

Graph 5.2 **Nominal and real net value added at factor cost, total labour input and Indicator 1 in the Community from 1980 to 1993 ("1985" = 100)**



Y_1 = real net value added at factor cost
Y_2 = nominal net value added at factor cost
Y_3 = total agricultural labour input
Y_4 = real net value added at factor cost per AWU (Indicator 1)

Trends in agricultural income in individual Member States can differ significantly from trends in the Community as a whole. Whereas some Member States recorded increases in agricultural income which were well above the Community average (IRL, E and GR), others showed a fall (I and P) or stability (D and NL). The same is true of variations in income and trends in the three sub-periods identified for the Community. Agricultural income in some Member States (DK and D) was subject to major fluctuations attributable to,

(4) For more details, see methodological comment A.1.4.

among other things, specific types of production and income structure. Movements in individual Member States broadly matched the three phases identified for the Community as a whole.

5.3 Factors determining changes in income

There are many factors which determine changes in income and an exhaustive examination of them is difficult. Factors such as climatic conditions and production cycles (i.e. of some animals) have no more than short-term effects on income. Any analysis of long-term changes must disregard these factors and focus on underlying trends. The structural elements include the overall agricultural environment (the CAP and the general economic situation), the state of the markets and the production process.

5.3.1 The agricultural environment

Article 39 (1b) of the Treaty of Rome states that one of the objectives of the Common Agricultural Policy is to ensure a fair standard of living for the agricultural community, in particular by increasing the earnings of persons engaged in agriculture. The regulation of markets and prices has been the main instrument of the CAP in the pursuit of that objective. The period 1980-93 saw some major changes in the management and development of the CAP. After reaching self-sufficiency for most products, the Community moved to a situation of production surpluses. This necessitated major budgetary reforms, which could not totally prevent the negative impact of the worsening markets on farm incomes. The milk sector was the first to be reformed, with the introduction in 1984 of quotas designed to stabilize the market in milk products. The reform of the CAP resulted in, among other things:

- the introduction of **stabilizers** and a maximum guaranteed quantity (MGQ), which implies that as soon as production in a particular sector exceeds a predetermined quantity, support levels are reduced automatically;
- unchanged or decreased **institutional prices**, depending on the product (average annual declines of -3.7% in real terms between 1984/85 and 1992/93), designed to send clear signals to producers;
- more flexible **intervention mechanisms** (quantitative, qualitative and time-limits) designed to make intervention less attractive as a "substitute market" and to reinstate its function as a safety net under short-term variations in production.

As the effects of these adjustments were too limited, a **new reform of the CAP** was agreed in 1992 with the principal objective of adapting agricultural production to internal and external demand. This is essentially characterised by a change from price support policy to a policy of direct income support. Without questioning the basic principles of the CAP, which are the unity of prices, community preference and financial solidarity, this reform is centred around three measures :

- **the substantial lowering of prices** (cereals, protein plants and cattle);
- compensation for the effects of this decrease in incomes through **direct compensatory payments** to producers (new direct compensatory payments and the updating of some existing aid);
- **the control of production** through the limitation of the use of the means of production (set-aside) and the maintenance of dairy quotas.

This reform entered into force at the start of the 1993/94 marketing year (with the exception of oilseeds, from 1992/93) and concerns a large number of agricultural sectors (with the exception of olive-oil, sugar, fruit and vegetables as well as wine). It is necessary to state that the lower prices and volumes recorded in 1993 are linked, at least partially, to changes apparent in the agricultural policy stemming from the reform of the CAP. This, through a partial change from price support policy to a policy of direct income support, makes it difficult to compare the development of prices and volumes in 1993 with the rest of the period analysed and significantly affects the development of gross value added at market prices.

Changes in agricultural income therefore have to be seen in a broad economic context. The economic convulsions which affected Europe during the second oil crisis in the early 1980s gradually gave way to a recovery which was slow in the years to 1986 and more pronounced in the period to 1991, although it was insufficient to make a significant dent in unemployment. The second half of 1990 brought a sudden slowdown in economic growth and certain Member States experienced severe recession in 1992 and 1993. Economic difficulties had some impact on agricultural income and the implementation of the CAP reforms, and poorer job prospects elsewhere stemmed the decline in agricultural labour input.

The monetary policies pursued by the Member States also had an impact on agricultural incomes through the development of real prices of agricultural products and of interest rates. Also, some countries tended to keep their currencies undervalued in the early 1980s. In the period which followed, the effects of the decline in inflation and the discipline of the European Monetary System combined to ensure greater stability between real exchange rates, which reduced the scope for devaluing "green" currencies and adjusting institutional prices, expressed in national currencies, to currency revaluations. Real interest rates remained slightly higher during this period, despite being greatly lowered in the course of 1992 and 1993. Since September 1992, the important monetary realignments apparent in the EMS have resulted in the devaluation of green currencies, allowing therefore, in certain Member States, a rise in agricultural prices expressed in national currency terms.

5.3.2 The state of the markets and production processes

The strong growth in agricultural income in the 1960s and early 1970s took place in the context of a major restructuring of European agriculture, which was still not self-sufficient in many sectors. The situation then changed dramatically. Growing disparities between the production and consumption of agricultural products led to surpluses which the Community and world markets were not always able to absorb. Increased agricultural production, resulting from new technical and biological developments, led to the Community becoming self-sufficient in nearly all non-tropical agricultural products, with the exception of oilseeds, fruit, and sheepmeat. However, this led to a deterioration of agricultural markets, which had repercussions on market prices and therefore on agricultural incomes. The main products to be affected were cereals, cattle, pigs and milk.

The evolution of agricultural structures, which had undergone profound changes in the previous two decades, slowed down in the face of the harsher economic environment and imbalances in the markets. These factors acted as a brake on the modernization of agricultural holdings and the process of agricultural intensification.

5.4 Changes in income components

5.4.1 Agricultural production

The volume of agricultural output grew almost regularly between "1981" and "1992" by an annual average of +1.3%. Growth was concentrated in the first half of the 1980s, led by crop production (see table 5.2). The growth in the volume of crop production (+2.1% per annum) exceeded that of animal production (+0.6% per annum) during the period under review.

The price index for agricultural products fell significantly, by an annual average of -3.6% in real terms, particularly from "1984" onwards, as institutional prices declined in real terms whilst there were structural surpluses on Community and world markets. The real value of final agricultural production declined by -2.3% per annum in line with real prices and volumes. This decline, which was more marked in animal production than in crop production, was particularly pronounced between "1984" and "1987" as a result of steep falls in real prices (-4.4% per annum).

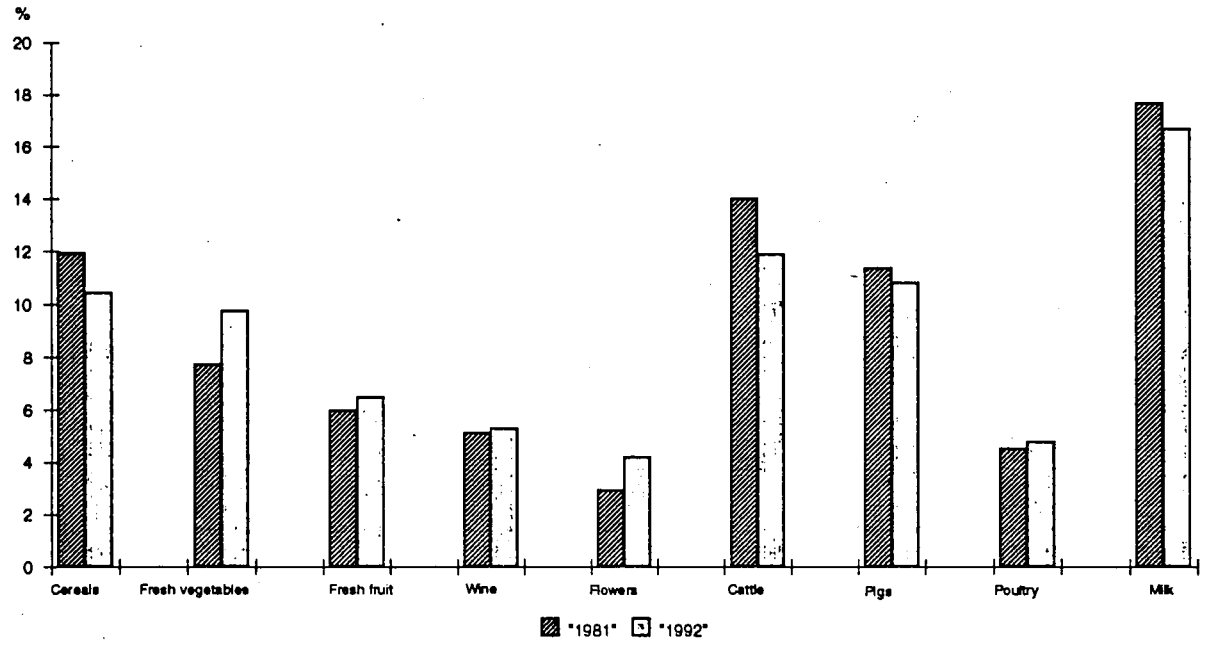
Table 5.2 **Average annual rates of change in real prices and values of crop, animal and final agricultural output in the Community during the three sub-periods, in %**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**2.7**	**2.5**	**1.4**	**2.1**	**-2.3**	**-4.3**	**-4.2**	**-3.7**	**0.4**	**-1.9**	**-2.8**	**-1.7**
Final animal output	**1.0**	**0.1**	**0.6**	**0.6**	**-2.1**	**-4.6**	**-3.6**	**-3.5**	**-1.1**	**-4.5**	**-3.1**	**-2.9**
Final output	**1.8**	**1.2**	**1.0**	**1.3**	**-2.1**	**-4.4**	**-3.9**	**-3.6**	**-0.4**	**-3.3**	**-2.9**	**-2.3**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

This decline in the value of production was particularly pronounced in animal production, where very weak volume growth (+0.6% per annum on average) was insufficient to compensate for a fall in real prices (-3.5% per annum), thus producing an average annual decline of -2.9% in the final real value of production. Following a period of slow growth between 1980 and 1983, the volume of animal production stayed relatively level during the last ten years. This is particularly true of milk after the introduction of quotas, and of beef. The decline in real prices resulted from an imbalance between production and consumption, particularly of beef, the only meat whose consumption fell between "1981" and "1992".

Graph 5.3 **The share of the main individual products in final agricultural production in "1981" and "1992", at current prices and exchange rates, in %**



In contrast, there were significant increases (+2.1% per annum) in the volume of crop production, which were able to compensate for some of the impact of declining real prices (-3.7% per annum); the real value of production fell by -1.7% per annum. Climatic conditions were such that the growth in the volume of crop production was erratic. Strong growth was recorded in two years: in 1982, production volume grew by +9.7%, mainly due to growth in cereal production (+12.2%), fresh fruit (+16.1%), wine (+43.5%) and industrial crops (+17.8%); in 1984, cereals (+25.3%), flowers (+9.2%) and industrial crops (+25.3%) largely accounted for higher crop production volume (+7.5%).

In the light of these developments, the share of crop production in final agricultural production, measured at current prices, rose from 45% in "1981" to 49% in "1992", principally due to fresh vegetables, fresh fruit, wine and flowers (see graph 5.3).

a) Crop production

Cereals

Cereal production rose in volume terms, by +2.3% per annum on average, between "1981" and "1992". The rate of increase varied because of changeable climatic conditions (droughts during some more recent years) and, with the exception of maize production, tended to slow-down greatly towards the end of the reference period (particularly wheat and barley production). The volume increase was due to greater yields, which more than offset the smaller area under cereals.

There were fairly major declines in producer prices (-4.0% per annum in real terms) between "1981" and "1984", when markets were saturated and intervention stocks were at very high levels. The decline in real prices then accelerated (-6.1% per annum) in the wake of a restrictive price and intervention policy (reduction in real support prices of -6.1% per annum between 1984/85 and 1992/93, and the introduction in 1988 of the stabilizer mechanism, which limits the price guarantee) and of growing surpluses in Community and world cereal markets (with, at the end of the period, intervention stocks that returned to some high levels). The strong fall registered in 1993, largely results from the implementation of the reform of the CAP which led to an important reduction in institutional prices.

Table 5.3 **Average annual rates of change in the volumes, real prices and real values of crop products in the Community between "1981" and "1992" over the three sub-periods, in %**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**2.7**	**2.5**	**1.4**	**2.1**	**-2.3**	**-4.3**	**-4.2**	**-3.7**	**0.4**	**-1.9**	**-2.8**	**-1.7**
Cereals	5.7	1.1	1.1	2.3	-4.0	-5.7	-6.4	-5.5	1.5	-4.6	-5.4	-3.3
Potatoes	-0.2	0.2	0.8	0.3	0.2	-7.2	-4.5	-4.0	0.0	-7.0	-3.8	-3.7
Sugar beet	-4.1	1.5	0.9	-0.3	-2.0	-3.8	-3.8	-3.3	-6.0	-2.3	-2.9	-3.6
Oleaginous seeds	20.1	23.8	0.6	11.7	-0.9	-8.7	-13.3	-8.8	19.0	13.0	-12.8	1.9
Fresh vegetables	1.5	1.3	1.4	1.4	-1.0	-2.9	-2.1	-2.0	0.5	-1.7	-0.8	-0.7
Fresh fruit	1.5	1.1	1.4	1.4	-1.8	-3.5	-4.7	-3.7	-0.3	-2.4	-3.3	-2.4
Wine	0.3	2.2	-1.2	0.1	-4.7	-3.3	-0.4	-2.4	-4.4	-1.2	-1.6	-2.3
Olive oil	2.8	-3.5	3.2	1.2	-1.3	-3.1	-0.5	-1.4	1.5	-6.5	2.7	-0.2
Flowers	4.4	4.2	4.4	4.3	-1.7	-2.6	-4.0	-3.0	2.7	1.4	0.2	1.2

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The real value of production thus grew by +1.5% per annum during "1981" and "1984" before declining by -5.1% per annum between "1984" and "1992", giving an average annual decline of -3.3% in the period "1981"/"1992".

Root crops (sugar beet and potatoes)

The real value of root crop production fell by an annual average of -3.6% between "1981" and "1992". Production volume was stable over the decade as a whole (-0.1% per annum), despite large annual fluctuations. In more detail, the volume of **sugar beet** production fell by -0.3% per annum during the period under review, whereas that of **potatoes** increased (+0.3% per annum). Real producer prices of sugar beet and potatoes declined considerably (-3.3% and -4.0% respectively per annum), particularly those of potatoes from "1984" onwards (-5.5% per annum).

Oilseeds

The production volume of oilseeds rose rapidly until "1987" (+21.9% per annum) thanks to the introduction of the Community's production aid scheme and, to some extent, the restrictive policy in the cereals sector. The establishment of guarantee thresholds and, then, in 1992, the reform of the common organization of the market in oilseeds subsequently caused the increase in production volume to slow down. Real prices, which were fairly stable from "1981" to "1984", later fell (-8.8% per annum over the period as a whole) in line with the reduction in Community support. Despite this fall in prices particularly at the end of the period, the real value of oilseed production grew faster on average than that of any other agricultural product (+1.9% per annum).

Fresh fruit and vegetables(5)

Despite their sensitivity to climatic conditions, the volume of fresh fruit and vegetables produced grew fairly constantly over the period (+1.4% per annum). This growth was based on improved yields, an unchanged cultivated area for fresh fruit and a slightly smaller one for fresh vegetables. The long-term trend in real prices is one of steady decline (-2.0% and -3.7% per annum respectively), although for fresh vegetables albeit less pronounced than the decline in final production prices. Therefore, whereas the real value of the production of fresh vegetables was declined slowly (-0.7% per annum), the real value of fresh fruit fell by -2.4% per annum between "1981" and "1992".

Wine

The volume of wine production remained stable between "1981" to "1992" (+0.1% per annum), despite a Community policy whose main instruments for supporting the wine market are private storage aid and distillation subsidies. During the 1980s, Community policy was aimed at reducing the imbalance between Community wine production and falling consumption. Intervention was later supplemented by structural measures designed to encourage wine growers to cease production (grubbing-up). The area under vines fell between "1981" and "1992". Therefore, the stability of wine production only resulted from higher yields. Wine prices generally fell in real terms (-2.4% per annum on average) despite a recovery which began in 1988 and continued at high levels in 1989 and 1991. The drop in real prices reflected structural overproduction in European viticulture at a time of falling consumption and triggered large-scale distillation (which regularly exceeded 20 million hectolitres for compulsory and optional distillation).

Having been particularly down between "1981" and "1984", the low level of the real value of wine production increased thanks to higher volumes in 1986 and 1987 and stable real prices which began in "1987". This gave an average annual decline of -2.3% per annum over the decade.

b) Animal production

Milk

Milk accounts for a larger share of total agricultural production in the Community than any other product (about 17% in 1985). The common organization of the market in milk, which operates a price and intervention system relatively similar to that for cereals, has been conducive to a major increase in production; it rose continually between 1973 and 1983.

Beginning in 1984, there were serious imbalances in Community milk markets; supply was far greater than demand, and surpluses exceeded 10 million tonnes. To counter this situation, a system of production quotas was introduced. The consequences were a reduction in production volume and diversification into products

(5) Including citrus fruit, tropical fruit and table grapes.

with higher value added (cheese, fresh products). Over the reference period, production volume declined by -0.6% per annum after having reached its highest level in 1983.

Over the period as a whole, the state of milk markets caused real producer prices to fall by an annual average of -2.0%, despite support given to the sector. This, plus the effect of production quotas from 1984 onwards, caused the real value of milk production to decline by -2.5% per annum.

Table 5.4 **Average annual rates of change in volumes, real prices and real values of animal output in the Community between "1981" and "1992", in %**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final animal output	**1.0**	**0.1**	**0.6**	**0.6**	**-2.1**	**-4.6**	**-3.6**	**-3.5**	**-1.1**	**-4.5**	**-3.1**	**-2.9**
Cattle	1.0	-0.8	0.1	0.1	-2.6	-4.6	-3.7	-3.6	-1.6	-5.4	-3.6	-3.6
Pigs	1.6	2.1	2.0	1.9	-3.0	-8.4	-3.0	-4.5	-1.5	-6.5	-1.1	-2.7
Sheep and goats	0.5	2.6	1.6	1.6	-2.5	-3.4	-6.3	-4.5	-2.0	-0.9	-4.8	-3.0
Poultry	0.3	2.9	3.8	2.6	-1.4	-6.1	-4.9	-4.3	-1.2	-3.4	-1.4	-1.9
Milk	1.2	-1.5	-1.0	-0.6	-1.1	-1.7	-2.7	-2.0	0.1	-3.2	-3.7	-2.5
Eggs	-1.2	-1.0	-0.8	-1.0	-2.2	-5.2	-3.7	-3.7	-3.3	-6.2	-4.5	-4.6

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

Cattle (including calves)

Cattle production increased in volume terms by +1.0% per year between "1981" and "1984" whilst consumption remained stable, thus causing an imbalance between supply and demand. The introduction of quotas in the milk sector led to large-scale slaughtering of milk cows, this in turn compounding the imbalances in cattle markets. Cattle production declined slightly (-0.8% per annum) from "1984" to "1987" as a result of reduced cattle numbers, before recovering a very little, by an annual average of +0.1% from "1987" to "1992". Over the period as a whole, cattle production was fairly stable (+0.1% per annum). Real prices declined by -3.6% per annum between "1981" and "1992". Market surpluses, combined with a decline in beef and veal consumption, had an adverse effect on prices. The upturn in the markets, recorded in 1988 and 1989, was no more than a short-term adjustment.

The slight increase in production volume and the sharp decline in real prices were reflected in a decrease in the real value of production (-3.6% per annum on average).

Pigs

The volume of pig production, sustained by high consumption levels, rose almost uninterruptedly from "1981" to "1992", by an annual average of +1.9%. There was a slight decline in 1988/89, brought about by the fall in prices in the wake of the swine fever crisis and the downward phase of the pig production cycle. The pig sector is assisted by price support and intervention measures, but not by guaranteed prices. Real producer prices declined by -4.5% per year between "1981" and "1992". The falls were particularly severe from 1986 to 1988, during the swine fever crisis. Prices rallied in 1989 (owing to reduced supply and sustained demand), only to decline again in 1990, 1991 and particularly 1993 (a new crisis). This sharp drop in real prices caused the real value of production to fall by -2.7% per year over the period as a whole.

5.4.2 Intermediate consumption

Between "1981" and "1992", the volume of intermediate consumption grew by an annual average of +0.7%. Real prices declined by -0.3% per annum between "1981" and "1984". The decline accelerated in 1986 and 1987, in line with world prices for agricultural commodities, the weaker dollar and lower oil prices. Despite a slight slowdown in the subsequent period, prices declined by an annual average of -2.8% over the period "1981"/"1992". With the increase in consumption being more stable in volume terms, the real value of intermediate consumption moved in parallel with real prices, showing an average annual decline of -2.1% over the period under review.

Table 5.5 Average annual rates of change in volumes, real prices and real values of intermediate consumption in the Community from "1981" to "1992", in %

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Intermediate consumption	**1.0**	**1.3**	**0.2**	**0.7**	**-0.3**	**-5.2**	**-2.8**	**-2.8**	**0.6**	**-4.0**	**-2.6**	**-2.1**
Energy	-0.1	2.5	1.2	1.2	1.0	-11.8	-1.3	-3.7	0.9	-9.5	-0.1	-2.5
Fertilizers	0.8	1.2	-3.2	-0.9	-1.5	-7.3	-4.8	-4.6	-0.7	-6.2	-7.9	-5.5
Plant protection products	4.6	4.2	0.2	2.5	-0.1	-2.3	-1.9	-1.5	4.6	1.9	-1.6	1.0
Feedingstuffs	0.9	0.6	0.6	0.7	-0.9	-6.4	-4.3	-4.0	-0.1	-5.8	-3.8	-3.3
Material and small tools	-0.2	-0.3	-0.2	-0.2	0.9	0.1	-0.4	0.1	0.7	-0.2	-0.6	-0.1
Services	0.9	1.6	0.9	1.1	1.0	0.2	2.1	1.3	1.9	1.8	3.0	2.4

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

Although animal feedingstuffs were consistently the largest item of intermediate consumption, their share declined from 45% in "1981" to 39% in "1992". This decline was only marginally related to the lower share of animal production in total agricultural production. The main reason was the large fall in the real prices of animal feedingstuffs. The proportion of intermediate consumption accounted for by materials and services rose over the decade, suggesting continued agricultural intensification and technological development.

a) Fertilizers and additives

There was a slight decline in the volume of fertilizers and soil additives consumed over the reference period (-0.9% per annum), although this reduction conceals large fluctuations since it resulted from a slight rise until 1987 and then a sharp fall during more recent years (a restrictive agricultural policy, changes to some production systems). Fertilizer prices decreased in real terms by an annual average of -4.6%. The decline was particularly steep from "1984" to "1987" (-7.3% per annum), because of falling energy prices (especially of crude oil), the weaker dollar and tougher competition on the European market. The small reduction in the volume of fertilizers, combined with a sharp fall in prices, depressed the real value of fertilizer consumption by an annual average of -5.5% from "1981" to "1992".

b) Energy, small tools, services and plant protection products

Energy prices fell back slightly in real terms until 1986, before nose-diving in the period to 1989 as a result of the weaker dollar and declining oil prices. Over the period as a whole, real prices went down by an average of -3.7% per annum. Agricultural producers used more energy particularly in the period from 1986 (by an average of +1.2% per annum from "1981" to "1992") because of falling prices. The volume of materials and small tools used fell very slightly over the period under review (-0.2% per annum), while prices remained relatively stable (+0.1%). The volume of services rose slightly from "1981" to "1992" (+1.1% per annum), whilst their real prices rose by an average +1.3% per year. The volume of plant protection products used developed strongly by an average of +2.5% per annum from "1981" to "1992" (despite, as observed for

fertilizers, a reverse in the trend in more recent years and particularly 1992 and 1993), this being related to a decline in real prices (-1.5% per annum).

c) Animal feedingstuffs

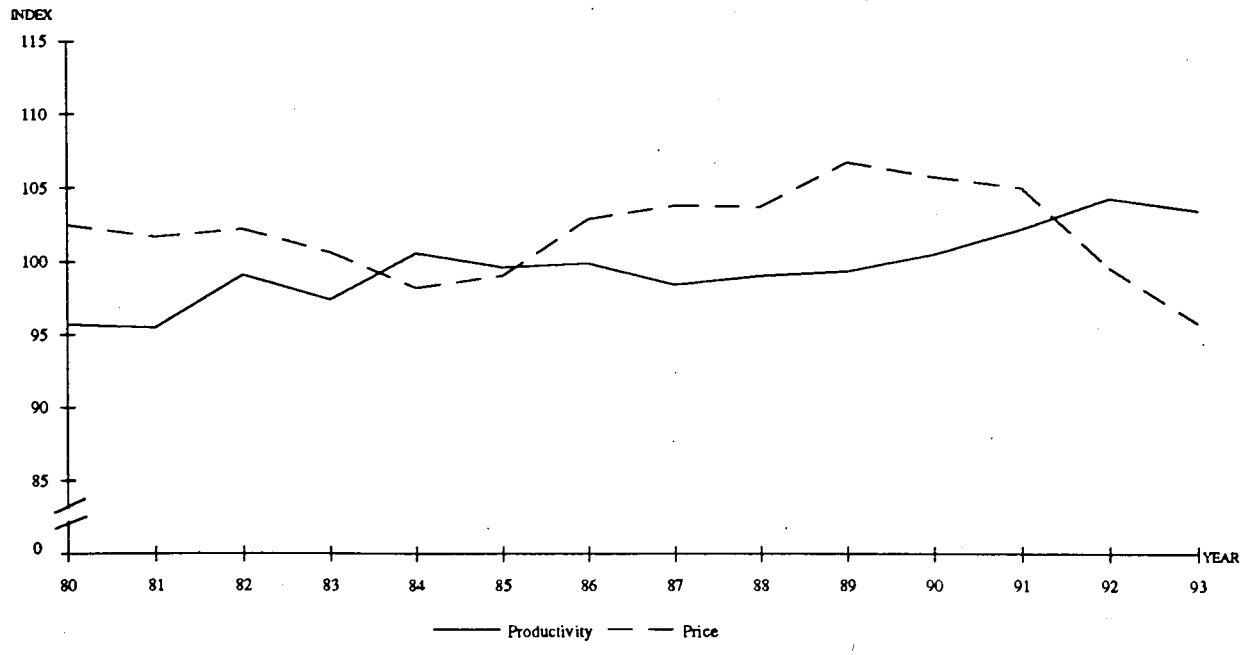
The consumption of animal feedingstuffs grew in volume terms by an annual average of +0.7% over the period "1981"/"1992". This was despite a slight decline in 1984 and 1985, which can be attributed to higher feedingstuff prices in those two years and to the sharp reduction in the milk herd following the introduction of quotas. The price of feedingstuffs fell in real terms in 1986 and 1987 in line with world commodity prices (particularly soya, manioc and other substitute feedingstuffs) and the weaker dollar. This trend was set to continue, despite a slight correction in 1988 and 1989 due, in part, to the drought in the United States. Over the period "1981"/"1992", real prices declined by an annual average of -4.0%. This strong decline and the slight increase in volume combined to give an annual average fall of -3.3% in the real value of feedingstuffs.

d) Productivity of intermediate consumption and the "price scissors"

Agricultural production and intermediate consumption have both been examined separately. The following is a comparison of changes in volumes and prices. The productivity of intermediate consumption is defined for present purposes as the ratio between the volume of production and the volume of intermediate consumption. Similarly, the "price scissors" are the ratio between the producer price index and the price index of intermediate consumption, in nominal terms.

Between "1981" and "1984", agricultural production grew more rapidly in volume terms than intermediate consumption. This resulted in a slight increase in the productivity of intermediate consumption (see graph 5.4). The productivity ratio was stable from "1984" until "1987", which was surprising in view of the decline in the share of total production accounted for by animal production.

Graph 5.4 **Development of the productivity of intermediate consumption and of the "price scissors" in the Community between "1981" and "1992" ("1985" = 100)**



It would appear that animal production is largely responsible for the unchanged productivity ratio of intermediate consumption in the second sub-period. Indeed, the cost of animal feedingstuffs can be attributed to animal consumption. The volume of feedingstuffs consumed grew fairly steadily from "1984" to "1987",

whereas the volume of animal production remained constant over the same period. During this period, the prices of animal feedingstuffs, which had represented slightly more than 40% of intermediate consumption in EUR 12, declined continuously (-6.4% per annum). This may have caused the consumption of feedingstuffs to rise, yet without triggering a proportional increase in production. Lower prices may have given rise to purchases of feedingstuffs in sectors other than agriculture (i.e. feedingstuffs not produced on agricultural holdings within the meaning of the methodology of the Economic Accounts for Agriculture (EAA)). This would have been taken into account in the EAA, unlike feedingstuffs produced on the "national farms".

It would appear that the high level of productivity of intermediate consumption during the sub-period "1987" to "1992" was due the development of crop production, animal production having a similar development to the use animal feedingstuffs.

Changes in this indicator of productivity must, however, be interpreted with care:

- this productivity ratio must be examined in a long-term perspective, since it is fairly sensitive to short-term changes, particularly climatic factors, which can have a significant effect on production volume. Nor can this measure of productivity be compared with productivity as defined in other economic sectors. The productivity of intermediate consumption concerns only one factor of production. All the variations in production which can stem from other factors (capital and labour.) are thus attributed to intermediate consumption.

- intra-sector consumption in agriculture causes some distortion. It is not covered by the EAA (see above) and can lead to underestimates of the real level of intermediate consumption. The productivity ratio of intermediate consumption can therefore vary from one Member State to another (depending on the relative importance of animal production and fodder production) and can be affected by climatic conditions and the supply of and demand for substitution products (i.e. products purchased in sectors other than agriculture).

The "price scissors" declined from "1981" to "1984" (-0.9% per annum), thereby continuing the steady deterioration which had taken place in most Member States since 1975, but staged a recovery starting in "1984" before beginning to fall significantly from 1990 onwards (+0.1% per annum from "1984" to "1992"). Nominal prices of agricultural production increased by +1.1% per year from "1984" to "1987", as against -0.3% for intermediate consumption. This is particularly due to energy, animal feedingstuffs and fertilizers, the prices of which fell considerably from 1986 in the wake of lower oil prices, a weaker dollar and the decline in world prices for agricultural commodities. After "1987", the fall in the prices of agricultural products was much more significant than intermediate consumption prices, resulting therefore in a deterioration in the "price scissors" of -0.7% per year. Over the period as a whole, therefore, the "price scissors" slightly decreased (-0.2% per annum)(6).

5.4.3 Other components of income

It must be stressed that the subsidies covered by the EAA are only those which consist of direct transfers to agriculture, i.e. neither price support, investment grants, nor aid given to the buyers of agricultural products, which are more or less reflected in prices. As a result, neither the level nor the trend of subsidies within the meaning of the EAA reflects the overall aid received by the agricultural sector in the Community. These subsidies, which regularly increased (by +8.0% per annum in real terms on average), accounted for a growing share of the value of final agricultural production, rising from 3% in "1981" to 9% in "1992". This was due, in particular, to 1992 and 1993, with the start of a new policy towards certain sectors of agricultural production,

(6) However, when this ratio is expressed in real terms there is a larger fall (decrease of -0.8% per year) because of a more rapid decline in real prices of agricultural output (-3.6% per year) than in those of intermediate consumption (-2.8%). These two ratios diverge because of the more important weighting of high inflation countries (particularly Italy and Greece) in the output price index than in the intermediate consumption price index, in which northern European countries with moderate inflation rates have greater weight.

based on direct income payments. The amount of taxes linked to production stabilized over the period, the rises for the first two sub-periods being more than offset by the falls in recent years (principally due to the dismantling of co-responsability levies for milk and cereals).

It should be pointed out that these items reflect widely varying conditions in different Member States. Indeed, the system and extent of agricultural support and disparate methodologies have caused considerable variations between Member States. Some care therefore has to be taken when examining the absolute value of these items, although the balance (subsidies less taxes linked to production) reflects the growing support given to agriculture in the form of direct transfers to producers. The balance represented nearly 15% of net value added at factor cost in "1992" (compared with 3% in "1981"). The result was that annual variations in "net subsidies" had a major impact on net value added at factor cost and income aggregates, particularly during periods of income stability (e.g. 1983, 1985, 1986, 1987 and 1993).

Table 5.6 **Annual average rate of variation in the components of indicators of agricultural income in the Community, from "1981" to "1992", over three sub-periods, and changes in the share of each component as a percentage of final output**

	Real value				as % of final output	
	SSP1	SSP2	SSP3	P	"1981"	"1992"
Final output	**-0.4**	**-3.3**	**-2.9**	**-2.3**	**100.0**	**100.0**
Intermediate consumption	**0.6**	**-4.0**	**-2.6**	**-2.1**	**44.1**	**45.0**
Gross value added at m.p.	**-1.2**	**-2.6**	**-3.2**	**-2.5**	**55.9**	**55.0**
Subsidies	8.0	5.4	9.6	8.0	2.8	8.8
Taxes linked to production	2.9	5.8	-6.3	-0.6	1.4	1.1
Depreciation	0.8	0.5	-0.3	0.2	10.5	13.9
Net value added at f.c.	**-1.2**	**-3.0**	**-2.2**	**-2.1**	**46.8**	**48.0**
Rent	-1.2	-1.6	-2.2	-1.8	2.1	2.2
Interest	1.2	-2.1	-1.2	-0.8	5.6	6.6
Net income of total labour	**-1.5**	**-3.3**	**-2.3**	**-2.4**	**39.2**	**39.2**
Compensation of employees	-1.7	-2.0	-0.4	-1.2	9.9	11.6
Net income of family labour	**-1.5**	**-3.7**	**-3.0**	**-2.8**	**29.3**	**27.6**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The real value of depreciation increased slightly between "1981" and "1984" (+0.8% per annum) before stabilizing (0.0% per annum). It appears that the less favourable situation in 1992 and 1993 and a more restrictive agricultural policy weighed down investment in the agricultural sector. Nevertheless, the share of depreciation in the value of total production was on an upward trend from 1985 (10.5% in "1981" and 13.9% in "1992"), which might reflect renewed increases in capitalization costs in the sector and, more generally, costs linked to the intensity of the production process.

It is not possible to interpret the development of net value added at factor cost in relation to a specific type of production, because intermediate consumption, subsidies, taxes linked to production and depreciation are not broken down along these lines. Real NVAfc declined by an annual average of -2.1% between "1981" and "1992". This decline was particularly pronounced between "1984" and "1987", when the real value of final agricultural production decreased (-3.3% per annum) in line with the fall in the real prices of products (cereals, root crops, oilseeds, fresh fruit, cattle and pigs).

The share of interest, rent and compensation of employees in final agricultural production was broadly unchanged from "1981" to "1992" at about 6%, 2% and 10% respectively (about 13%, 5% and 22% respectively in terms of net value added at factor cost). The stability of these figures confirms that these components had little impact on net income in the Community as a whole (although this may not be true of individual Member States). In real terms, their costs fell by -0.8%, -1.8% and -1.2% respectively per annum over the period "1981"/"1992".

Real net incomes of total labour input and family labour input moved in line with real net value added at factor cost, falling by -2.4% and -2.8% respectively per annum over the period under review. Therefore, when the declines in total labour input (-3.0% per annum) and in family labour input (-3.2% per annum) are taken into account, Indicators 2 and 3 of agricultural income rose by +0.7% and +0.3% respectively, per annum on average. These figures, which are therefore similar to the corresponding figure for Indicator 1, underline once again the relatively weak long-term impact of interest costs, rent and compensation of employees on the average changes in Indicators 2 and 3 in the Community as a whole (at a time when reductions in total labour input and in family labour input are very similar).

6 LONG-TERM TRENDS IN AGRICULTURAL INCOME IN THE COMMUNITY MEMBER STATES FROM 1980 TO 1993

6.1 Introduction

The trend in agricultural income in the Community Member States differed considerably in the period "1981"/"1992". Specific scrutiny of agricultural income in each Member State is based on the division of the reference period into three phases adopted in Chapter 5. The different trends recorded mainly stem from the intensity of each of these phases in each Member State and from factors such as the individual climatic conditions and consequent specific production, production techniques and structures, as well as the internal market situation subject to the supply and demand structure of each country. Nonetheless, European policy of support and intervention in the agricultural sector, as well as the main trends of the agricultural markets in the Community, can be traced in all Member States with differing time-scales as far as their influence on agricultural income is concerned.

Real net value added at factor cost per AWU, i.e. Indicator 1, had highly divergent annual average trends for "1981"/"1991" (cf. Table 6.1): Ireland (+4.5%) and Spain (+3.3%) had the sharpest increases. Italy (-1.4%), Portugal (-1.4%) and Germany (-0.1%) were the only countries to record an annual average fall in income in the Community. Income in some cases fluctuated sharply, as in Denmark, where the annual rate of increase moved from +6.3% from "1981" to "1984" to -1.3% from "1984" to "1987".

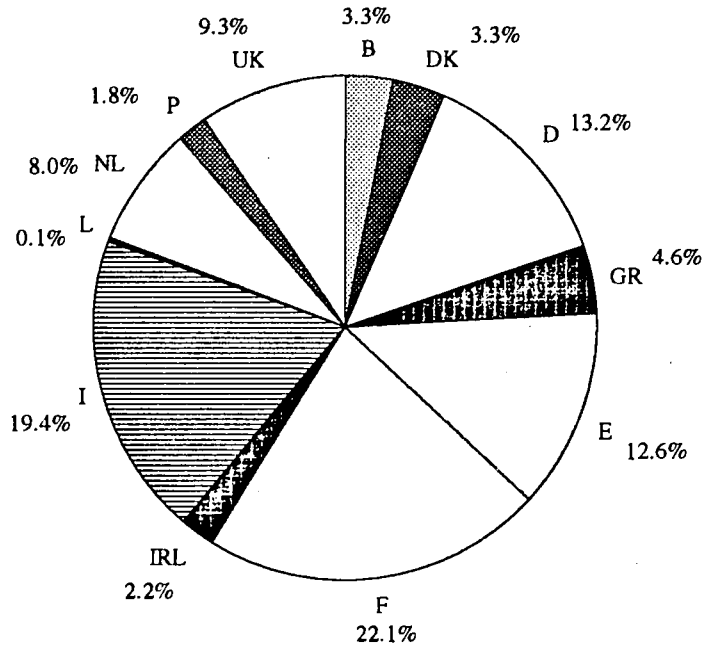
Table 6.1 **Average annual percentage changes in the indices of real net value added at factor cost per annual work unit (Indicator 1) for EUR 12, in three sub-periods**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
"1981"/"1984"	3.4	6.3	-0.8	0.2	4.0	1.5	4.4	-0.9	4.7	3.1	0.3	0.4	1.2
"1984"/"1987"	-3.0	-1.3	2.0	1.8	2.1	0.2	2.2	-2.7	3.2	-1.3	-0.6	-2.7	-0.4
"1987"/"1992"	2.1	-1.5	-1.0	4.5	3.6	2.9	6.0	-0.9	-2.0	-1.0	-2.8	2.1	1.5
"1981"/"1992"	1.0	0.6	-0.1	2.6	3.3	1.8	4.5	-1.4	1.2	0.0	-1.4	0.3	0.9

The Member States' share in final agricultural Community production only changed slightly in the reference period. France occupied the first place in "1992" with 22.1% of total Community production (cf. Graph 6.1), followed by Italy (19.4%) and Germany (13.2%). The only notable changes were Spain, whose share increased considerably (12.6% in "1992"), and the United Kingdom, with the steepest decline (9.3% in "1992").

The trend of final agricultural production in the Community, which is characterized by a rise in volume (+1.3% per year) accompanied by an annual fall in real prices of -3.6%, can be found in all Member States to varying degrees (cf. Table 6.2). For example, whilst three countries recorded an annual increase in their final production volume of over +2.0% (Ireland, Belgium and the Netherlands), Germany, Luxembourg, the United Kingdom and Italy recorded an increase of less than +1.0% per year, the production of the five other Member States (GR, P, F, E, and DK) kept close to the Community average. Real prices fell slightly in Greece (-1.7% per year). The fall in real prices varied between -2.2% and -4.4% for the other Member States, except Portugal, where it approached -6.0% per year. These trends led to a decline in the real value of total production in 11 countries, especially in Portugal, Germany and Italy for whom it was over -3.0% per year. Only the Netherlands recorded an increase of real final production value (+0.1% per year).

Graph 6.1 **Member States' share (in values) of total production in "1992"**



The average decline in the real value of production in EUR 12 (-2.3%) was slightly offset by a fall in the real value of intermediate consumption of -2.1% per year, the gross value added at market prices declining by an annual -2.5% on average. The increase in the use of intermediate consumption for the Community was less steep in volume terms (+0.7% per year, with increases in all countries except Germany and Portugal) than for final production, thus automatically resulting in a slight increase in productivity (+0.6% per year). This productivity is also positive in eight countries, but negative in Greece, Spain and Luxembourg. The fall in the real prices of intermediate consumption can be traced in all Member States (but to a lesser degree than for the prices of final production) reaching of -2.8% as an annual average for the Community as a whole. The "price scissors" very slightly declined, by an average of -0.2% per year for the Community.

Table 6.2 **Average annual rates of change in the real value of final production and intermediate consumption in agriculture, in the productivity of intermediate consumption and in the "price scissors"(*) from "1981" to "1992", in %**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Final production													
Volume	2.5	1.9	0.6	1.1	1.6	1.4	2.6	0.9	0.6	2.5	1.3	0.8	1.3
Price	-3.0	-4.3	-4.4	-1.7	-3.5	-3.4	-2.6	-4.2	-2.2	-2.3	-5.7	-3.2	-3.6
Value	-0.6	-2.5	-3.8	-0.7	-1.9	-2.1	-0.1	-3.3	-1.7	0.1	-4.4	-2.5	-2.3
Intermediate consumption													
Volume	2.5	0.6	-0.9	1.3	1.8	0.9	1.8	0.8	2.4	1.6	0.0	0.1	0.7
Price	-2.8	-3.2	-3.0	-1.3	-2.8	-2.4	-2.5	-4.5	-2.7	-2.0	-3.0	-2.3	-2.8
Value	-0.3	-2.6	-3.9	0.0	-1.0	-1.5	-0.8	-3.7	-0.4	-0.5	-2.9	-2.2	-2.1
Productivity of Intermediate consumption	0.0	1.2	1.5	-0.3	-0.2	0.5	0.8	0.1	-1.8	0.9	1.3	0.7	0.6
"Price scissors"	-0.2	-1.1	-1.4	-0.5	-0.8	-1.0	-0.2	0.3	0.6	-0.3	-2.9	-1.0	-0.2

* see para. 5.4.2 d, note 6

The real value of intermediate consumption remained unchanged in Greece, fell slightly in four Member States (B, L, NL and IRL) but more steeply in two others (I and D).

The labour input in Community agriculture decreased between "1981" and "1992" by an average rate of -3.0% per year (cf. Table 6.3). In Spain, the rate of fall in the labour input was especially high at -4.5% per year on average, whereas it remained relatively small in the Netherlands (-0.5%). The decline in agricultural labour input accelerated in the second part of the period, in most of the Member States, with the exceptions being Denmark, Luxembourg, the Netherlands and Portugal.

Table 6.3 **Average annual rates of change in total labour input in agriculture, in % for each Member State and EUR 12**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
"1981"/"1984"	-1.4	-3.2	-2.0	-0.6	-3.8	-2.9	-1.0	-2.2	-4.5	-0.5	-3.9	-1.2	-2.5
"1984"/"1987"	-2.0	-4.0	-2.4	-2.4	-3.4	-3.5	-2.4	-2.3	-4.0	-0.9	-2.1	-1.6	-2.6
"1987"/"1992"	-3.0	-3.2	-4.3	-4.0	-5.6	-4.1	-2.7	-3.0	-2.8	-0.3	-3.7	-2.2	-3.7
"1981"/"1992"	-2.3	-3.4	-3.2	-2.6	-4.5	-3.6	-2.1	-2.6	-3.6	-0.5	-3.3	-1.8	-3.0

6.2 Belgium

The development of agricultural income in Belgium, as measured by Indicator 1, is very slightly above the European average with a real annual average growth of +1.0% over the reference period "1981"/"1992". As in other Member States, three phases may be distinguished: a rise from 1980 to 1983, a falling-off and decline from 1984 to 1987 and then a slight pick-up from 1988 to 1993. Nevertheless, each of these phases is much more pronounced in Belgium; from "1981" to "1984", for example, income went up considerably (+3.4% per annum) as a consequence of higher real agricultural prices (+0.7% per year), this being partly due to more favourable Community policies and a downward movement of the Belgian franc. From "1984" to "1987", agricultural income fell by -3.0% per annum on average, the rise in production (+2.5%) not being sufficient to offset a major fall in real prices (-5.8%). The period "1987"/"1992" saw an increase in income (+2.1% per year) but this rise was very irregular; on the one hand, income went up rapidly in 1988 and 1989, principally because of higher agricultural prices (particularly for cattle, pigs and milk), which profited from the readjustment of Community agricultural markets following a more restrictive agricultural policy, and more favourable world markets conditions, but on the other, the years 1990, 1992 and 1993 were particularly bad in certain sectors (particularly pigs and crop production).

Over the entire period "1981"/"1992", the fall in real prices is less marked than in the other Member States (-3.0% per year) and the increase in production volume is above the Community average (+2.5% per year). Animal production represents approximately two thirds of total agricultural production (principally pigs, cattle and milk), with fresh vegetables being the major item of crop production.

The growth in production volume was mainly due to crop products during the first two sub-periods (+2.4%), when cereals, potatoes and fresh vegetables had high annual rates of growth (+3.2%, +4.2% and +4.7% respectively). After having increased from "1981" to "1984" (+2.0% per year), the real price of fresh vegetables declined strongly, particularly from "1984" to "1992" (-4.9%), despite a major rise in 1990. The real value of fresh vegetable production rose (although by irregular amounts) at an average annual rate of +1.9% for the whole of the period.

After having remained at almost constant levels from "1981" to "1984" (+0.2%), pig production increased steeply in volume terms during the rest of the reference period (+4.5% per year from "1984" to "1992"), despite a fall of -13.0% in 1990 following the swine fever which led to massive slaughtering. Real prices fell overall during the period "1981"/"1992" (-3.7% per year), particularly from "1984" to "1987" (-9.4% per

year). Milk production was more or less maintained at a level in volume terms from 1980 to 1987, but fell from 1988 (-0.7% per year over the entire period). There was a slowly declining trend in real milk prices (-1.1% per annum on average) from "1981" to "1992". The short term rises of 1988 and 1989 (lower production volume and lower surpluses on the market) were offset by the falls of 1990 and 1991. Cattle production, the volume of which had been somewhat restricted from "1984" to "1987" (+1.6% per year on average) by milk quotas, went up by +2.8% per year over the whole period. The real price of cattle fell regularly (-3.6% per annum from "1981" to "1992") except for the years 1981, 1982, 1989, 1992 and 1993, because of surplus supply on the market and a continued decline in consumption (particularly in 1989 and 1990).

Table 6.4 **Annual average rates of change for production volume, real prices and real value of agricultural products in Belgium from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.6**	**3.2**	**4.2**	**3.2**	**1.7**	**-5.2**	**-4.0**	**-2.8**	**3.4**	**-2.1**	**0.0**	**0.3**
Cereals	4.9	1.5	0.1	1.8	-1.6	-6.2	-6.9	-5.3	3.2	-4.8	-6.7	-3.6
Potatoes	1.3	7.1	8.1	6.0	4.5	-15.4	-5.8	-5.9	6.0	-9.3	1.8	-0.3
Fresh vegetables	4.0	5.4	5.6	5.1	2.0	-5.3	-4.7	-3.1	6.1	-0.2	0.6	1.9
Final animal output	**1.5**	**2.2**	**2.5**	**2.2**	**0.2**	**-6.2**	**-3.3**	**-3.2**	**1.7**	**-4.2**	**-0.9**	**-1.1**
Cattle	4.2	1.6	2.6	2.8	-1.0	-6.2	-3.7	-3.6	3.2	-4.7	-1.2	-1.0
Pigs	0.2	4.9	4.2	3.3	-0.5	-9.4	-2.0	-3.7	-0.3	-4.9	2.1	-0.5
Milk	0.4	-0.5	-1.4	-0.7	1.5	-1.6	-2.4	-1.1	1.9	-2.1	-3.8	-1.8
Final output	**1.5**	**2.5**	**3.1**	**2.5**	**0.7**	**-5.8**	**-3.5**	**-3.0**	**2.3**	**-3.4**	**-0.5**	**-0.6**
Intermediate consumption	**1.0**	**3.4**	**2.9**	**2.5**	**1.4**	**-6.3**	**-3.1**	**-2.8**	**2.4**	**-3.1**	**-0.3**	**-0.3**
Gross value added at m.p.	**2.3**	**1.3**	**3.4**	**2.5**	**-0.3**	**-5.1**	**-4.1**	**-3.4**	**2.0**	**-3.9**	**-0.8**	**-0.9**
Subsidies									1.7	-1.8	3.0	1.3
Taxes linked to production									8.6	12.9	1.2	6.3
Depreciation									1.5	2.3	1.1	1.5
Net value added at f.c.									**2.0**	**-5.0**	**-0.9**	**-1.3**
Rent									-3.3	-1.0	-1.9	-2.1
Interest									3.5	-2.3	5.1	2.6
Net income of total labour									**2.1**	**-5.7**	**-2.0**	**-1.9**
Compensation of employees									4.3	3.5	3.5	3.7
Net income of family labour									**2.0**	**-6.4**	**-2.6**	**-2.4**

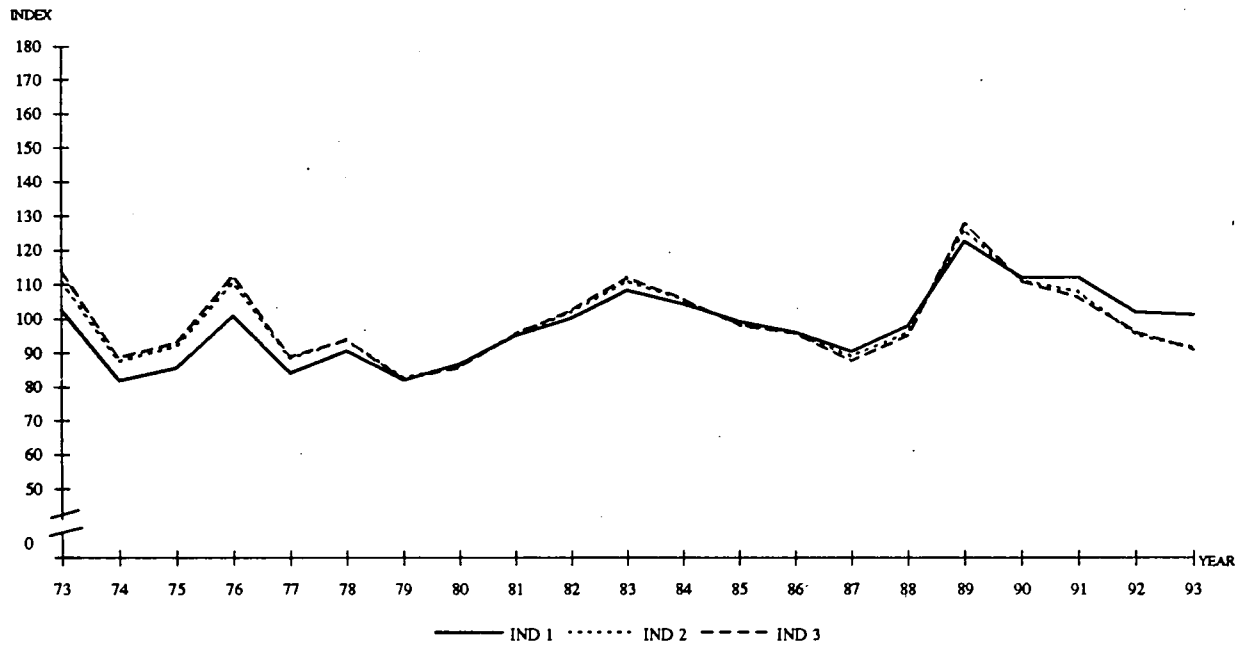
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The growth in intermediate consumption volume with an average annual rise of +2.5%, was equivalent to the development of final production volume, thus leading to the stability in productivity (0.0% per year), which was mainly due to the costs of animal production. It would therefore seem that there was a measure of continuity in the intensification of production. The real price of intermediate consumption fell by -2.8%, which resulted in a small deterioration in the "price scissors" (-0.2% per year).

The share of intermediate consumption in final production was high (58% compared with 44% for EUR 12). The extensive use of these items appears to have offset a limited capital investment level; this development is reflected in the depreciation and interest charges, whose share in total production is only 7% and 5% respectively (lower than for EUR 12) despite increasing +1.5% and +2.6% per year. The share of subsidies in total production remained fairly stable and limited, despite a short-term increase in 1990 (compensation for the massive slaughtering following swine fever). Taxes linked to production went up regularly although at a slower rate in the final period due to the dismantling of co-responsibility levies for cereals and milk. The level of net income in final production is lower than in the other Member States at 28% (compared with 39% for EUR 12). The total labour input in agriculture declined (-2.3% from "1981" to "1992") at a slow rate from

"1981" to "1985" but more rapidly from "1985" to "1992" (following the slowing-down of agricultural activity), thus permitting agricultural income (measured in AWU terms) to rise.

Graph 6.2 **Development of the three indicators of agricultural income in Belgium between 1973 and 1993, with "1985" = 100**



Indicators 2 and 3, which take interest charges, rents and compensation of employees into account, underwent a relatively similar development to that of Indicator 1 (+0.3% per year on average).

6.3 Denmark

The growth in agricultural income in Denmark, measured at +0.6% per annum by Indicator 1, was only slightly lower than the Community average during the period under review. However, this figure does conceal very large annual fluctuations, since agricultural income showed sustained growth in the first half of the 1980s (+6.3% per annum from "1981" to "1984"), to be followed by a decline in the second half (-1.4% per annum).

This fluctuation in agricultural income, which gives rise to a certain vulnerability in Danish agriculture, can be explained by the low proportion of total production accounted for by net income. It is therefore very susceptible to slight variations in volume and price, particularly if measured by Indicators 2 and 3. Intermediate consumption represents about 51% of total production, compared with an average of 44% for the Community as a whole. The difference reflects the major intensification of the agricultural production process in Denmark and the importance of animal production. Likewise, the major investments which have been made in the agricultural sector represent a considerable burden on accounts, since financial costs have risen to about 16% of total product compared with 6% for the Community. Finally, this accumulation of expense explains why the net income of total labour input, the basis of Indicator 2, is only a small part (19%) of total product in the sector, compared with about 39% for the Community as a whole (the corresponding figures obtained using Indicator 3 are 10% and 29% respectively). Despite there being a small average annual increase in the level of Indicator 1, agricultural income as measured by Indicators 2 and 3 decreased by an average -0.6% and -2.2% per year respectively during the period under review. These falls were aggravated by an increase in rental payments (+0.8% per year in real terms) and average rates of decline for interest payments and compensation of employees (-2.3% and -1.8% per annum). They also occurred despite a reduction in agricultural labour

input, which continued to be high throughout the period (-3.4% per annum for the total labour input and -3.4% per year for family labour input).

Table 6.5 **Annual average rates of change for production volume, real prices and real value of agricultural products in Denmark from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**6.1**	**3.7**	**1.0**	**3.1**	**-3.1**	**-6.2**	**-4.7**	**-4.7**	**2.8**	**-2.7**	**-3.7**	**-1.7**
Cereals	4.2	2.3	1.9	2.6	-4.4	-8.2	-5.5	-5.9	-0.4	-6.1	-3.7	-3.5
Final animal output	**1.7**	**0.4**	**1.7**	**1.3**	**-1.7**	**-6.4**	**-4.2**	**-4.2**	**0.0**	**-6.0**	**-2.6**	**-2.9**
Cattle	-0.6	-4.3	-0.2	-1.4	-1.9	-6.7	-4.5	-4.4	-2.4	-10.8	-4.7	-5.8
Pigs	2.3	3.0	4.4	3.5	-2.4	-9.3	-4.2	-5.1	-0.1	-6.6	0.1	-1.8
Milk	0.9	-2.7	-1.0	-0.9	-0.8	-1.8	-2.5	-1.9	0.0	-4.4	-3.5	-2.8
Final output	**2.9**	**1.4**	**1.5**	**1.9**	**-2.1**	**-6.3**	**-4.4**	**-4.3**	**0.8**	**-5.0**	**-3.0**	**-2.5**
Intermediate consumption	**0.4**	**-0.1**	**1.2**	**0.6**	**-0.5**	**-6.5**	**-2.8**	**-3.2**	**-0.1**	**-6.6**	**-1.6**	**-2.6**
Gross value added at m.p.	**6.2**	**3.1**	**1.8**	**3.3**	**-4.1**	**-6.2**	**-6.1**	**-5.6**	**1.8**	**-3.3**	**-4.5**	**-2.5**
Subsidies									3.7	-12.2	15.9	4.2
Taxes linked to production									-11.3	8.8	-1.7	-1.7
Depreciation									1.4	-1.2	-1.3	-0.5
Net value added at f.c.									**3.0**	**-5.1**	**-4.6**	**-2.7**
Rent									7.3	-1.4	-1.6	0.8
Interest									-5.6	-2.3	-0.4	-2.3
Net income of total labour									**12.7**	**-7.9**	**-10.3**	**-3.9**
Compensation of employees									1.3	-1.5	-3.8	-1.8
Net income of family labour									**20.6**	**-11.4**	**-16.0**	**-5.9**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

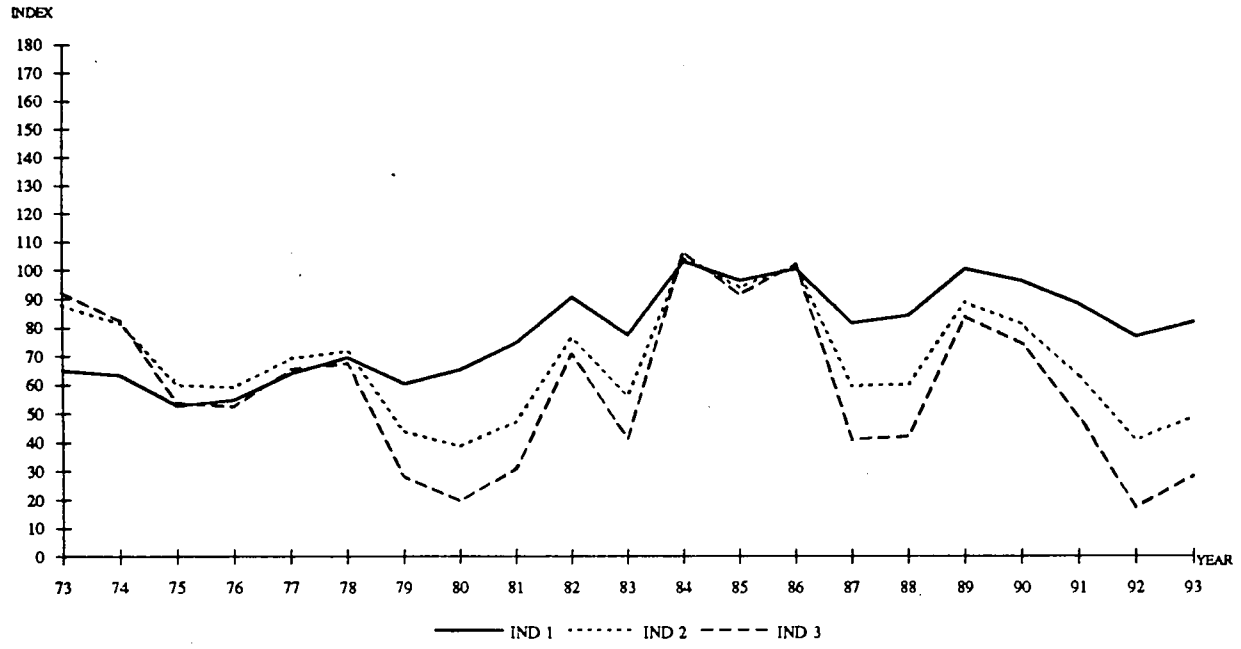
The volume of final output increased moderately between "1981" and "1984" (+2.9% per annum) and was then followed by a period of slower growth. This was due, in particular, to the slowdown in the annual rate of increase of crop production (from +6.1% in "1981"/"1984", progressively down to +1.0% in "1987"/"1992") despite representing only a third of final output. The volume of final animal output recovered the rate of growth experienced in "1981"/"1984" in the final sub-period, having dipped in between. Over the period as a whole, real prices decreased fairly sharply (particularly after 1984) at a rate of -4.3% per annum, which was only partly compensated for by increased volume (+1.9% per annum). The net result was a fall in the real value of production (-2.5% per annum).

The mainstay of agricultural production in Denmark is animal production (particularly pig and milk production), which represents nearly two thirds of the total. Production is highly concentrated, with the average number of animals per holding being much higher than in the Community as a whole. Denmark has a pigmeat and milk self-sufficiency rate of more than 200%. Pig production volume rose by an average +3.5% per annum over the entire period, although the annual increases were higher in the latest sub-period. The value of production stabilized after 1986, as increases in the production volume compensated for the drop in producer prices. Real prices fell by -2.4% per annum until "1984", before plummeting by -9.3% between "1984" and "1987". This was followed by a rally in 1989 and by further falls in 1991, 1992 and particularly 1993. Following a period of relatively weak growth from 1980 to 1983, the volume of milk production fell more strongly (-1.6% per annum) from "1984" to "1991" owing to the introduction of milk quotas, although since then it has gradually stabilized, partly as a result of higher yields.

The volume of crop production increased by an average +3.1% per annum over the entire period, particularly due to cereals (+2.6%), flowers (+4.0%) and oilseeds (+6.1%). The real price of final crop production declined

steadily throughout the period (-4.7% per annum), although this followed the pattern observed in most other Member States.

Graph 6.3 **Development of the three indicators of agricultural income in Denmark between 1973 and 1993, with "1985" = 100**



Intermediate consumption volume rose only slightly throughout the period "1981"/"1992" (+0.6% per annum). This is in stark contrast to the 1970s, which witnessed a marked intensification of production. However, the fall in the real price of intermediate consumption (-3.2%) was not as steep as the fall in the implicit prices of agricultural products (-4.3% per annum). This led to a deterioration in the "price scissors".

Changing policy instruments linked to the development of the CAP have greatly altered the amount of subsidies and taxes linked to production, even in the short-term. There had been a national policy of reducing production subsidies, particularly in the period before 1992. However, the reform of the CAP, with a considerable rise in subsidies linked to crop production in particular for 1993, resulted in an "average" annual rate of increase of +4.2% over the entire period. This was also reflected in the proportion of total agricultural production accounted for by subsidies, which had fallen from 1.7% in 1981 to 0.9% in 1991, but rose spectacularly to 7.4% in 1993. Taxes linked to production fell over the period (an average -1.7% per annum) to provide a double-edged impetus to incomes.

6.4 Germany[1]

Agricultural income in Germany, measured by Indicator 1, declined very slightly (by an average of -0.1% per annum) during the period under review, one of only three decreases in the Community. The impact of the strong increases of 1988 and 1989 on income being more than compensated for four consecutive decreases (from 1990 to 1993). Growth in production volume was relatively weak, rising by an annual average of just +0.6% between "1981" and "1992". This rate of increase, together with that of Luxembourg, was the lowest in EUR 12. The fall in real producer prices (-4.4% per annum) was also marked and above the EUR 12 average. However, the decline in the real value of agricultural production resulting from these trends was balanced by the lower volume of intermediate consumption (-0.9% per annum, the only fall in the Community) and by a

[1] Germany as constituted prior to October 3rd 1990.

drop in the real prices of intermediate consumption (-3.0%, this being greater than for EUR 12). Furthermore, although the "price scissors" deteriorated (-1.4%), there was an improvement in the productivity of intermediate consumption (at +1.5% per year, the strongest rise in EUR 12). The stagnation of agricultural income resulted from a decline of the NVAfc in real terms of -3.2% per year and a reduction of labour input at close to the EUR 12 average (-3.2%), although the speed of departures had nearly doubled by the second half of the period.

The three phases which can generally be identified for the Community as a whole are not so distinct for Germany, where fluctuations in income were more marked than in the other countries, although the general trend was similar to that of EUR 12 until 1992 (a strong fall was apparent for 1993 which greatly affected the average rate of change). Net income accounted for 25% of final production, compared with a Community average of 39%, making for less stability. The use of intermediate consumption was high, but declined towards the end of the 1980s. This has to be seen in relation to animal production, which represents nearly two-thirds of agricultural production in Germany. Depreciation, which accounts for a large part of final production (nearly 17%) but whose real value fell slightly during the period under review, reflects the high level of capital intensiveness in German agriculture. Although taxes on production declined (-1.5%), the value of subsidies grew at a double-digit rate (+11.2%) to a level where it represents nearly 10% of total final agricultural production, which constitutes one of the highest levels in EUR 12. This is especially due to the compensation given to Germany for cut-backs in monetary compensatory amounts in 1984 and, in the second half of the 1980s, to the subsidies granted for milk quotas and set-aside.

Table 6.6 **Annual average rates of change for production volume, real prices and real value of agricultural products in Germany from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**0.8**	**1.9**	**3.1**	**2.1**	**-2.7**	**-5.0**	**-5.9**	**-4.8**	**-1.9**	**-3.2**	**-3.0**	**-2.7**
Cereals	2.4	1.8	3.1	2.5	-4.1	-6.2	-8.4	-6.6	-1.8	-4.5	-5.6	-4.3
Fresh fruit	1.5	2.4	-1.7	0.3	1.4	-3.8	-2.0	-1.6	2.9	-1.5	-3.6	-1.3
Final animal output	**1.1**	**-0.5**	**-0.9**	**-0.3**	**-2.7**	**-6.0**	**-3.9**	**-4.2**	**-1.6**	**-6.5**	**-4.8**	**-4.4**
Cattle	1.4	0.0	-0.5	0.2	-3.0	-7.0	-6.1	-5.5	-1.6	-7.0	-6.5	-5.3
Pigs	0.9	0.8	-1.2	-0.1	-4.4	-10.4	-1.8	-5.0	-3.6	-9.7	-3.0	-5.0
Milk	1.5	-2.3	-1.9	-1.1	-0.8	-2.2	-3.5	-2.4	0.6	-4.5	-5.3	-3.5
Final output	**1.0**	**0.3**	**0.6**	**0.6**	**-2.7**	**-5.7**	**-4.7**	**-4.4**	**-1.7**	**-5.4**	**-4.1**	**-3.8**
Intermediate consumption	**0.2**	**-0.8**	**-1.6**	**-0.9**	**-0.8**	**-6.3**	**-2.3**	**-3.0**	**-0.7**	**-7.1**	**-3.9**	**-3.9**
Gross value added at m.p.	**2.2**	**1.7**	**3.0**	**2.4**	**-5.1**	**-4.9**	**-7.3**	**-6.0**	**-3.0**	**-3.3**	**-4.5**	**-3.8**
Subsidies									20.5	18.7	2.0	11.2
Taxes linked to production									2.7	4.2	-7.2	-1.5
Depreciation									0.2	-1.7	-0.1	-0.4
Net value added at f.c.									**-2.8**	**-0.5**	**-5.0**	**-3.2**
Rent									3.0	3.0	3.8	3.4
Interest									0.6	-3.5	-4.0	-2.7
Net income of total labour									**-4.1**	**0.1**	**-6.4**	**-4.0**
Compensation of employees									-0.7	-0.8	-1.5	-1.1
Net income of family labour									**-5.0**	**0.4**	**-7.9**	**-4.9**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

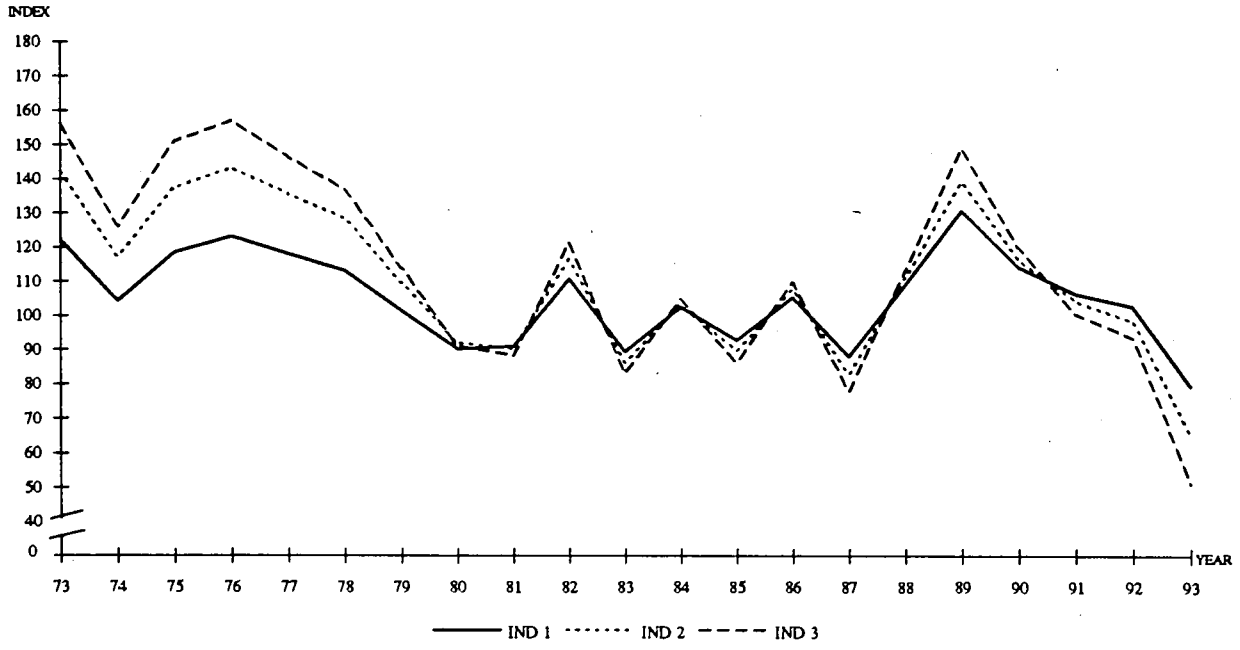
The growth in volume of agricultural production took place in the first half of the decade before stabilizing. Crop production, which grew by an annual average of +2.1% over the whole period (compared with a -0.3% for animal production) accounted for this higher volume, particularly between "1984" and "1992" (+2.6% per annum), whereas the situation in the animal sector deteriorated (-0.8% per annum over the same period).

The growth in the volume of cereal production recovered somewhat after slowing down around the mid 1980's, the decline in the area under cultivation being more than compensated for by higher yields. Real producer prices fell substantially (by an average of -6.6% per annum) over the entire period, and particularly after 1984, in parallel with institutional prices.

Cattle production increased very slightly in volume terms during the period under review (an average +0.2% per year). After growing by an annual rate of +1.4% at the beginning of the 1980's, it stabilized following the introduction of milk quotas, which led to a short-term increase in cow slaughtering and a fall in the cattle population in 1990 and 1991. The volume of milk produced decreased after 1984 (-2.1% from "1984" to "1992"), as in the other Community countries, following the introduction of milk quotas. Over the period as a whole, the fall was equivalent to an average -1.1% per annum. Real producer prices of milk and beef declined in each of the sub-periods (-2.4% and -5.5% per annum respectively from "1981" to "1992"), despite some recovery in 1988 and 1989.

Over the period as a whole, pig production volume was stable (the slight increase recorded between 1980 and 1986 was wiped out by falls from 1987 to 1992). The crisis which affected the pig sector in the Community in 1987 and 1988 brought about a decline in the volume of production which was particularly pronounced in Germany in 1989. Such a strong decrease led to a slower decline in real prices (-1.8%) over the period from "1987" to "1992" (despite a new crisis in 1993), which followed a period of steep falls in real prices, at an annual average of -7.4% between "1981" and "1987".

Graph 6.4 **Development of the three indicators of agricultural income in Germany between 1973 and 1993, with "1985" = 100**



In this way, agricultural income in Germany was severely affected by declines in real values of milk, beef, pigmeat and cereal production. Indicators 2 and 3 of agricultural income, which take account of interest, rent and compensation of employees, followed a similar trend to Indicator 1 during almost the whole of the period "1981"/"1992". Nevertheless, the significant reduction in agricultural income Indicator 1 for 1993 was accompanied by an extremely strong drop in income Indicators 2 and 3 (the latter being most down). These large changes greatly affected the average annual development of these two Indicators, which decreased by -1.0% and -1.8% per year on average, respectively.

6.5 Greece

Agricultural income in Greece, measured by Indicator 1, grew by +2.6% per annum, which is well above the Community average. The various phases in agricultural income movements identified for the Community as a whole were less pronounced in Greece, where income rose increasingly through the sub-periods, with the rate between "1987" and "1992" being particularly sharp (+4.5% per annum, compared with +0.2% per annum between "1981" and "1984"). The reduction in the agricultural labour input was slight from 1980 to 1985, but then accelerated, resulting in an overall decline of -2.6% per annum in the period under review.

Table 6.7 **Annual average rates of change for production volume, real prices and real value of agricultural products in Greece from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**0.5**	**2.1**	**1.7**	**1.5**	**0.4**	**-3.1**	**-1.9**	**-1.6**	**0.9**	**-1.0**	**-0.3**	**-0.2**
Cereals	-4.4	6.1	3.3	1.9	-0.8	-6.2	-5.6	-4.5	-5.2	-0.5	-2.5	-2.7
Fibre plants	9.8	12.3	4.0	7.8	6.6	-6.3	-0.7	-0.3	17.1	5.2	3.3	7.4
Fresh vegetables	1.7	-0.6	0.5	0.5	3.8	-1.9	0.5	0.7	5.6	-2.4	1.0	1.3
Fresh fruit	1.9	-3.4	0.9	0.0	-1.7	-0.1	-4.5	-2.6	0.1	-3.5	-3.6	-2.6
Olive oil	-2.3	2.7	3.4	1.6	1.5	-1.8	1.0	0.4	-0.8	0.8	4.4	2.0
Final animal output	**-0.7**	**1.2**	**0.2**	**0.2**	**-1.2**	**-1.8**	**-2.5**	**-2.0**	**-1.9**	**-0.7**	**-2.3**	**-1.7**
Sheep and goats	1.1	3.9	1.5	2.0	-2.5	-3.3	-5.1	-3.9	-1.4	0.5	-3.7	-2.0
Milk	0.4	-0.6	-0.2	-0.1	0.5	0.3	-0.7	-0.1	0.9	-0.3	-0.9	-0.2
Final output	**0.1**	**1.8**	**1.2**	**1.1**	**-0.1**	**-2.7**	**-2.1**	**-1.7**	**-0.1**	**-0.9**	**-0.9**	**-0.7**
Intermediate consumption	**2.1**	**0.1**	**1.6**	**1.3**	**-0.6**	**-1.6**	**-1.6**	**-1.3**	**1.5**	**-1.5**	**0.0**	**0.0**
Gross value added at m.p.	**-0.5**	**2.3**	**1.1**	**1.0**	**0.0**	**-3.0**	**-2.3**	**-1.9**	**-0.5**	**-0.8**	**-1.2**	**-0.9**
Subsidies									4.4	7.4	11.9	8.6
Taxes linked to production									-0.8	11.9	-3.0	1.5
Depreciation									2.6	1.8	-2.3	0.1
Net value added at f.c.									**-0.4**	**-0.6**	**0.4**	**-0.1**
Rent									8.6	-4.4	-5.6	-1.6
Interest									8.0	1.4	4.5	4.5
Net income of total labour									**-1.2**	**-0.5**	**0.4**	**-0.3**
Compensation of employees									-3.0	-2.2	-0.5	-1.7
Net income of family labour									**-1.1**	**-0.4**	**0.4**	**-0.2**

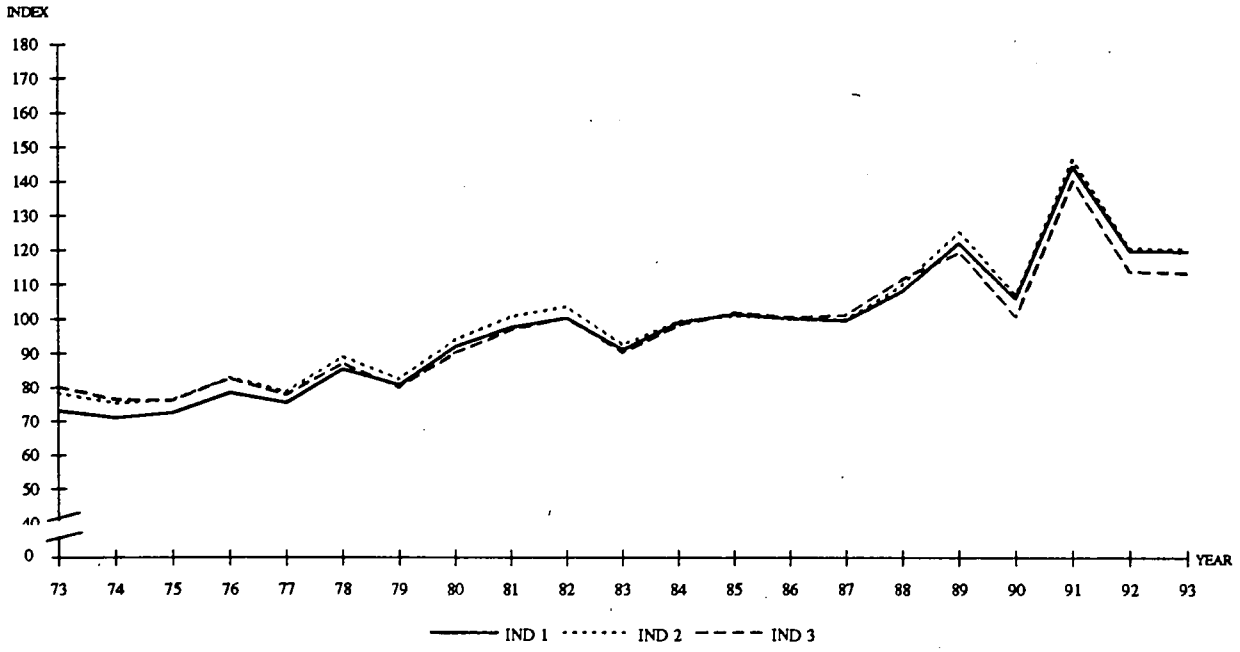
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

Agricultural production grew in volume terms between "1981" and "1992" at an average annual rate of +1.1%, much the same as the Community average. This rate represents a definite break with the 1970s, which were marked by sustained increases. This lower rate of growth was partly compensated for by the limited fall in producer prices (-1.7% per annum compared with -3.6% for EUR 12). Agricultural production is dominated by crop production (fresh fruit and vegetables, textiles, olive oil and cereals), which represents about 70% of total production. The volume of crop production grew at an average annual rate of +1.5% between "1981" and "1992", and with real prices declining by -1.6% per year on average, about half the Community average, the real value remained largely unchanged (-0.2% per year). In contrast, the volume of animal production (mainly sheep/goats and milk) remained quite stable over the whole period (+0.2% per year) but increasingly downward pressure on real prices, especially for sheep and goats, led to a steady fall in the real value (-1.7% on average).

Production of fresh vegetables rose slowly (+0.5% per annum on average), and the production of fresh fruit[2] remained unchanged at either end of the period, although these figures conceal wide fluctuations brought about by varying weather conditions and the nature of production. Over the period as a whole, the real price of fresh vegetables also increased slightly (+0.7% per annum). This comprised considerable rises between "1981" and "1984" (+3.8% per year) being largely offset by falls from "1984" to "1992". In comparison, the real price of fresh fruit fell steadily, but particularly strongly in the period after "1987" (an average -4.5% per year) The volume of olive oil produced rose progressively after declining by an average -2.3% per year in "1981"/"1984" (+3.4% in "1987"/"1992"). This was accompanied by real producer prices that were largely unchanged at either end of the period as a whole (+0.4% per year on average), despite the fall in the support price in the "1987"/"1992" period.

The volume of industrial crops produced soared, because of the strong growth in textile crop production (an annual average of +7.8%). The growth in production volume slowed considerably between the second and third sub-periods (+12.3% in "1984"/"1987" to +4.0% per year in "1987"/"1992") although still remained high in comparison to other products. This slow-down can be attributed almost entirely to the relatively weak growth in cotton production (+11.1% from "1981" to "1987", down to +4.0% between "1987" and "1992") which slowed down considerably as a result of the introduction of the maximum guaranteed quantity, the fall in the target price and Community assistance triggered by the stabilizer mechanism with effect from the 1987/88 season. Producer prices for textile plants as a whole remained similar at both ends of the period (an average -0.3% fall per annum). There was also relatively slow growth in tobacco production after 1986 (+1.6% from "1987" to "1992"). The fall in institutional prices, brought about by the stabilizer mechanism affecting the various varieties of tobacco, combined with very high levels of intervention stocks from 1985 onwards, contributed to an average annual decline in prices of -2.3% between "1984" and "1992".

Graph 6.5 **Development of the three indicators of agricultural income in Greece between 1973 and 1992, with "1985" = 100**



Sheep and goat production grew by an annual rate of +2.0% between "1981" and "1992". This rate of growth must be seen in the light of the continuous increase in consumption and of the common organisation of the market in these products, as the system of ewe premiums favoured growth in the sector. The restrictive policy

2 Including citrus fruit and table grapes.

of institutional prices failed to cap production in the period from "1987" to "1992", when it grew by +1.5% per annum (+3.9% per annum from "1984" to "1987"). Milk production volume was almost unchanged over the period (-0.1% per annum), as were real prices (-0.1% per annum).

The use of intermediate consumption grew at a relatively fast rate (an annual average of +1.3%), although in terms of absolute value it was particularly low (about 23% of the value of final production). This was due mainly to the large proportion of final agricultural production accounted for by crops and to the fact that agricultural production in Greece is less intensive than in the other Member States. The "price scissors" and the productivity of intermediate consumption declined slightly over the period "1981"/"1992". The lower level of intensive production is reflected in capital utilization. The level of depreciation is much lower than in the Community as a whole (4.5% of total production, compared with 13% for the Community) and increased only slightly in the period under review (+0.1% per annum). Subsidies, which started from a relatively high base, rose by an average +8.6% per year, although taxes on production also rose slightly (+1.5% per year after particularly large increases in "1984"/"1987" at +11.9% per annum). Net agricultural income, the basis for Indicator 2, represents nearly 70% of total product (compared with 39% for EUR 12) and is therefore less susceptible to variations in price and production volumes.

Indicators 2 and 3 of agricultural income, which take account of interest (+4.5 per annum), rent (-1.6% per year) and compensation of employees (-1.7% per year), rose broadly in line with Indicator 1 (+2.4% and +2.2% per annum respectively).

6.6 Spain

During the period under review, Spain recorded one of the highest increases in agricultural income, when measured by Indicator 1 (+3.3% per annum), particularly from "1981" to "1984" (+4.0% per year). Agricultural income in Spain displays a different trend from that in the other Member States. This is because of Spain's recent accession to the Community (1986) and its specific types of agricultural production. The rise in income per AWU reflects a relatively minor fall in real NVAfc (-1.3% per annum on average), being more than offset by the considerable reduction in agricultural labour input (-4.5% per annum, this being the highest rate in EUR 12).

A feature of Spanish agriculture is the dominance of crop production, which represents about 58% of the value of final agricultural production. The main agricultural products are fresh fruit and vegetables, cereals, pigs and, to a lesser extent, milk and cattle.

The wave of modernization in Spain has had two effects: firstly, an increase in the volume of production (+1.6% per annum on average, a slightly higher rate than the Community average, accompanied by a decline in real producer prices, which were (-3.5%) about the same as the Community average); and secondly, higher costs resulting from more intensive use of intermediate consumption (+1.8% per year in volume, one of the highest rates in EUR 12) and of fixed capital (investment, whilst nevertheless strong, slowed down at the end of the period).

The volume of fresh vegetables increased regularly, although less so between "1987" to "1992", during the period "1981"/"1992", at an annual average of +1.7%, thanks to increases in the area under cultivation and rising yields. Real prices decreased slightly over the medium term (-1.3% per annum), despite major annual fluctuations. The volume of fresh fruit production[3] increased by more than that of fresh vegetables, with wide fluctuations giving way to relatively continuous growth over the whole period (+3.2% from "1981" to "1992"). Higher production resulting from larger areas under cultivation and greater yields translated into a rise in

[3] Including citrus fruit, tropical fruit and table grapes.

exports, whilst domestic consumption plummeted. Real prices varied with production, most notably in 1981, 1986, 1989 and 1992, and declined by an annual average of -4.6% over the period as a whole.

Table 6.8 **Annual average rates of change for production volume, real prices and real value of agricultural products in Spain, from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**5.2**	**2.9**	**-0.2**	**2.1**	**-1.4**	**-3.1**	**-4.4**	**-3.2**	**3.8**	**-0.3**	**-4.6**	**-1.2**
Cereals	16.5	2.1	-5.7	2.1	-0.8	-4.3	-6.3	-4.3	15.6	-2.3	-11.7	-2.3
Fresh vegetables	2.8	2.1	0.9	1.7	-3.4	1.6	-1.6	-1.3	-0.7	3.7	-0.8	0.4
Fresh fruit	2.4	3.5	3.6	3.2	0.4	-4.1	-7.7	-4.6	2.8	-0.7	-4.4	-1.5
Final animal output	**0.6**	**1.2**	**0.9**	**0.9**	**-0.4**	**-4.7**	**-5.7**	**-4.0**	**0.2**	**-3.5**	**-4.8**	**-3.1**
Cattle	-3.0	1.1	0.1	-0.5	1.0	-2.8	-3.9	-2.3	-2.0	-1.7	-3.8	-2.8
Pigs	3.5	2.3	4.5	3.6	0.1	-6.5	-6.0	-4.5	3.7	-4.3	-1.8	-1.1
Milk	2.1	-1.2	-0.9	-0.1	-1.0	-3.1	-5.9	-3.8	1.1	-4.2	-6.7	-3.9
Final output	**2.9**	**2.2**	**0.5**	**1.6**	**-0.8**	**-3.7**	**-4.9**	**-3.5**	**2.0**	**-1.6**	**-4.5**	**-1.9**
Intermediate consumption	**2.2**	**2.1**	**1.4**	**1.8**	**1.7**	**-4.5**	**-4.3**	**-2.8**	**3.9**	**-2.5**	**-3.0**	**-1.0**
Gross value added at m.p.	**3.5**	**2.2**	**-0.3**	**1.4**	**-2.9**	**-3.0**	**-5.4**	**-4.1**	**0.6**	**-0.9**	**-5.6**	**-2.7**
Subsidies									3.7	8.0	35.8	18.5
Taxes linked to production									10.4	9.0	4.4	7.3
Depreciation									4.8	3.1	-10.9	-3.1
Net value added at f.c.									**0.0**	**-1.3**	**-2.2**	**-1.3**
Rent									-3.7	0.0	-2.9	-2.4
Interest									2.5	-2.6	5.8	2.5
Net income of total labour									**0.0**	**-1.2**	**-3.3**	**-1.8**
Compensation of employees									-4.7	-4.1	-2.6	-3.6
Net income of family labour									**1.8**	**-0.3**	**-3.5**	**-1.2**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

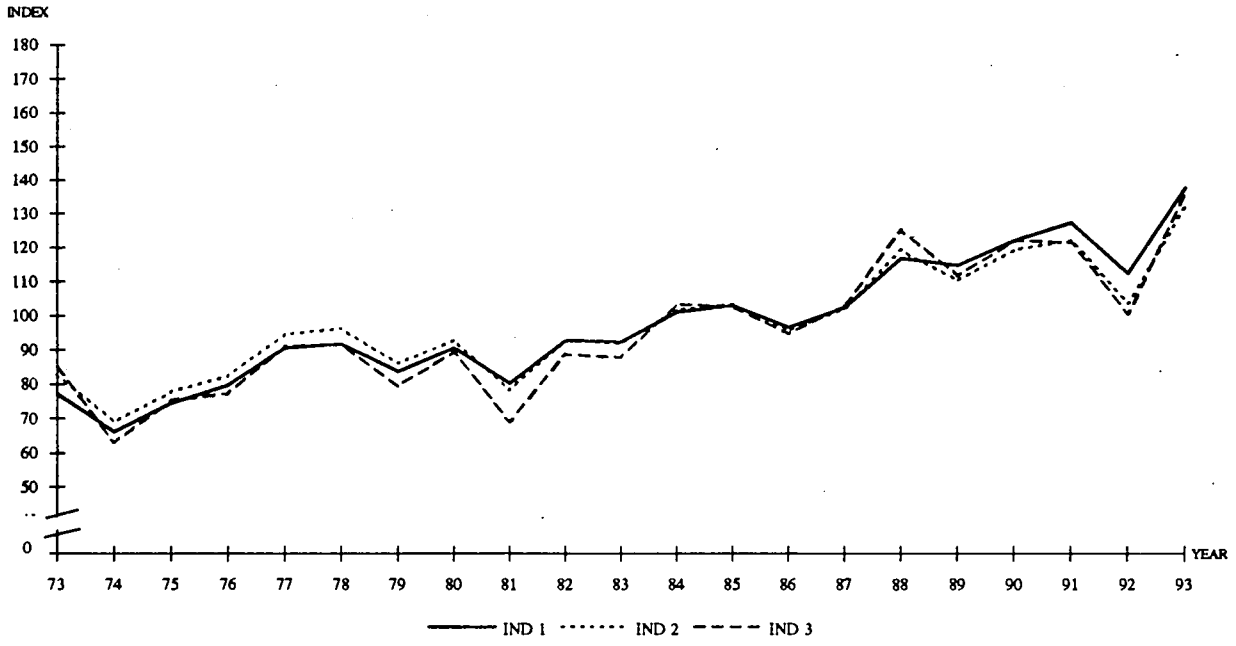
Cereal production increased by +2.1% per annum over the period. However, this figure does conceal a progressive slow-down over the period and major annual variations brought about by very wide fluctuations in the area under cultivation. Following slight falls in the period to 1986, real prices declined steeply, giving an average annual decline of -4.3% over the period "1981"/"1992", which was in line with other cereal markets in the Community.

Pig production experienced sustained growth (+3.6% per annum), particularly during the period "1987"/"1992" (+4.5% per annum). This has to be seen in the context of a major increase in pork consumption in Spain (around +4% per annum between 1983 and 1992). Real prices held their ground in the first half of the 1980's, only to plummet afterwards (-6.2% in the period "1984"/"1992"). The swine fever crisis, which affected all of Europe, combined with sustained levels of domestic production, appears to have depressed prices. Milk production decreased only very slightly in volume terms over the reference period (-0.1% per year on average), despite an increase in the period from "1981" to "1984" (+2.1% per annum) before Spain was exposed to overproduction in the Community and the introduction of the common milk policy put a brake on growth in the sector. Real prices declined in the period as a whole (-3.8%), despite a slight recovery in 1989.

Following Spain's accession to the Community, subsidies paid to Spanish agriculture rocketed (an annual average of +35.8% from "1987" and "1992"), to reach one of the higher levels in the Community. The subsidies were paid either for specific products (sheep and goats, and olive oil) or as part of aid programmes for mountain farming and other less favoured areas. The low level of taxation on agricultural production should also be borne in mind, since this remained less than 0.5% of the value of final agricultural production.

The growing share of depreciation in final production reflects the drive towards more capital-intensive agriculture, despite some decline at the end of the period.

Graph 6.6 **Development of the three indicators of agricultural income in Spain between 1973 and 1993, with "1985" = 100**



Interest payments rose by +2.5% per annum in real terms, which would seem to indicate more intensive agriculture. With rent payments declining by an average -2.4% per year, Indicator 2 rose by +2.8% per annum. These changes, plus the decline in the compensation of employees (-3.6% per annum), were such that Indicator 3 rose by +3.4% per annum.

6.7 France

Agricultural income, as measured by Indicator 1, rose on average by +1.8% per year from "1981" to "1992" in France (this rate being slightly more than that of EUR 12). It underwent a period of growth from 1980 to 1982 (+10.6% per year) to reach a level which more or less stayed the same in 1983 and 1984, since the upswing which most Community states experienced in 1984 did not take place in France. Nevertheless, the levelling-out of income in the Community from "1984" to "1987" did not spare France (+0.2% per year), and the country did not profit from the renewed rise in income until 1989. Income levels went up by an annual average of +2.9% from "1987" to "1992" despite recording falls in 1991 and 1993.

The main products are cereals, wine, milk and cattle, which make up rather more than 60% of total French agricultural production. Crop production (slightly more than 50%) expanded greatly in volume during the reference period (+2.3% as an annual average). This virtually continuous development was mainly the result, from "1981" to "1984", of cereal production (wheat and maize) and oilseed plants, which increased by +5.8% and +15.7% respectively per year (the gradual reduction in production area devoted to cereals being offset by the rise in yields, +4.1% and +3.3% per year for wheat and maize). During "1984" to "1987", whereas the volume of cereal production stabilized (+0.2%), there was a record growth rate for oilseeds (+24.5%). The upswing in cereal production from "1987" to "1992" was accompanied by a stabilization in oilseed production following a more restrictive Community policy and more difficult climatic conditions. The real prices of cereals declined by -5.5% per annum on average over the entire period. This reflects the situation on French cereal markets, which were oversupplied for the whole peirod, and the reduction in Community support

measures. The same factors also brought about a deterioration in the real prices of oilseeds from "1984" to "1992" (-11.1% per year).

Table 6.9 **Annual average rates of change for production volume, real prices and real value of agricultural products in France from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**3.4**	**3.2**	**1.0**	**2.3**	**-2.5**	**-4.7**	**-4.2**	**-3.8**	**0.8**	**-1.6**	**-3.2**	**-1.7**
Cereals	5.8	0.2	2.7	2.8	-4.0	-4.9	-6.7	-5.5	1.5	-4.7	-4.2	-2.8
Oleaginous seeds	15.7	24.5	-1.5	9.7	0.1	-9.0	-12.3	-8.2	15.9	13.3	-13.6	0.8
Fresh vegetables	1.4	0.8	1.8	1.4	0.6	-4.5	-2.3	-2.1	2.0	-3.7	-0.5	-0.7
Wine	2.4	4.1	-1.8	0.9	-4.7	-2.9	0.7	-1.8	-2.4	1.1	-1.1	-0.9
Final animal output	**0.5**	**-0.4**	**0.9**	**0.4**	**-1.6**	**-4.0**	**-3.1**	**-2.9**	**-1.1**	**-4.4**	**-2.2**	**-2.5**
Cattle	0.8	-1.9	0.5	-0.1	-2.2	-3.8	-3.3	-3.1	-1.4	-5.6	-2.7	-3.2
Pigs	0.0	2.4	3.7	2.3	-2.4	-8.2	-2.6	-4.1	-2.5	-6.0	1.0	-1.9
Milk	0.6	-1.2	-1.3	-0.8	-0.9	-1.8	-1.9	-1.6	-0.3	-3.0	-3.2	-2.4
Final output	**2.0**	**1.4**	**1.0**	**1.4**	**-2.0**	**-4.4**	**-3.6**	**-3.4**	**-0.1**	**-3.1**	**-2.6**	**-2.1**
Intermediate consumption	**0.8**	**1.6**	**0.6**	**0.9**	**0.0**	**-4.4**	**-2.6**	**-2.4**	**0.8**	**-2.9**	**-2.1**	**-1.5**
Gross value added at m.p.	**3.1**	**1.1**	**1.5**	**1.8**	**-3.7**	**-4.3**	**-4.5**	**-4.3**	**-0.8**	**-3.2**	**-3.1**	**-2.5**
Subsidies									-2.1	10.6	14.2	8.5
Taxes linked to production									5.2	4.2	-9.8	-2.2
Depreciation									0.2	-1.5	-0.5	-0.6
Net value added at f.c.									**-1.4**	**-3.3**	**-1.3**	**-1.9**
Rent									-3.0	-3.9	-2.9	-3.2
Interest									6.9	-2.2	-2.6	0.0
Net income of total labour									**-2.0**	**-3.4**	**-1.1**	**-2.0**
Compensation of employees									0.1	-1.2	0.1	-0.2
Net income of family labour									**-2.6**	**-3.9**	**-1.4**	**-2.4**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The volume of wine production rose by +0.9% per year from "1981" to "1992", despite major annual fluctuations due to the weather and a -2.0% decrease in planted area, which was, however, offset by better yields. The real price of wine fell by -1.8% per year from "1981" to "1992".

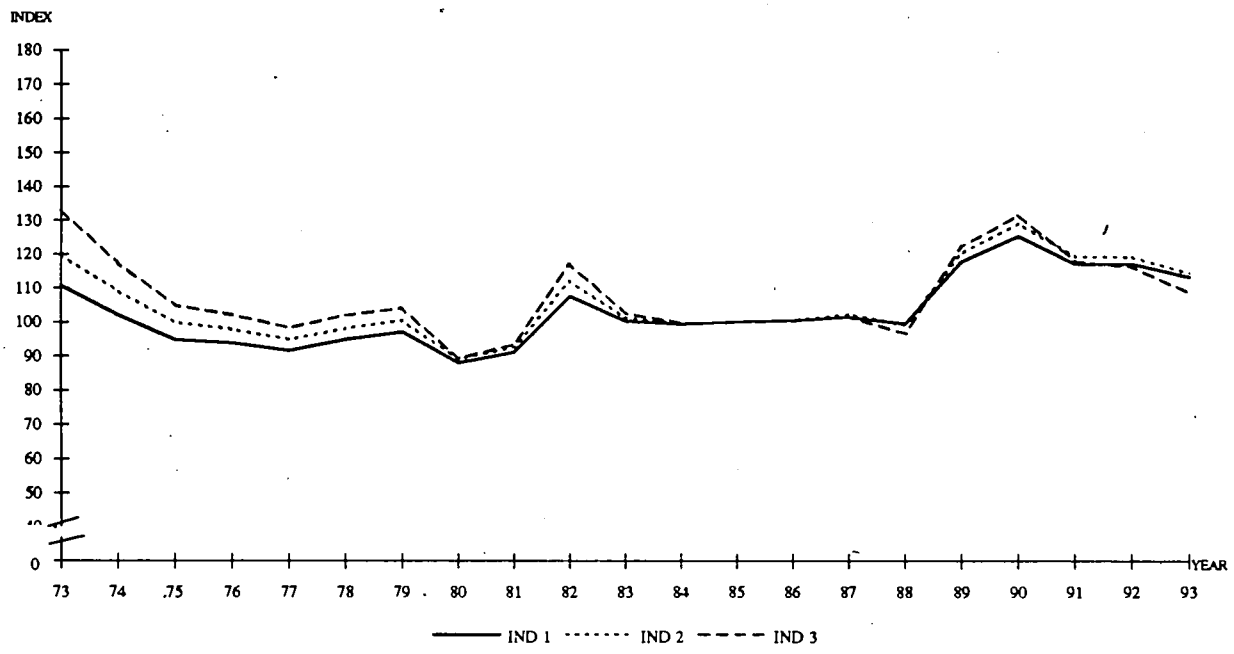
Animal production volume remained fairly constant over the entire period (+0.4% per year). A fall in this aggregate volume was avoided by the steady rise in the volumes of pig and poultry production during "1984" to "1992" (+3.2% and +5.0% respectively). In fact, the volume of cattle production declined (-0.4% per year) from "1984" to "1992", as did milk production (-1.3%) following the introduction of quotas. These falls followed a slight rise in the volume of production in the cattle (+0.8%) and milk sectors (+0.6%) from "1981" to "1984". As in all other European countries, the imbalance between supply and demand affected the domestic prices of animal production. Real prices fell, on an annual average, by -3.1% between "1981" and "1992" for cattle, by -1.6% for milk and by -4.1% for pigs. The introduction of milk quotas in 1984 enabled the French market to recover in 1988 and 1989, given a certain upswing in real producer prices of milk and beef, although it could not prevent a fall in real prices from "1987" to "1992".

The share of the main costs in final production is similar to that in the Community by reason of the share of French agriculture in the Community agricultural branch and the great variety of French agricultural production, which reflects the diversity of Community agriculture.

Nevertheless, it is apparent that the share of animal feedingstuffs in intermediate consumption is the lowest in EUR 12, whereas the charges directly connected with crop production represent around 35% of intermediate consumption as compared with 24% for EUR 12. This might reflect the large proportion of feedingstuffs

which comes directly from the agricultural holdings. The volume increase in intermediate consumption (+0.9% per year) was higher than the Community average but was influenced by the change in French production volume. There was a slight increase in productivity of intermediate consumption (+0.5% per year) but a decline in the price scissors (-1.0% per year). The level of taxes linked to production (the highest in EUR 12) was higher than the amount of subsidies, although these taxes decreased by -2.2% per annum in real terms as opposed to a substantial increase of +8.5% for subsidies (since 1991, a radical change in the development of subsidies and taxes linked to production has been observed, as a result of the start of the reforms of the Common Agricultural Policy). The development of depreciation and interest, whose share in total production, at 9% and 4% respectively, is slightly lower than in the rest of the Community, would seem to point to a reduction in capital intensity. Thus, while depreciation fell by -0.6% per year, interest stabilized at an annual rate of change of 0.0% in real terms.

Graph 6.7 **Development of the three indicators of agricultural income in France between 1973 and 1993, with "1985" = 100**



The agricultural labour input has persistently reduced in number (-3.6% per year), which allowed agricultural income, expressed in AWU, to rise slightly despite the fall in real net value added at factor cost (-1.9%). Indicators 2 and 3, which take interest charges, rent and compensation of employees into account, underwent a similar development to Indicator 1 (+1.7% and +1.2% per year respectively).

6.8 Ireland

Agricultural income in Ireland, as measured by Indicator 1, rose substantially but unevenly between "1981" and "1992" (+4.5% per year). This was the highest rate of increase in the Community (EUR 12 +0.9%) and resulted in agricultural income in Ireland exceeding the levels reached just after accession to the European Community. The trend in agricultural income in Ireland is fairly similar to the Community average but with more marked fluctuations (steep declines in 1980, 1985 and 1986 and sharp increases in 1982, 1984, 1987, 1988 and 1992).

Over the whole period, the average annual rates of change in final output volume and real prices balanced each other out (+2.6% and -2.6% respectively). In each of the three sub-periods, an increase in production volume was accompanied by a fall in real prices. This set the foundations for an increase in income per AWU, as the

real value of intermediate consumption fell an average -0.8% a year, subsidies jumped +11.8% per annum and the total labour input declined by an average -2.1% per year.

Table 6.10 **Annual average rates of change for production volume, real prices and real value of agricultural products in Ireland from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.3**	**-2.6**	**3.3**	**1.1**	**-4.3**	**-4.1**	**-0.9**	**-2.7**	**-3.0**	**-6.6**	**2.4**	**-1.6**
Final animal output	**4.7**	**1.2**	**2.7**	**2.8**	**-3.8**	**-2.6**	**-1.9**	**-2.6**	**0.8**	**-1.4**	**0.8**	**0.2**
Cattle	4.6	2.2	3.1	3.3	-3.5	-3.0	-2.2	-2.8	0.9	-0.8	0.9	0.4
Pigs	-0.7	0.2	6.4	2.7	-6.2	-8.8	-1.2	-4.7	-6.8	-8.6	5.1	-2.1
Sheep and goats	6.3	8.1	11.5	9.1	-6.3	-3.4	-6.9	-5.8	-0.4	4.4	3.8	2.8
Milk	5.8	-1.3	-0.4	1.0	-3.2	-0.3	0.2	-0.9	2.4	-1.5	-0.2	0.1
Final output	**4.3**	**0.7**	**2.8**	**2.6**	**-3.9**	**-2.8**	**-1.8**	**-2.6**	**0.2**	**-2.1**	**1.0**	**-0.1**
Intermediate consumption	**2.2**	**1.6**	**1.6**	**1.8**	**-2.3**	**-5.3**	**-0.9**	**-2.5**	**-0.2**	**-3.7**	**0.7**	**-0.8**
Gross value added at m.p.	**6.2**	**-0.1**	**3.8**	**3.4**	**-5.4**	**-0.7**	**-2.6**	**-2.9**	**0.5**	**-0.9**	**1.2**	**0.4**
Subsidies									15.9	4.5	14.0	11.8
Taxes linked to production									-20.3	10.5	-4.3	-5.3
Depreciation									-2.2	-1.6	1.4	-0.4
Net value added at f.c.									**3.4**	**-0.5**	**3.2**	**2.2**
Rent									-6.3	-5.7	-25.4	-15.3
Interest									-9.4	-11.0	2.3	-4.7
Net income of total labour									**7.0**	**1.4**	**3.4**	**3.8**
Compensation of employees									-3.2	2.3	3.7	1.4
Net income of family labour									**8.3**	**1.3**	**3.4**	**4.1**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The trend in the volume of agricultural production largely follows that of animal production, which accounts for over 85% of the total and increased by an annual average of +2.8%, although there was particularly strong growth in the "1981/"1984" period at +4.7% per year. There was more uneven development in the volume of crop production; -2.6% from "1984" to "1987" and +3.3% per year from "1987" to "1992" (largely due to cereals and fresh vegetables). The volume of intermediate consumption rose at a steady annual average of +1.8%, predominantly due to the increased use of feedingstuffs for the livestock sector. With final output volume increasing at a faster rate than intermediate consumption, the productivity of the latter rose (by +0.8%, in line with the Community average).

The fall in the real price for final output was slightly less than the Community average (-2.6% p.a.), and its development almost exactly matched that of final animal output. Over the period as whole the average annual rate of change in the real price of final output also matched that of intermediate consumption (-2.5%), so that the price scissors were almost unchanged (-0.2% p.a.).

The main products in Ireland are cattle and milk, which account for about seventy percent of final output. The production volumes of these two items grew considerably between "1981" and "1984" (+4.6% and +5.8% per year respectively). However, following the introduction of milk quotas, milk production declined before stabilizing; an annual reduction of -0.4% being recorded for the "1987"/"1992" period. Nevertheless, there was an increase in production over the whole period (+1.0% p.a.). Despite the impact of milk quotas, the volume of cattle production continued to increase, at an annual rate of +2.6% from "1984" to "1992".

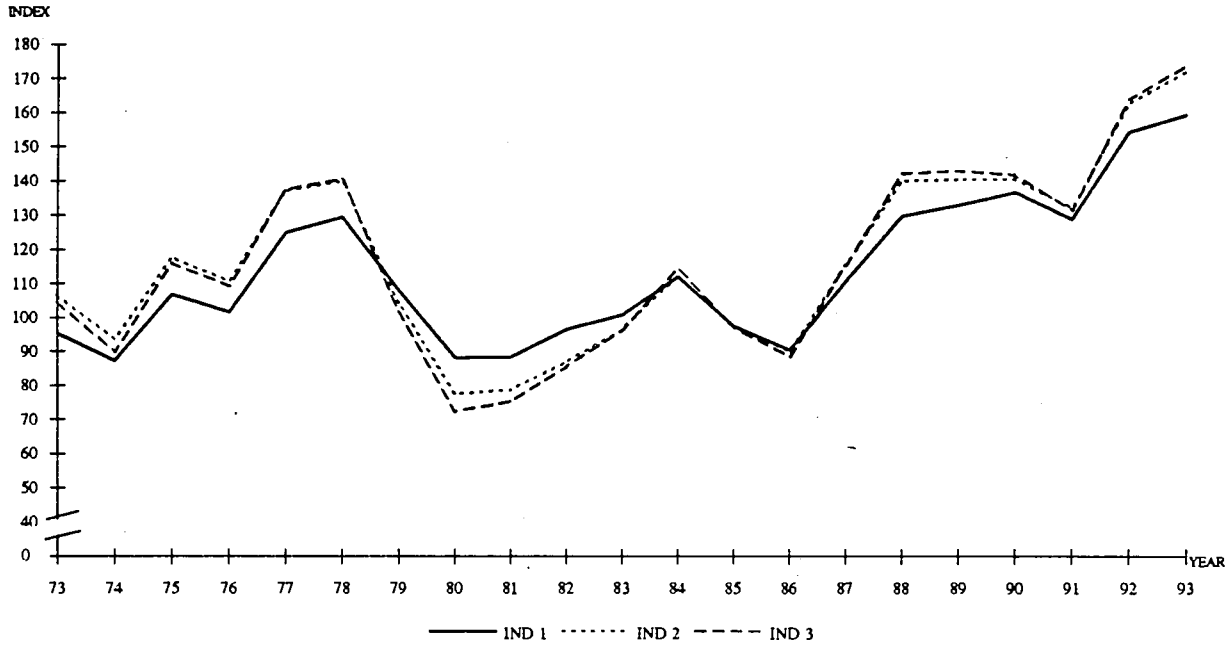
Like final animal output as a whole, the decline in real prices almost exactly offset the average rise in milk production (-0.9% and +1.0% p.a. respectively). However, only very substantial real price increases in 1988

and 1989 allowed the downward impact on prices, caused by markets with a structural surplus, to be limited. The real price of cattle also fell (-2.8% per year on average), reflecting higher production volumes.

The volume of pig production increased at an average annual rate of +2.7%, although higher production volumes were mainly concentrated in the "1987"/"1992" period (+6.4% p.a.), when conversely real prices fell the least over the period (-1.2% per year). Over the whole period, the real price of pig production decreased a strong -4.7% a year. There was an accelerated growth in the volume of sheep production during the period under review (from +6.3% through +8.1% to +11.5% in the three sub-periods), and although real prices fell considerably (-5.8% p.a. on average) it was insufficient to stop a rise in the real value (+2.8% per year -the highest rate of increase among animal products).

Agricultural incomes recovered from falling considerably between 1979 and 1981 in the wake of the decline in prices of agricultural products, the high costs of a period of intensification (especially interest costs) and the loss of the advantages derived from currency devaluation.

Graph 6.8 **Development of the three indicators of agricultural income in Ireland between 1973 and 1993, with "1985" = 100**



The reduction in the agricultural labour input, which had been large-scale in the 1970s, slowed down to an annual rate of -2.1% for total labour input (-2.3% per annum for family labour input), which is one of the lowest rates in EUR 12. The development of real interest payments, rents and compensation of employees (-4.7%, -15.3% and +1.4% per year respectively) led to a sharp increases in Indicators 2 and 3 (+6.1% and +6.6% per year).

6.9 Italy

Italy along with Portugal recorded the steepest fall in agricultural income over the period "1981"/"1992" in the Community. As measured by Indicator 1, income fell by an annual average of -1.4%. The situation in Italy deteriorated continually, the rises in 1989 and 1992 not being sufficient to halt this trend. The impact of the fall in the real value of final agricultural production (-3.3% per annum on average) on income was slightly attenuated by the reduction in the real cost of intermediate consumption (-3.7% per year). Nevertheless, the higher depreciation costs (which represented an important and probably over-estimated share of around 23% of total production in "1992") of +1.9% contributed to the fall in net value added at factor cost in real terms by

-4.0 per annum on average. This decline became more marked in the period "1984"/"1992", when the annual average rate of reduction was -4.3%.

The small increase in final production volume (+0.9% per year) and the clear fall in real producer prices (-4.2% per year) during the period "1981"/"1992" (which was marked by a certain upwards movement of the Italian lire, unlike the period 1975/80) were partially offset by the severe fall in the real prices of intermediate consumption (-4.5% per year), which led to an improvement in the price scissors (+0.3%). At the same time, there was a very slight improvement in the productivity of intermediate consumption (+0.1%). The reduction of agricultural labour input, although less marked than that in the other Member States, was still regular from "1981" to "1992" (-2.6%) and thus cushioned the impact of the lower NVAfc. Subsidies also moved upwards in real terms (+3.2%) to account for almost 10% of production value in "1992", while the level of taxes linked to production remained very low.

Table 6.11 **Annual average rates of change for production volume, real prices and real value of agricultural products in Italy from "1981" to "1992, in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.2**	**2.0**	**0.7**	**1.2**	**-3.6**	**-4.9**	**-4.0**	**-4.1**	**-2.4**	**-3.0**	**-3.3**	**-3.0**
Cereals	3.4	2.8	1.1	2.2	-5.4	-6.8	-6.7	-6.4	-2.2	-4.2	-5.6	-4.3
Fresh vegetables	0.4	-0.2	-0.3	-0.1	-2.4	-4.4	-2.4	-2.9	-2.0	-4.5	-2.7	-3.0
Fresh fruit	1.3	1.0	1.7	1.4	-4.2	-3.9	-5.5	-4.7	-3.0	-2.9	-4.0	-3.4
Wine	-2.3	-0.4	-3.2	-2.2	-2.8	-0.8	1.6	-0.3	-5.1	-1.3	-1.6	-2.5
Final animal output	**0.7**	**-0.2**	**0.5**	**0.4**	**-3.7**	**-5.6**	**-3.8**	**-4.3**	**-3.1**	**-5.8**	**-3.3**	**-3.9**
Cattle	0.4	-1.4	-1.8	-1.1	-4.9	-5.7	-3.1	-4.3	-4.5	-7.0	-4.8	-5.3
Milk	0.9	-0.1	0.6	0.5	-2.1	-3.6	-4.1	-3.4	-1.2	-3.7	-3.5	-2.9
Final output	**1.0**	**1.2**	**0.6**	**0.9**	**-3.6**	**-5.1**	**-3.9**	**-4.2**	**-2.6**	**-4.0**	**-3.3**	**-3.3**
Intermediate consumption	**0.5**	**2.1**	**0.1**	**0.8**	**-2.6**	**-7.2**	**-3.8**	**-4.5**	**-2.1**	**-5.3**	**-3.7**	**-3.7**
Gross value added at m.p.	**1.2**	**0.8**	**0.9**	**0.9**	**-4.0**	**-4.2**	**-3.9**	**-4.0**	**-2.9**	**-3.5**	**-3.1**	**-3.1**
Subsidies									7.2	-2.9	4.6	3.2
Taxes linked to production									3.9	7.8	2.1	4.1
Depreciation									1.7	2.0	1.9	1.9
Net value added at f.c.									**-3.1**	**-5.0**	**-3.9**	**-4.0**
Rent									-11.5	-4.3	-3.7	-6.0
Interest									3.5	-0.7	-5.2	-1.7
Net income of total labour									**-3.6**	**-5.6**	**-3.7**	**-4.2**
Compensation of employees									-2.2	-2.5	-0.4	-1.4
Net income of family labour									**-4.4**	**-7.5**	**-6.3**	**-6.1**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The cost of intermediate consumption was only 29% of the value of final production, which indicates the importance of crop production in Italian agriculture. The main items in the latter category are fresh vegetables, fresh fruit, cereals and wine, with the main animal production items being milk and cattle.

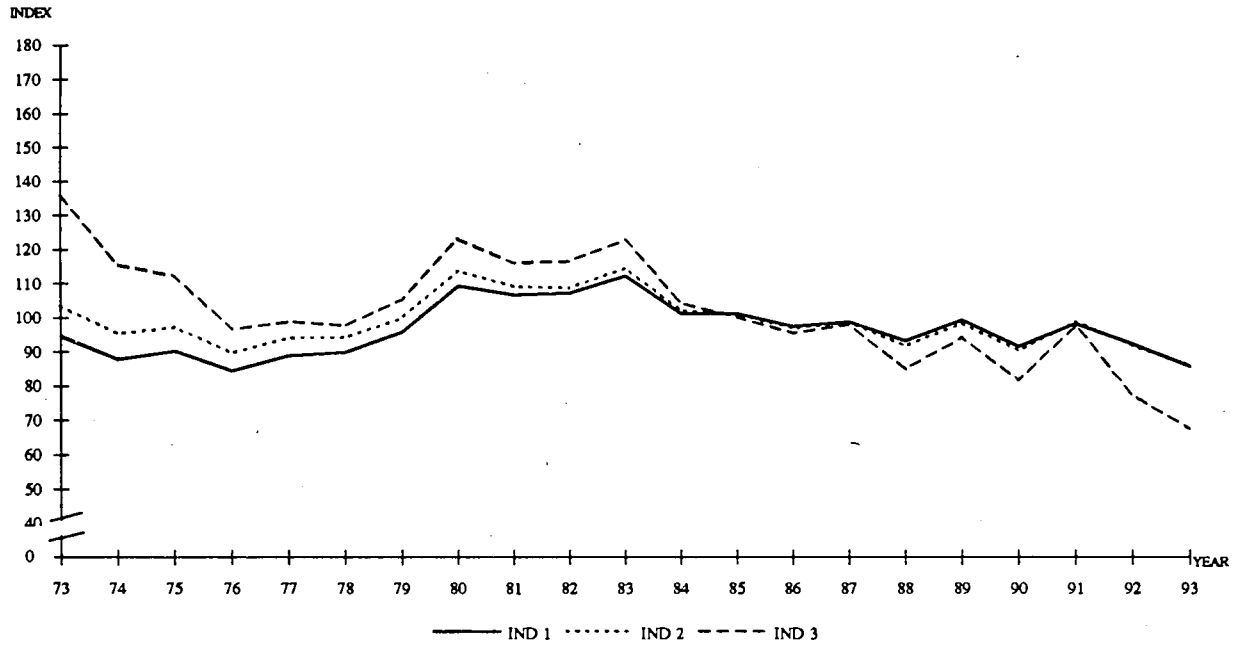
Fresh vegetable volume remained constant during the period (-0.1% per year on average), despite strong annual variations due mainly to climatic conditions. Real prices fell by -2.9% per year. The rates of change for the real wine price regularly improved over the entire period (despite a decline of -0.3% per annum on average), with two major falls in 1984 and 1987 which followed two excellent harvests. Wine production volume fell markedly (-2.2% per year), the result of a significant decline in the area under cultivation. The real

price of fresh fruit[4] fell sharply (-4.7%), whereas production volume rose (+1.4% per year) in volume from "1981" to "1992".

Cereal production volume increased by +3.1% per year between "1981" and "1987", with the exceptional harvest in 1984 being a special feature. This rise has since eased (+1.1% per year); this resulted from a smaller area under production for soft wheat and maize, and difficult climatic conditions. Real prices fell by -6.4% on an annual average over the entire period, due to a stricter Community policy and unfavourable market conditions.

Animal production volume remained virtually level from "1981" to "1992" with a movement of +0.4% per year, resulting from an expansion of pig production on the one hand, and a levelling off in milk and cattle production on the other (+0.5% and -1.1% annually). This stagnation started in 1984 and 1985 with the introduction of milk quotas, which brought about a slow down in production (+0.3% and -1.7% per year from "1984" to "1992" respectively).

Graph 6.9 **Development of the three indicators of agricultural income in Italy between 1973 and 1993, with "1985" = 100**



The annual falls in real interest charges (-1.7% per annum), rents (-6.0% per annum, but this item is of little importance) and compensation of employees (-1.4% per annum, accounting for around one third of NVA at factor cost, which is the highest level in EUR 12) caused Indicators 2 and 3 to fall by -1.6% and -3.4% respectively per annum on average.

6.10 Luxembourg

Agricultural income, as measured by Indicator 1, had a special development in Luxembourg during the period "1981"/"1992" since there was an relatively continuous rise (+1.2% per year), despite the lowest rate of increase of production volume in the Community (+0.6% per year). The fluctuations in agricultural income, when measured by Indicator 1, do not follow the three distinct phases identifiable in the other Member States, since income progressed steadily until 1989 despite a decline in 1983, which followed an exceptional 1982,

[4] Including citrus fruit and table grapes.

followed by four consecutive annual declines since 1990. The levelling-off in production went hand in hand with greater use of intermediate consumption (+2.4% per annum in volume), thus marking a break with the preceding sub-period. However, the level of intermediate consumption, at less than 40% of final production, is quite low for a country with a dominantly animal production-based agriculture.

The decline in productivity of intermediate consumption (-1.8% per year) was nevertheless offset by an improvement in the "price scissors" (+0.6% per year). This improvement resulted from the fall in final agricultural prices in real terms (-2.2%, one of the smallest declines in the Community), which took place in the overall perspective of a relative undervaluation of the currency.

Luxembourg agriculture is dominated by animal production, which represents almost 80% of the total. It is constituted by mostly milk and cattle production, while wine-growing accounts for almost 50% of crop production.

Table 6.12 **Annual average rates of change for production volume, real prices and real value of agricultural products in Luxembourg from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**-2.3**	**3.4**	**2.4**	**1.4**	**-2.8**	**-2.1**	**-5.2**	**-3.7**	**-5.0**	**1.2**	**-2.9**	**-2.4**
Wine	1.6	0.1	3.4	2.0	-9.3	0.8	-3.7	-4.1	-7.8	1.0	-0.5	-2.1
Final animal output	**1.9**	**-0.5**	**0.0**	**0.4**	**0.7**	**-1.5**	**-3.4**	**-1.8**	**2.6**	**-2.0**	**-3.4**	**-1.4**
Cattle	0.5	-0.6	2.2	1.0	0.1	-4.7	-4.4	-3.3	0.6	-5.3	-2.3	-2.4
Pigs	3.1	2.1	-0.5	1.1	-2.6	-8.1	-1.8	-3.8	0.4	-6.2	-2.3	-2.7
Milk	2.9	-0.9	-1.2	0.0	2.2	1.7	-3.0	-0.3	5.1	0.7	-4.2	-0.4
Final output	**1.0**	**0.2**	**0.5**	**0.6**	**0.0**	**-1.7**	**-3.8**	**-2.2**	**1.0**	**-1.5**	**-3.4**	**-1.7**
Intermediate consumption	**2.7**	**2.8**	**1.9**	**2.4**	**0.3**	**-5.7**	**-2.7**	**-2.7**	**3.0**	**-3.0**	**-0.8**	**-0.4**
Gross value added at m.p.	**0.0**	**-1.6**	**-0.6**	**-0.7**	**-0.2**	**1.2**	**-4.5**	**-1.8**	**-0.2**	**-0.4**	**-5.1**	**-2.5**
Subsidies									4.0	4.2	12.5	7.8
Taxes linked to production									7.6	11.5	-5.0	2.7
Depreciation									-0.9	2.6	4.6	2.6
Net value added at f.c.									**0.2**	**-0.9**	**-4.7**	**-2.4**
Rent									-0.1	2.1	-1.2	0.0
Interest									2.9	0.3	7.4	4.2
Net income of total labour									**0.0**	**-1.3**	**-6.4**	**-3.3**
Compensation of employees									-0.7	6.8	2.9	2.9
Net income of family labour									**0.0**	**-1.6**	**-6.9**	**-3.6**

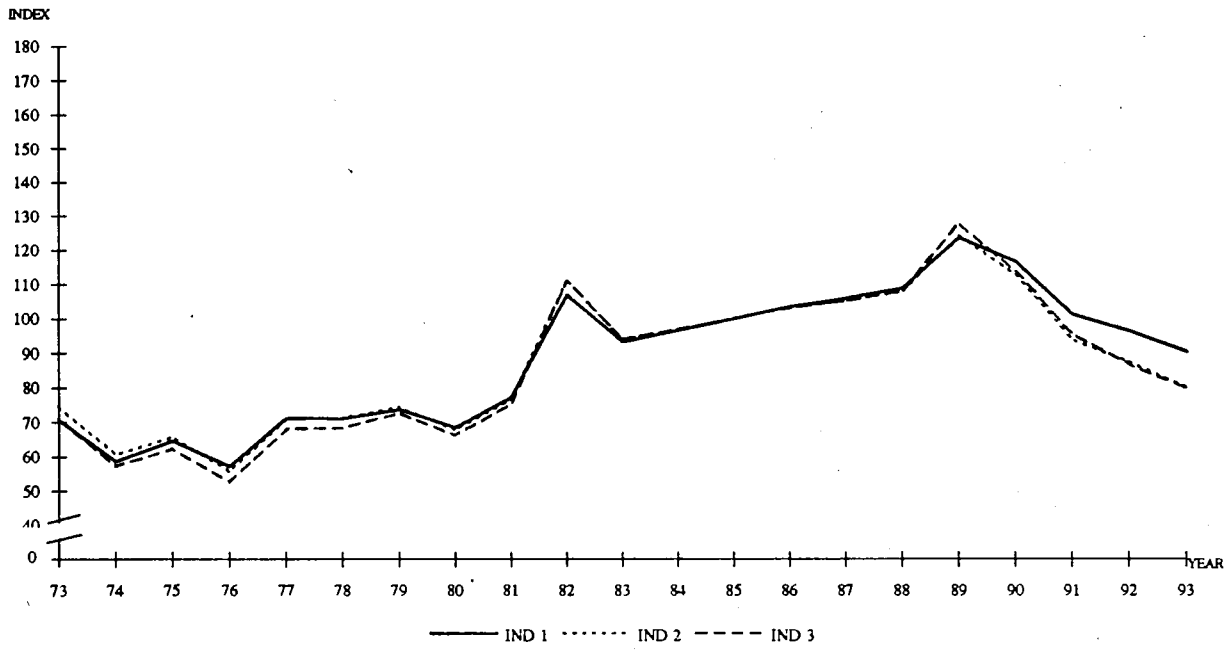
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

Milk production volume developed at an annual rate of +2.9% from "1981" to "1984", then, following the introduction of quotas, fell at an annual rate of -1.1% up to "1992". Despite the crisis which struck milk markets in the other Member States, real prices remained relatively unchanged. The volume of beef production rose (+1.0% per year from "1981" to "1992") in the general context of livestock reduction, although large annual disparities were recorded. Real producer prices fell by an annual average of -3.3% over the period "1981"/"1992". Nevertheless, this fall in real prices had not begun before 1982 and thus the milk crisis only reinforced the existing trend. Pig production volume rose by +1.1% per year over the period "1981"/"1992". Real prices fell severely (by an average -3.8% per year over the period), particularly in 1986, 1987, 1988 and 1993.

The production volume of wine, which was characterized by major fluctuations (+165% in 1982 and +216% in 1992), increased by +2.0% per annum on average. The volume growth in the 1980s was almost completely

wiped out by the severe falls of 1991 and 1992, which were caused by unfavourable weather conditions. Real prices declined by -4.1% per year over the period "1981"/"1992".

Graph 6.10 **Development of the three indicators of agricultural income in Luxembourg between 1973 and 1993, with "1985" = 100**



Depreciation often rose between "1981" and "1992", and by an annual average of +2.6%, which appears to confirm an ease-up in general investment within the agricultural branch started in the 1970's. Total labour input declined considerably over the reference period (-3.6% per year), only Spain recording a higher rate of decrease. The fall in the volume of agricultural labour input nevertheless slowed down in the course of the period and provided some compensation for the fall in net value added at factor cost (-2.4% in real terms).

Agricultural income measured by AWU therefore increased, with Indicators 2 and 3 rising by +0.2% and +0.3% per year respectively.

6.11 Netherlands

Agricultural income in the Netherlands, measured by Indicator 1, remained unchanged over the period as a whole (0.0% per year), despite average gains of +3.1% per annum in the "1981"/"1984" period. This stability in agricultural incomes contrasts with a small annual average increase for the Community. It resulted from the fall in real prices for final output balancing out the increase in production volume, which combined with one of the smallest declines in the real value of intermediate consumption, led to the highest annual average rate of increase of gross value added at maket price (+0.8%) in the Community. It also reflected only a very small decline in agricultural labour input (-0.5% per year, the least in EUR 12): increases in the expanding horticultural sector (including fresh fruit and vegetables), and declines in agricultural employment in the other agricultural sectors (animal production and field crops).

Final output volume increased a steady +2.5% per year on average, and was comprised of an accelerated rate of growth for final crop output in the three sub-periods (averaging out at +5.2% per year) and a smaller growth in final animal output volume (+0.9% per year), particularly in the period after "1984". Higher production volumes were accompanied by lower real prices, although when comparing final output prices, these appeared to be moderate (-2.3% per year compared with -3.6% for EUR 12). This is due to several factors: a very low inflation rate (the lowest in EUR 12), a large share of production marketed in developing

sectors (flowers, etc.) and a less unfavourable trend in real institutional prices than in the other Member States. The real price of intermediate consumption also declined moderately (-2.0% per year on average), but particularly in the second sub-period (-4.8%) when the real price of energy plummeted an average -16.2% per year. The purchases of intermediate consumption broadly mirrored these price patterns (+1.6% per year on average). The ratios of prices and volumes between final output and intermediate consumption show that the productivity of intermediate consumption improved (+0.9% per year) but that the price scissors deteriorated slowly (-0.3% per year, although this was almost the same as the rate at the Community level).

Table 6.13 Annual average rates of change for production volume, real prices and real value of agricultural products in the Netherlands from "1981" to "1992", in % terms

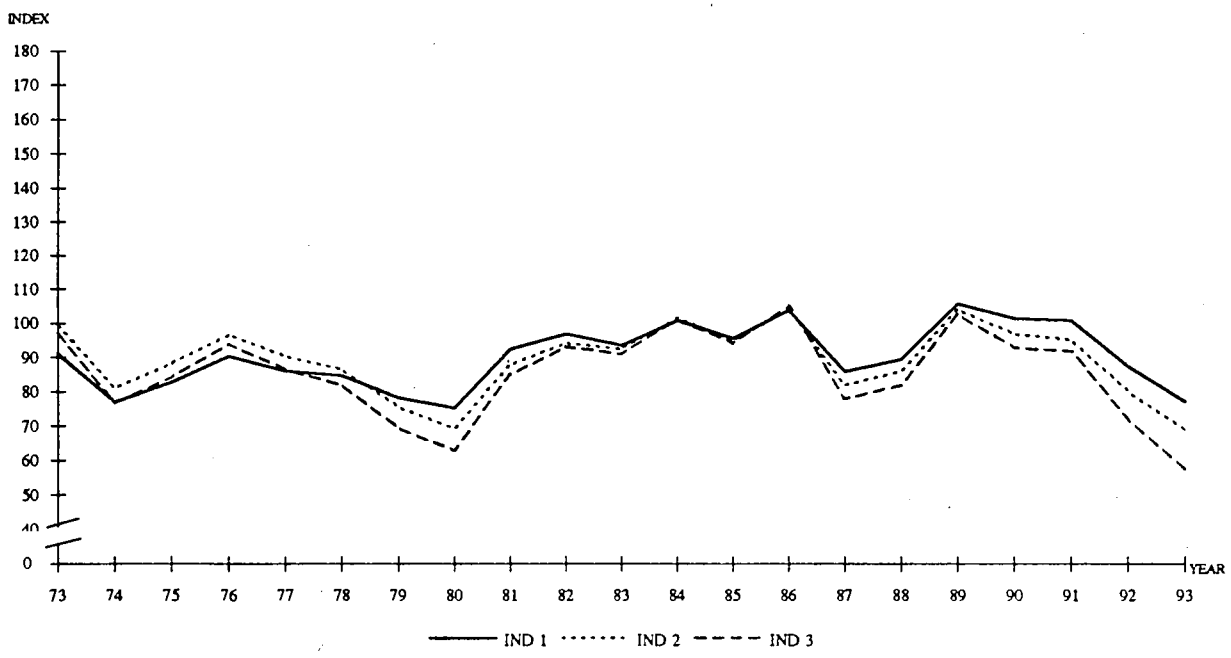
	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**3.6**	**5.5**	**5.9**	**5.2**	**-0.1**	**-2.7**	**-3.7**	**-2.5**	**3.5**	**2.6**	**2.0**	**2.6**
Fresh vegetables	3.3	4.0	5.6	4.6	-0.1	-2.9	-2.8	-2.1	3.3	1.0	2.7	2.4
Flowers	6.7	7.2	8.9	7.8	-0.6	-1.8	-5.5	-3.2	6.1	5.3	2.9	4.4
Final animal output	**2.6**	**0.2**	**0.3**	**0.9**	**-1.1**	**-3.2**	**-2.3**	**-2.2**	**1.4**	**-3.0**	**-2.0**	**-1.4**
Cattle	2.3	0.2	2.2	1.7	-1.9	-2.7	-2.6	-2.4	0.3	-2.5	-0.5	-0.8
Pigs	4.6	5.0	0.6	2.8	-2.3	-8.7	-1.2	-3.6	2.2	-4.2	-0.6	-0.8
Milk	1.5	-3.1	-1.4	-1.1	0.3	0.9	-2.5	-0.8	1.7	-2.2	-3.8	-1.9
Final output	**2.9**	**2.0**	**2.5**	**2.5**	**-0.8**	**-2.9**	**-2.9**	**-2.3**	**2.1**	**-1.0**	**-0.4**	**0.1**
Intermediate consumption	**1.8**	**2.9**	**0.7**	**1.6**	**-0.3**	**-4.8**	**-1.4**	**-2.0**	**1.6**	**-2.1**	**-0.7**	**-0.5**
Gross value added at m.p.	**4.1**	**1.1**	**4.5**	**3.5**	**-1.3**	**-0.9**	**-4.4**	**-2.6**	**2.7**	**0.2**	**-0.1**	**0.8**
Subsidies									6.0	-7.7	10.4	4.0
Taxes linked to production									6.4	5.1	-1.8	2.3
Depreciation									2.5	10.3	5.8	6.1
Net value added at f.c.									**2.6**	**-2.1**	**-1.3**	**-0.5**
Rent									0.4	3.2	-2.2	0.0
Interest									-5.0	0.9	4.0	0.6
Net income of total labour									**4.3**	**-2.9**	**-2.4**	**-0.7**
Compensation of employees									-0.6	3.6	6.3	3.6
Net income of family labour									**5.3**	**-4.2**	**-5.0**	**-2.0**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

Agricultural production is dominated by animal production, which represented about 65% of final production in 1985, although among the main agricultural products are some crop products. Milk, flowers, pigs, cattle and fresh vegetables together constitute about 80% of total production. The volume of milk production fell by an average of -1.1% per year. This decline began in 1984 after the introduction of the new Community policy for the milk sector (-2.1% per year from "1984" to "1992"). Cattle production was also affected by large-scale slaughtering following the decline in milk quotas and this maintained the annual growth in production volume (+1.7% for the reference period and +1.4% between "1984" and "1992"). The volume of pig production expanded rapidly at the start of the period (+4.8% per year on average between "1981" and "1987") although this levelled-out between "1987" and "1992" (+0.6% per year).

The structure of the trend in real prices for the main animal products (milk, cattle and pigs) was fairly similar: a slight increase from 1980 to 1982, a decline from 1983 to 1993 as a result of flooded markets and a stricter Community policy, a degree of recovery in 1988 and 1989 (only 1989 for pigs and 1992 for cattle) with the markets benefiting from favourable economic conditions and a relative structural adjustment of production. Over the period "1981"/"1992", the fall in real average prices per year was -0.8% for milk, -3.6% for pigs and -2.4% for cattle.

Graph 6.11 **Development of the three indicators of agricultural income in the Netherlands between 1973 and 1993, with "1985" = 100**



Flower production, which plays a major role in the crop sector, increased in volume terms at an accelerating rate over the period, that averaged at an annual rate of +7.8%. Real prices of flowers fell regularly (-3.2% per year on average) but the real value of flowers rose by an average annual +4.4%. There was a highly similar pattern for fresh vegetables, the two crops accounting for over half of the value of crop products. Fresh vegetable production increased substantially, the growth rate for volume being +4.6% per year, and a similar acceleration took place during the second half of the period. Real prices fluctuated greatly but there was a general decline of -2.1% per year for the overall period.

The increase in the volume of intermediate consumption used over the whole period was higher than the Community average (+1.6% per year compared to +0.7%). However, the limited growth in animal production in relation to crop production, that resulted in the share of final production accounted for by animal production falling from 65% in 1985 to 56% in 1993, was reflected in a rate of increase for intermediate consumption slowing to an annual +0.7% between "1987" and "1992". The real price of intermediate consumption declined (-2.0% per year) by slightly less than the Community average.

There was a considerable increase in the use of capital in the Netherlands, as shown by the trend in depreciation in real terms, which, with an average annual rate of change of +6.1% from "1981" to "1992", was the highest in EUR 12. The strong development in interest and rental payments, and compensation of employees (+0.6%, +0.0% and +3.6% per year respectively in real terms), combined with some of the smallest reductions in total and family labour input in the Community (-0.5% and -1.3% respectively), led to a decline in agricultural income Indicators 2 and 3 (-0.3% and -0.8%) rather than the unchanged level of Indicator 1.

6.12 Portugal

Agricultural income in Portugal as measured by Indicator 1 decreased by an average -1.4% per annum during the period under review. This reduction is the largest along with that registered for Italy, in the Community. Following slight improvements from "1981" to "1984" (+0.3% per annum), agricultural income fell until "1987" (-0.6% per year). There was a substantial decline between "1987" and "1992" due to strongly downward results for three consecutive years after 1990. The fall in agricultural income during the reference

period reflects a larger decline in real net value added at factor cost (-4.6%) than agricultural labour input (-3.3%).

Table 6.14 **Annual average rates of change for production volume, real prices and real value of agricultural products in Portugal from "1981" to "1992", in % terms**

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.3**	**-0.3**	**-0.4**	**0.1**	**-4.4**	**-3.0**	**-7.9**	**-5.6**	**-3.2**	**-3.3**	**-8.3**	**-5.6**
Cereals	1.8	6.9	-2.3	1.2	6.3	-3.9	-14.5	-6.3	8.2	2.7	-16.5	-5.2
Fresh vegetables	5.1	-2.1	0.0	0.8	-5.6	-1.9	-2.1	-3.0	-0.9	-4.0	-2.1	-2.3
Wine	-2.3	-4.8	1.2	-1.4	-11.3	-4.0	-12.1	-9.7	-13.3	-8.6	-11.1	-11.0
Final animal output	**-0.7**	**3.3**	**3.3**	**2.2**	**2.2**	**-5.1**	**-10.6**	**-5.8**	**1.5**	**-2.0**	**-7.6**	**-3.7**
Cattle	-1.5	2.3	0.5	0.4	3.4	-4.1	-12.4	-6.0	1.8	-1.9	-11.9	-5.6
Pigs	-1.3	1.1	6.4	2.8	3.1	-6.5	-11.6	-6.4	1.8	-5.5	-5.9	-3.8
Sheep and goats	0.1	4.1	-1.0	0.7	-0.7	-6.7	-8.1	-5.7	-0.5	-2.8	-9.0	-5.1
Milk	1.1	5.7	3.5	3.4	2.4	-3.8	-9.0	-4.6	3.6	1.7	-5.8	-1.3
Final output	**0.4**	**1.8**	**1.7**	**1.3**	**-1.1**	**-4.2**	**-9.2**	**-5.7**	**-0.7**	**-2.5**	**-7.7**	**-4.4**
Intermediate consumption	**-2.3**	**1.2**	**0.7**	**0.0**	**5.5**	**-3.4**	**-7.4**	**-3.0**	**3.1**	**-2.2**	**-6.8**	**-2.9**
Gross value added at m.p.	**3.6**	**2.3**	**2.6**	**2.8**	**-7.2**	**-5.0**	**-11.0**	**-8.4**	**-3.9**	**-2.8**	**-8.6**	**-5.8**
Subsidies									27.2	24.0	19.4	22.8
Taxes linked to production									3.0	-22.7	-27.3	-18.7
Depreciation									-2.8	13.2	0.0	2.6
Net value added at f.c.									**-3.5**	**-2.6**	**-6.3**	**-4.6**
Rent									-1.7	5.9	-5.2	-1.3
Interest									15.1	-7.5	1.3	2.3
Net income of total labour									**-6.2**	**-1.8**	**-8.0**	**-5.8**
Compensation of employees									-9.5	-1.8	-1.4	-3.8
Net income of family labour									**-5.3**	**-1.9**	**-9.8**	**-6.5**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

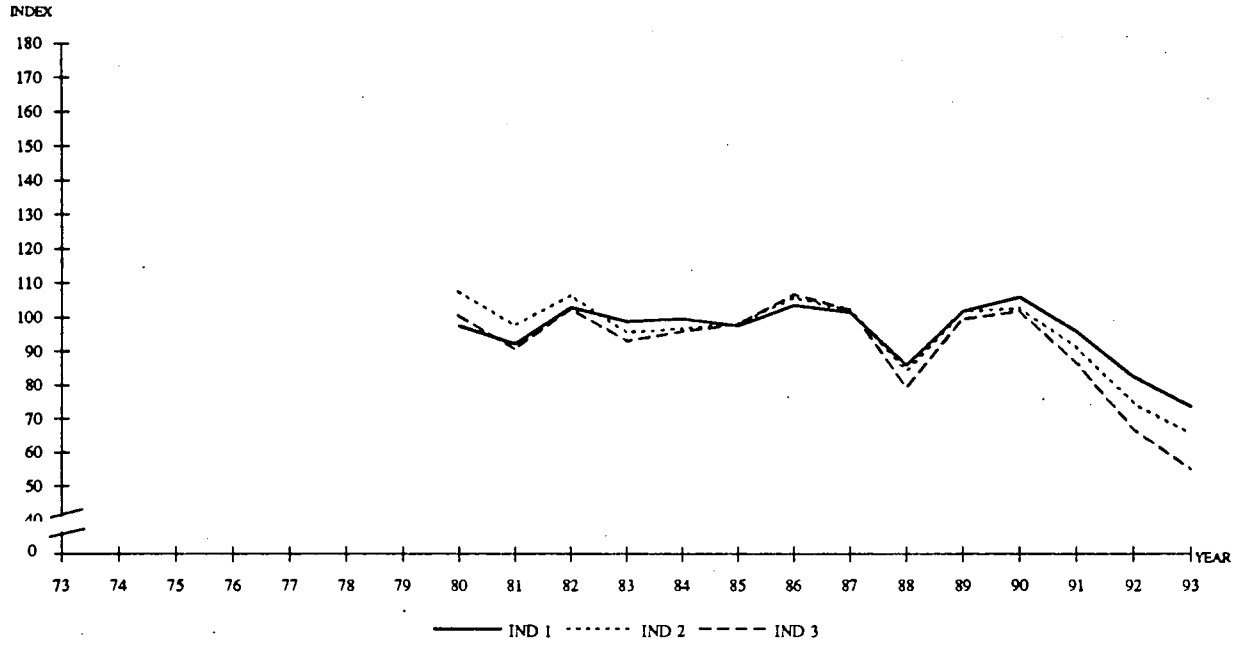
The value of final production decreased in real terms (-4.4% per annum) as a result of the particularly steep fall in the real price (at -5.7% per year on average, the biggest fall in the Community) and despite higher production volume (+1.3%). The downward movement in prices and the increase in volumes accelerated during the period "1981"/"1992" as a result of Portugal's entry into the European Community. The use of intermediate consumption remained constant (0.0% per year) due to strong declines registered in 1991 and 1992. The decline in the real price (-3.0% per year on average), about the Community average, was heavily influenced by the development in the later years. In fact, over the period "1981" to "1984", real prices of inputs nevertheless rose strongly, possibly as a result of the dominant role played by the State in the marketing of energy products and animal feedingstuffs in the early 1980s. The average productivity of intermediate consumption improved over the reference period by an average of +1.3% per annum, although the rate of increase was on a downward trend (i.e. marginal productivity declined) as intermediate consumption reached an intensive level.

The average "price scissors" deteriorated sharply (-2.9% per annum on average, this being the steepest fall in EUR 12). Nevertheless, the deterioration was cushioned by Portugal's entry into the Community, which meant lower prices for agricultural products but also for intermediate consumption.

Agricultural production in Portugal breaks down fairly evenly between animal and crop production. The products examined below (cereals, fresh vegetables, wine, pigs, milk and cattle) represent about two-thirds of final production. The volume of crop production stabilized at an annual average of +0.1%. This result hides large annual fluctuations and an irregular development. After rising by +1.3% per annum between "1981" and

caused by climatic conditions, which can have very marked effects in Portugal. The volume of cereal production rose by +1.2% per annum. The increase was not consistent, however, owing to fairly large variations in the area under cultivation. Real prices of cereals rose by +6.3% per annum between "1981" and 1984", only to decline by -10.7% per annum in the following years. The volume of fresh vegetable production increased by +0.8% per annum but that of wine declined by -1.4% per year, with major annual fluctuations in both cases. For example, wine production fell by a massive -66.8% in 1988, bringing about a steep decline in income. The real prices of fresh vegetables and wine declined in the period under review by -3.0% and -9.7% per annum respectively, both figures concealing wide annual fluctuations.

Graph 6.12 **Development of the three indicators of agricultural income in Portugal between 1973 and 1992, with "1985" = 100**



In line with the growth in meat consumption, the volume of animal production rose significantly (+2.2% per annum) over the reference period (one of the biggest increases in the Community). This increase was largely concentrated in the period from "1984" to "1992" (+3.3% per annum), led by pig production (+4.4% per annum) and milk production (+4.3% per year). Cattle, pig and milk production increased in volume terms by +0.4%, +2.8% and +3.4% respectively. Following increases of +2.2% from "1981" to "1984", real prices of animal production fell steeply (-8.6%) from "1984" to "1992". From "1981" to "1992", real prices recorded annual average falls of -6.0% for cattle, -6.4% for pigs and -4.6% for milk.

The share of depreciation in final production is below the Community average, but has been on an upward trend (+2.6% per annum), which might indicate growing capital intensiveness in Portuguese agriculture. The value of subsidies rose (+22.8% per annum in real terms), to reach one of the highest levels in EUR 12. Taxes linked to production, which are among the lowest in the Community, declined by an annual average of -18.7%. Increases in annual interest payments of +2.3% (one of the highest in EUR 12, further evidence of capital investment), combined with slightly lower rental payments (-1.3% per annum) and a decline in compensation of employees of -3.8% per annum in real terms (although this is not a major cost item, given the importance of family labour input in Portuguese agriculture), caused Indicators 2 and 3 to decline (-2.7% and -3.1% respectively per annum).

6.13 United Kingdom

Agricultural income in the United Kingdom, as measured by Indicator 1, showed little growth over the whole period (+0.3% per annum), although there were strong annual fluctuations. This long-term stabilization of income appears to have resulted from the combination of a downward trend which has existed since "1974" (see Graph 6.13) and the developments observed in other Community Member States. Accordingly, the sub-periods marked by high Community income levels recorded a more moderate development in the United Kingdom (with the exception of the last years), and the stagnation of incomes in the "1984"/"1987" period for the Community as a whole were reflected in moderate declines in this Member State (-2.7% p.a.). One of the strongest annual fluctuations was in 1988 when income plummeted -10.2% to reach a ten-year low, in the wake of a stagnation in production value, a sharp increase in running costs and high inflation.

The rate of real price decrease seemed to accelerate during the period under review for final animal output and final output itself. Rises in final output volume, mostly concentrated in the "1981"/"1984" period, were insufficient to balance these lower real prices, and the final production value declined at an annual average of -2.5%.

Table 6.15 Annual average rates of change for production volume, real prices and real value of agricultural products in the United Kingdom from "1981" to "1992", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**5.0**	**1.0**	**0.7**	**1.9**	**-2.0**	**-4.3**	**-4.2**	**-3.6**	**2.9**	**-3.3**	**-3.5**	**-1.8**
Cereals	8.3	-1.1	-0.5	1.6	-4.8	-6.2	-4.0	-4.8	3.0	-7.2	-4.5	-3.3
Fresh vegetables	0.1	3.3	1.0	1.4	2.7	-2.2	-3.9	-1.7	2.8	1.1	-2.9	-0.3
Final animal output	**0.6**	**-0.5**	**0.1**	**0.1**	**-2.8**	**-3.0**	**-3.2**	**-3.0**	**-2.2**	**-3.5**	**-3.1**	**-3.0**
Cattle	1.6	-2.5	-1.5	-1.0	-3.4	-3.1	-2.3	-2.8	-1.9	-5.5	-3.9	-3.8
Pigs	0.4	0.8	0.3	0.5	-3.3	-6.2	-3.6	-4.2	-2.9	-5.4	-3.3	-3.8
Milk	0.6	-1.8	-1.2	-0.9	-2.6	-1.4	-1.4	-1.7	-2.0	-3.1	-2.5	-2.6
Final output	**2.2**	**0.1**	**0.3**	**0.8**	**-2.4**	**-3.5**	**-3.6**	**-3.2**	**-0.3**	**-3.4**	**-3.3**	**-2.5**
Intermediate consumption	**1.6**	**0.8**	**-1.3**	**0.1**	**-0.4**	**-4.2**	**-2.3**	**-2.3**	**1.2**	**-3.4**	**-3.5**	**-2.2**
Gross value added at m.p.	**3.0**	**-0.8**	**2.3**	**1.6**	**-4.9**	**-2.6**	**-5.2**	**-4.4**	**-2.0**	**-3.5**	**-3.0**	**-2.8**
Subsidies									13.5	-0.4	10.8	8.3
Taxes linked to production									4.4	13.3	-11.3	-0.9
Depreciation									-1.7	-1.7	-3.5	-2.5
Net value added at f.c.									**-0.8**	**-4.3**	**-0.1**	**-1.4**
Rent									10.3	0.0	-7.5	-0.9
Interest									-1.0	-1.0	-4.8	-2.8
Net income of total labour									**-1.1**	**-5.1**	**1.0**	**-1.2**
Compensation of employees									-0.1	-2.9	-1.6	-1.5
Net income of family labour									**-1.7**	**-6.5**	**2.7**	**-1.1**

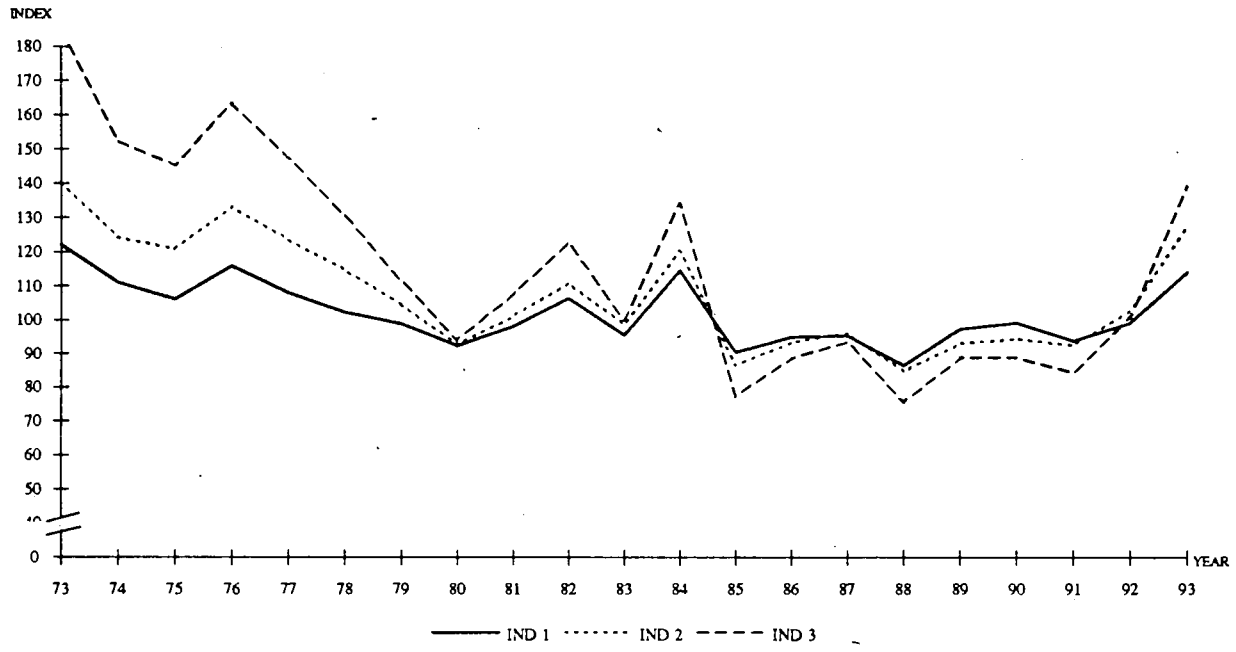
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1992" P = "1981"/"1992"

The period "1981"/"1984" was marked by a sharp average annual increase in the volume of crop production (+5.0%), which, though only representing 38% of final production, caused most of the increase in final output for the entire period (+0.8% p.a.). This influence arose because of a generally steady level in the volume of animal production throughout the period and a much weaker rate of crop production growth during the second half of the period, partly as a result of a more restrictive agricultural policy. The volume of cereal production, which had increased by +8.3% from "1981" to "1984", declined during "1984" to "1992" (-0.7%). In parallel, real prices of cereals fell an average -4.8% in between "1981" to "1984" and in the period afterwards ("1984/"1992"). The volume of fresh vegetable production increased gradually (+1.4% as an annual average),

but was matched by the average annual rate of decline in the real price (-1.7%, although particularly strongly in the sub-period "1987"/"1992" at -3.9%).

The stability of the volume of animal production over the whole period stemmed from average annual decreases for milk and cattle, limited to the period after "1984" with the introduction of milk quotas, being countered by steady and progressive growth in the sheep and poultry sectors (+4.2% and +3.5% p.a. respectively), and pig production remaining largely stable. The real price for animal output decreased very steadily throughout the period (-3.0% per year on average), based principally around falls for cattle, pigs and milk (-2.8%, -4.2% and -1.7% respectively).

Graph 6.13 **Development of the three indicators of agricultural income in the United Kingdom between 1973 and 1993, with "1985" = 100**



The volume of intermediate consumption also remained principally unchanged (+0.1% as an annual average from "1981" to "1992"), although this hides a distinct shift from moderate increases in "1981"/"1984" through small rises to moderate declines in "1987"/"1992". A greater rate of increase for the volume of final output (+0.8% per annum) led to an increase in the productivity of this item by +0.7% per year over the whole period. The "price scissors" deteriorated by -1.0% per year, following a fall in real intermediate consumption prices (-2.3% per year) which was less steep than the fall in real product prices.

Although none of the costs included in the calculation of income is unusually high, the proportion of final production represented by net income (for total labour input) is only about 30% compared with 39% for EUR 12. Fluctuations in Indicator 2 may be explained by this low level. This volatile situation becomes even more accentuated for Indicator 3, owing to the very high employee compensation charges in the United Kingdom (about 18% of the final product compared with 10% for EUR 12). They fell by -1.5% per year over the period under study, and interest payments declined a stronger -2.8% per annum in real value terms, with lower interest rates after 1992 in particular.

In spite of a slight increase in the rate of decline of agricultural labour input during the second half of the period, agricultural employment only fell by -1.8% per year for total labour input (-3.0% for EUR 12) and by -1.1% per year for family labour input. As a result, agricultural income Indicators 2 and 3 also appeared to be relatively unchanged (+0.5% and +0.0% per year respectively).

7 COMPARISON OF AGRICULTURAL INCOME LEVELS IN THE MEMBER STATES OF THE COMMUNITY

The previous chapters have concentrated on the annual rates of change of agricultural income. This chapter deals with the differences in income levels between the Member States(1) and the relative trends in these levels(2).

For this purpose, the parameter chosen is **net value added at factor cost per annual work unit**. Three-year averages have been used ("1992" for the comparison of current levels, with "1981" and "1985" for trends in income levels(3)) in order to attenuate the short-term effects on income (annual fluctuations in production, agricultural prices and subsidies). The basic data in nominal value and national currencies have been converted into ECU and PPS via current exchange rates. The use of PPS brings the purchasing power of the national currencies in the Member States more into line(4). To improve comparability, the values for each Member State have been compared with a Community average.

The statistical and methodological reservations expressed below mean that, economically speaking, the data published in this chapter can only be regarded as indicative and limited in value.

- The data refer only to incomes from agricultural activity. It should not be forgotten that for numerous farmers, agricultural income represents only one part of the total or disposable income of their household. The relative size of this portion can of course vary from one Member State to another.
- The use of other income indicators, such as net income from agricultural activity of the family labour input by AWU, might show significant changes in the relative position of certain Member States, since the share of rents, interest paid and compensation of employees differs from one country to another. As stated in the introduction, however, the corresponding series do not seem to be sufficiently harmonized as yet.
- Methodological and statistical checking of the Economic Accounts for Agriculture is in hand; this applies to all the items (production, intermediate consumption, distributive transactions, gross fixed capital formation and depreciation) and will probably lead to more amendments to the absolute levels than to the annual changes. In particular, it will be seen that the various methods used to calculate depreciation could create systematic bias in income levels.
- The agricultural labour input is measured in annual work units; this is justified by the importance of part-time work in agriculture. In spite of the advantages which this concept presents, one should not forget that it does not allow any under-employment in agriculture to be taken into account. In addition, data on the agricultural labour input measured in AWU are not yet completely harmonized at Community level.

With the above reservations in mind, it is clear that considerable differences in agricultural income per annual work unit exist between the Member States (see graph 7.1 and Table 7.1). It is also evident that the relative levels and the income order of Member States change little according to whether the ECU or PPS is taken as the basis, and have changed only slightly over the twelve-year period.

(1) Data for the Federal Republic of Germany as constituted prior to 3 October 1990.

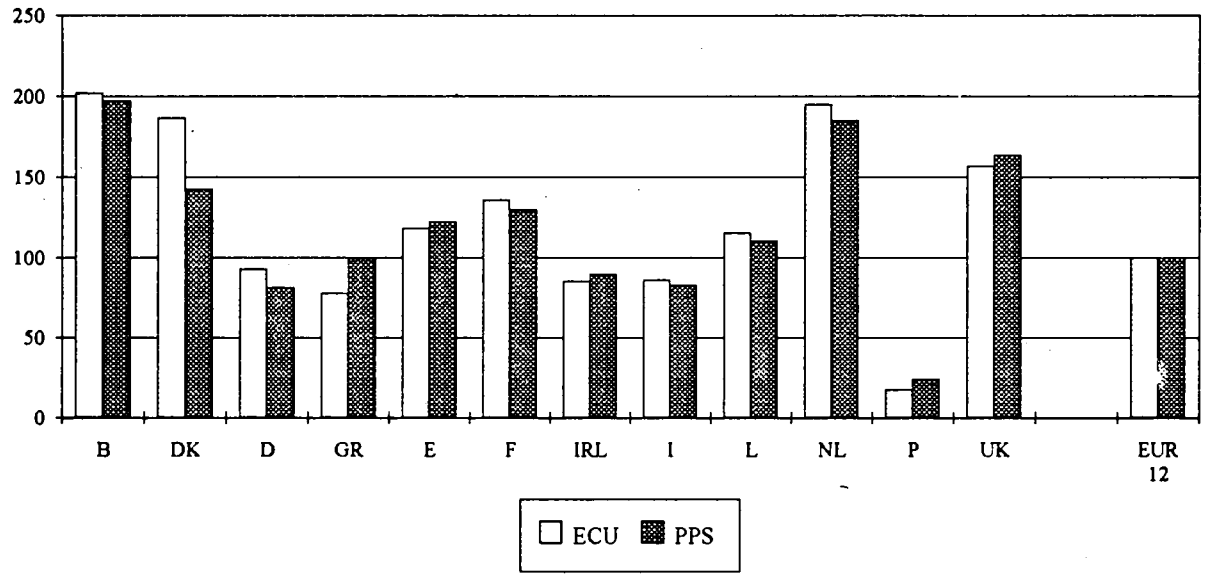
(2) For Italy (depreciation) and Portugal, more detailed plausibility checks are in hand.

(3) "1992" = (1991 + 1992 + 1993)/3.

(4) PPS = purchasing power standard; for the definition, see Eurostat: **Purchasing power parities and real gross domestic product - results for 1985, Luxembourg 1988** (theme 2, series C). In the absence of specific purchasing power parities for the agricultural sector, the ones used are applicable to the whole economy and reflect the general structure of expenditure in each Member State.

Three Member States of northern Europe (B, NL and DK) are at the top of the agricultural income scale measured by **net value added at factor cost per AWU for "1992" in ECU**, with levels about twice as high as the Community average. In the United Kingdom agricultural income is also considerably above the Community average (about +60% higher), with France, Spain and Luxembourg providing a third tier with agricultural incomes some +15-35% above the Community average. Agricultural income is clearly below the Community average in the other Member States, although in Germany, Ireland and Italy the difference is moderate (from -5 to -15% below the average). Income is much lower in Greece (about -20% less than the average) and Portugal, at around one-fifth of the average. Although direct comparisons between Member States, especially using ECU, should be treated with caution (see the reservations stated above), it can be concluded that the differences in average income received by a person (whether self-employed or employed) for activities in the agricultural branch over a one-year period (after adjustment for subsidies, taxes linked to production and depreciation) may be very substantial, especially in extreme cases (Belgium and Portugal).

Graph 7.1 **Indices of net value added at factor cost per annual work unit in "1992", in ECU and PPS (EUR 12 = 100).**



The use of PPS for measuring **net value added at factor cost per AWU** slightly reduces differences in agricultural income between Member States. Income measured in PPS is in fact lower in relative terms than when measured in ECU for almost all Member States above the Community average (except the United Kingdom and Spain, where income in PPS is slightly higher), Denmark being an especially clear-cut case. In three of the countries below the average (GR, IRL and P), conversion into PPS results in some improvement in the relative position of income, whereas in the case of Italy the difference (in the other direction) is small. Germany is somewhat of an anomaly among Member States below the average, since the PPS level is quite clearly beneath the corresponding ECU level. Although Portugal's relative position definitely improves with the use of PPS (its difference with the countries who have a relatively high agricultural income is clearly reduced as a result), agricultural income in that country remains by far the lowest in the Community (24% of the average). It should be noted that the order of classification of the Member States according to the level of agricultural income is only slightly changed by conversion into PPS instead of ECU: Denmark moves from third to fourth position, with the United Kingdom moving the other way, Italy and Ireland swap ninth and tenth places, and most noticeably Germany and Greece change places, with the former moving to eleventh, the latter to eighth place.

Table 7.1 **Indices of net value added at factor cost per annual work unit in "1981", "1985" and "1992", in ECU and PPS (EUR 12 = 100)**

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
"1981" ECU	228.5	191.1	109.7	77.2	80.6	139.5	68.0	89.1	123.9	246.2	17.2	182.8	100.0
"1985" ECU	213.6	244.5	107.9	71.5	84.0	137.1	76.3	89.6	133.8	257.3	16.9	161.5	100.0
"1992" ECU	202.3	186.5	93.0	78.0	118.4	135.9	85.4	86.3	115.7	194.9	17.6	156.7	100.0
"1981" PPS	201.9	145.3	93.3	84.7	93.9	121.6	63.2	102.8	112.0	205.1	29.7	160.5	100.0
"1985" PPS	207.0	183.1	92.9	84.7	103.5	123.1	66.9	91.9	127.2	225.1	30.0	156.4	100.0
"1992" PPS	197.4	142.6	81.3	99.8	122.3	129.7	89.9	83.0	110.6	185.0	24.4	163.6	100.0

The differences between the levels of agricultural income of the Member States in "1992" having been described, there follows a brief review of the trend in their relative positions since "1981" (see Table 7.1). For this purpose, the relative positions of net value added at factor cost per AWU have been calculated in ECU and PPS for each Member State, taking as a reference the NVAfc per AWU of EUR 12 for each of the years studied ("1981", "1985" and "1992").

When measured in PPS, which would appear preferable for a comparative analysis of income levels over a twelve-year period, the relative situations of some Member States changed significantly over the period, as a result of differing trends. The widely disparate development of incomes for 1993 in Member States has in some cases altered the long-term trends and in others accentuated it. However, it is clear that there have been substantial improvements in Spain, Ireland and Greece, and significant declines in Germany and Italy. This is in line with the trends of agricultural income Indicator 1 recorded for these countries (see Chapter 6). In four Member States (GR, E, IRL and the UK), estimates for "1992" put the indices of net value added at factor cost per annual work unit in terms of PPS at the highest level since the start of the period ("1981"). In six other Member States (B, DK, D, L, NL and P) the index is at its lowest level over the period.

In "1981", the two Member States with the highest agricultural income (in terms of PPS) were the Netherlands and Belgium. By "1992" these countries continued to hold the highest levels of income, although swapping relative positions. However, in the Netherlands, it appears that income has decreased markedly and steadily since it peaked in "1985". In Belgium, the index level has gently fluctuated either side of about 208. The downward trend in income that was so apparent in the United Kingdom in previous Income Reports was so completely arrested in "1992" that the index level reached its highest level over the period. The United Kingdom regained the third highest level in the Community, a position that it last held in "1982". In Denmark, income increased sharply in the middle of the 1980's to a peak in "1985" and then fell back to just a little less than its level in "1981" (although this is still 40% more than EUR 12). The progressive rise in the index level for France over the period was knocked by the "1992" figures, although it remains eight percentage points higher than "1981". The progressive increases for Luxembourg that were evident until "1989" were more than undone by the cumulative falls in the sub-period "1990" - "1992". With continued improvements to the income level in Spain, sixth position on the index was no longer held by Luxembourg.

Among the Member States which are below the Community average, the relative situations of Greece and Ireland improved considerably over the second part of the twelve-year period. Agricultural income in Greece is now almost exactly the Community average having been 15% lower in "1981", and in Ireland has narrowed from being 30% lower to 10% lower. The opposite has occurred in Italy and Germany. In Italy income has declined steeply and steadily over the period, falling about twenty percentage points. In Germany, a similarly sharp fall has been evident in the much shorter period since "1989", which in itself represented a peak over the whole period, at the level of the average in the Community. Finally, the relative situation of agricultural income in Portugal has not improved, indeed it has fallen to about 25% of the Community average.

8 TOTAL INCOME OF AGRICULTURAL HOUSEHOLDS

8.1 Introduction to the TIAH project and stages of progress

The Economic Accounts for Agriculture, and hence the income indicators used elsewhere in this publication, give information on the level and development of income arising from the production of agricultural commodities. While this is a central element in the income of the agricultural community, there is now a strong realisation that the economic situation of those households which comprise this community cannot be adequately described using these indicators alone. Previous Agricultural Income reports have given information about the work that Eurostat is undertaking, with the support of the Directorate-General for Agriculture and with the co-operation of Member States, into estimating the aggregate incomes of agricultural households. This has become known as the Total Income of Agricultural Households (TIAH) project. The need for this project is now well established and has been repeatedly endorsed by high-level reviews of the agricultural statistics available within the Community. This chapter describes progress to date, concentrating on the most recent developments.

From the outset of the Common Agricultural Policy there has been recognition of the interaction of agriculture with the rest of the economy, especially the local economy in rural areas. The Farm Structure Survey has established that about one third of farm holders have another gainful activity[1], to which when assessing the importance of these links should be added the work of spouses and other members of farmers' households in activities off the holding. The use of farm resources in forms of production that are not strictly agricultural (such as food processing, tourism and for the provision of environmental services) is encouraged as one way of enabling farmers to cope with the changes to the CAP that are intended to make agriculture more sensitive to market conditions. Off-farm occupations appear to be of increasing importance to farm families, and the enlarged Structural Funds of the European Community are, in part, used for promoting such broadening in areas selected for rural development assistance. To these sources of income from economic activity could be added other forms of income, including welfare transfers such as pensions received by elderly farmers (important in some Member States) and receipts from property (interest and rents). The reforms to the CAP introduced in 1992 seem likely to accelerate this diversification of income sources among farm households.

Figure 8.1 Objectives of the TIAH project

A harmonised methodology is to be used to generate an aggregate income measure for the following purposes:

- *monitoring the year-on-year changes in the total income of agricultural households at aggregate level in Member States;*
- *monitoring the changing composition of income, especially the proportions of income from the agricultural holding and from other gainful activities, from property and from social benefits;*
- *comparing the trends in the total income of agricultural households per unit (household, household member, consumer unit) with that of other socio-professional groups;*
- *comparing the absolute income of farmers with that of other socio-professional groups, on a unit basis.*

The objectives of the TIAH project are given in Figure 8.1. In subsequent discussion with the Commission's Directorate-General for Agriculture, one of the major users of agricultural data, it has become clear that the TIAH results are seen as providing important background information by which developments can be

[1] The latest survey results from Member States show that the following percentages of holders had another gainful activity: B 33% (1987), DK 34% (1989), D 43% (1989), GR 33% (1987), E 34% (1989), F 27% (1988), IRL 26% (1991), I 24% (1987), L 19% (1989), NL 24% (1987), P 36% (1989), UK 30% (1990) EUR12 30% (1987). Most of these results will be appearing in the 1989 FSS.

monitored and the needs for policy can be considered. Other uses can be anticipated in the areas of regional development, social policy and so on. It is recognised that TIAH results are not appropriate for the detailed management of individual policy programmes. Furthermore, they are supplementary to the existing production-branch indicators; there is no suggestion that the new measure should be a substitute for them.

The TIAH project has undergone an establishment phase and is now in the early part of its operation as a component of the statistical information system of the European Community.

The establishment phase was marked by two publications. The first TIAH report of 1988[2] collated existing estimates of total and disposal incomes of agricultural households in Member States, identified actual and potential data sources, and reviewed the alternative ways in which aggregate results could be calculated. In 1990 the TIAH Manual[3] was issued, setting out the target methodology by which TIAH results were to be estimated; this was agreed by the Working Party on the Economic Accounts for Agriculture (hereafter shortened to the Working Party) consisting of representatives of Member States and Eurostat, with an input from the Commission's Directorate-General for Agriculture (DG VI). The methodology is in the form of "target" definitions. Central among these are the definition of income and of what constitutes an agricultural household. The principal income concept is disposable income, an indicator of the household potential to spend on consumption and to save; it comprises income from independent activity (self-employment) in agriculture and other occupations, from dependent activity (wages), from property, from welfare transfers and other sources, and is after the deduction of items such as personal taxes and compulsory social contributions (for a detailed definition see the TIAH Manual). The definition of an agricultural household is considered in detail below.

The operational phase has so far seen the publication in 1992 of a second TIAH[4]. This reviewed the methodology and first results from the TIAH project on a country-by-country basis. A detailed account of more recent progress will be published in the spring of 1994 (with the title ***Total Income of Agricultural Households: Progress in 1993***) and an update of results will appear early in 1995.

8.2 Developments in methodology

(a) The TIAH definition of an agricultural household - "narrow" approach

An important feature of the TIAH methodology is its definition of an agricultural household. For the purpose of classification, households are allocated to socio-professional groups on the basis of the main source of income of a reference person (typically the head of household or the largest contributor to the family budget). This system allows a complete allocation of households to socio-professional groups for the purpose of drawing income comparisons. Thus an agricultural household is one in which ***the main source of income of the reference person is from independent activity in agriculture.*** Some Member States, which cannot at present use an income criterion, depend on the main declared *occupation* of the reference person. Of course, when measuring household income the incomes of all members are summed, but these additional incomes are not considered at the classification stage. Such a classification system can result in some households being classed as agricultural where farming is only a minor part of the household's total income, but such cases have

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2 Hill, Berkeley (1988) ***Total Incomes of Agricultural Households: Existing information and proposed methodology for a harmonised aggregate indicator.*** Theme 5 Series D. Luxembourg: Eurostat. 133 pages. Also available in French and German

3 Eurostat (1990) ***Manual on the Total Income of Agricultural Households***. Theme 5 Series E. Luxembourg: Eurostat. Three language version (DE, EN, FR)

4 Hill, Berkeley (1992) ***Total Income of Agricultural Households: 1992 Report.*** Theme 5 Series C. Luxembourg: Eurostat. 134 pages. Also available in French and German.

to be accepted as a price of the practicality of a reference person system.[5] All Member States (except the Netherlands) now use this reference person system in calculating their TIAH results.[6]

(b) Choice of socio-professional groups with which to compare agricultural households

Two of the objectives of the TIAH project explicitly involve comparisons between agricultural households and other socio-professional groups (developments of income and absolute levels of income). The TIAH Manual does not fully solve the question of with which other socio-professional group or groups the income estimates of agricultural households should be compared. An important step was taken in 1993 in this area by establishing a ***harmonised list of socio-professional groups*** for use within the TIAH project. This was drawn up after reviewing the categories currently used in the data sources from which TIAH results are derived. Some Member States already divide their "private households" sector into sub-sectors for national purposes within the framework of their national accounts (France and Germany in the disaggregation of their household sectors, and the Netherlands within its related Socio-Economic Accounts). An important source of distribution keys in many Member States is the national Family Budget Survey (FBS); in some countries it is a primary data source. Though the methodology of Surveys is not fully harmonised across the European Community, FBS results published by Eurostat as "comparative tables" use standard socio-economic categories for the head of household.

Figure 8.2 "Minimum" list of socio-professional groups, and first level of expansion

(a) Employers and own-account workers (main income of reference person from independent activity)

(i) Farmers

(ii) Others

(x) retail and wholesale distribution: accommodation and catering

(y) services (including professions operating as own-account workers)

(z) others (including manufacturing industry)

(iii) All self-employed [(i)+(ii)]

(b) Employees (main income of reference person from dependent activity):

(i) Manual workers in agriculture, industry and services

(ii) Non-manual workers

(iii) All employees ((b)(i) + (b)(ii))

(c) Others

(i) Recipients of property income

(ii) Recipients of pensions

(iii) Recipients of other current transfers

(iv) All others

(d) All households except farmers ((e) minus (a)(i))

(e) All households ((a) + (b) + (c))

Following discussion by the Working Party and consultation with parts of Eurostat responsible for Family Budget Surveys and National Accounts, a list of socio-professional groups was agreed in June 1993 for the purpose of disaggregating the household sector and the drawing of comparisons. This list is expressed in two levels, a "minimum" list (shown in **bold** in Figure 8.2) and an indication where the first level of expansion should take place (shown in normal print). Member States that wished to use a more detailed breakdown could do so. In line with the existing TIAH Manual instructions, where possible the group of agricultural (farmer) households should not include forestry or fishery households. By the agreement in the Working Party this "minimum" list has become part of the "target" methodology of the TIAH project which Member States will endeavour to apply. It will be incorporated into a future revised edition of the TIAH Manual of Methodology.

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[5] Initially the "target" TIAH methodology used a classification based on the main source of income of the entire household. This is what appears in the 1990 TIAH Manual. However, in practice few Member States found this practical. As results were submitted the need to harmonise on a reference person system became clear. The Working Party formally changed the "target" methodology to a reference person system in December 1992. This will be incorporated into a revised TIAH Manual.

[6] In the Netherlands the socio-economic characteristics of households with agricultural holdings means that this departure from the harmonised methedology is of little significance, though the extent of this will be regularly monitored..

When comparing households in different socio-professional groups according to their levels of disposable income, there appears to be no strong reason why restrictions should be placed *a priori* on the selection of groups. Though there may be a particular policy interest in seeing how the incomes of agricultural households compare with, for example, the incomes of small retail traders, there is little inherent reason why their potential spending power should not be compared with household headed by employed persons, or by persons who are retired or mainly dependent on social transfers for their income. Real differences in costs of living (especially of housing, food and transport) may require caution when drawing inferences about relative potential consumption levels, but this also applies to many other forms of comparison (such as disparities in the costs faced by rural and urban households, which may be large). These cost differences are not in essence related to the manner in which the income is generated. Nevertheless, when interpreting comparisons it should be borne in mind that the income from farming differs in its economic characteristics (including risk) from, for example, income from employment, and that satisfactory data are often less easy to obtain for income from self-employment, not least because the concept of income is more complex and involves the identification and evaluation of a greater volume of items which are taken as income in kind.

c) *The provision for the use of a "broad" definition of an agricultural household within the TIAH methodology.*

Though the main focus of attention of the TIAH project remains this "narrow" approach to what constitutes an agricultural household, defined above, which permits a systematic breakdown of all households into socio-professional groups for comparative purposes, during the period since the project was established the desirability has risen for also making income estimates using a "broad" approach. In discussions between Eurostat and DGVI it has become clear that results using this "broad" approach are seen as a valuable extension of and not a substitute for those generated using the existing "narrow" definition. For some policy purposes it may be desirable to treat all households with some income from farming as "agricultural". By subtraction it should also be possible to throw light on the income situation of those households with agricultural holdings which are not primarily dependent on farming for their livelihood (those households which fall outside the "narrow" but inside the "broad" approaches). Results from use of the "broad" approach have to be interpreted with caution; in some Member States (for example, Greece) it is felt by the national statistical authority that the familial structure makes income figures calculated on this "broad" basis of limited value for casting light onto the income situation of the agricultural community. It should be noted that the possibility of using a "broad" approach has been an issue from the outset of the TIAH project and is specifically mentioned in the detailed TIAH methodology set out in the 1990 TIAH Manual

Because there is not a direct correspondence between agricultural holdings and households deriving some income from farming, numbers of holdings are not necessarily a satisfactory indicator of the numbers of households which satisfy the "broad" definition. A more direct method of assessment is required, based on households rather than holdings.

In principle, alternative criteria exist for defining a "broad" agricultural household, and these criteria can be applied at levels of the entire household, the farmer and spouse or an individual (reference person). The main criteria[7] and the populations to which they give rise are:

(a) occupancy of an agricultural holding (the ***occupancy population)***:
(b) receipt of income from independent agricultural activity (the ***income population)***;
(c) labour input to independent agricultural activity (the ***labour input population)***.

These three are likely to overlap greatly. However, the groups are not identical. For example, there will be some occupiers who receive no cash income from farming (such as where the farm is primarily residential). Conversely, some households will receive entrepreneurial income without being the legal occupier (such as

[7] The use of residence on an agricultural holding, used for many years in the USA, is not appropriate in the European context.

households of sons of farmers in partnership with their fathers). Occupancy and receipt of income need not necessarily imply labour input to agriculture (as on farms where the legal owner of the business is absent and employs a manager and hired labour), and cases could be found where there is labour input to farming but no income.

In December 1993, after considering possible alternative approaches, the existing empirical evidence on the implications of using the alternatives, and the views of the Commission's Directorate-General for Agriculture, the Working Party reached agreement on the "broad" definition of an agricultural household, to form part of the target methodology of the TIAH project This implied that, under the "broad" definition, an agricultural household is one ***which derives an income from independent activity in agriculture (other than income solely in kind)***. Because of the way in which the household is defined in the TIAH methodology, this means that a household is included if *any* member of the household has some income in this form. The TIAH Manual allows a degree of flexibility in the precise ways in which the terms "household" and "income" are interpreted, to reflect national data sources and customs. In the absence of an internationally applied definitions of these terms, the TIAH Manual states that they be defined as in national household (family) budget surveys. This "broad" definition of an agricultural household will in time be incorporated in a revised TIAH Manual.

As the prime focus of the TIAH project remains on the "narrow" definition, it is not seen as necessary to generate results based on the "broad" definition annually (though Member State may do so if they wish). Rather, occasional estimates are likely to be adequate.

8.3 Results from the TIAH project

(a) Results using the "narrow" definition of an agricultural household

Although TIAH results are available for all Member States using the "narrow" definition of an agricultural household, they differ widely in the number of years covered and degree of disaggregation. At one extreme is Germany, where annual figures for the period 1972-92 are contained in the TIAH data bank. At the other are those countries for which only a single year is currently represented (Belgium (1987), Ireland (1987) and Luxembourg (1989)). Findings on a country-by-country basis were given in the TIAH 1992 Report, in which the degree of detail given was matched to the state of progress in each country and attention was drawn to the disparities which remain between Member States in the methodologies they employ. These will not be repeated here. Nevertheless, it is worth reiterating some of the preliminary general findings that can be discerned from the results; these are given in Figure 8.3.

Results using the newly-agreed "minimum" list of socio-professional groups are only currently available for a small number of countries, though the application of the list is being investigated by the other Member States. For purely illustrative purposes, Figure 8.4 shows the development of income over time for **Germany** (in current DM) with households grouped according to the "minimum" list (for clarity, the groupings of all self-employed households and all households except farmers are omitted)[8]. Figure 8.5 repeats this form of analysis for France. It should be noted that, in Germany, the average disposable income of agricultural households has been consistently above the all-household average, although the gap is narrower in the later years of the series shown (1972-92) than in early years. Agricultural households had higher incomes than the relatively far more numerous groups of waged employees and salary earners. However, the average income of non-farmer self-employed households was much higher than that of farmers; furthermore, over the period they increased their position relative to the all-household average. When expressed in terms of income per consumer unit, agricultural households have been below the national all-household average since the late 1970s. Although there was a recovery in the position to 1989, when the all-household average was almost reached, since then there has been a further dropping behind.

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[8] Figures from which these graphs are drawn will be given in subsequent TIAH publications.

Figure 8.3 Preliminary general findings from the TIAH project: "narrow" definition of an agricultural household.

(a) Agricultural households are shown to be recipients of substantial amounts of income from outside agriculture. Though typically about a half to two thirds of the total comes from farming, there are large differences between Member States and some between years. Countries in which less than half of the total household income came from farming include Denmark, Germany, Spain and Italy. At the other end of the spectrum, with more than two thirds coming from farming, are Ireland, the Netherlands and Portugal.

(b) The total income of agricultural households is more stable than the income from independent agricultural activity. Non-agricultural income (taken together) is less variable from year to year than is farming income. Disposable income seems to be less stable than total income, but the relationship between the two depends on a variety of factors, including the way that taxation is levied.

(c) Countries differ in the share of income taken from agricultural households in taxation and other deductions, so the same average total income figure can imply different levels of disposable income in different Member States. At one extreme are Germany and Denmark, where more than a quarter is taken, and at the other are Greece, Spain, Ireland and Portugal, where the estimates suggest that only a tenth or less of household income is removed in this way.

(d) For those countries in which comparisons are possible, agricultural households appear to have average disposable incomes which are typically higher than the all-household average. The relative position is eroded or reversed when income per household member or per consumer unit is examined. In Member States that have information extending over several decades (Germany and France, though in the latter case there are breaks in the methodology) the relative disposable income situation of agricultural households seems to have been deteriorating over time.

In the shorter series for **France** (1984-89) a similar picture emerges. The average disposable income per household of agricultural households has been consistently above the national all-household average, higher than that of employees but below that of self-employed households outside agriculture. Income per consumer unit of agricultural households has been consistently below the national average, although in France the level has not deteriorated noticeably relative to it, and, in contrast with Germany, in 1989 the level was above that of households of employees in 1989.

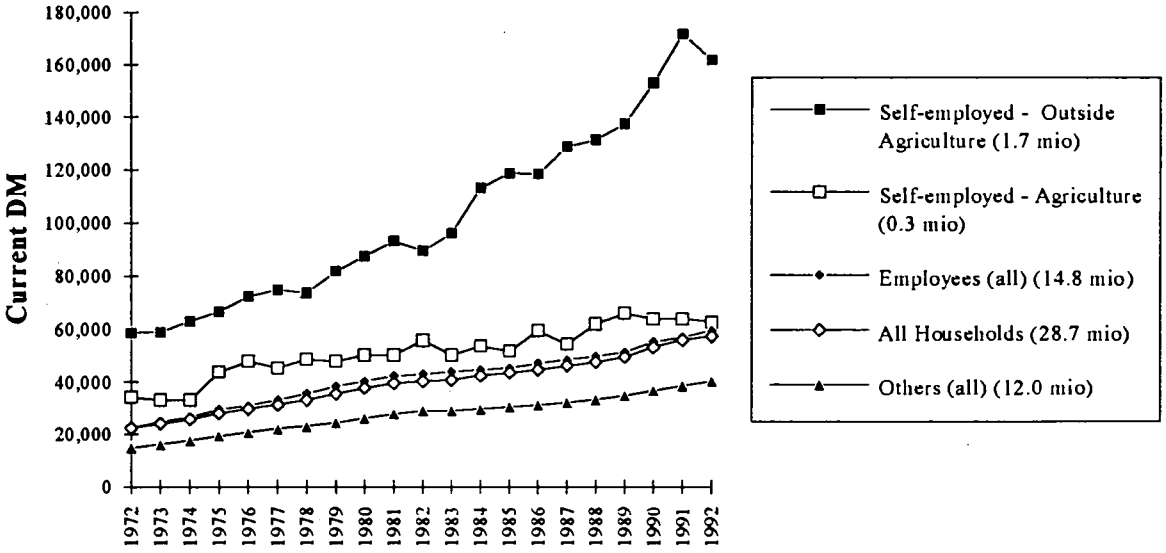
(b) Findings using the "broad" definition of an agricultural household.

Although many Member States have responded positively to enquiries about the feasibility of calculating estimates of disposable income using the "broad" definition of an agricultural household, and partial information is available for some, in reality detailed results are only currently available for Ireland (which were presented in detail in the TIAH 1992 Report) and from recent special studies commissioned by Eurostat from the Centraal Bureau voor de Statistiek (CBS) in the Netherlands and the Statistisches Bundesamt (StBA) in Germany. Each explored the implications of using a range of definitions, including ones based on differing

Figure 8.4 **Germany: Disposable income per household and consumer unit by socio-professional group, 1972-92. Current DM**

(i) Disposable income per household

(the number of socio-professional households in 1992 are given in brackets)



(ii) Disposable income per consumer unit

(the number of socio-professional consumer units in 1992 are given in brackets)

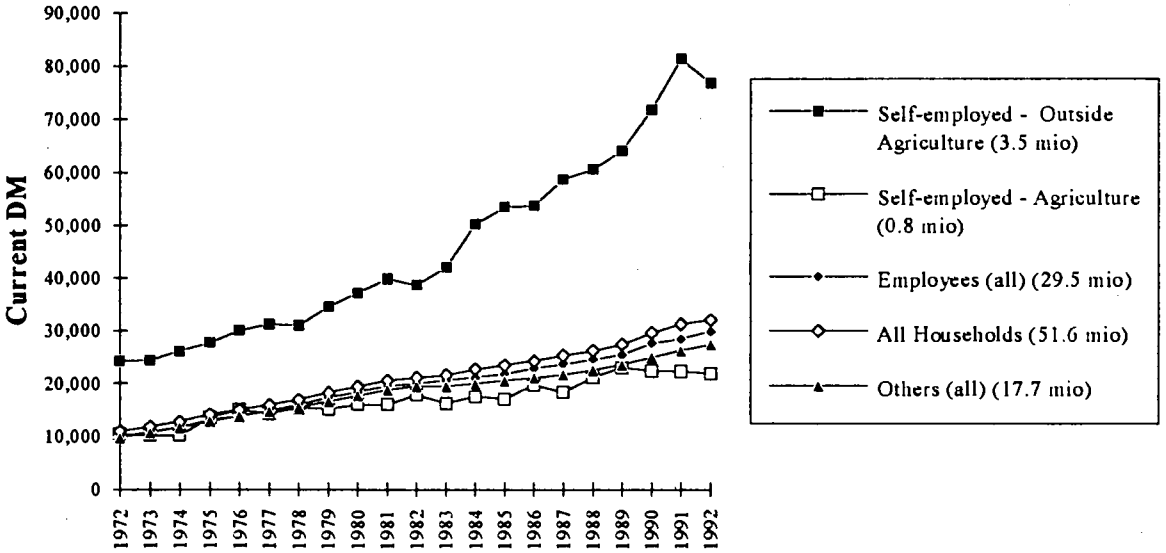
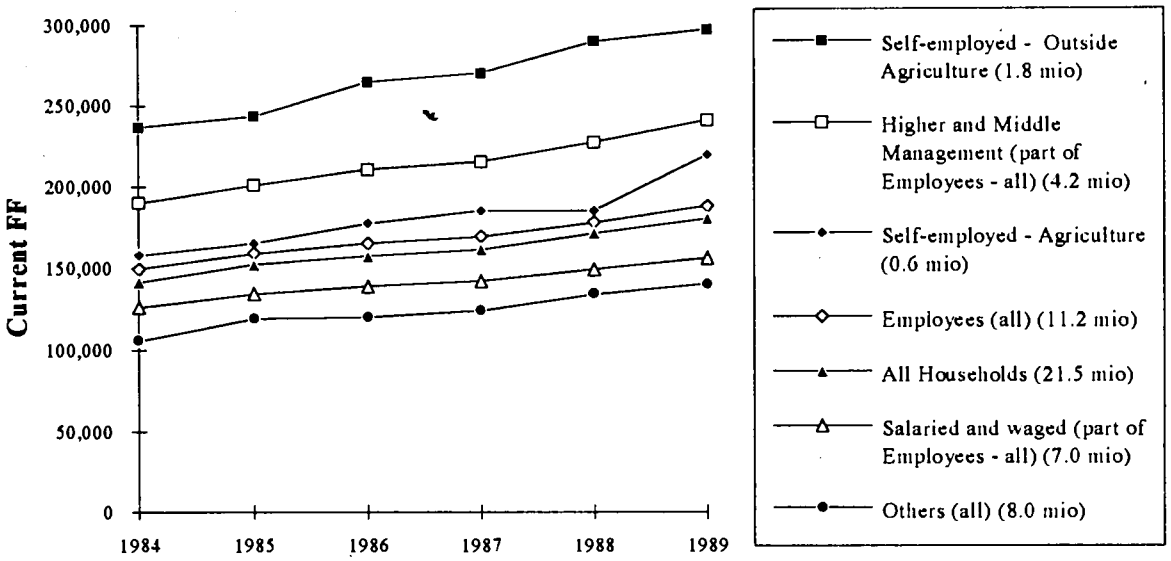


Figure 8.5 **France: Disposable income per household and consumer unit by socio-professional group, 1984-89. Current FF**

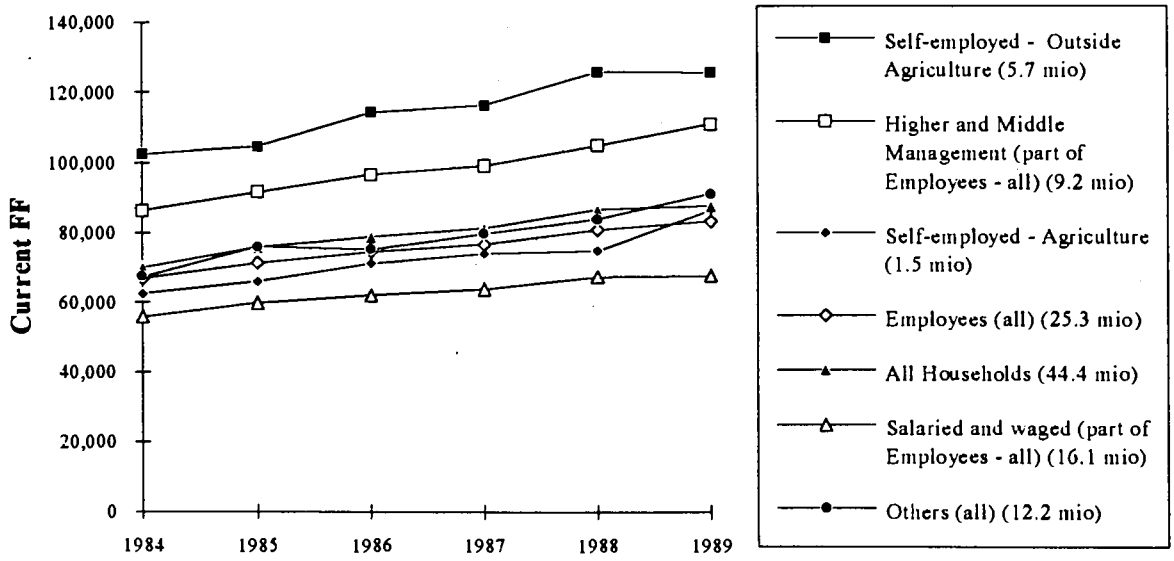
(i) Disposable income per household

(the number of socio-professional households in 1989 are given in brackets)



(ii) Disposable income per consumer unit

(the number of socio-professional consumer units in 1989 are given in brackets)



receiving units (reference person, farmer and spouse or the entire household) having either some income from farming or where farming formed the major income source. Here only a brief summary is possible (for a more detailed account see the forthcoming publication *TIAH Progress in 1993*).

In ***Ireland*** the numbers of households found to have *some* independent agricultural income ("broad" definition of an agricultural household) was 2.4 times the number where farming was the *main* income source of the head of household (the "narrow" definition). Households in which there was some farming income but where it did *not* constitute the main income of the head (termed here marginal households) are numerically important in Ireland; they formed more than half the total in the "broad" group in 1987 (122,000 out of 207,000)(see Table 8.2).

Table 8.1 **Ireland: Numbers of households and average disposable income per unit for alternative definitions of an agricultural household. 1987**

Classification criterion	Households ('000)	Income per household £IRL	Income per household member £IRL	Income per consumer unit £IRL
"Narrow" definition (reference person: income criterion):	84.5	12867	3266	4529
"Broad" definition	206.7	10600	2837	3910
Marginal households ("Broad" minus "narrow")	122.2	9032	2512	3447
All households in Ireland		10101	2882	3854

Source: adapted from Table IRL1 of the TIAH 1992 Report. Main source of data is the 1987 Household Budget Survey

Adopting the "broad" definition gave an average disposable income per household which was below that of the "narrow" approach. This situation is explained by examining the income level of those households which fell outside the "narrow" definition but which still had some income from farming. Not only did these marginal households have an average income below that of households which satisfied the "narrow" definition; their relative income position was also below the national all-household average, whereas the "narrow" definition agricultural households were substantially above the national average. The effect of including these low-income marginal households was to bring the average of the "broad" definition nearer to the all-household average, but still above it. Farming only constituted some 14 per cent of the average total income of the marginal households; their main source was wages (51 per cent), and the second most important source was social benefits (26 per cent). Overall the impact of these marginal households was to reduce the proportion of income coming from independent agricultural activity for the entire "broad" group to 39 per cent (compared with 67 per cent for the "narrow" definition), with wages and salaries accounting for almost as much (35 per cent). Social benefits were pushed into third place.

Results for the **Netherlands**, summarised in Table 8.2, show that relatively few additional households are bought in when the definition is changed from the "narrow" to the "broad" approach, in contrast to the large numerical impact of these marginal household in Ireland. The ratio between "broad" and "narrow" numbers in 1988 was 1.6: 1. Although these marginal households had an average income per household which was below that of the "narrow" agricultural households (so that the average income of the "broad" definition of an agricultural household was lower than the "narrow"), they still received incomes above the national all-households average (in contrast with Ireland). The share of receipts coming from farming (before the payment of interest and rent) was 60% using the "broad" definition and 74% using the "narrow".

Table 8.2 **The Netherlands: Numbers of households and average disposable income per unit for alternative definitions of an agricultural household. 1988**

Classification criterion	Households ('000)	Income per household ('000 HFL)	Per household member ('000 HFL)	Per consumer unit ('000 HFL)
"Narrow" definition (reference person: income criterion):	87	104	28	57
"Broad" definition	136	82	22	45
Marginal households ("Broad" minus "narrow")	49	42	12	23
All households	5792	39	16	27

Results for **Germany** (Table 8.3) suggest a somewhat different pattern of relative income levels, though at present estimates deal with an earlier year (1983) than the studies cited above and are restricted to averages per household. In contrast with the findings for Ireland and the Netherlands, in Germany the average income arising from using the "broad" definition of an agricultural household was ***higher*** than that from the "narrow" definition, as adopted in the TIAH project (and in the national accounts of Germany). Thus the marginal households which were brought in had relatively high incomes compared with agricultural households defined in the "narrow" sense and with the national all-households average. Examining the income components of the "broad" and "narrow" groups found that the average income from farming of the former was lower but this was more than offset by larger earnings from gross wages and salaries and larger incoming current transfers.

Table 8.3 **Germany: Numbers of households and average disposable income per household for alternative definitions of an agricultural household. 1983**

Classification criterion	Households ('000)	Income per household ('000 DM)
"Narrow" definition (reference person: income criterion):	353	41.2
"Broad" definition	613	43.3
Marginal households ("Broad" minus "narrow")	260	46.2
All households	25424	39.2

The results reported for Ireland, the Netherlands and Germany (and fragmentary information for Denmark not given here but available in the TIAH 1992 Report) point to some implications of using the "broad" definition of an agricultural household, though caution has to be exercised because, at present, the figures relate only to single years. While in each country the use of the "broad" definition expands the number of agricultural households compared with the numbers which qualified under the revised target "narrow" definition, the extent varies substantially; the number of "broad" households as a percentage of "narrow" households was 245% in Ireland (1987), 121% in Denmark (1988), 156% in the Netherlands (1988) and 172% in Germany (1983).

Perhaps of even greater importance is the different impacts the marginal households (which derive some income from farming but where farming is not the main source of income of the reference person) have on average income levels. In Ireland and the Netherlands they lowered the average household net disposable income (by 18% and 21% respectively), implying that the marginal households had lower average incomes than agricultural households narrowly defined (though in the Netherlands they were still above the national all-households average). In Denmark the income level was almost unchanged. However, in Germany they raised the average income of agricultural households by 5%, implying that the marginal households had incomes which were on average higher than households that satisfied the "narrow" definition. Such diversity should prevent any quick assumptions about the relative results from using the alternative approaches and points to the need for results to be available from each Member State. The differing social, economic and agricultural structures seem likely to require each country to be considered individually, at least until more comprehensive information is available.

8.4 Developments in related projects

Other steps have been taken which are expected to enhance the quality and usefulness of TIAH results. Close liaison has been maintained with other parts of the Commission which are also concerned, in separate ways, with the income situation of farmers and their households. In particular, this applies to two sections. First there is the Farm Accountancy Data Network (FADN, or RICA), co-ordinated by the Directorate-General for Agriculture (DG VI) where there are plans to extend the range of questions posed to the 60,000 or so farm businesses which co-operate in this annual survey to cover non-farm income in addition to items leading to farming income. Second, there is Eurostat's Unit E2 (Living Conditions) which is co-ordinating the European Community Household Panel (ECHP) survey, an exercise currently being designed to improve knowledge of incomes and living conditions of households in the European Community (not restricted to agricultural types). These microeconomic projects are potentially complementary to the aggregate approach of the TIAH project.

ANNEXES

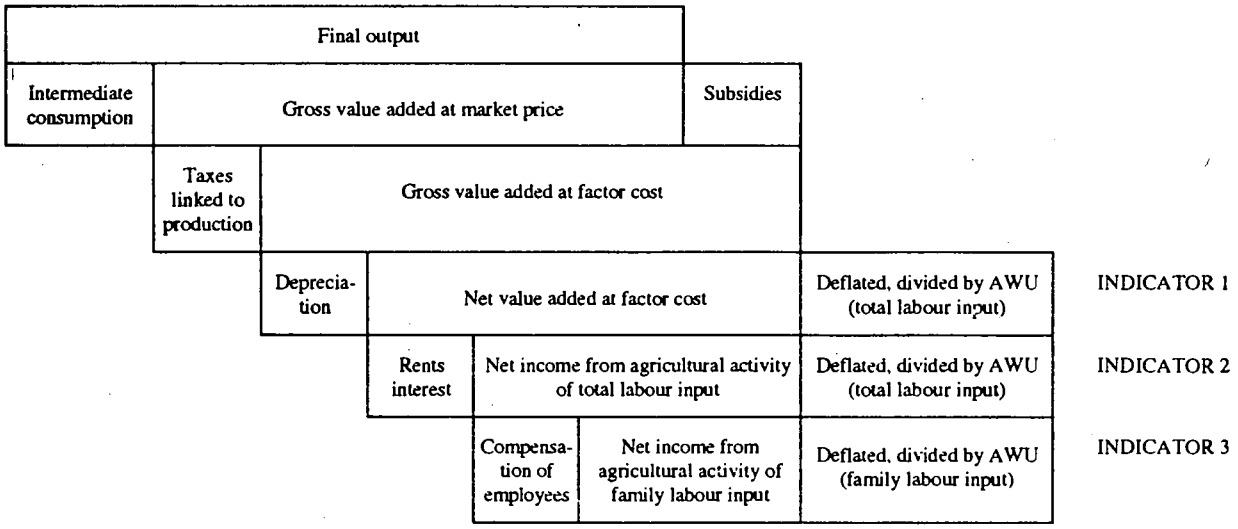
I Notes on methodology

II Detailed tables

I NOTES ON METHODOLOGY

A.1 Income indicators

Computation or estimation of income indicators is based on the Economic Accounts for Agriculture[1] (EAA), which form part of the European System of Integrated Economic Accounts (ESA). The three Indicators are derived as follows:



The data cover the **production branch** "Products of Agriculture and Hunting" which includes all **agricultural production** (defined according to a list of products) resulting from a main or secondary activity, but excludes non-agricultural secondary activities of agricultural holdings. They therefore do not refer to the activity sector "Agriculture", which may be taken to be the total of economic activities of agricultural holdings. Nor are the aggregates and income indicators used in Chapters 2 to 7 of this publication indicative of the total income or disposable income of households engaged in agriculture, since these may receive income from sources other than agriculture (non-agricultural activities, wages or salaries, social benefits, property income) which are only dealt with in Chapter 8 of this report. In other words, **agricultural income** as described and analysed in this report must not be regarded as farmers' income.

It should also be noted that the concept used for assessing production, on which value added and income aggregates naturally depend, is that of **final output**, which in particular results in the exclusion of intra-branch consumption of agricultural products (seeds and animal feedingstuffs produced by the agricultural branch and used directly by it).

This concept of final production, and the income aggregates to which it leads, may differ in some cases from those used in the calculations and estimates made by the Member States for their own purposes. For example, some Member States use the concept of "deliveries", which implies inclusion of the production supplied in the course of the year (either sold or used for own consumption) even if it was produced in a previous year; the income indicator resulting from it therefore measures the income actually received during the year. The concept of final production, by contrast, is used for measuring **income generated by the year's production,**

1) cf.Eurostat: "Manual on Economic Accounts for Agriculture and Forestry", Theme 5, series E, Luxembourg 1989 (and Addendum, 1989), and "Economic Accounts for Agriculture and Forestry" 1987-1992, Theme 5, series C, Luxembourg 1994.

even if the corresponding payments are not received until later in some cases; this result is obtained by summing to sales and own consumption additions to stocks and own-account produced fixed capital goods, and deducting from them withdrawals from stocks. It should also be noted that the income indicators in this report relate to **calendar years**, which goes some way to explain the substantial differences between these figures and those in a number of national publications, which are based on the farm year. Other variances may result from a different list of the deductions operated on the value of production in order to calculate income.

Finally, since harmonization of the absolute values of income indicators is not yet completed between Member States, the data and analyses of this report are mainly expressions of **annual changes**.

A.2 Agricultural labour input

Labour input or rates of change in it are calculated in **annual work units (AWUs)** to reflect the role of part-time and seasonal work in agriculture. An AWU is equivalent to the time worked by one person employed full-time in agricultural activities on a holding over a whole year[2]. A distinction is made between family AWUs (the holder and members of his family working on the holding) and non-family AWUs (paid workers not belonging to the holder's family), the two added together constituting the total AWUs.

The data published and used in this report for calculating agricultural income indicators are based on the trend in the number of AWUs used in absolute values. Harmonization of time series at Community level is not yet quite complete, especially as far as the definition of an AWU in hours worked per year is concerned. Furthermore, for some Member States the results have been estimated partly or totally by Eurostat in the absence of complete national data[3].

A.3 Aggregation of Community data

Indices and rates of change for the Community as a whole (EUR 12, unless otherwise stated) can be calculated as weighted averages of national indices or rates of change, or calculated directly from Community aggregates resulting from conversion of national data into ECUs (or PPSs). In both cases, a base year has to be chosen: the one used for establishing the different countries' share in the calculation of Community averages, or the one taken for the rates of change used for calculating aggregates.

In this report, the calculations for the short-term (changes in 1993 compared with 1992) and long-term (trends from 1980 to 1993) sections are based on slightly different methods and on different base years.

For the **short-term section** (Chapters 2 to 4, and tables A.3 to A.7 of Annex II), the rates of change of volumes and nominal or real values of the Community for 1993 compared with 1992 have been calculated as **weighted averages** of the corresponding rates of change estimated in the Member States. The weighted coefficients have been calculated from **EAA data for 1992**, converted into ECUS at **1992 exchange rates**; clearly, these coefficients are specific to each item. Rates of change of nominal or real prices have been deduced from those of values and volumes. All in all, this method, which is based on 1992, appears the most logical for short-term analysis and the most consistent with that used in the Member States for calculating rates of change in volumes and prices in 1993 for mixed product groups.

For the **long-term section** (Chapters 5 and 6, and tables A.8 et seq. of Annex II), income indices and rates of change of volumes and values for the Community have been calculated from **Community aggregates**

2) cf. Eurostat: "Structure of Holdings - Community Survey Methodology", Theme 5, series E, Luxembourg 1986 (p. 21).

3) The countries concerned are Ireland, for the entire series, and Denmark, and Portugal for some of the data on family workers (1973-79 and 1973-78 respectively).

expressed in ECUs at constant 1985 exchange rates; for real values, **the deflators are also based on 1985 = 100.** The indices and rates of change of prices are deduced from the corresponding values and volumes. This method based on 1985 appears the most logical one for describing and analysing trends for the whole of the period 1980-1993. For consistency, the EAA uses 1985 constant prices in the calculation of indices and changes in the volume and price for each Member State. It should also be noted that indices (especially the three agricultural income indicators) are expressed as base "1985" = 100[4].

A.4 Calculation of deflated series

For each Member State, **indices and changes** in the prices and values in real terms of different products, aggregates and indicators are obtained by deflating the corresponding nominal figures with the **implicit price index of gross domestic product at market prices.** For long-term series, use is made of the GDP price index with base 1985 = 100. For short-term changes (1993 compared with 1992), forecasts of this index for 1993 were supplied by the Commission's Directorate-General for Economic and Financial Affairs (DG II).

There are a number of important points in favour of using this deflator, such as its reliability and comparability. The GDP implicit price index is an indicator of trends in the general level of prices of all goods produced and all services rendered in an economy. The price index of national final "uses" could also be used as a deflator. Unlike the GDP price index, it also directly takes account of the effect of external trade and thus reacts faster and less ambiguously to price changes for imports (e.g. energy price changes). However, to ensure comparability with other Commission publications, it was decided not to introduce a new deflator.

Real values for the Community as a whole are calculated by deflating each Member State's nominal figures (at current prices) with the GDP implicit price index of the country concerned and converting the results into ECUs (at 1985 exchange rates for the long term and 1992 exchange rates for the short term as indicated above). The results are then added together to give real values for the Community. These aggregates, in real terms, are used for calculating indices and rates of change for EUR 12 and therefore there is never any explicit application of a "Community deflator". In particular, it is the Community income aggregates in this deflated form expressed in 1985 ECUs, that are set against the number of Annual Work Units in the Community as a whole in order to calculate the trend of income indicators since 1973 for EUR 11 and since 1980 for EUR 12. As an example, the following algorithm is used to calculate indicator 1 for the Community :

$$IND1_{EC,t} = \frac{\sum_i \frac{NVA_{i,t}}{PGDP_{i,t} \times ER_{i,85}}}{\sum_i TLI_{i,t}},$$

where: IND 1 = Indicator 1 (in ECUs per AWU);
NVA = Net Value Added at Factor Cost for agriculture (in national currency);
PGDP = Implicit Price Index of Gross Domestic Product at Market Prices (1985=100);
ER = Exchange Rate (1ECU = ...N.C.);
TLI = Total Labour Input of Agriculture (in AWU's);
i = Member State (B...UK);
t = Year (1973...1993).

4) It should be recalled that "1985" throughout this report means (1984+1985+1986)/3, an operation aimed at choosing a base year which is hardly affected by short-term fluctuations.

Finally, it should be noted that this method renders unnecessary the calculation of a deflator for the Community as a whole and therefore none is given in this publication. However, it should be noted that the "average rate of inflation for the Community" which could be derived from the above-mentioned real values (a rate which would in fact differ according to the product or aggregate chosen for calculating it) would not correspond to the figures in the Commission's other publications for the average change in the implicit price index of gross domestic product in the Community (as this rate of change is generally calculated from each Member State's share in the Community's GDP expressed in PPS).

Table A.1

Share of net value added at factor cost of agriculture in net domestic product at factor cost (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	4.2	5.7	2.8	20.3	10.2	7.1	18.5	7.8	3.8	5.4	:	2.7	:
1980	2.3	3.9	1.4	17.6	6.6	4.1	10.1	5.9	2.4	3.4	6.7	1.8	3.6
1985	2.3	4.2	1.3	17.6	5.8	3.8	9.4	4.4	2.6	3.9	5.7	1.5	3.2
1990	2.0	3.2	1.1	14.1	4.5	3.3	8.6	3.0	1.9	3.5	4.1	1.2	2.6
1992	1.7	2.3	0.8	15.1	3.5	2.8	8.6	2.9	1.5	3.0	2.9	1.2	2.2

Table A.2

Agricultural employment (1) as a share (2) of total employment (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	4.0	9.4	7.2	36.8	23.6	10.9	23.9	17.8	7.9	6.0	34.9	2.9	11.3
1980	3.1	8.0	5.2	28.7	18.6	8.5	18.1	13.9	5.7	4.8	28.0	2.6	9.4
1985	3.1	7.0	4.5	27.5	17.7	7.4	15.8	10.9	4.3	4.8	23.4	2.5	8.3
1987	2.9	6.3	4.1	25.7	14.7	6.8	15.2	10.2	4.1	4.8	21.8	2.4	7.6
1988	2.8	6.0	3.9	25.3	14.0	6.5	15.2	9.6	3.4	4.7	20.3	2.2	7.2
1989	2.7	5.6	3.6	24.1	12.7	6.2	15.0	9.1	3.3	4.6	18.8	2.1	6.8
1990	2.7	5.6	3.4	22.8	11.5	5.9	14.8	8.6	3.2	4.5	17.8	2.1	6.4
1991	2.6	5.4	3.2	22.1	10.4	5.6	13.7	8.3	3.0	4.5	17.3	2.1	6.1
1992	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Including Forestry and Fishing.
(2) Eurostat estimate for GR, P and EUR 12 in 1973, for GR and EUR 12 in 1991.

Table A.3

Percentage change in volume of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	0.4	20.4	-4.9	0.3	-1.8	-7.2	-12.8	-5.3	-23.9	0.4	-18.3	-4.5	-4.1
	Cereals	4.5	48.2	5.5	2.7	28.6	-10.8	-21.7	-1.7	-3.9	7.1	7.4	-11.2	-1.4
	Potatoes	-8.2	-5.3	-5.3	-9.0	-24.6	-9.1	-8.0	-20.0	-6.5	1.0	-26.0	-8.0	-11.6
	Sugar beet	7.9	33.6	8.6	-5.2	14.0	0.6	-14.1	-19.0	-	-2.5	-	-8.1	1.0
	Industrial crops	0.0	0.0	6.1	1.4	-24.7	-7.6	-	-8.5	95.8	-18.5	-33.0	-0.6	-5.1
	Oilseeds and oleaginous fruit (excluding olives)	-18.6	0.0	4.6	-55.3	-12.6	-14.1	-	-19.0	95.8	-35.0	-12.0	-1.0	-8.6
	Fresh vegetables	-1.8	-6.2	-1.8	-2.0	-2.6	-1.3	-1.5	-10.0	-3.5	-1.5	-6.9	2.8	-4.1
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	-1.7	0.1	-37.8	2.0	-4.1	-10.0	-19.4	-8.0	-31.0	18.0	-17.1	-4.7	-11.2
	Grape must and wine	-	-	-13.6	-2.5	-23.6	-10.6	-	-9.4	-37.6	-	-41.2	-	-12.1
	Olive oil	-	-	-	-0.1	5.1	-	-	25.0	-	-	-28.6	-	9.7
	Flowers and ornamentals	0.0	-0.6	1.3	0.0	0.0	0.0	-	1.8	-	0.5	-	1.4	0.8
+	Final animal output	4.8	2.2	-1.4	-0.7	-0.5	-0.3	-0.6	0.9	2.0	1.4	-0.3	-1.8	-0.1
	Animals	5.4	5.0	-2.9	-3.3	0.5	0.1	-0.6	2.0	0.9	1.8	2.5	-3.3	0.1
	Cattle (including calves)	4.0	-6.7	-6.4	-4.0	-9.2	-5.9	-1.4	2.0	-3.8	-1.8	-3.0	-9.8	-4.4
	Pigs	6.0	10.0	-0.5	-4.0	9.2	11.2	5.4	0.8	15.8	5.0	10.0	3.3	5.0
	Sheep and goats	-20.0	0.0	0.0	-2.5	-6.4	-0.5	1.3	-3.2	-	-0.5	-1.0	-3.5	-3.3
	Poultry	10.0	0.0	-0.3	-2.4	-3.5	0.9	-3.5	3.6	15.6	-0.5	-1.4	0.8	0.7
	Animal products	3.1	-3.1	0.4	3.2	-3.0	-1.0	-0.5	-1.1	2.9	0.9	-6.3	0.3	-0.4
	Milk	2.0	2.2	1.3	5.2	0.0	-1.2	-0.5	-1.5	2.9	1.5	-7.8	0.5	0.2
	Eggs	10.0	1.4	-6.9	-2.7	-11.2	0.9	0.0	0.8	-0.8	-3.5	-1.0	-0.5	-3.0
=	Final output	3.0	7.2	-2.9	0.0	-1.2	-4.0	-2.2	-2.9	-3.9	1.0	-8.6	-2.9	-2.1
	Seeds and seedlings	-1.0	-9.9	-4.5	0.0	-3.5	1.0	-12.5	-2.5	-0.8	0.0	-	1.0	-1.4
	Energy and lubricants	-1.0	0.0	-4.0	4.0	-3.4	1.0	2.5	-0.5	-0.6	1.5	-18.3	-3.0	-1.5
	Fertilizers and soil improvers	-3.0	-10.0	-6.0	-4.0	-21.3	-4.5	4.6	-5.8	-3.2	-4.0	-	-4.7	-7.0
	Plant protection products	-5.0	-10.0	-6.0	2.5	-9.2	-10.0	-1.5	-2.2	0.0	-3.0	-29.9	5.8	-7.0
	Feedingstuffs	5.0	3.0	-4.4	-5.0	-2.6	3.5	4.7	-0.2	-4.2	1.5	0.5	2.8	0.5
	Material and small tools ; maintenance and repairs	-1.0	0.0	-5.6	0.0	5.4	-2.0	-0.7	-	0.0	-1.0	-18.6	-3.3	-1.6
	Services	0.0	0.0	-3.2	-0.2	-5.3	3.0	-1.7	-	-	0.0	-10.7	-1.3	-0.7
-	Intermediate consumption	1.8	-0.3	-4.5	-0.7	-3.3	0.1	2.1	-1.1	-0.6	0.4	-9.5	0.0	-1.4

Table A.4

Percentage change in nominal prices of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	2.0	-10.0	-6.7	6.3	4.8	-8.5	0.6	-3.7	1.0	-0.3	2.7	-2.3	-2.9
	Cereals	-21.1	-15.3	-17.3	3.8	0.4	-22.8	-2.7	7.9	-16.4	-22.9	-8.2	-0.1	-10.7
	Potatoes	60.0	-21.0	-22.9	32.5	23.7	32.2	-9.5	-10.0	-6.6	16.0	-7.7	-8.8	3.5
	Sugar beet	-1.6	-2.2	-3.5	8.5	13.7	-0.4	14.4	5.0	-	-5.0	-	-5.7	0.2
	Industrial crops	-0.6	-0.3	17.6	8.7	33.8	26.1	-	-5.7	42.5	8.3	22.3	-7.8	12.0
	Oilseeds and oleaginous fruit (excluding olives)	-3.0	-0.3	24.0	9.5	109.5	36.4	-	-10.0	42.5	7.0	69.2	-8.9	24.6
	Fresh vegetables	2.8	-4.3	5.0	2.6	3.8	1.1	1.8	-9.0	-4.8	-2.5	7.7	2.3	-1.0
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	5.1	-15.8	-8.7	4.4	-3.2	19.6	5.5	-9.1	75.2	-3.5	-6.9	4.7	-2.7
	Grape must and wine	-	-	0.0	-2.8	-3.5	-6.8	-	-5.5	8.7	-	39.0	-	-4.9
	Olive oil	-	-	-	8.9	12.8	-	-	-4.0	-	-	-6.0	-	4.4
	Flowers and ornamentals	0.8	-1.8	0.0	2.0	15.9	2.4	0.0	4.5	-	2.5	-	1.1	3.2
+	Final animal output	-10.0	-10.8	-7.5	9.1	2.0	-4.8	5.6	3.6	-1.2	-10.4	-5.2	6.5	-2.6
	Animals	-14.0	-16.6	-12.7	3.6	0.0	-7.6	5.1	4.9	-1.8	-17.9	-7.0	6.3	-5.4
	Cattle (including calves)	3.0	2.1	1.8	12.3	23.6	2.2	7.6	15.0	6.2	-2.1	7.1	15.5	7.0
	Pigs	-27.9	-23.9	-25.1	-6.5	-13.2	-26.5	-16.6	-7.0	-23.2	-30.0	-27.0	-11.5	-21.4
	Sheep and goats	-6.1	0.0	-5.0	3.4	3.9	-5.3	15.5	3.5	-	-15.0	6.0	16.9	5.3
	Poultry	-3.0	4.4	-1.6	6.5	5.1	-4.2	-6.6	5.0	11.5	-5.0	6.4	5.5	0.9
	Animal products	1.2	1.5	-1.3	17.0	7.2	0.1	6.4	1.3	-0.8	-0.6	-0.8	6.6	1.8
	Milk	0.8	-3.1	-2.0	20.8	5.7	0.4	6.7	0.8	-0.8	-1.0	-6.6	6.9	1.2
	Eggs	3.5	11.3	4.1	4.7	15.1	-3.0	-2.4	3.6	-1.9	2.0	22.1	8.6	5.2
=	Final output	-5.7	-10.5	-7.0	7.1	3.6	-6.6	5.0	-0.8	-0.8	-6.2	-1.9	3.1	-2.7
	Seeds and seedlings	3.0	0.0	-2.3	-9.1	1.2	-7.9	2.0	1.5	2.1	-10.0	-	-1.5	-4.1
	Energy and lubricants	5.7	0.0	1.0	25.3	6.7	2.0	2.4	20.0	1.5	-1.0	5.6	5.0	6.0
	Fertilizers and soil improvers	-2.0	-3.0	-4.6	0.5	-4.5	-4.1	-4.1	4.0	-6.0	-7.0	-	-5.3	-3.3
	Plant protection products	3.5	0.0	3.8	4.8	4.7	0.7	2.3	2.0	0.6	2.0	6.3	2.0	2.3
	Feedingstuffs	-3.4	-2.0	-4.0	13.0	1.1	-1.7	0.0	6.6	-1.0	-5.0	-1.2	4.8	0.2
	Material and small tools ; maintenance and repairs	5.5	3.0	4.3	10.8	4.7	2.0	2.1	0.0	2.9	1.5	6.0	3.8	3.8
	Services	4.1	2.0	7.4	7.9	5.9	1.0	3.0	4.1	0.0	3.0	6.8	6.1	4.3
-	Intermediate consumption	-0.4	-0.3	0.4	12.5	2.8	-1.1	0.0	7.1	-3.8	-3.0	2.4	3.5	1.4

Table A.5

Percentage change in real price of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	-0.8	-11.0	-10.8	-6.4	0.9	-10.9	-2.1	-7.4	-2.1	-2.0	-4.0	-5.1	-6.7
	Cereals	-23.2	-16.2	-20.9	-8.6	-3.4	-24.9	-5.2	3.7	-19.0	-24.1	-14.2	-2.9	-14.0
	Potatoes	55.6	-21.9	-26.3	16.8	19.1	28.6	-11.9	-13.5	-9.4	14.1	-13.7	-11.3	-0.4
	Sugar beet	-4.3	-3.3	-7.7	-4.4	9.4	-3.1	11.4	1.0	-	-6.6	-	-8.3	-3.4
	Industrial crops	-3.3	-1.4	12.5	-4.2	28.7	22.7	-	-9.3	38.1	6.4	14.2	-10.3	5.0
	Oilseeds and oleaginous fruit (excluding olives)	-5.6	-1.4	18.5	-3.5	101.6	32.7	-	-13.5	38.1	5.3	58.1	-11.4	20.5
	Fresh vegetables	0.0	-5.3	0.4	-9.6	-0.1	-1.7	-0.9	-12.5	-7.7	-4.1	0.7	-0.6	-4.8
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	2.2	-16.7	-12.7	-8.0	-6.8	16.4	-2.0	-12.6	69.8	-5.1	-13.0	1.7	-7.0
	Grape must and wine	-	-	-4.4	-14.3	-7.2	-9.3	-	-9.2	5.3	-	29.9	-	-8.2
	Olive oil	-	-	-	-4.1	8.6	-	-	-7.7	-	-	-12.1	-	-1.5
	Flowers and ornamentals	-2.0	-2.9	-4.4	-10.2	11.5	-0.4	-	0.5	-	0.8	-	-1.7	0.0
+	Final animal output	-12.5	-11.7	-11.5	-3.9	-1.8	-7.4	2.9	-0.4	-4.3	-11.9	-11.4	3.5	-6.0
	Animals	-16.3	-17.5	-16.5	-8.7	-3.8	-10.2	2.4	0.9	-4.8	-19.2	-13.1	3.3	-8.7
	Cattle (including calves)	0.2	1.0	-2.7	-1.0	19.0	-0.6	4.9	10.6	2.9	-3.7	0.1	12.2	3.4
	Pigs	-29.9	-24.8	-28.5	-17.6	-16.5	-28.5	-18.9	-10.6	-25.6	-31.2	-31.8	-14.0	-24.0
	Sheep and goats	-8.6	-1.1	-9.2	-8.9	0.1	-7.9	12.5	-0.5	-	-16.4	-0.9	13.6	0.3
	Poultry	-5.6	3.2	-6.0	-6.2	1.1	-6.8	-9.1	1.0	8.0	-6.6	-0.6	2.5	-2.6
	Animal products	-1.6	0.4	-5.7	3.1	3.3	-2.6	3.7	-2.6	-3.9	-2.3	-7.3	3.6	-1.7
	Milk	-2.0	-4.2	-6.3	6.4	1.7	-2.3	3.9	-3.1	-3.9	-2.6	-12.7	3.9	-2.3
	Eggs	0.7	9.9	-0.5	-7.8	10.8	-5.6	-5.0	-0.4	-5.0	0.3	14.1	5.6	1.2
=	Final output	-8.3	-11.5	-11.1	-5.6	-0.3	-9.1	2.2	-4.6	-3.9	-7.8	-8.3	0.2	-6.3
	Seeds and seedlings	0.2	-1.1	-6.6	-19.9	-2.6	-10.4	-0.6	-2.4	-1.1	-11.5	-	-4.3	-7.3
	Energy and lubricants	2.8	-1.1	-3.4	10.4	2.7	-0.8	-0.3	15.4	-1.7	-2.7	-1.3	1.9	1.7
	Fertilizers and soil improvers	-4.7	-4.1	-8.8	-11.4	-8.1	-6.7	-6.6	0.0	-9.0	-8.5	-	-7.9	-6.6
	Plant protection products	0.7	-1.1	-0.8	-7.7	0.8	-2.0	-0.4	-1.9	-2.5	0.3	-0.7	-1.0	-1.4
	Feedingstuffs	-6.0	-3.1	-8.3	-0.4	-2.7	-4.4	-2.5	2.5	-4.1	-6.6	-7.7	1.8	-3.2
	Material and small tools ; maintenance and repairs	2.6	1.9	-0.3	-2.4	0.8	-0.8	-0.6	-	-0.3	-0.2	-0.9	0.9	0.2
	Services	1.3	0.9	2.7	-4.9	1.9	-1.7	0.2	-	-	1.3	-0.2	3.1	0.9
-	Intermediate consumption	-3.1	-1.4	-4.0	-0.9	-1.1	-3.8	-2.6	3.0	-6.8	-4.6	-4.3	0.6	-2.1

Table A.6

Percentage change in nominal value of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	2.4	8.4	-11.3	6.6	2.9	-15.1	-12.3	-8.8	-21.8	0.1	-16.1	-6.7	-6.8
	Cereals	-17.6	24.4	-12.7	6.5	29.2	-31.1	-23.8	6.1	-19.7	-17.4	-1.3	-11.3	-12.0
	Potatoes	46.8	-25.2	-27.0	20.6	-6.7	20.2	-16.8	-28.0	-12.6	17.2	-31.7	-16.1	-8.5
	Sugar beet	6.2	30.7	4.8	2.9	29.6	0.2	-1.7	-14.9	-	-7.4	-	-13.3	1.2
	Industrial crops	-0.7	-0.3	24.8	10.2	0.7	16.5	-	-13.7	179.0	-11.8	-18.1	-8.3	6.3
	Oilseeds and oleaginous fruit (excluding olives)	-21.1	-0.3	29.7	-51.1	83.1	17.2	-	-27.1	179.0	-30.4	48.9	-9.8	13.9
	Fresh vegetables	1.0	-10.2	3.1	0.6	1.1	-0.2	0.2	-18.1	-8.1	-3.9	0.3	5.2	-5.1
	Fresh fruit (with citrus fruit tropical fruit and grapes)	3.2	-15.7	-43.2	6.4	-7.1	7.7	-15.0	-16.4	20.9	13.9	-22.9	-0.2	-13.5
	Grape must and wine	-	-	-13.6	-5.2	-26.3	-16.7	-	-14.4	-32.2	-	-18.2	-	-16.4
	Olive oil	-	-	-	8.8	18.6	-	-	20.0	-	-	-32.9	-	14.5
	Flowers and ornamentals	0.8	-2.4	1.3	2.0	15.9	2.4	-	6.4	-	3.0	-	2.6	4.0
+	Final animal output	-5.7	-8.8	-8.8	8.3	1.5	-5.1	5.1	4.5	0.8	-9.1	-5.4	4.5	-2.7
	Animals	-9.3	-12.4	-15.2	0.2	0.5	-7.6	4.5	7.0	-0.9	-16.4	-4.7	2.7	-5.3
	Cattle (including calves)	7.1	-4.7	-4.7	7.8	12.2	-3.8	6.2	17.3	2.2	-3.8	3.9	4.2	2.2
	Pigs	-23.6	-16.3	-25.5	-10.2	-5.2	-18.3	-12.2	-6.3	-11.1	-26.5	-19.7	-8.6	-17.5
	Sheep and goats	-24.8	0.0	-5.0	0.8	-2.7	-5.8	17.0	0.2	-	-15.4	4.9	12.8	1.8
	Poultry	6.7	4.4	-2.0	3.9	1.4	-3.3	-9.9	8.8	28.9	-5.5	4.9	6.3	1.7
	Animal products	4.3	-1.7	-1.0	20.7	4.1	-0.9	6.0	0.2	2.0	0.2	-7.1	6.9	1.4
	Milk	2.8	-2.3	-0.8	27.1	5.7	-0.8	6.2	-0.7	2.1	0.5	-13.9	7.4	1.4
	Eggs	13.9	12.7	-3.1	1.8	2.2	-2.1	-2.4	4.4	-2.7	-1.6	20.9	8.1	2.1
=	Final output	-2.8	-4.0	-9.7	7.1	2.3	-10.4	2.7	-3.7	-4.7	-5.3	-10.3	0.1	-4.7
	Seeds and seedlings	2.0	-9.9	-6.7	-9.1	-2.3	-7.0	-10.7	-1.0	1.2	-10.0	-	-0.5	-5.5
	Energy and lubricants	4.6	0.0	-3.0	30.3	3.1	3.0	5.0	19.4	0.8	0.5	-13.7	1.8	4.3
	Fertilizers and soil improvers	-4.9	-12.7	-10.3	-3.5	-24.8	-8.4	0.3	-2.0	-9.1	-10.7	-	-9.7	-10.0
	Plant protection products	-1.6	-10.0	-2.4	7.4	-4.9	-9.4	0.8	-0.2	0.6	-1.1	-25.5	7.8	-4.9
	Feedingstuffs	1.4	1.0	-8.3	7.3	-1.5	1.7	4.8	6.4	-5.2	-3.6	-0.7	7.7	0.7
	Material and small tools ; maintenance and repairs	4.4	3.0	-1.5	10.7	10.4	0.0	1.4	-	2.9	0.5	-13.7	0.4	2.1
	Services	4.1	2.0	4.0	7.7	0.3	4.0	1.2	-	-	3.0	-4.6	4.7	3.5
-	Intermediate consumption	1.4	-0.6	-4.1	11.7	-0.6	-1.0	2.1	5.9	-4.3	-2.6	-7.3	3.5	0.0

Table A.6 (continued)

Percentage change in nominal value of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
=	Gross value added at market prices	-8.9	-8.3	-15.7	5.5	5.1	-18.2	3.0	-7.3	-5.0	-8.1	-13.7	-3.8	-8.5
+	Subsidies	55.6	199.2	5.5	49.9	96.6	109.9	4.1	23.7	13.4	6.1	30.0	113.4	49.9
-	Taxes linked to production	-90.5	-22.6	5.2	41.3	-29.0	-29.0	-3.1	4.4	-0.6	-3.9	-10.3	-47.0	-14.0
=	Gross value added at factor cost	-2.3	3.8	-11.3	10.8	17.4	-4.5	3.3	-3.8	-2.1	-7.9	-5.4	12.9	-0.6
-	Depreciation	2.5	0.0	1.5	11.0	-17.1	1.0	-0.3	4.0	4.9	3.0	5.7	-2.6	1.2
=	Net value added at factor cost	-3.4	5.5	-17.9	10.8	21.2	-5.6	3.9	-7.1	-4.8	-11.6	-6.9	17.6	-1.2
-	Rent and other payments in cash or in kind	9.0	0.0	5.5	10.0	-4.0	0.7	0.0	-7.5	4.8	-0.5	-2.5	3.3	1.4
-	Interest	6.0	0.0	-0.2	13.6	8.5	-4.7	-15.5	-11.5	1.7	-5.0	-2.8	-32.0	-4.2
=	Net income from agricultural activity of total labour input	-6.5	18.4	-24.0	10.6	26.1	-6.2	6.4	-6.5	-7.1	-13.8	-8.3	26.3	-0.8
-	Compensation of employees	4.0	0.3	4.0	10.0	-3.2	2.3	3.4	-1.8	16.8	3.5	3.8	2.1	0.6
=	Net income from agricultural activity of family labour input	-7.8	61.8	-42.0	10.7	36.8	-8.7	6.8	-11.4	-8.8	-21.1	-12.8	40.8	-1.5

Table A.7

Percentage change in real value of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	-0.4	7.2	-15.2	-6.1	-0.9	-17.4	-14.6	-12.3	-24.2	-1.6	-21.6	-9.3	-10.5
	Cereals	-19.8	23.0	-16.5	-6.1	24.3	-33.0	-25.8	2.0	-22.2	-18.7	-7.8	-13.8	-15.2
	Potatoes	42.8	-26.0	-30.2	6.2	-10.2	16.9	-19.0	-30.8	-15.3	15.2	-36.2	-18.4	-11.9
	Sugar beet	3.3	29.3	0.2	-9.3	24.7	-2.5	-4.3	-18.2	-	-8.9	-	-15.7	-2.4
	Industrial crops	-3.4	-1.4	19.3	-2.9	-3.1	13.4	-2.6	-17.1	170.3	-13.3	-23.5	-10.9	-0.3
	Oilseeds and oleaginous fruit (excluding olives)	-23.2	-1.4	24.0	-56.9	76.2	14.0	-	-29.9	170.3	-31.6	39.1	-12.3	10.1
	Fresh vegetables	-1.7	-11.2	-1.4	-11.4	-2.7	-2.9	-2.4	-21.2	-10.9	-5.5	-6.3	2.2	-8.8
	Fresh fruit (with citrus fruit tropical fruit and grapes)	0.4	-16.6	-45.7	-6.2	-10.6	4.8	-21.1	-19.6	17.2	11.9	-27.9	-3.1	-17.4
	Grape must and wine	-	-	-17.4	-16.4	-29.1	-19.0	-	-17.7	-34.3	-	-23.6	-	-19.3
	Olive oil	-	-	-	-4.1	14.1	-	-	15.4	-	-	-37.3	-	8.1
	Flowers and ornamentals	-2.0	-3.5	-3.2	-10.2	11.5	-0.4	-	2.3	-	1.3	-	-0.3	0.8
+	Final animal output	-8.3	-9.8	-12.8	-4.6	-2.3	-7.7	2.3	0.5	-2.4	-10.6	-11.6	1.6	-6.1
	Animals	-11.8	-13.4	-18.9	-11.7	-3.3	-10.1	1.8	2.9	-4.0	-17.8	-10.9	-0.2	-8.6
	Cattle (including calves)	4.2	-5.7	-8.9	-5.0	8.0	-6.4	3.4	12.8	-1.0	-5.4	-2.9	1.2	-1.2
	Pigs	-25.7	-17.2	-28.8	-20.9	-8.8	-20.5	-14.5	-9.9	-13.9	-27.7	-25.0	-11.2	-20.2
	Sheep and goats	-26.9	-1.1	-9.2	-11.2	-6.4	-8.3	13.9	-3.7	-	-16.8	-1.9	9.6	-3.0
	Poultry	3.8	3.2	-6.3	-8.4	-2.4	-6.0	-12.3	4.6	24.9	-7.1	-1.9	3.3	-1.9
	Animal products	1.5	-2.7	-5.3	6.4	0.2	-3.6	3.2	-3.7	-1.2	-1.4	-13.2	3.9	-2.1
	Milk	0.0	-3.4	-5.1	12.0	1.7	-3.5	3.4	-4.5	-1.1	-1.2	-19.5	4.4	-2.1
	Eggs	10.7	11.5	-7.4	-10.3	-1.6	-4.8	-5.0	0.4	-5.7	-3.2	13.0	5.0	-1.8
=	Final output	-5.5	-5.1	-13.7	-5.7	-1.5	-12.8	0.0	-7.4	-7.7	-6.9	-16.2	-2.7	-8.3
	Seeds and seedlings	-0.8	-10.8	-10.8	-19.9	-6.0	-9.5	-13.0	-4.8	-1.9	-11.5	-	-3.3	-8.6
	Energy and lubricants	1.8	-1.1	-7.3	14.8	-0.8	0.2	2.2	14.8	-2.3	-1.2	-19.4	-1.1	0.2
	Fertilizers and soil improvers	-7.5	-13.6	-14.3	-15.0	-27.7	-10.9	-2.3	-5.8	-11.9	-12.2	-	-12.3	-13.1
	Plant protection products	-4.3	-10.9	-6.7	-5.4	-8.5	-11.8	-1.9	-4.0	-2.5	-2.8	-30.4	4.8	-8.3
	Feedingstuffs	-1.3	-0.1	-12.3	-5.4	-5.2	-1.0	2.0	2.3	-8.1	-5.2	-7.2	4.7	-2.7
	Material and small tools ; maintenance and repairs	1.6	1.9	-5.9	-2.4	6.2	-2.8	-1.3	-	-0.3	-1.2	-19.4	-2.5	-1.5
	Services	1.3	0.9	-0.6	-5.1	-3.5	1.2	-1.5	-0.4	-	1.3	-10.9	1.8	0.2
-	Intermediate consumption	-1.3	-1.7	-8.3	-1.6	-4.3	-3.7	-0.6	1.8	-7.3	-4.2	-13.4	0.6	-3.5

Table A.7 (continued)

Percentage change in real value of 1993 over 1992

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
=	Gross value added at market prices	-11.3	-9.3	-19.4	-7.0	1.2	-20.4	0.3	-10.9	-8.0	-9.6	-19.3	-6.5	-12.1
+	Subsidies	51.4	196.0	0.9	32.1	89.2	104.2	1.4	19.0	9.9	4.3	21.5	107.4	43.9
-	Taxes linked to production	-90.7	-23.4	0.6	24.5	-31.7	-30.9	-5.6	0.4	-3.7	-5.5	-16.1	-48.5	-17.3
=	Gross value added at factor cost	-5.0	2.7	-15.2	-2.4	13.0	-7.1	0.6	-7.5	-5.1	-9.5	-11.6	9.7	-4.5
-	Depreciation	-0.3	-1.1	-2.9	-2.2	-20.2	-1.8	-2.9	0.0	1.6	1.3	-1.2	-5.4	-2.4
=	Net value added at factor cost	-6.0	4.3	-21.5	-2.4	16.7	-8.2	1.2	-10.7	-7.7	-13.1	-13.0	14.3	-5.2
-	Rent and other payments in cash or in kind	6.0	-1.1	0.8	-3.1	-7.6	-2.1	-2.6	-11.1	1.6	-2.2	-8.9	0.4	-2.6
-	Interest	3.1	-1.1	-4.6	0.1	4.4	-7.3	-17.7	-14.9	-1.4	-6.6	-9.2	-33.9	-7.6
=	Net income from agricultural activity of total labour input	-9.0	17.1	-27.3	-2.5	21.4	-8.8	3.6	-10.1	-10.0	-15.3	-14.3	22.7	-4.9
-	Compensation of employees	1.2	-0.8	-	-3.1	-6.8	-0.5	0.7	-5.6	13.2	1.8	-3.0	-0.7	-
=	Net income from agricultural activity of family labour input	-10.3	60.1	-	-2.5	31.6	-11.2	4.0	-14.9	-11.6	-22.4	-18.5	36.8	-

Table A.8 **Belgique/België**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	66.1	46.1	143.3	139.9	102.5
1974	57.3	51.9	110.2	134.5	82.0
1975	64.3	58.2	110.4	128.8	85.8
1976	77.6	62.6	123.8	122.5	101.1
1977	66.4	67.2	98.6	117.2	84.1
1978	72.3	70.2	102.8	113.4	90.7
1979	68.1	73.4	92.7	112.9	82.2
1980	71.9	76.2	94.2	108.5	86.8
1981	80.3	79.7	100.4	105.5	95.3
1982	88.8	85.4	103.7	103.4	100.3
1983	100.5	90.2	111.2	102.7	108.3
1984	101.2	94.9	106.5	102.0	104.4
1985	99.8	100.6	99.0	99.6	99.5
1986	99.0	104.5	94.5	98.4	96.2
1987	92.5	106.9	86.3	95.4	90.5
1988	98.6	108.8	90.4	92.3	98.0
1989	126.0	113.8	110.5	90.1	122.6
1990	115.7	117.3	98.4	87.9	112.1
1991	115.3	120.5	95.5	85.2	112.2
1992	105.2	124.6	84.2	82.6	102.0
1993	101.6	128.1	79.2	78.2	101.3
% 93/92	-3.4	2.8	-6.0	-5.3	-0.7

(1) AWU : Annual Work Unit

Table A.9 **Danmark**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	37.9	35.6	106.3	163.9	64.9
1974	38.9	40.3	96.4	152.5	63.3
1975	34.9	45.3	76.9	145.5	52.9
1976	38.1	49.4	77.1	140.9	54.7
1977	46.8	54.1	86.4	135.4	63.9
1978	53.8	59.4	90.4	130.2	69.5
1979	48.2	63.9	75.4	124.9	60.4
1980	53.8	69.2	77.7	119.0	65.3
1981	64.8	76.1	85.0	113.7	74.8
1982	83.6	84.2	99.2	109.6	90.5
1983	75.3	90.6	82.9	107.1	77.5
1984	102.9	95.7	107.3	104.1	103.2
1985	95.6	99.9	95.6	99.2	96.4
1986	101.5	104.4	97.1	96.7	100.4
1987	81.1	109.3	74.1	90.9	81.5
1988	83.2	113.0	73.5	87.4	84.2
1989	101.0	117.8	85.6	85.2	100.5
1990	95.9	120.8	79.3	82.4	96.3
1991	87.8	123.9	70.8	80.2	88.3
1992	75.5	126.2	59.7	77.8	76.9
1993	79.7	127.6	62.3	76.2	81.8
% 93/92	5.5	1.1	4.3	-2.0	6.5

(1) AWU : Annual Work Unit

Table A.10 **Deutschland (1)**

Major components of the calculation of indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (2)	Real net value added at factor cost per AWU
1973	104.2	61.6	169.2	138.6	122.0
1974	91.3	66.0	138.4	132.8	104.2
1975	107.0	69.7	153.5	129.5	118.5
1976	112.2	72.2	155.4	126.3	123.0
1977	105.9	74.9	141.4	120.0	117.9
1978	103.6	78.1	132.6	117.4	113.0
1979	91.6	81.1	113.0	111.6	101.2
1980	83.9	85.1	98.6	109.4	90.1
1981	86.9	88.7	98.0	108.0	90.8
1982	108.1	92.6	116.7	105.4	110.6
1983	87.7	95.6	91.8	102.8	89.3
1984	101.0	97.6	103.5	101.1	102.3
1985	92.4	99.6	92.8	100.2	92.6
1986	106.6	102.8	103.7	98.7	105.1
1987	85.2	104.7	81.3	92.7	87.8
1988	105.3	106.3	99.0	91.0	108.8
1989	122.0	108.9	112.1	85.9	130.4
1990	107.0	112.3	95.3	83.6	114.0
1991	98.4	116.7	84.3	79.4	106.2
1992	95.5	122.9	77.7	75.9	102.3
1993	72.5	127.2	56.4	72.0	79.1
% 93/92	-24.1	3.5	-27.4	-5.1	-22.7

(1) Germany in its boundaries prior to 3 October 1990.
(2) AWU : Annual Work Unit

Table A.11 **Ellada**

Major components of the calculation of indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	12.5	14.1	89.1	121.9	73.1
1974	14.4	17.0	84.7	119.3	71.0
1975	16.1	19.1	84.4	116.6	72.4
1976	19.8	22.0	89.6	114.1	78.5
1977	21.0	24.9	84.2	111.6	75.4
1978	26.2	28.1	93.1	109.1	85.3
1979	28.8	33.4	88.2	106.8	80.8
1980	37.7	39.3	96.0	104.4	92.0
1981	46.8	47.0	99.5	102.1	97.4
1982	59.4	58.8	101.0	100.9	100.1
1983	63.8	70.1	91.0	100.1	90.9
1984	83.5	84.3	99.0	100.3	98.8
1985	102.2	99.2	103.0	101.7	101.3
1986	114.3	116.5	98.0	98.1	99.9
1987	122.8	133.2	92.2	92.7	99.4
1988	150.3	153.9	97.6	90.4	108.0
1989	177.7	173.1	102.5	84.1	121.9
1990	182.0	209.3	86.9	82.2	105.8
1991	265.2	246.0	107.7	74.7	144.3
1992	265.2	282.7	93.7	78.4	119.6
1993	293.8	320.8	91.5	76.6	119.5
% 93/92	10.8	13.5	-2.4	-2.3	-0.1

(1) AWU : Annual Work Unit

Table A.12 **Espana**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	27.8	18.4	150.7	195.5	77.1
1974	26.8	21.3	125.0	189.0	66.1
1975	32.6	24.9	130.5	175.6	74.4
1976	37.5	29.0	128.7	161.9	79.6
1977	49.0	35.8	136.3	150.9	90.4
1978	58.0	43.2	133.7	146.2	91.5
1979	57.8	50.5	114.1	136.7	83.5
1980	65.4	57.3	113.7	125.9	90.3
1981	59.3	64.5	91.6	114.6	80.0
1982	75.1	73.5	101.9	110.4	92.4
1983	82.7	82.1	100.4	109.0	92.2
1984	95.8	91.7	104.2	103.4	100.8
1985	101.9	98.7	102.9	100.2	102.7
1986	102.3	109.6	92.9	96.5	96.4
1987	111.5	116.0	95.7	93.8	102.1
1988	131.5	122.6	106.9	91.8	116.5
1989	132.2	131.3	100.3	87.6	114.6
1990	142.1	141.0	100.4	82.5	121.8
1991	142.4	150.9	94.0	74.1	127.0
1992	127.3	160.7	78.9	70.4	112.1
1993	154.3	166.9	92.1	67.1	137.4
% 93/92	21.2	3.9	16.7	-4.8	22.5

(1) AWU : Annual Work Unit

Table A.13 **France**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	47.2	31.0	151.8	137.2	110.6
1974	47.3	34.8	135.6	132.8	102.0
1975	48.0	39.4	121.7	128.4	94.8
1976	51.6	43.7	117.9	125.6	93.8
1977	53.7	47.6	112.7	123.1	91.6
1978	60.3	52.4	115.0	121.1	95.0
1979	67.0	57.7	115.9	119.2	97.2
1980	65.9	64.5	102.2	116.2	88.0
1981	74.0	71.8	103.0	113.0	91.2
1982	95.3	80.4	118.4	110.0	107.6
1983	94.5	88.1	107.1	106.8	100.3
1984	97.5	94.5	103.0	103.6	99.4
1985	100.2	100.1	100.0	100.0	100.0
1986	102.3	105.4	97.0	96.5	100.5
1987	102.6	108.6	94.4	93.0	101.5
1988	100.0	111.9	89.2	89.6	99.6
1989	116.8	115.9	100.7	85.4	117.9
1990	122.0	119.5	102.0	81.3	125.4
1991	113.2	123.0	91.9	78.5	117.1
1992	111.7	125.6	88.8	75.7	117.2
1993	105.4	129.2	81.5	72.0	113.3
% 93/92	-5.6	2.8	-8.2	-5.0	-3.4

(1) AWU : Annual Work Unit

Table A.14 **Ireland**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	28.8	23.6	121.5	127.8	95.2
1974	26.8	25.1	106.5	122.3	87.2
1975	38.5	30.1	127.2	119.1	106.9
1976	43.4	36.4	118.4	116.7	101.6
1977	59.3	41.3	142.9	114.5	125.0
1978	66.4	45.6	145.0	112.0	129.5
1979	61.3	51.9	117.6	109.1	108.0
1980	55.9	59.5	93.5	106.2	88.1
1981	64.6	69.9	92.0	104.1	88.4
1982	79.8	80.5	98.7	102.4	96.5
1983	91.3	89.1	102.1	101.3	100.9
1984	107.9	94.8	113.3	101.2	112.1
1985	98.7	99.7	98.6	101.2	97.5
1986	93.4	105.5	88.1	97.6	90.4
1987	112.0	108.0	103.3	93.4	110.7
1988	132.0	111.3	118.0	91.0	129.8
1989	138.5	116.4	118.4	89.2	133.0
1990	137.1	114.5	119.2	87.3	136.7
1991	125.9	115.6	108.4	84.2	129.0
1992	148.3	116.8	126.4	82.0	154.4
1993	154.1	120.0	127.9	80.3	159.4
% 93/92	3.9	2.7	1.2	-2.0	3.3

(1) AWU : Annual Work Unit

Table A.15 **Italia**

Major components of the calculation of Indicator 1
(Indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	21.1	16.5	127.5	135.1	94.4
1974	23.1	19.8	116.0	132.3	87.7
1975	26.5	23.1	114.7	127.2	90.1
1976	29.4	27.3	107.2	127.2	84.3
1977	35.4	32.4	109.0	122.7	88.9
1978	40.8	37.0	110.2	122.7	89.8
1979	49.5	42.7	115.7	120.7	95.8
1980	65.4	51.3	127.2	116.5	109.2
1981	71.3	61.1	116.4	109.1	106.7
1982	79.1	71.6	110.2	102.8	107.2
1983	97.3	82.4	117.8	104.9	112.3
1984	96.2	91.9	104.3	103.0	101.3
1985	100.4	100.1	100.1	98.9	101.2
1986	103.4	108.0	95.6	98.1	97.5
1987	108.8	114.4	94.9	96.1	98.8
1988	104.6	122.0	85.5	91.7	93.3
1989	112.3	129.6	86.5	87.0	99.4
1990	109.2	139.5	78.1	85.4	91.5
1991	126.1	149.8	84.0	85.5	98.3
1992	118.4	156.8	75.4	81.7	92.3
1993	110.0	163.1	67.3	78.6	85.7
% 93/92	-7.1	4.0	-10.7	-3.8	-7.1

(1) AWU : Annual Work Unit

Table A.16 **Luxembourg**

Major components of the calculation of Indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	56.7	46.0	123.3	174.8	70.5
1974	53.1	53.8	98.7	167,9	58.7
1975	54.6	53.3	102.3	158.3	64.6
1976	50.9	59.9	85.0	148.6	57.2
1977	62.9	60.6	103.9	145.9	71.2
1978	62.8	63.7	98.6	139.0	70.9
1979	66.6	67.7	98.4	133.5	73.6
1980	63.3	73.1	86.6	126.6	68.3
1981	71.5	78.3	91.3	118.3	77.1
1982	106.0	86.8	122.1	114.2	106.8
1983	94.0	92.7	101.4	108.7	93.2
1984	96.6	96.8	99.7	103.2	96.6
1985	100.2	99.7	100.6	100.5	100.0
1986	103.2	103.5	99.7	96.3	103.4
1987	100.2	102.5	97.8	92.2	105.9
1988	102.2	106.6	95.9	88.1	108.8
1989	121.1	112.9	107.2	86.7	123.6
1990	111.8	116.3	96.1	82.6	116.3
1991	96.7	119.7	80.7	79.8	101.1
1992	97.6	125.1	78.0	81.0	96.2
1993	93.0	129.2	72.0	79.7	90.2
% 93/92	-4.8	3.2	-7.7	-1.6	-6.2

(1) AWU : Annual Work Unit

Table A.17 **Nederland**

Major components of the calculation of Indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	55.9	52.6	106.3	116.8	91.0
1974	50.6	57.4	88.2	114.7	76.9
1975	59.4	63.2	93.9	113.3	82.8
1976	69.5	68.9	100.8	111.7	90.2
1977	68.5	73.5	93.2	108.6	85.9
1978	69.5	77.5	89.7	106.1	84.6
1979	65.8	80.5	81.7	104.7	78.0
1980	66.4	85.1	78.0	103.8	75.1
1981	84.2	89.7	93.9	101.8	92.2
1982	93.3	95.1	98.0	101.3	96.8
1983	91.7	96.9	94.6	101.4	93.3
1984	100.2	98.7	101.5	100.7	100.7
1985	96.3	100.6	95.7	100.2	95.5
1986	103.5	100.7	102.8	99.1	103.7
1987	84.4	100.2	84.2	98.2	85.8
1988	87.7	101.4	86.5	96.9	89.3
1989	105.0	102.6	102.3	97.0	105.5
1990	102.8	105.0	97.9	96.7	101.3
1991	105.1	107.9	97.4	96.7	100.7
1992	94.1	110.6	85.0	97.6	87.1
1993	83.2	112.5	73.9	96.1	76.9
% 93/92	-11.6	1.7	-13.1	-1.5	-11.7

(1) AWU : Annual Work Unit

Table A.18 **Portugal**

Major components of the calculation of indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	:	10.3	:	136.9	:
1974	:	11.8	:	133.9	:
1975	:	13.7	:	130.8	:
1976	:	14.5	:	133.0	:
1977	:	20.3	:	129.0	:
1978	:	24.9	:	122.1	:
1979	:	30.2	:	121.9	:
1980	42.9	36.3	118.0	121.0	97.4
1981	44.9	42.5	105.3	114.3	92.0
1982	58.5	51.3	113.8	110.6	102.8
1983	65.0	64.5	100.6	101.9	98.6
1984	83.3	81.7	101.8	102.4	99.3
1985	100.6	100.2	100.1	102.8	97.4
1986	116.1	118.1	98.1	94.8	103.3
1987	131.7	131.1	100.2	99.0	101.2
1988	118.4	145.4	81.3	94.7	85.7
1989	148.5	162.0	91.5	90.0	101.6
1990	170.1	190.0	89.4	84.5	105.7
1991	175.9	218.6	80.3	83.9	95.6
1992	181.2	248.0	65.8	78.8	82.3
1993	150.1	265.3	57.3	76.7	73.5
% 93/92	-6.9	7.0	-13.0	-2.6	-10.7

(1) AWU : Annual Work Unit

Table A.19 **United Kingdom**

Major components of the calculation of indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	36.8	24.7	147.2	120.7	122.1
1974	37.0	28.4	128.6	116.0	110.9
1975	43.7	36.1	119.6	112.9	106.0
1976	55.4	41.6	131.7	113.8	115.8
1977	58.2	47.4	121.5	112.5	108.0
1978	61.3	52.9	114.6	112.2	102.1
1979	66.5	60.5	108.5	109.9	98.8
1980	71.7	72.3	98.8	107.1	92.3
1981	82.9	80.6	102.6	104.7	98.0
1982	95.7	86.7	110.0	103.5	106.3
1983	89.6	91.1	98.0	102.7	95.5
1984	110.4	95.1	115.6	100.9	114.6
1985	91.9	100.8	90.8	100.4	90.5
1986	97.8	104.1	93.6	98.7	94.9
1987	100.7	109.2	91.8	96.4	95.3
1988	94.9	115.9	81.6	94.4	86.5
1989	111.2	124.1	89.3	91.9	97.2
1990	118.1	132.1	89.1	89.9	99.2
1991	115.9	140.7	82.1	87.6	93.8
1992	126.1	146.9	85.5	86.2	99.2
1993	148.3	151.1	97.7	85.6	114.2
% 93/92	17.6	2.9	14.3	-0.7	15.1

(1) AWU : Annual Work Unit

Major components of the calculation of Indicator 1
(indices, 1984-1986=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (2)	Real net value added at factor cost per AWU
1973	:	:	:	:	:
1974	:	:	:	:	:
1975	:	:	:	:	:
1976	:	:	:	:	:
1977	:	:	:	:	:
1978	:	:	:	:	:
1979	:	:	:	:	:
1980	75.1	:	105.9	115.2	91.9
1981	80.5	:	102.7	109.7	93.6
1982	94.2	:	109.6	106.0	103.4
1983	93.2	:	103.7	104.5	99.2
1984	100.4	:	104.6	102.4	102.2
1985	99.0	:	98.6	100.2	98.4
1986	100.6	:	96.8	97.3	99.5
1987	97.5	:	91.8	94.8	96.8
1988	101.1	:	91.2	91.7	99.5
1989	114.5	:	97.7	87.3	111.9
1990	114.1	:	92.4	84.3	109.7
1991	116.6	:	89.8	81.2	110.5
1992	110.1	:	82.6	78.6	105.1
1993	109.0	:	78.4	75.7	103.6
% 93/92	-1.0	:	-5.0	-3.7	-1.4

(1) Germany in its boundaries prior to 3 October 1990.
(2) AWU : Annual Work Unit

Indices of real net value added at factor cost of total labour input per annual work unit (AWU) from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	102.5	64.9	122.0	73.1	77.1	110.6	95.2	94.4	70.5	91.0	:	122.1	:
1974	82.0	63.3	104.2	71.0	66.1	102.0	87.2	87.7	58.7	76.9	:	110.9	:
1975	85.8	52.9	118.5	72.4	74.4	94.8	106.9	90.1	64.6	82.8	:	106.0	:
1976	101.1	54.7	123.0	78.5	79.6	93.8	101.6	84.3	57.2	90.2	:	115.8	:
1977	84.1	63.9	117.9	75.4	90.4	91.6	125.0	88.9	71.2	85.9	:	108.0	:
1978	90.7	69.5	113.0	85.3	91.5	95.0	129.5	89.8	70.9	84.6	:	102.1	:
1979	82.2	60.4	101.2	80.8	83.5	97.2	108.0	95.8	73.6	78.0	:	98.8	:
1980	86.8	65.3	90.1	92.0	90.3	88.0	88.1	109.2	68.3	75.1	97.4	92.3	91.9
1981	95.3	74.8	90.8	97.4	80.0	91.2	88.4	106.7	77.1	92.2	92.0	98.0	93.6
1982	100.3	90.5	110.6	100.1	92.4	107.6	96.5	107.2	106.8	96.8	102.8	106.3	103.4
1983	108.3	77.5	89.3	90.9	92.2	100.3	100.9	112.3	93.2	93.3	98.6	95.5	99.2
1984	104.4	103.2	102.3	98.8	100.8	99.4	112.1	101.3	96.6	100.7	99.3	114.6	102.2
1985	99.5	96.4	92.6	101.3	102.7	100.0	97.5	101.2	100.0	95.5	97.4	90.5	98.4
1986	96.2	100.4	105.1	99.9	96.4	100.5	90.4	97.5	103.4	103.7	103.3	94.9	99.5
1987	90.5	81.5	87.8	99.4	102.1	101.5	110.7	98.8	105.9	85.8	101.2	95.3	96.8
1988	98.0	84.2	108.8	108.0	116.5	99.6	129.8	93.3	108.8	89.3	85.7	86.5	99.5
1989	122.6	100.5	130.4	121.9	114.6	117.9	133.0	99.4	123.6	105.5	101.6	97.2	111.9
1990	112.1	96.3	114.0	105.8	121.8	125.4	136.7	91.5	116.3	101.3	105.7	99.2	109.7
1991	112.2	88.3	106.2	144.3	127.0	117.1	129.0	98.3	101.1	100.7	95.6	93.8	110.5
1992	102.0	76.9	102.3	119.6	112.1	117.2	154.4	92.3	96.2	87.1	82.3	99.2	105.1
1993	101.3	81.8	79.1	119.5	137.4	113.3	159.4	85.7	90.2	76.9	73.5	114.2	103.6
% 93/92	-0.7	6.5	-22.7	-0.1	22.5	-3.4	3.3	-7.1	-6.2	-11.7	-10.7	15.1	-1.4

(1) Germany in its boundaries prior to 3 October 1990.

Table A.22 **Indicator 2**

Indices of real net income from agricultural activity of total labour input per annual work unit (AWU) from 1973 to 1993, 1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	110.6	87.7	141.9	78.3	82.6	119.5	106.4	103.4	74.3	99.1	:	140.1	:
1974	87.7	81.3	117.1	75.3	68.9	109.0	93.6	95.3	60.6	81.0	:	124.1	:
1975	92.2	59.9	137.4	76.3	77.6	99.8	117.7	97.2	65.8	88.2	:	120.8	:
1976	110.4	59.2	143.2	82.9	82.3	97.8	110.7	89.7	55.6	96.5	:	133.0	:
1977	88.6	69.3	135.5	78.7	94.4	94.8	137.2	94.1	71.0	90.2	:	123.4	:
1978	94.0	71.8	128.2	89.1	96.0	98.2	139.9	94.3	71.1	86.4	:	114.7	:
1979	82.8	43.8	109.5	82.4	85.7	100.4	104.3	99.9	74.4	75.4	:	104.5	:
1980	86.2	38.6	91.9	93.9	92.7	89.1	77.5	113.8	67.7	69.1	107.4	92.7	93.5
1981	95.8	47.2	90.1	100.6	77.9	92.6	78.7	109.1	76.5	87.6	97.4	101.0	94.0
1982	102.0	76.2	116.1	103.5	92.5	112.0	87.0	108.7	110.9	94.1	106.3	110.8	105.3
1983	111.0	56.1	86.2	92.3	91.6	101.3	96.6	114.6	94.2	92.3	95.4	98.6	99.9
1984	105.7	104.3	103.0	99.3	101.5	99.6	112.5	102.0	96.9	101.5	96.5	120.1	103.0
1985	98.4	94.1	89.6	100.7	103.0	100.0	97.4	101.1	100.1	94.7	97.9	86.6	97.7
1986	95.9	101.6	107.5	100.1	95.4	100.5	90.1	96.9	103.0	103.9	105.6	93.3	99.3
1987	89.2	59.4	82.6	99.7	101.9	102.4	115.6	98.7	105.3	81.7	101.7	96.0	96.3
1988	96.2	60.0	110.8	109.7	119.0	99.1	140.1	91.7	107.8	85.9	84.1	84.7	99.0
1989	125.9	88.7	138.8	125.0	110.1	120.4	140.5	98.3	124.1	103.8	101.5	93.0	112.0
1990	111.2	81.1	116.1	106.9	119.1	129.1	140.5	90.3	112.4	96.7	102.5	94.4	108.9
1991	107.9	62.5	104.0	146.1	121.8	119.2	132.2	98.9	93.6	95.0	90.9	92.5	109.7
1992	95.4	40.7	98.0	120.3	103.3	119.1	162.6	91.8	87.2	79.9	74.5	102.9	103.5
1993	91.6	48.6	65.0	120.0	131.7	114.4	172.1	85.8	79.8	68.7	65.5	127.2	102.4
% 93/92	-3.9	19.4	-33.7	-0.2	27.5	-4.0	5.8	-6.5	-8.5	-14.0	-12.0	23.6	-1.0

(1) Germany in its boundaries prior to 3 October 1990.

Table A.23 **Indicator 3**

Indices of real net income from agricultural activity of family labour input per annual work unit (AWU) from 1973 to 1993, 1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	113.6	92.0	155.9	80.1	84.8	132.8	104.5	135.5	70.9	96.8	:	184.8	:
1974	88.7	82.3	126.0	76.4	62.9	117.1	89.8	115.4	57.2	76.7	:	152.2	:
1975	93.3	53.7	150.9	76.1	75.2	104.9	115.9	112.1	62.4	84.3	:	145.2	:
1976	112.4	52.4	157.1	82.7	77.1	102.1	109.3	96.6	52.6	93.8	:	163.3	:
1977	89.0	65.5	146.4	77.7	90.9	98.3	137.5	98.9	68.0	86.4	:	147.1	:
1978	94.1	67.5	136.6	87.1	91.4	102.0	140.6	97.8	68.3	81.8	:	130.4	:
1979	82.3	28.2	113.7	79.9	79.1	104.1	101.6	105.4	72.6	69.3	:	111.5	:
1980	85.8	19.5	90.9	90.1	89.1	89.3	72.3	123.1	66.1	62.7	100.4	93.9	91.8
1981	95.7	30.8	88.2	96.7	68.8	93.4	75.3	116.1	75.2	84.8	90.4	107.4	92.4
1982	102.5	70.5	120.9	100.2	88.4	117.1	85.5	116.6	110.8	93.0	102.4	122.6	107.7
1983	112.0	41.2	83.0	90.2	87.5	102.6	96.4	122.9	94.0	90.8	92.9	99.9	99.7
1984	105.9	106.4	104.5	97.9	103.2	99.7	114.4	104.3	96.9	101.1	95.7	134.1	104.4
1985	98.3	91.5	86.1	101.7	102.5	100.0	97.2	100.2	100.0	93.9	97.8	77.3	96.6
1986	95.8	102.1	109.4	100.4	94.4	100.3	88.4	95.5	103.1	105.0	106.6	88.6	99.0
1987	87.8	40.9	77.7	100.9	102.8	101.5	115.4	98.1	105.1	77.8	101.9	93.5	94.8
1988	95.3	42.0	112.8	111.5	124.9	96.7	142.2	84.9	108.0	81.8	79.4	75.5	97.6
1989	127.5	83.6	148.5	119.2	111.5	122.3	143.0	94.3	127.6	102.4	99.4	88.8	113.4
1990	111.0	74.3	119.5	100.7	121.7	131.6	141.8	81.5	113.4	92.7	101.7	88.8	108.6
1991	106.3	48.6	100.3	139.8	121.2	117.8	131.3	97.6	95.2	91.6	86.0	84.3	108.2
1992	96.3	17.3	93.1	113.6	100.2	116.2	163.8	77.3	86.4	71.9	67.0	100.8	98.4
1993	91.2	28.2	51.1	113.1	135.5	108.6	173.8	67.5	79.5	57.2	54.9	138.9	96.0
% 93/92	-5.3	63.3	-45.1	-0.4	35.3	-6.5	6.1	-12.7	-8.0	-20.5	-18.1	37.8	-2.4

(1) Germany in its boundaries prior to 3 October 1990.

Table A.24

Volume indices of final output in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	89.8	72.4	83.9	80.9	79.7	79.3	73.4	82.2	94.6	65.2	:	88.3	:
1974	91.8	79.0	84.2	82.0	76.7	78.7	74.0	83.5	97.6	69.1	:	85.4	:
1975	85.2	72.5	84.4	88.0	77.3	75.6	75.4	86.6	94.7	68.7	:	80.2	:
1976	84.4	73.4	84.8	87.5	80.4	75.9	74.8	84.8	90.6	71.5	:	80.1	:
1977	85.9	79.9	89.0	84.0	80.9	78.4	81.9	86.4	92.6	74.6	:	84.4	:
1978	89.4	82.3	92.2	91.2	84.9	84.0	86.0	89.0	93.2	79.5	:	88.0	:
1979	90.3	84.8	92.5	87.5	85.5	90.9	86.0	94.5	92.3	83.2	:	89.0	:
1980	90.7	85.5	93.6	96.0	93.6	90.3	84.9	98.6	90.3	85.3	97.0	91.2	92.5
1981	91.4	87.7	92.8	96.8	86.5	89.8	84.8	97.5	94.0	89.2	94.2	89.8	91.5
1982	94.3	92.1	101.1	98.1	91.8	98.1	90.2	95.9	103.0	92.7	98.0	95.8	96.3
1983	93.2	90.1	98.3	93.9	94.3	95.9	93.4	102.6	97.7	94.7	94.8	94.7	96.7
1984	97.7	99.1	101.1	97.1	99.9	99.6	101.2	98.7	100.2	97.7	97.3	102.0	99.6
1985	98.5	99.9	96.9	100.6	102.0	99.8	100.0	99.5	98.5	98.7	100.4	98.6	99.4
1986	103.8	101.0	101.9	102.3	98.0	100.6	98.8	101.8	101.3	103.6	102.3	99.4	101.0
1987	102.1	97.9	96.9	98.5	106.0	103.9	100.0	106.0	98.3	101.7	108.6	98.6	102.2
1988	106.2	102.6	99.9	107.1	112.2	103.1	101.8	103.7	98.6	104.2	97.3	98.1	103.4
1989	109.3	105.7	100.0	108.2	105.7	105.7	104.1	104.7	102.1	107.8	110.4	98.9	104.4
1990	107.8	109.4	99.8	95.1	110.0	108.7	111.7	102.6	101.2	112.2	119.5	100.0	105.4
1991	115.4	108.8	100.2	109.5	108.8	106.0	112.6	107.9	96.4	114.8	119.8	100.1	106.7
1992	122.3	104.2	105.7	108.8	108.1	111.2	117.5	108.5	106.6	117.3	112.5	101.8	109.1
1993	126.0	111.7	101.6	108.7	106.8	106.8	114.9	105.3	102.5	118.5	102.8	98.9	106.7
% 93/92	3.0	7.2	-3.9	0.0	-1.2	-4.0	-2.2	-2.9	-3.9	1.0	-8.6	-2.9	-2.2

(1) Germany in its boundaries prior to 3 October 1990.

Table A.25

Nominal price indices of final output in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	59.2	48.3	83.3	14.6	27.5	44.2	30.6	22.7	57.6	74.4	:	35.3	:
1974	57.6	47.8	81.6	16.9	30.0	47.7	31.4	27.1	56.0	70.4	:	41.0	:
1975	66.6	53.8	89.1	18.1	34.2	51.0	41.5	30.9	61.0	78.4	:	50.1	:
1976	76.0	60.9	98.6	21.8	38.4	57.1	50.9	37.4	66.2	87.3	:	63.5	:
1977	73.0	63.3	97.1	24.3	48.0	60.5	62.7	43.8	67.4	86.8	:	68.1	:
1978	72.4	68.3	93.9	27.4	53.7	63.9	69.2	49.6	67.6	84.1	:	69.3	:
1979	73.1	69.3	96.1	33.0	57.1	66.8	73.7	55.1	70.6	83.5	:	77.2	:
1980	77.4	76.2	96.7	40.0	59.6	71.9	72.8	62.0	72.8	87.9	39.0	81.6	72.7
1981	83.8	85.8	103.9	48.4	68.2	80.6	84.7	71.1	79.3	96.8	46.4	91.0	81.4
1982	91.1	95.8	104.7	59.0	77.6	88.8	91.6	81.6	92.2	99.4	55.7	96.5	88.8
1983	101.3	99.3	104.0	69.7	85.7	96.3	99.0	89.7	97.1	100.3	69.5	99.6	94.4
1984	101.7	103.2	103.5	85.7	94.5	98.8	101.6	96.2	97.8	102.8	87.8	101.0	98.6
1985	101.6	99.3	101.5	101.8	98.9	100.8	99.0	101.1	101.5	101.6	100.1	98.6	100.5
1986	96.8	97.5	94.9	112.6	106.7	100.5	99.5	102.7	100.7	95.6	112.2	100.5	100.8
1987	94.3	93.0	90.6	123.8	104.0	97.7	103.8	101.9	100.6	94.3	119.7	103.3	99.9
1988	94.2	92.3	92.4	139.0	108.2	100.4	112.3	103.3	103.5	94.3	131.6	104.4	102.7
1989	104.6	97.9	99.0	156.7	116.1	107.1	117.3	107.9	110.8	99.8	135.9	112.0	109.6
1990	100.7	93.0	93.4	188.5	117.1	105.9	104.3	112.2	110.8	94.2	141.0	113.7	109.7
1991	99.2	90.3	92.1	226.6	116.9	103.1	100.9	117.5	101.6	94.3	142.7	112.6	111.7
1992	92.1	90.4	84.2	231.6	109.4	95.2	103.4	113.7	99.6	90.2	134.8	113.3	106.4
1993	86.9	80.9	78.7	248.0	113.3	88.9	108.6	112.8	98.8	84.6	132.2	116.8	103.7
% 93/92	-5.7	-10.5	-6.6	7.1	3.6	-6.6	5.0	-0.8	-0.8	-6.2	-1.9	3.1	-2.5

(1) Germany in its boundaries prior to 3 October 1990.

Table A.26

Real price indices of final output in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	128.4	135.4	135.0	103.3	148.9	142.2	129.2	137.2	125.3	141.7	:	142.3	:
1974	110.9	118.5	123.6	99.0	140.2	136.7	124.9	136.4	104.1	122.7	:	143.8	:
1975	114.4	118.6	127.7	94.3	137.1	129.3	137.3	133.5	114.4	124.0	:	138.3	:
1976	121.4	123.1	136.4	98.7	131.9	130.5	139.3	136.4	110.5	126.8	:	152.1	:
1977	108.4	116.9	129.4	97.2	133.9	126.9	151.3	134.9	111.2	118.2	:	143.3	:
1978	103.0	114.8	120.1	97.2	124.2	121.7	151.3	134.0	106.1	108.6	:	130.8	:
1979	99.6	108.3	118.4	98.6	112.8	115.5	141.6	128.8	104.2	103.8	:	127.4	:
1980	101.6	110.1	113.6	101.7	103.8	111.4	122.0	120.6	99.7	103.5	106.6	112.6	111.6
1981	105.0	112.5	117.1	102.6	105.6	112.1	120.9	116.1	101.2	108.0	108.6	112.7	112.2
1982	106.5	113.6	113.0	100.0	105.5	110.3	113.5	113.6	106.2	104.5	107.9	111.1	110.1
1983	112.2	109.4	108.7	99.2	104.2	109.1	110.8	108.6	104.7	103.6	107.1	109.1	107.7
1984	107.1	107.7	106.0	101.4	102.8	104.3	106.9	104.4	101.0	104.2	106.7	105.9	104.8
1985	100.8	99.3	101.8	102.4	100.0	100.6	99.0	100.8	101.8	101.1	99.2	97.6	100.4
1986	92.5	93.2	92.3	96.3	97.1	95.2	94.0	94.9	97.2	95.0	94.4	96.3	94.9
1987	88.1	84.9	86.5	92.8	89.4	89.8	95.9	88.8	98.1	94.2	90.6	94.4	90.0
1988	86.5	81.5	86.8	90.1	88.1	89.6	100.6	84.4	97.1	93.1	89.9	89.9	88.2
1989	91.9	82.9	90.8	90.3	88.3	92.3	100.5	83.1	98.1	97.4	83.3	90.1	89.7
1990	85.8	76.8	83.1	89.9	82.9	88.5	90.9	80.3	95.3	89.8	73.7	85.9	84.8
1991	82.3	72.8	78.9	91.9	77.3	83.7	87.0	78.3	84.9	87.4	64.8	79.9	80.9
1992	73.8	71.5	68.4	81.7	67.9	75.6	88.3	72.4	79.6	81.6	54.0	77.0	73.7
1993	67.8	63.3	61.8	77.1	67.7	68.7	90.3	69.0	76.5	75.2	49.5	77.1	69.3
% 93/92	-8.3	-11.5	-9.7	-5.6	-0.3	-9.1	2.2	-4.6	-3.9	-7.8	-8.3	0.2	-6.0

(1) Germany in its boundaries prior to 3 October 1990.

Table A.27

Nominal value indices of final output in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	53.2	35.0	69.9	11.8	21.9	35.0	22.5	18.7	54.5	48.5	:	31.2	:
1974	52.9	37.8	68.7	13.8	23.0	37.5	23.2	22.6	54.7	48.7	:	35.0	:
1975	56.8	39.1	75.2	15.9	26.5	38.6	31.3	26.7	57.8	53.9	:	40.2	:
1976	64.2	44.7	83.6	19.0	30.9	43.4	38.1	31.7	60.0	62.4	:	50.8	:
1977	62.7	50.6	86.4	20.3	38.9	47.4	51.3	37.8	62.4	64.8	:	57.4	:
1978	64.8	56.2	86.6	24.9	45.6	53.6	59.5	44.2	63.0	66.9	:	61.0	:
1979	66.1	58.8	89.0	28.8	48.8	60.7	63.3	52.0	65.2	69.6	:	68.7	:
1980	70.3	65.2	90.6	38.3	55.8	65.0	61.8	61.1	65.8	75.0	37.7	74.4	67.3
1981	76.6	75.3	96.4	46.7	59.0	72.4	71.8	69.3	74.6	86.4	43.6	81.6	74.5
1982	85.9	88.2	105.9	57.7	71.3	87.2	82.7	78.2	94.9	92.2	54.5	92.4	85.5
1983	94.5	89.5	102.3	65.2	80.9	92.4	92.5	92.0	94.8	95.1	65.8	94.3	91.2
1984	99.5	102.3	104.7	83.0	94.4	98.3	102.7	95.0	98.0	100.5	85.2	103.0	98.3
1985	100.0	99.2	98.4	102.2	101.0	100.6	99.0	100.6	100.1	100.4	100.3	97.2	99.9
1986	100.5	98.5	96.8	114.9	104.6	101.0	98.3	104.5	102.0	99.1	114.5	99.8	101.8
1987	96.3	91.1	87.8	121.7	110.2	101.4	103.8	108.0	98.8	96.0	129.7	101.8	102.1
1988	100.1	94.7	92.3	148.5	121.4	103.5	114.3	107.0	102.0	98.3	127.8	102.3	106.2
1989	114.4	103.5	99.0	169.1	122.8	113.2	122.0	112.9	113.2	107.7	149.7	110.8	114.4
1990	108.6	101.8	93.2	178.9	128.8	115.1	116.6	115.0	112.2	105.8	168.1	113.6	115.6
1991	114.5	98.3	92.3	247.7	127.3	109.3	113.5	126.8	98.0	108.3	170.5	112.7	119.1
1992	112.7	94.2	89.0	251.3	118.2	105.9	121.5	123.3	106.2	105.9	151.4	115.3	116.1
1993	109.5	90.4	79.9	269.1	121.0	94.8	124.7	118.7	101.2	100.2	135.7	115.5	110.7
% 93/92	-2.8	-4.0	-10.2	7.1	2.3	-10.4	2.7	-3.7	-4.7	-5.3	-10.3	0.1	-4.6

(1) Germany in its boundaries prior to 3 October 1990.

Table A.28

Real value indices of final output in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	115.3	98.0	113.3	83.6	118.6	112.8	94.8	112.8	118.5	92.3	:	125.7	:
1974	101.8	93.6	104.0	81.2	107.6	107.5	92.4	113.9	101.6	84.8	:	122.9	:
1975	97.4	86.1	107.8	83.0	106.0	97.7	103.5	115.6	108.3	85.2	:	111.0	:
1976	102.5	90.3	115.6	86.4	106.1	99.1	104.3	115.6	100.1	90.6	:	121.9	:
1977	93.1	93.4	115.2	81.6	108.3	99.4	124.0	116.6	103.0	88.1	:	120.9	:
1978	92.1	94.5	110.8	88.6	105.4	102.2	130.1	119.3	98.9	86.3	:	115.1	:
1979	89.9	91.9	109.6	86.3	96.4	105.0	121.8	121.7	96.3	86.4	:	113.3	:
1980	92.2	94.1	106.3	97.6	97.2	100.6	103.6	118.9	90.0	88.2	103.4	102.7	103.2
1981	95.9	98.7	108.6	99.3	91.3	100.7	102.5	113.2	95.2	96.3	102.2	101.1	102.6
1982	100.4	104.6	114.3	98.2	96.8	108.3	102.4	109.0	109.3	96.8	105.7	106.4	106.0
1983	104.6	98.6	106.8	93.1	98.2	104.7	103.5	111.5	102.2	98.0	101.5	103.3	104.1
1984	104.7	106.7	107.2	98.5	102.8	103.8	108.1	103.1	101.2	101.8	103.8	108.0	104.4
1985	99.3	99.2	98.7	103.0	102.0	100.4	99.0	100.3	100.3	99.8	99.6	96.3	99.8
1986	96.0	94.2	94.1	98.5	95.2	95.7	92.9	96.6	98.5	98.4	96.6	95.7	95.8
1987	90.0	83.1	83.8	91.4	94.8	93.3	95.8	94.2	96.4	95.8	98.5	93.0	92.0
1988	91.9	83.6	86.7	96.5	98.8	92.4	102.4	87.5	95.7	97.0	87.5	88.1	91.2
1989	100.4	87.7	90.8	97.6	93.3	97.6	104.5	87.0	100.2	105.0	92.0	89.1	93.6
1990	92.5	84.1	82.9	85.5	91.1	96.2	101.5	82.3	96.5	100.8	88.1	85.8	89.3
1991	94.9	79.2	79.0	100.7	84.2	88.7	98.0	84.5	81.8	100.4	77.6	80.0	86.3
1992	90.3	74.5	72.3	88.9	73.4	84.1	103.7	78.5	84.9	95.7	60.8	78.4	80.5
1993	85.4	70.7	62.7	83.9	72.3	73.3	103.7	72.7	78.4	89.1	50.9	76.2	74.0
% 93/92	-5.5	-5.1	-13.3	-5.7	-1.5	-12.8	0.0	-7.4	-7.7	-6.9	-16.2	-2.7	-8.0

(1) Germany in its boundaries prior to 3 October 1990.

Table A.29

Volume indices of intermediate consumption in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	90.8	83.9	84.8	66.3	54.5	81.2	71.9	72.4	96.2	70.3	:	98.0	:
1974	91.0	78.2	82.0	68.7	58.8	83.9	64.1	73.9	99.6	73.1	:	93.2	:
1975	91.5	81.4	83.8	75.6	60.6	80.3	61.1	74.3	97.7	73.5	:	93.6	:
1976	91.0	89.2	90.2	78.3	65.8	84.3	68.5	78.4	106.8	78.1	:	94.6	:
1977	92.3	91.4	94.9	83.3	69.8	86.2	75.5	83.4	100.1	81.1	:	95.7	:
1978	93.5	99.4	98.5	85.5	75.2	90.8	86.8	89.5	91.9	86.1	:	96.5	:
1979	95.0	106.2	103.3	87.5	81.9	95.1	99.5	95.3	90.5	90.8	:	97.5	:
1980	94.0	101.2	102.9	91.8	87.3	96.4	88.7	98.7	91.6	96.0	105.9	94.8	96.6
1981	92.8	98.6	99.3	95.4	92.3	96.3	93.2	96.3	91.5	94.3	109.9	92.2	95.8
1982	94.7	99.9	99.5	97.1	95.6	96.8	92.6	96.4	89.4	93.5	108.5	98.1	97.2
1983	94.3	102.3	102.1	100.0	95.8	97.7	97.4	98.0	98.5	101.5	103.4	100.8	99.2
1984	96.5	100.0	100.7	99.8	98.8	99.3	97.2	98.5	96.9	96.9	99.0	99.1	99.1
1985	99.1	101.0	100.4	103.0	98.9	99.5	98.2	99.5	100.1	101.3	100.0	98.9	99.8
1986	104.3	99.0	98.9	97.2	102.4	101.2	104.6	102.0	103.1	101.9	100.9	102.1	101.2
1987	107.4	102.6	99.1	102.9	103.6	104.0	100.8	106.3	108.3	113.5	107.3	101.9	103.9
1988	109.2	100.6	98.2	103.7	106.7	106.2	101.8	106.7	110.0	111.1	105.5	101.8	104.4
1989	113.0	99.9	97.2	105.4	107.1	108.0	107.4	107.2	111.5	111.7	115.5	100.2	105.1
1990	113.6	103.0	95.2	106.6	109.4	109.3	109.0	105.4	114.5	109.9	119.0	98.2	104.9
1991	120.2	101.9	93.6	107.5	111.0	106.6	110.0	107.2	116.3	110.7	118.3	96.7	104.5
1992	123.7	109.8	92.4	111.4	113.6	106.7	110.2	105.6	119.0	113.2	108.6	95.2	104.7
1993	126.0	109.4	87.8	110.5	109.8	106.8	112.5	104.4	118.3	113.6	98.3	95.2	103.2
% 93/92	1.8	-0.3	-4.9	-0.7	-3.3	0.1	2.1	-1.1	-0.6	0.4	-9.5	0.0	-1.4

(1) Germany in its boundaries prior to 3 October 1990.

Table A.30

Nominal price indices of intermediate consumption in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	51.3	39.8	67.0	13.7	31.4	30.5	21.7	20.1	48.2	64.8	:	29.8	:
1974	56.0	46.4	72.0	17.0	34.6	37.9	29.7	27.1	53.9	68.5	:	38.2	:
1975	58.9	49.8	74.2	19.2	35.4	40.6	36.4	31.0	59.8	70.2	:	42.9	:
1976	65.9	54.5	80.6	21.0	38.6	45.0	44.0	36.8	65.1	76.7	:	51.5	:
1977	67.4	57.8	82.2	22.9	42.8	50.0	53.1	41.7	66.6	79.2	:	59.5	:
1978	65.1	57.2	79.2	24.4	45.4	53.3	55.4	44.7	66.3	77.2	:	61.5	:
1979	68.8	61.4	84.1	30.9	49.0	57.9	59.9	49.4	68.5	82.0	:	69.1	:
1980	74.2	71.3	88.8	40.9	54.1	66.5	68.2	59.1	74.7	86.7	29.6	77.6	71.0
1981	80.8	83.5	97.9	49.6	65.5	75.2	78.5	72.3	83.1	94.9	37.2	84.2	80.1
1982	89.6	92.7	101.3	57.1	72.2	83.5	86.8	82.0	90.0	99.4	45.8	90.1	86.9
1983	97.7	98.4	102.1	70.7	84.5	92.3	93.1	91.5	98.8	98.3	63.1	97.0	93.8
1984	102.6	103.6	104.8	84.1	95.5	99.9	99.7	99.6	103.7	105.7	86.3	100.4	100.5
1985	101.4	100.9	101.4	99.9	101.6	101.7	102.2	102.2	100.6	102.0	100.5	101.1	101.5
1986	96.1	95.5	93.8	116.0	102.9	98.5	98.1	98.3	95.8	92.3	113.3	98.5	98.0
1987	90.4	91.2	88.8	126.6	104.5	97.1	93.1	97.2	89.0	86.9	117.3	99.2	96.3
1988	91.6	96.1	88.7	143.1	105.4	100.2	96.0	98.6	90.2	90.0	128.5	103.4	99.0
1989	94.5	100.4	91.8	159.4	108.5	103.5	99.9	102 2	94.3	92.0	134.4	107.7	102.7
1990	92.3	96.7	91.6	188.1	110.0	101.8	99.3	105.2	95.8	90.7	142.1	111.1	103.8
1991	92.9	96.5	93.4	227.0	112.9	101.7	99.2	106.6	96.6	92.1	148.8	116.3	106.4
1992	92.1	94.0	93.4	245.4	114.3	99.8	99.4	107.9	96.9	92.6	147.8	118.8	106.9
1993	91.8	93.7	93.4	276.1	117.5	98.7	99.3	115.5	93.2	89.9	151.4	123.0	108.3
% 93/92	-0.4	-0.3	0.0	12.5	2.8	-1.1	0.0	7.1	-3.8	-3.0	2.4	3.5	1.4

(1) Germany in its boundaries prior to 3 October 1990.

Table A.31

Real price indices of intermediate consumption in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	111.3	111.3	108.6	97.2	170.4	98.1	91.6	121.3	104.8	123.4	:	120.2	:
1974	108.0	114.8	109.0	100.0	161.6	108.6	118.6	136.2	100.2	119.5	:	134.0	:
1975	101.2	109.6	106.1	100.7	141.5	103.0	120.9	133.8	112.0	111.1	:	118.6	:
1976	105.2	110.0	111.4	95.1	132.6	102.8	120.6	134.3	108.7	111.5	:	123.5	:
1977	100.1	106.7	109.5	91.7	119.3	104.8	128.6	128.2	109.9	107.8	:	125.4	:
1978	92.8	96.0	101.2	86.8	104.8	101.5	121.4	120.4	104.1	99.7	:	116.1	:
1979	93.7	95.8	103.5	92.6	96.8	100.1	115.5	115.3	101.1	102.0	:	114.1	:
1980	97.3	102.8	104.1	104.2	94.2	102.9	114.5	114.7	102.2	102.0	81.1	107.2	103.8
1981	101.2	109.4	110.2	105.5	101.3	104.6	112.3	117.9	106.0	105.9	87.0	104.4	106.9
1982	104.8	109.8	109.2	97.0	98.0	103.7	107.9	114.1	103.7	104.5	88.8	103.9	105.4
1983	108.3	108.4	106.6	100.9	102.6	104.5	104.5	110.7	106.6	101.5	97.4	106.4	105.5
1984	108.1	107.9	107.1	99.8	104.0	105.5	105.2	107.9	107.1	107.1	105.0	105.4	106.1
1985	100.7	100.8	101.6	100.7	102.7	101.4	102.5	101.7	100.9	101.5	99.7	100.2	101.4
1986	91.9	91.3	91.1	99.5	93.6	93.2	92.9	90.7	92.5	91.7	95.4	94.6	92.7
1987	84.5	83.2	84.6	95.0	89.8	89.2	86.2	84.6	86.8	86.8	88.9	90.7	87.5
1988	84.1	84.8	83.3	93.0	85.8	89.4	86.2	80.5	84.6	88.9	87.9	89.1	86.3
1989	83.0	85.0	84.1	92.0	82.4	89.2	85.7	78.6	83.5	89.7	82.5	86.7	85.4
1990	78.6	79.8	81.4	89.9	77.8	85.0	86.7	75.1	82.4	86.4	74.4	84.0	81.8
1991	77.1	77.7	79.9	92.2	74.7	82.5	85.8	70.9	80.7	85.4	67.7	82.6	79.5
1992	73.9	74.3	75.9	86.8	71.0	79.3	85.0	68.5	77.4	83.8	59.3	80.8	76.5
1993	71.6	73.2	73.3	86.0	70.2	76.3	82.8	70.6	72.2	80.0	56.7	81.3	75.0
% 93/92	-3.1	-1.4	-3.5	-0.9	-1.1	-3.8	-2.6	3.0	-6.8	-4.6	-4.3	0.6	-2.0

(1) Germany in its boundaries prior to 3 October 1990.

Table A.32

Nominal value indices of intermediate consumption in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	46.6	33.4	56.8	9.1	17.1	24.8	15.6	14.5	46.4	45.6	:	29.2	:
1974	51.1	36.3	59.0	11.7	20.3	31.8	19.1	20.0	53.8	50.1	:	35.6	:
1975	53.9	40.5	62.1	14.6	21.4	32.6	22.3	23.0	58.5	51.7	:	40.1	:
1976	60.0	48.6	72.7	16.5	25.4	38.0	30.1	28.9	69.5	60.0	:	48.7	:
1977	62.2	52.9	78.0	19.1	29.9	43.1	40.1	34.8	66.7	64.3	:	57.0	:
1978	61.0	56.9	78.0	20.9	34.1	48.4	48.1	40.0	61.0	66.6	:	59.3	:
1979	65.5	65.1	86.8	27.1	40.1	55.1	59.7	47.1	62.0	74.5	:	67.4	:
1980	69.8	72.1	91.4	37.7	47.2	64.1	60.5	58.3	68.5	83.3	31.3	73.6	68.6
1981	75.1	82.3	97.1	47.4	60.4	72.4	73.1	69.6	76.1	89.5	40.8	77.6	76.7
1982	84.9	92.5	100.7	55.5	69.0	80.9	80.5	79.1	80.5	93.0	49.6	88.4	84.4
1983	92.1	100.7	104.2	70.8	80.9	90.2	90.7	89.7	97.4	99.9	65.3	97.8	93.1
1984	99.1	103.5	105.5	84.1	94.3	99.3	97.0	98.1	100.5	102.5	85.4	99.5	99.5
1985	100.6	101.9	101.8	103.0	100.5	101.2	100.4	101.7	100.7	103.4	100.4	100.0	101.3
1986	100.3	94.6	92.7	112.9	105.2	99.6	102.6	100.2	98.8	94.1	114.3	100.6	99.2
1987	97.2	93.6	87.9	130.5	108.3	100.9	93.8	103.4	96.4	98.7	125.7	101.1	100.0
1988	100.1	96.6	87.1	148.6	112.5	106.5	97.8	105.2	99.3	100.1	135.5	105.2	103.4
1989	106.9	100.3	89.2	168.2	116.2	111.9	107.3	109.6	105.3	102.8	155.2	108.0	108.0
1990	104.9	99.6	87.2	200.8	120.3	111.2	108.2	110.8	109.8	99.7	169.0	109.1	108.8
1991	111.7	98.3	87.4	244.2	125.3	108.5	109.2	114.2	112.5	102.0	175.9	112.5	111.1
1992	114.1	103.2	86.3	273.7	129.8	106.5	109.5	113.9	115.4	105.0	160.4	113.1	111.9
1993	115.7	102.6	82.0	305.7	129.0	103.4	111.8	120.7	110.4	102.3	148.6	117.1	111.8
% 93/92	1.4	-0.6	-5.0	11.7	-0.6	-1.0	2.1	5.9	-4.3	-2.6	-7.3	3.5	-0.1

(1) Germany in its boundaries prior to 3 October 1990.

Table A.33

Real value indices of intermediate consumption in agriculture from 1973 to 1993
1984-1986=100

	B	DK	D (1)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	101.0	93.4	92.1	64.4	92.9	79.6	65.9	87.8	100.8	86.7	:	117.8	:
1974	98.3	89.8	89.3	68.7	95.0	91.1	76.0	100.6	99.8	87.3	:	124.9	:
1975	92.6	89.3	89.0	76.1	85.8	82.7	73.8	99.5	109.5	81.7	:	111.0	:
1976	95.8	98.2	100.5	74.5	87.3	86.7	82.5	105.3	116.1	87.0	:	116.8	:
1977	92.4	97.5	103.9	76.4	83.3	90.3	97.1	106.9	110.0	87.4	:	120.1	:
1978	86.8	95.5	99.7	74.1	78.8	92.1	105.4	107.8	95.7	85.9	:	112.1	:
1979	89.1	101.7	106.8	81.0	79.3	95.2	115.0	109.9	91.5	92.6	:	111.2	:
1980	91.5	103.9	107.2	95.7	82.2	99.3	101.6	113.2	93.6	97.9	85.9	101.6	100.3
1981	94.0	107.8	109.4	100.6	93.5	100.7	104.6	113.5	97.1	99.8	95.7	96.2	102.4
1982	99.2	109.7	108.6	94.2	93.7	100.4	99.9	110.1	92.7	97.8	96.3	101.9	102.4
1983	102.0	110.8	108.8	100.9	98.3	102.1	101.7	108.4	105.0	103.0	100.7	107.2	104.7
1984	104.4	107.8	107.9	99.6	102.7	104.8	102.2	106.3	103.7	103.7	104.0	104.4	105.1
1985	99.8	101.8	102.0	103.7	101.6	100.9	100.6	101.2	101.0	102.8	99.7	99.1	101.2
1986	95.9	90.4	90.1	96.7	95.8	94.3	97.1	92.5	95.4	93.4	96.3	96.5	93.7
1987	90.8	85.4	83.8	97.8	93.1	92.7	86.8	90.0	94.0	98.5	95.4	92.5	90.9
1988	91.8	85.3	81.8	96.4	91.5	94.9	87.7	85.9	93.1	98.7	92.8	90.7	90.2
1989	93.8	84.9	81.8	97.0	88.3	96.4	92.0	84.2	93.1	100.2	95.4	86.9	89.8
1990	89.4	82.2	77.5	95.8	85.2	92.9	94.5	79.2	94.3	94.9	88.6	82.5	85.8
1991	92.6	79.2	74.8	99.1	82.9	88.0	94.4	76.0	93.9	94.5	80.1	79.9	83.1
1992	91.4	81.5	70.1	96.6	80.6	84.6	93.7	72.4	92.1	94.9	64.4	76.9	80.1
1993	90.2	80.2	64.4	95.1	77.1	81.5	93.1	73.7	85.4	90.9	55.8	77.4	77.4
% 93/92	-1.3	-1.7	-8.3	-1.6	-4.3	-3.7	-0.6	1.8	-7.3	-4.2	-13.4	0.6	-3.4

(1) Germany in its boundaries prior to 3 October 1990.

Table A.34

Trends in productivity of intermediate consumption (1) from 1973 to 1993
1984-1986=100

	B	DK	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	98.9	86.3	99.0	122.1	146.2	97.7	102.0	113.6	98.3	92.7	:	90.1	:
1974	100.9	101.0	102.7	119.5	130.5	93.7	115.4	113.0	98.0	94.5	:	91.7	:
1975	93.1	89.1	100.6	116.5	127.5	94.2	123.5	116.4	96.9	93.5	:	85.8	:
1976	92.7	82.3	93.9	111.7	122.3	90.0	109.3	108.1	84.9	91.5	:	84.7	:
1977	93.1	87.4	93.8	100.9	115.8	90.9	108.5	103.6	92.5	92.0	:	88.1	:
1978	95.6	82.8	93.7	106.7	113.0	92.5	99.1	99.5	101.4	92.3	:	91.2	:
1979	95.0	79.9	89.6	100.0	104.3	95.7	86.4	99.2	102.1	91.7	:	91.3	:
1980	96.5	84.5	91.0	104.5	107.3	93.6	95.8	99.9	98.5	88.8	91.6	96.2	95.7
1981	98.4	89.0	93.5	101.5	93.7	93.3	91.0	101.3	102.7	94.7	85.7	97.4	95.5
1982	99.6	92.3	101.7	101.1	96.0	101.3	97.4	99.5	115.2	99.1	90.4	97.7	99.1
1983	98.9	88.1	96.3	93.9	98.4	98.2	96.0	104.7	99.1	93.3	91.6	94.0	97.4
1984	101.3	99.2	100.4	97.2	101.2	100.2	104.0	100.2	103.4	100.9	98.2	102.9	100.6
1985	99.3	98.9	96.5	97.7	103.2	100.3	101.8	100.0	98.5	97.5	100.4	99.8	99.6
1986	99.5	102.0	103.1	105.3	95.8	99.5	94.6	99.8	98.3	101.7	101.4	97.4	99.9
1987	95.0	95.4	97.8	95.7	102.3	99.9	99.2	99.8	90.8	89.6	101.2	96.8	98.4
1988	97.3	102.0	101.7	103.4	105.1	97.1	100.0	97.1	89.6	93.8	92.2	96.4	99.0
1989	96.7	105.8	102.9	102.6	98.7	97.9	96.9	97.6	91.6	96.5	95.6	98.7	99.3
1990	94.9	106.3	104.8	89.3	100.5	99.5	102.6	97.3	88.4	102.1	100.4	101.8	100.5
1991	96.0	106.8	107.0	101.9	98.1	99.4	102.4	100.7	82.9	103.7	101.2	103.6	102.2
1992	98.9	94.9	114.4	97.7	95.2	104.3	106.6	102.7	89.6	103.6	103.6	107.0	104.2
1993	100.0	102.1	115.6	98.4	97.2	100.0	102.1	100.8	86.6	104.2	104.6	103.9	103.4
% 93/92	1.1	7.6	1.0	0.7	2.1	-4.1	-4.2	-1.9	-3.3	0.6	1.0	-2.9	-0.8

(1) Index of the volume of final output divided by the index of the volume of intermediate consumption.
(2) Germany in its boundaries prior to 3 October 1990.

Table A.35

Trends in "price scissors" of agriculture (1) from 1973 to 1993
1984-1986=100

	B	DK	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
1973	115.4	121.4	124.2	106.5	87.3	144.9	141.4	112.9	119.6	114.9	:	118.5	:
1974	102.8	103.1	113.3	99.3	86.8	125.8	105.6	100.0	103.9	102.7	:	107.4	:
1975	113.1	108.1	120.2	93.8	96.9	125.5	113.8	99.7	102.1	111.6	:	116.7	:
1976	115.4	111.7	122.4	104.0	99.4	126.9	115.9	101.5	101.7	113.8	:	123.3	:
1977	108.3	109.5	118.1	106.2	112.1	121.1	117.9	105.1	101.2	109.6	:	114.4	:
1978	111.1	119.4	118.6	112.3	118.4	119.9	124.9	111.1	101.9	108.9	:	112.8	:
1979	106.3	113.0	114.4	106.8	116.5	115.3	122.9	111.5	103.1	101.8	:	111.7	:
1980	104.4	107.0	108.9	97.8	110.2	108.2	106.8	105.0	97.5	101.5	131.7	105.2	102.5
1981	103.7	102.8	106.2	97.5	104.2	107.2	108.0	98.4	95.5	102.0	124.9	108.1	101.7
1982	101.7	103.3	103.4	103.3	107.6	106.4	105.5	99.4	102.4	100.0	121.6	107.0	102.2
1983	103.7	100.9	101.8	98.5	101.5	104.4	106.3	98.0	98.2	102.1	110.1	102.7	100.7
1984	99.1	99.7	98.8	101.9	98.9	98.9	101.9	96.7	94.4	97.3	101.8	100.6	98.2
1985	100.2	98.4	100.1	101.8	97.3	99.2	96.8	98.9	101.0	99.6	99.6	97.5	99.0
1986	100.7	102.0	101.2	97.1	103.7	102.0	101.4	104.5	105.1	103.6	99.0	102.0	102.9
1987	104.3	101.9	102.0	97.8	99.5	100.6	111.5	104.8	113.1	108.5	102.0	104.1	103.8
1988	102.9	96.0	104.1	97.1	102.6	100.2	116.9	104.8	114.7	104.8	102.4	100.9	103.7
1989	110.7	97.5	107.8	98.3	107.0	103.5	117.4	105.6	117.5	108.6	101.1	104.0	106.7
1990	109.2	96.1	101.9	100.2	106.4	104.1	105.1	106.7	115.7	104.0	99.2	102.3	105.7
1991	106.8	93.6	98.6	99.9	103.5	101.4	101.6	110.3	105.2	102.4	95.9	96.8	105.0
1992	100.0	96.1	90.1	94.4	95.7	95.3	104.1	105.4	102.8	97.3	91.2	95.3	99.6
1993	94.7	86.3	84.2	89.8	96.4	90.0	109.3	97.6	106.1	94.1	87.3	95.0	95.7
% 93/92	-5.3	-10.2	-6.6	-4.8	0.8	-5.6	5.0	-7.4	3.0	-3.4	-4.2	-0.4	-3.8

(1) Nominal index of prices of final output divided by the nominal index of prices of intermediate consumption.
(2) Germany in its boundaries prior to 3 October 1990.

Table A.36

Volume of total labour input in agriculture in annual work units (AWU) from 1973 to 1993 in 1000

	B	DK	D (1)	GR	E	F	IRL (2)	I	L	NL	P	UK	EUR 12
1973	149.0	189.5	1250.0	1116.0	2537.7	2147.0	348.4	3407.5	12.7	286.0	1360.0	578.4	13382.2
1974	143.3	176.3	1198.0	1092.0	2454.0	2078.0	333.4	3336.7	12.2	281.0	1330.0	556.0	12990.9
1975	137.2	168.2	1168.0	1068.0	2279.7	2008.0	324.6	3209.1	11.5	277.5	1299.3	541.3	12492.4
1976	130.5	162.9	1139.0	1045.0	2101.9	1965.0	318.1	3207.5	10.8	273.7	1320.8	545.4	12220.6
1977	124.9	156.5	1082.0	1022.0	1959.0	1926.0	312.0	3094.4	10.6	265.9	1281.7	539.4	11774.4
1978	120.8	150.5	1059.0	999.0	1898.3	1895.0	305.4	3094.5	10.1	259.9	1212.8	538.0	11543.3
1979	120.3	144.4	1007.0	978.0	1774.9	1864.0	297.3	3044.4	9.7	256.5	1210.7	526.6	11233.8
1980	115.6	137.6	987.0	956.0	1634.7	1817.0	289.6	2938.8	9.2	254.3	1202.2	513.3	10855.3
1981	112.4	131.4	974.0	935.0	1487.5	1768.0	283.8	2751.6	8.6	249.3	1135.7	501.7	10339.0
1982	110.2	126.7	951.0	924.0	1432.5	1720.0	279.0	2593.4	8.3	248.0	1098.1	496.0	9987.2
1983	109.4	123.8	927.0	917.0	1415.0	1671.0	276.1	2645.8	7.9	248.3	1012.2	492.1	9845.6
1984	108.7	120.3	912.0	918.0	1341.9	1620.0	275.9	2598.7	7.5	246.7	1017.0	483.6	9650.3
1985	106.1	114.7	904.0	931.0	1300.4	1564.0	275.8	2494.1	7.3	245.4	1020.7	481.2	9444.7
1986	104.8	111.8	890.0	898.0	1252.1	1509.0	266.0	2473.4	7.0	242.7	942.0	473.2	9170.0
1987	101.6	105.1	836.0	849.0	1218.0	1455.0	254.5	2422.9	6.7	240.5	983.2	462.1	8934.6
1988	98.3	101.0	821.0	828.0	1191.2	1401.0	248.0	2313.2	6.4	237.4	940.7	452.6	8638.8
1989	96.0	98.5	775.0	770.4	1137.5	1335.2	243.0	2193.6	6.3	237.5	893.5	440.3	8226.8
1990	93.6	95.2	754.0	752.4	1070.7	1272.4	238.0	2153.2	6.0	236.8	839.2	430.7	7942.2
1991	90.8	92.7	716.3	683.7	961.5	1227.9	229.4	2155.7	5.8	236.9	833.6	419.8	7654.1
1992	88.0	89.9	684.8	718.0	914.5	1184.9	223.4	2060.6	5.9	239.0	782.3	413.4	7404.6
1993	83.3	88.1	650.0	701.5	870.6	1125.6	218.9	1982.0	5.8	235.3	762.0	410.4	7133.5
% 93/92	-5.3	-2.0	-5.1	-2.3	-4.8	-5.0	-2.0	-3.8	-1.6	-1.5	-2.6	-0.7	-3.7

(1) Germany in its boundaries prior to 3 October 1990.

(2) Eurostat estimate.

Table A.37

Volume of family labour input in agriculture in annual work units (AWU) from 1973 to 1993 in 1000

	B	DK (2)	D (1)	GR	E	F	IRL (3)	I	L	NL	P (4)	UK	EUR 12
1973	139.0	156.6	1122.0	974.0	1935.3	1824.0	314.3	2237.7	12.1	237.5	1140.0	330.9	10423.4
1974	134.0	144.5	1066.0	956.0	1871.4	1771.0	299.6	2207.3	11.7	232.3	1114.8	316.3	10124.9
1975	129.1	137.1	1045.0	939.0	1738.5	1716.0	291.9	2146.0	11.0	228.9	1088.9	311.1	9782.5
1976	122.4	132.2	1024.0	922.0	1602.9	1675.0	285.0	2131.9	10.3	224.9	1107.0	317.5	9555.1
1977	117.2	126.3	971.0	906.0	1493.9	1639.0	278.7	2055.8	10.1	217.1	1074.1	313.0	9202.2
1978	113.7	120.8	951.0	889.0	1447.6	1610.0	272.0	2111.0	9.6	210.3	1016.1	314.1	9065.2
1979	112.9	115.2	895.0	874.0	1353.5	1581.0	264.5	2095.4	9.1	207.0	1034.5	307.8	8849.9
1980	108.7	109.8	881.0	858.0	1246.6	1534.0	257.3	2069.9	8.6	203.7	1027.7	300.0	8605.3
1981	106.3	105.0	860.0	843.0	1134.4	1492.0	250.8	1940.2	8.0	198.8	970.8	295.6	8204.9
1982	103.8	98.9	841.0	827.0	1092.4	1451.0	245.7	1807.1	7.7	197.1	938.7	294.1	7904.5
1983	102.6	95.8	820.0	813.0	1079.1	1409.0	242.2	1880.0	7.3	197.6	847.0	293.2	7786.8
1984	101.5	91.9	812.0	808.0	1023.4	1366.0	241.1	1864.6	6.9	196.5	851.1	292.6	7655.6
1985	99.1	86.7	791.0	803.0	991.7	1319.0	240.7	1767.8	6.7	193.7	854.1	293.1	7446.6
1986	97.2	84.7	780.0	781.0	954.9	1272.0	233.0	1766.5	6.4	189.4	788.2	294.8	7248.1
1987	94.1	79.1	737.0	729.0	928.9	1225.0	223.8	1729.7	6.1	186.0	822.9	288.8	7050.4
1988	90.8	76.2	718.0	712.0	908.4	1179.0	216.5	1633.8	5.8	182.6	787.2	284.5	6794.8
1989	88.5	73.7	675.0	706.6	867.5	1123.6	211.0	1502.6	5.6	179.8	747.7	277.4	6459.0
1990	86.1	71.0	662.0	691.7	816.5	1070.8	206.5	1466.4	5.4	176.7	690.1	269.7	6212.9
1991	83.5	68.6	628.9	627.7	733.3	1033.1	199.9	1495.9	5.1	174.0	692.9	264.9	6007.8
1992	77.6	65.9	601.2	662.9	697.4	997.1	194.7	1391.1	5.3	174.4	642.8	263.4	5773.7
1993	73.4	64.6	570.6	649.0	678.6	947.2	190.8	1356.5	5.1	170.2	639.6	261.5	5607.1
% 93/92	-5.3	-2.0	-5.1	-2.1	-2.7	-5.0	-2.0	-2.5	-3.9	-2.4	-0.5	-0.7	-2.9

(1) Germany in its boundaries prior to 3 October 1990.

(2) Eurostat estimate for the period 1973-1979.

(3) Eurostat estimate.

(4) Eurostat estimate for the period 1973-1978.

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FR Classification des publications d'Eurostat

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