



# RAPID REPORTS

## Agriculture, forestry and fisheries

1994 □ 6

ISSN 1017-5776

### FORECASTS OF AGRICULTURAL ACCOUNTS FOR 1993

#### Widely varying trends in income in 1993

- Slight fall (-1.2%) in agricultural income in the Community in 1993, with widely varying trends in individual Member States;
- Declines in the prices of certain agricultural products (cereals, cattle) in the wake of the CAP reform and the introduction of large-scale direct compensatory aid;
- Unfavourable economic trends for other products not covered by the CAP reform (pigs, wine, fruit);
- Only aid actually paid in 1993 (about 86% of new aid available under the CAP reform) was taken into account in the calculation of agricultural income. This percentage varies between Member States, a fact which could consequently affect comparisons between countries.

#### Overview of results

According to provisional figures, agricultural income in the Community, measured by net value added at factor cost per annual work unit (AWU), is forecast to have declined in real terms by -1.2% in 1993. This follows the steep decline recorded for 1992. In 1993, changes in agricultural income varied considerably from one Member State to another. It stabilized in Belgium and Greece, improved in Ireland and Denmark, and increased very significantly in the United Kingdom and Spain. In contrast, there was a decline in the other Member States, with decreases in excess of -10% in Portugal, the Netherlands and Germany.

These results are due to a combination of the following developments:

- a major decline in the volume of crop production (-4.1%), particularly of wine (-12.1%), fresh fruit (-11.2%) and fresh vegetables (-4.1%);
- a fall in the real prices of final agricultural production (-6.3%, due mainly to a fall in cereal prices of -14.0% and a -24.0% drop in the real prices of pigs);
- a major increase in subsidies, which rose by +43.9% in real terms, in line with the direct subsidies introduced in the context of CAP reform.

Manuscript completed on = 23.02.1994

For further information please contact: M. P. BASCOU  
Eurostat, L-2920 Luxembourg, tel. 4301-37219 Fax: 4301-37317

Price (excl. VAT) in Luxembourg: Subscription ECU 227

Catalogue number: CA-NN-94-006-EN-C

These developments can be explained in the light of the following factors: (1) the implementation of the **reform of the Common Agricultural Policy**, which, in certain areas of production, has led to lower support prices, measures designed to control production, the granting of new direct compensatory payments and the upgrading of some existing aid; (2) **devaluations** of green currencies following monetary realignments which have occurred since September 1992 and which as a consequence in certain Member States have led to a raising of agricultural prices in national currencies; (3) **inclement weather**, which affected the production of certain crops (fresh fruit and wine); and (4) **major sectoral imbalances** (pigs, wine).

Despite the limitations inherent to agricultural accounts, which are macro-economic in character, those agricultural production sectors whose market organization has been reformed (in particular, cereals, oilseeds, protein crops and cattle) generally seem to have produced better results, thanks to the introduction of compensatory aid, than other sectors which have been badly affected (pigs, fresh fruit and vegetables, wine).

Finally, it should be pointed out that only aid actually paid to farmers in the calendar year 1993 was included in the calculation of agricultural income for that year. In the Community as a whole, it is thought that **aid actually paid was about 86% of total aid payable** under the CAP reform for the 1993/94 marketing year. However, this percentage varies between Member States, a fact which may affect the comparison between countries.

### **The development of the income indicators**

Every year at this time, Eurostat publishes data and analyses of changes in agricultural income in the Community<sup>1</sup> and in the twelve individual Member States during the previous year. This is done on the basis of the Member States' official estimates, which become available in January/February. **Two indicators<sup>2</sup>** are used to monitor changes in agricultural income.

**Net value added in agriculture** at factor cost, in real terms and by total AWU (independent and hired labour) (**Indicator 1**) fell by -1.2% in EUR 12.

**Net income from agricultural activity of the total labour force** (net value added at factor cost, less rents and interest payments), in real terms and by total AWU (**Indicator 2**), fell by -0.9% for EUR 12.

As data for the unified Germany are only available for 1992 and 1993, it has not been possible to compare the development of Indicators 1 and 2 in 1993 with the development of the same indicators in previous years.

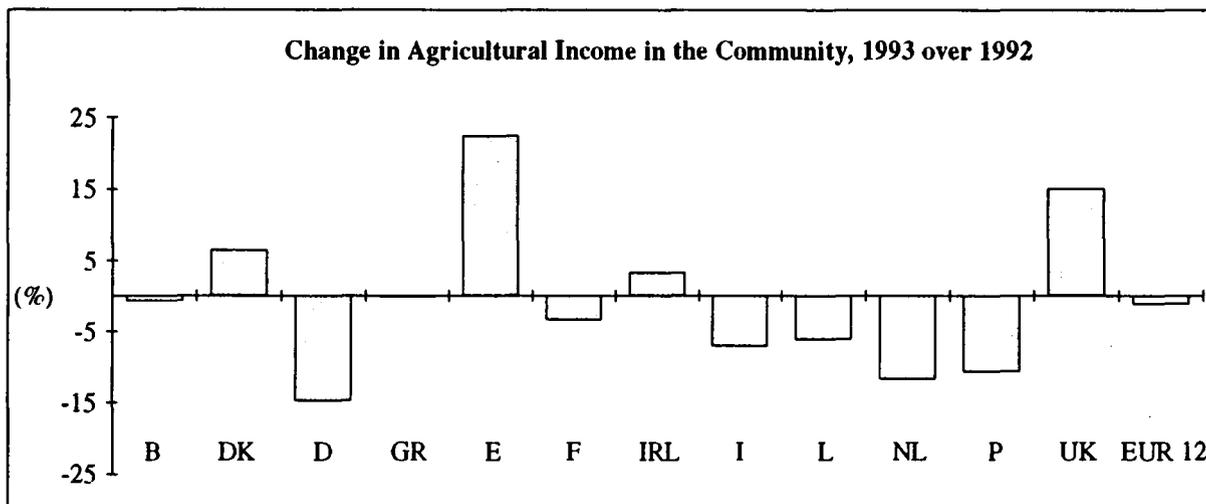
Nevertheless, in order to obtain an overview of how agricultural income in the Community has changed in recent years, the three indicators have been calculated on the basis of agricultural income in the Federal Republic of Germany as constituted prior to 3 October 1990 (estimated in December 1993). It is estimated that Indicator 1 fell by -1.3% in 1993, following a steep decline of -5.4% in

---

<sup>1</sup> For the first time, the forecasts of agricultural income include the new German Länder. The aggregated results for EUR12 therefore cover the entire Community.

<sup>2</sup> A third indicator which is generally used, **net income from agricultural activity of the family labour** (net income from total agricultural activity, less the compensation of employees), in real terms and by family AWU (the holder and members of his family working on the holding) has not been estimated: it was not possible to calculate the compensation of employees in Germany on a basis comparable with that in the other Member States, because of the special circumstances of agriculture in the five new Länder.

1992 (revised figure). The stabilization of agricultural income in 1990 and 1991 at a high level after the sharp increase of 1989, gave way to a serious deterioration in 1992. This decline has turned out to be steeper than first estimates suggested (-3.5% in January/February 1993); some results being adjusted sharply downwards (the case in Germany, Greece). Indicators 2 and 3 are estimated to have fallen by -1.0% and -2.2% respectively in 1993 (1992: -6.4% and -10.2%; 1991: +0.7% and -0.3%).



### Implementation 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 during the 1993/94 marketing year (apart from oilseeds, for which the new common organization of the market took effect in the 1992/93 year). The main aim of the CAP reform is to adjust agricultural production to internal and external demand.

The most important measures adopted as part of the reform centre on the three following elements: (i) lower prices for agricultural products; (ii) measures designed to control production; and (iii) the granting of compensatory aids to producers (new forms of direct compensatory aid and/or the upgrading of certain types of aid already available).

The reform of the CAP is essentially characterised by a change from price-support policy to a policy of direct income support. This new orientation of the CAP has brought about some major changes in the analysis of agricultural accounts: the fall in prices and production volumes has resulted in a significant drop in final production and gross value added at market prices. However, the large amounts paid in the form of direct compensatory aid and by way of upgrading existing types of aid have resulted in a very significant increase in subsidies. This increase reflects the modification of the support system to agriculture, 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 is worth pointing out that they are included only insofar as they have actually been paid, as opposed to merely being payable. Thus, only subsidies actually paid during the calendar year 1993 have been added to the calculation of agricultural income in that year. Some aid granted in respect of the 1993/94 season was not actually paid in 1993, and has therefore been disregarded. **It has been calculated that nearly 86% of the total amount granted in new or upgraded aid as part of the CAP reform was actually paid in 1993 and therefore taken into account in that year's estimate of agricultural income.**

## **Changes in final agricultural production in the Community as a whole**

The value of **total final agricultural production**, expressed in nominal terms, fell sharply in 1993 (-4.7%, comprising a -2.7% decline in nominal prices and a -2.1% fall in production volume). This was due to the lower value of **crop production** (-6.8%) and **animal production** (-2.7%). The decline in the volume of final agricultural production in 1993 (-2.1%) was the first since 1981. If the effects of inflation are taken into account<sup>3</sup>, the **real value of final production** fell by -8.3%, mainly as a result of **lower real prices** (-6.3%) and the decline in production volume (-2.1%).

### **Crop production: large overall declines in harvests and real prices**

The value of crop production decreased by an average of -6.8% in nominal terms, because of a lower production volume (-4.1%) and nominal price (-2.9%). In real terms, there was a much more dramatic decline, brought about by a combination of lower volume and an average fall of -6.7% in real prices. Denmark was the only country which saw an increase in the real value of crop production in 1993 (+7.2%). All the other Member States recorded declines, the four most seriously affected being Germany and France, where real prices fell by more than -10%, and Portugal and Luxembourg, where production volumes plummeted by nearly -20%.

An examination of changes in the main groups of crop products reveals that harvests of fresh fruit, grape must and wine, fresh vegetables, potatoes and oilseeds were much smaller than in 1992. The changes, mainly declines, in the real prices of crop products did not therefore offset lower production volumes in terms of their real value, except in the case of oilseeds. The lower prices were caused either by structural or short-term market imbalances (as was the case with many products) or by a change in the common organization of the market (cereals and protein crops). It should be noted that the decline in the cereals harvest (-1.4%) was fairly small given the restrictive measures taken as part of the CAP reform (in particular, set-aside). Accordingly, it appears that the major improvement in yields in some Member States, whose harvests had fallen significantly in 1992 in the wake of inclement weather, mitigated the impact of the reduction in cultivated areas. The fall in the real prices of cereals (-14.0%) which followed the reduction of institutional prices was felt by most Member States, although in varying degrees, since the impact of lower prices was limited in some countries by the realignment of green currencies.

### **Animal production: widespread stability in the quantities produced and a sharp decline in real prices**

The nominal value of animal production fell by -2.7% as a result of lower nominal prices (-2.6%) and the stagnation of production volume (-0.1%, a figure which masks fairly divergent trends for individual products). In real terms, the decline in the value of animal production was more pronounced (-6.1%), because of the steeper fall in real prices (-6.0%). The real value of animal production rose in only three Member States (Italy, the UK and Ireland), mainly as a result of a marked increase in real prices (Ireland and the UK) or of higher volume (Italy).

The most significant feature of animal production in 1993 was the persistent crisis affecting the pig sector, where the Community market is experiencing severe structural imbalance: despite a chronic excess of supply over demand, production continues to rise. Moreover, the worrying veterinary situation in some Member States has been depressing trade in the sector since the spring of 1993.

---

<sup>3</sup> See Methodological Note 3.

The results for pig production depressed the average real price and real value of animal production. The trend in the production volume of cattle was broadly similar throughout the Community, with reductions in ten Member States and increases in only two (Belgium and Italy). The overall fall was mainly due to the cyclical character of production, although this was accentuated by the fact that producers had retained some female cattle in 1992 in order to benefit from the suckler-cow aids. The lowering of institutional prices, which was decided upon as part of the CAP reform, had only a minor effect on real prices, which rose by +3.4%, thanks to a drop in supply.

Finally, average production of milk, the Community's main agricultural product, remained stable in 1993 (+0.2%). The changes in most Member States fell within a fairly narrow band, except in Portugal, where there was a relatively large decline, and Greece, which recorded an above-average increase. Milk quotas for 1993 were maintained at their 1992 levels in most Member States. Thanks to stable production and lower intervention stocks for butter and skimmed milk, nominal prices firmed somewhat, rising by +1.2% on average, although real prices fell by -2.3%.

Although the use of **intermediate consumption** fell by -1.4% in volume terms, its nominal value remained stable, due to higher prices (+1.4%). For the fourth year running, these price increases caused a deterioration in the Community farm "price scissors" (-4.1%) at a time when the apparent productivity of intermediate consumption fell slightly (-0.7%). However, as the increase in the prices of intermediate consumption was below the rate of inflation, the value of intermediate consumption fell by -3.5% in real terms. The volume of the main items of intermediate consumption fell, particularly fertilizers and plant protection products, the consumption of which showed a further appreciable decline. The only notable exception was the increased volume of feedingstuffs, which was probably due to the trend in pig production.

The changes in intermediate consumption and final agricultural production led to a significant decline in **gross added value at market prices** of -8.5% in nominal terms (-12.1% in real terms). The big increase in subsidies,<sup>4</sup> which rose by +49.9% in nominal terms for EUR 12 (+43.9% in real terms), mainly reflects the introduction and strengthening of measures comprising part of the CAP reform, designed to compensate farmers for reduced price and market support. As was pointed out before, only subsidies actually paid in the course of the 1993 calendar year were included in the calculation of agricultural income. These are thought to have amounted to nearly 86% of new and upgraded aid payable under the CAP reform.

By adding subsidies and deducting **taxes linked to production**, which fell by -14.0% in nominal terms (-17.3% in real terms, mainly because of the dismantling of co-responsibility levies for cereals and milk), **gross value added at factor cost** is obtained. This decreased by -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, including a further significant decline in Spain) from gross value added at factor cost, **net value added at factor cost** is obtained, which fell by -1.2% in nominal terms for EUR 12 and by -5.2% in real terms.

The reduction of the total agricultural labour force, expressed in annual work units, increased to -4.0% in 1993, significantly more than the long-term trend. National changes ranged from -0.7% in the UK to -7.8% in Germany, with other large reductions in Belgium, France and Spain. This decline in the agricultural labour force attenuated the impact of lower value added on **Indicator 1**, which nevertheless fell by -1.2%.

---

<sup>4</sup> In the Economic Accounts for Agriculture, subsidies include only current direct transfers to agriculture, i.e. they exclude such items as price support (which has a direct effect on production prices), investment aid and aid to the agri-food industry (including aid designed to support agricultural production).

The moderate increase in rents and, more especially, the steep decline in interest payments (+1.4% and -4.2% respectively in nominal terms; in real terms, there were declines of -2.6% and -7.6% respectively, i.e. greater than the reduction in net added value at factor cost) partly explain the fall in **Indicator 2** (-0.9%), which was slightly smaller than the fall in Indicator 1. **Net total income**, which forms the basis of Indicator 2, fell by -0.8% in nominal terms (as against -1.2% for net value added at factor cost) and by -4.9% in real terms (compared with -5.2% for net value added at factor cost).

Owing to the lack of data for Germany, it was not possible to calculate the change in **compensation of employees** for the Community as a whole, nor the changes in income aggregates deriving from it, i.e. net family income and Indicator 3 of agricultural income. Nevertheless, it should be noted that, in the other eleven Member States, compensation of employees was stable in nominal terms (0.0%), declining in real terms by -3.5%. This caused **net family income** to rise by +3.8% in nominal terms (-0.7% in real terms). Combined with a -2.6% decline in the **family agricultural labour input**, this caused **Indicator 3** of agricultural income to rise by +1.9% in the eleven Member States referred to above. It is clear from this result that the sharp drop in agricultural income recorded in Germany in 1993 had a considerable negative effect on agricultural income in the Community as a whole (this is also true of Indicators 1 and 2).

### **Contrasting trends in different Member States**

Country-by-country analysis reveals contrasting situations, because of disparate agro-economic trends in 1993 and differences in the reference base (1992), itself the result of developments in previous years. Agricultural income as measured by Indicator 1 fell in 1993 by more than -10% in Portugal, the Netherlands and Germany, which recorded the biggest fall. Fairly large declines were also recorded in Italy and Luxembourg and, to a lesser degree, in France. Agricultural income was stable in Greece and Belgium, and rose in only four Member States: Ireland, Denmark (where the increase was relatively small in 1993, and the cumulative change for 1992 and 1993 remains negative), and the United Kingdom and Spain, which showed the biggest increases in 1993. Whereas only Ireland and the UK have seen two consecutive years of increase, three Member States (Luxembourg, the Netherlands and Portugal) have now experienced three successive years of decline (the same goes for Belgium if Indicators 2 and 3 are used).

### **Methodological notes**

1. The results published here are based on data for last year, and are provided by the competent bodies in the Member States, although Eurostat provided estimates of the agricultural labour input in Ireland. The income indicators cover only the agriculture branch and do not, therefore, represent the total income of persons employed in agriculture, who may have other sources of income (secondary activities, wages, social security payments etc.).
2. The concept of "final production" is applied to the European Community's Economic Accounts for Agriculture and differs from the "delivery" concept used in some Member States, in that it includes changes in stocks, for example. This explains certain differences between the data published nationally and those published by Eurostat in accordance with a harmonized methodology.

3. The deflator used to calculate prices and values in real terms for each product or aggregate in each Member State is the implicit price index of GDP. The rates of change (nominal or real) for EUR 12 are averages of national rates, weighted by their shares in the corresponding EC aggregate in a base year, expressed in ECUs. In the calculation of Indicator 1 for long-term (or short-term) analysis, for example, the rates of change, nominal or real, in net value added (NVA) for EUR 12 are averages of the rates of change in the Member States, weighted in accordance with their share of NVA in the Community in 1985 (or 1992), measured in 1985 (or 1992) ECUs. Real rates of change in NVA are then divided by the rates of change in the numbers of AWUs to obtain the rates of change in Indicator 1.

### **Further information**

Detailed data and analyses of trends in agricultural income and its components may be found in *Agricultural Income 1993* (Theme 5, series D) (in preparation). This publication contains an analysis of changes in agricultural income in 1993 compared with 1992 in the Community as a whole and in each Member State (on the basis of the indicators described here, plus a cash-flow indicator), followed by an in-depth analysis of corresponding trends over the period from 1980 to 1993, and some comments on the relative levels of agricultural income in each Member State. Eurostat has also published *the Economic Accounts for Agriculture and Forestry 1987-1992* (Theme 5, series C).

**Table 1: Indicator 1: Calculation of annual changes 1992/91 and 1993/92, in %**

Member State	Nominal net value added		Deflator (GDP price)		Real net value added		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 (1)	-	-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

(1) Unified Germany

**Table 2: Indicator 1: Net value added per AWU (1984+1985+1986/3 = 100)**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
B	86.8	95.3	100.3	108.3	104.4	99.5	96.2	90.6	98.0	122.6	112.1	112.2	102.0	101.3
DK	65.3	74.8	90.5	77.5	103.2	96.4	100.4	81.5	84.2	100.5	96.3	88.3	76.9	81.8
D (1)	90.1	90.8	110.6	89.3	102.3	92.6	105.1	87.8	108.8	130.4	114.0	106.2	102.3	79.0
GR	92.0	97.4	100.1	90.9	98.8	101.3	99.9	99.4	107.9	121.9	105.8	144.3	119.6	119.5
E	90.3	80.0	92.4	92.2	100.8	102.7	96.4	102.1	116.5	114.6	121.8	127.0	112.1	137.4
F	88.0	91.2	107.6	100.3	99.4	100.0	100.5	101.5	99.6	117.9	125.4	117.1	117.2	113.3
IRL	88.1	88.4	96.5	100.9	112.1	97.5	90.4	110.7	129.8	133.0	136.7	129.0	154.4	159.4
I	109.2	106.7	107.2	112.3	101.3	101.2	97.5	98.8	93.3	99.4	91.5	98.3	92.2	85.7
L	68.3	77.1	106.8	93.2	96.6	100.0	103.4	105.9	108.8	123.6	116.3	101.1	96.2	90.2
NL	75.1	92.2	96.8	93.3	100.7	95.5	103.7	85.8	89.3	105.5	101.3	100.7	87.1	76.9
P	97.4	92.0	102.8	98.6	99.3	97.4	103.3	101.2	85.7	101.6	105.7	95.6	82.3	73.5
UK	92.3	98.0	106.3	95.5	114.6	90.5	94.9	95.3	86.5	97.2	99.2	93.8	99.2	114.2
EUR 12	91.9	93.6	103.4	99.2	102.2	98.4	99.5	96.8	99.5	111.9	109.7	110.5	105.1	103.6

(1) Federal Republic of Germany as constituted prior to 3 October 1990