

1990 □ 16

EC AGRICULTURAL ACCOUNTS 1990

Agricultural income 1990

In 1990 agricultural income in the Community (1) is expected to fall in real terms by 2.8%, chiefly because of a drop in the prices in real terms of agricultural products (particularly animal) which was greater than the increase in production volume. Agricultural income is declining in all Member States except Spain and Portugal, although in most cases the downturn is less than the significant increases in agricultural income in 1989.

The forecasts of **agricultural income** for 1990 are based on provisional estimates as at 12 December 1990. Some degree of decline in agricultural income is expected for 1990 in the Community as a whole. There are **three indicators** for assessing trends in this income. **Net value added** at factor cost, in real terms and by annual work unit (AWU) (**indicator 1**) should fall by 2.8% for the Community (EUR 12). This follows a sharp increase of 11.5% in 1989 (see Table 1).

Net income from agricultural activity (net value added at factor cost less rents and interest payments), in real terms and by annual work unit (hired and non-hired workers) (**indicator 2**), and the **net income of the non-hired agricultural labour force**, i.e. the holder and the members of his family working on the holding (net value added at factor cost less rent, interest payments and wages), again in real terms and per non-remunerated annual work unit (**indicator 3**), are likely to show decreases of -4.1% (1989: +12.3%) and -6.0% (1989: +16.1%) respectively.

Eurostat is shortly to publish the Economic Accounts for Agriculture and Forestry for the period 1984-1989 (Theme 5 Series C)

(1) Data for the Federal Republic of Germany as it was before 3 October 1990, including West Berlin.

Manuscript completed on = 18.12.1990

Statistical Office of the European Communities, L-2920 Luxembourg, tel. 4301-2985/3339

Price (excl. VAT) in Luxembourg: Subscription ECU 145

Catalogue number: CA-NN-90-016-EN-C

Initial analysis of the main causes of this drop in agricultural income shows first of all that the overall value of **final production** appears to have remained very stable in 1990 (+0.1%), with a slight drop in prices (-0.4%) in nominal terms and an equally slight growth in volume (+0.5%).

The **volume of crop production** is likely to have fallen by 0.9% (though far more sharply in Greece, Italy and Luxembourg) following a fall-off in most products except root crops (production of which fell only in Greece and Italy) and oil seeds and oleagenous fruit, which were produced in larger quantities almost everywhere. The sharpest falls in volume production were in olive oil (-19%), particularly in Italy (-55%, but increasing in Spain and Portugal), fresh fruits (-3.9%, particularly in Belgium, Spain, the Netherlands, Portugal and the United Kingdom) and cereals (-2.6%, particularly in Belgium, Greece, Spain, France and Portugal). Wine production shows conflicting and mutually compensatory trends (-1.4% despite reductions of around 30% in Germany, Greece and Luxembourg). The same was true of fresh vegetable (-0.5%, with appreciable drops in Belgium, France and the United Kingdom).

A 3.8% rise in nominal terms in **crop production prices** continues the 1989 trend (less than the inflation rate but more than the rise in intermediate consumption prices) and applies to most Member States. There were, however, some reductions (Belgium, Ireland, Germany and Luxembourg) in the prices of potatoes (-2.4%) and oilseeds and oleaginous fruit. Cereal prices remained stable on average (-0.1%), but increases (however slight) in Spain, France and the United Kingdom were offset by reductions everywhere else. The prices of all other crop products rose significantly in 1990: fruit (+15.8%) and vegetables (+9%), olive oil (+8.9%) and grape must and wine (+5.9%, despite a fall-off in Spain and Portugal).

The **value** of crop production thus increased by 2.9% (above all in Spain, the Netherlands and Portugal) owing to price rises (although it fell appreciably in Belgium, Greece and Luxembourg). The rise was particularly in fruit and fresh vegetables (11.3% and 8.4%) and wine (4.4%), but there was a decrease for cereals (-2.7%) and olive oil (-11.8%).

The **volume of total animal production** should go up (a fairly even increase of +1.5%, ranging from -0.3% in Belgium and Greece to more than 5% in Ireland and Portugal), chiefly because of production of animals: cattle (+2.9%), pigs (+2% despite an as yet uncertain drop in Belgium), sheep (+3.8% despite a downturn in Portugal) and poultry (+1.3%). Milk and egg production varied only slightly overall, despite contrasting trends in individual Member States.

The **price of animal production** in nominal terms shows a clear downturn (-3.5%, compared with the very sharp increases in 1989). This affects the main products (cattle: -6.4%; pigs: -3.8%; milk: -3.4%) and all Member States except some of those with high inflation rates. The result is a drop in the **value of animal production**: -2.0% across the board, with -1.5% for animals and -2.8% for animal products.

The value of **intermediate consumption** is likely to rise by 1.6% owing to an increase in both the volume (+0.4%) and the price (+1.2%) of intermediate consumption. The upturn in the consumption of animal feedingstuffs and plant protection products accounts for the increase in volume, while all prices of products consumed by agriculture are likely to increase in nominal terms (except animal feedingstuffs: -4.7%).

Gross value added at market prices (total final production less intermediate consumption) in nominal terms is expected to remain more or less the same in 1990 as in 1989 (-0.4%). Value added at factor cost is calculated from value added at market prices by adding production subsidies and deducting taxes linked to production.

Depreciation is expected to rise by 5.6%, which explains the negligible change in net value added at factor cost for EUR 12: -0.1% (following +12.6% in 1989). It could, however, be noted that the decrease is -1.7% for EUR 10 (following +14.3% in 1989).

Interest rates and rents are expected to rise by 6.6%, with a consequent downturn of -1.5% in the net nominal income of the workforce as a whole for EUR 12 (+13.4% in 1989) and -3.2% for EUR 10 (+15.8% in 1989).

Compensation of employees in agriculture will probably rise by 5.0%, causing a drop of -3.5% in the net nominal income of family workers for EUR 12 (+16.4% in 1989) and -5.8% for EUR 10 (+14.3% in 1989).

Lastly, two further factors influence agricultural income per AWU in real terms: the variation of the number of such units and the inflation rate.

According to the data currently available, the **agricultural labour force** should diminish by 2.8% in 1990 (-3.9% in 1989). This slow-down of the drop in the labour force appears to be due to the surprising rates of change recorded in Ireland and Italy, which will also stand out as the only two Member States to experience a cumulative downturn in real agricultural income per AWU over 1989 and 1990. The rate of change of the implicit price index of gross domestic product at market prices, which is used as a **deflator**, will be slightly higher in 1990 than the rates of change in previous years (1988: 4.5%; 1989: 5.1%; 1990: 5.7%).

A country-by-country analysis reveals contrasting situations due to differences in agro-economic trends and the reference base, i.e. differences in trends in previous years.

The sharpest drops in agricultural income (indicator 1) occurred in the following Member States:

- Belgium (-15.2%, following +16.5% in 1989), owing to a drop in the prices of almost all products while volume production remained stable on average;
- Ireland (-10.0%, following only +1.3% in 1989), caused by very sharp drops in the prices of all products and despite a significant increase in production volume and the very sharp rise in subsidies (the fall in income per AWU is also due to the unusual growth in the agricultural labour force);
- Italy (-9.9%, following +5.6% in 1989), despite an increase in agricultural prices which was higher than that in intermediate consumption, but caused by drops in the volume of crop production and the apparently unchanged agricultural labour force;
- Federal Republic of Germany (-9.8%, following +16.7% in 1989), attributable to drops in prices (animal production) combined with contrasting changes in volume (decreases in wine and milk offsetting the increases in other products).

The following six Member States showed smaller rates of decrease than those set out above:

- Luxembourg (-7.0%, following +15.8% in 1989), chiefly because of the fall-off in grape-must and wine production;
- Greece (-5.8%, following +8.0% in 1989), owing to very severe drops in the production volume of crops (due to drought); apparent price increases (production and intermediate consumption) followed the general inflationary trend;
- Denmark (-4.7%, following 19.5% in 1989), chiefly because of falling animal prices;
- United Kingdom (-3.6%, following +11.7% in 1989), the slight increase in agricultural prices (a decrease in animal prices) being substantially less than the rise in intermediate consumption prices and in the deflator, while production volume increased only very slightly on average;

- Netherlands (-2.4%, following +16.6% in 1989), the sharp drop in agricultural prices (except fruit and vegetables) being offset by the growth in production volume, the fall in intermediate consumption prices and the increase in subsidies;
- France (-1.9%, following +15.6% in 1989), downturns in animal prices being offset by increases in fruit and vegetables and in grape must and wine, while volume trends were on average slightly upward (drop in cereals) and subsidies increased considerably.

Lastly, two Member States went against the general trend in agricultural income in 1990:

- Spain (+3.6%, following only +1.8% in 1989), the increases in crop prices being offset by lower animal production prices, while production volume rose appreciably (particularly wine and olive oil, but also animal production) and the agricultural labour force continued to decline sharply;
- Portugal (+10.5%, following +17.0% in 1989), owing to mutually offsetting volume trends (growth in wine and olive oil and fall-off in cereals), whereas prices showed a favourable trend on average and the agricultural labour force fell sharply.

A **medium-term comparison** shows that real agricultural income in the Community in 1990 was still above its "1985" level (+8.5%) (see Table 2). Here, too, there are considerable differences between Member States. The increase between "1985" and 1990 is above average in Spain, the Netherlands, Ireland, Luxembourg, Germany and Greece (growth of 14-20% in these six Member States) and close to average in France and Portugal. In contrast, income has been more or less unchanged since "1985" in Belgium and is even showing a downturn in the United Kingdom, Italy and Denmark (-7% to -11%).

Averaging the indices of agricultural income (indicator 1) from 1988 to 1990 ("1989") per Member State eliminates the sharp annual fluctuations in agricultural production. It will be seen that "1989" income has remained at least at the same level as in "1980", remaining more or less unchanged in Italy and the United Kingdom. There was an increase in the other Member States, but at very different rates:

1988-1990 ("1989") trends compared with 1979-1981 ("1980")
 ("1980" = 100) (a)

B	121,1	IRL	147,7
DK	129,8	I	97,2
D	125,1	L	158,5
GR	129,1	NL	137,5
E	143,5	P	105,0
F	108,3	UK	99,3
EUR 10	113,3	EUR 12	119,8

(a) For Portugal, "1980" = 1980-1981
 (data for 1979 not available)

These are provisional estimates. In March 1991, Eurostat will publish **revised figures** and a **detailed analysis** of trends in agricultural income for the Community as a whole and for each Member State.

Methodological notes:

1. The results published here are estimates by the relevant national bodies in the Member States for the current year (with the exception of a Eurostat estimate of depreciation and interest in Italy). The income indicator "net value added at factor cost" covers only the production sector agriculture and does not therefore represent total income of persons employed in agriculture, who may have income from other sources. The labour force input and any changes therein are expressed in annual work units (AWU). One AWU is equivalent to one person employed full-time in agriculture for the whole year.
2. The concept of "final production" is applied in the European Community's economic accounts. It differs from the "delivery" concept used in certain Member States in that it includes changes in stocks and investments in agricultural products. This explains any differences between data published nationally and data published by Eurostat according to a harmonized methodology.
3. The rates of change in net value added (NVA) in nominal terms for the Community (EUR 12 and EUR 10) are averages of the corresponding rates of change in the Member States, weighted by their share of NVA in the Community in 1988 and 1989 (column 1 of Table 1). This result is divided by the total change in the number of AWU (column 2) to give the rates of change in nominal NVA per AWU in the Community (column 3). The change in real NVA per AWU in the Community (column 5) is obtained by deflating this result by the implicit price index of GDP for the Community, which is an average of the corresponding indices in each Member State, weighted by each country's share of Community GDP.

**Further information may be obtained from:
Paul Bonnefoy, Tel. (+352)4301 3339 - Fax (+352)4301 3370.**

Table 1 : Indicator 1, yearly variation 89:88 et 90:89

	Nominal net value added at factor cost (a)		Total agricultural labour input in AWU (b)		Nominal net value added at factor cost per AWU (1 : 2)		Implicit price index of GDP at market prices		Real net value added at factor cost per AWU (3 : 4)	
	1		2		3		4		5	
	89:88	90:89	89:88	90:89	89:88	90:89	89:88	90:89	89:88	90:89
B	19,0	-14,6	-2,3	-2,5	21,8	-12,4	4,5	3,3	16,5	-15,2
DK	20,0	-2,9	-3,9	-1,0	24,8	-1,9	4,5	3,0	19,5	-4,7
D	17,3	-9,3	-2,0	-3,0	19,7	-6,5	2,6	3,7	16,7	-9,8
GR	19,8	11,5	-3,9	-2,0	24,7	13,7	15,5	20,8	8,0	-5,8
E	(1,8)	4,5	-6,5	-6,1	8,9	11,3	6,9	7,4	1,8	+3,6
F	15,6	-1,8	-3,3	-3,3	19,5	+1,5	3,4	3,5	15,6	-1,9
IRL	4,3	-6,2	-2,0	+2,0	6,4	-8,1	5,1	2,1	1,3	-10,0
I	7,6	-3,5	-4,2	0,0	12,3	-3,5	6,3	7,1	5,6	-9,9
L	17,4	-7,9	-2,3	-4,0	20,2	-4,1	3,8	3,1	15,8	-7,0
NL	18,3	-0,6	0,0	-1,0	18,3	+0,4	1,5	2,9	16,6	-2,4
P	25,0	18,3	-5,0	-6,0	31,6	25,9	12,5	13,9	17,0	+10,5
UK	16,7	1,8	-2,4	-1,9	19,6	3,8	7,0	7,7	11,7	-3,6
EUR 12	12,6	-0,1	-3,9	-2,8	17,2	+2,7	5,1	5,7	11,5	-2,8
EUR 10	14,3	-1,7	-3,1	-1,5	18,0	-0,1	4,8	5,4	12,6	-5,3

(a) Based on the concept of "final output", rather than on that of "deliveries" (see methodological note 2, particularly for France).

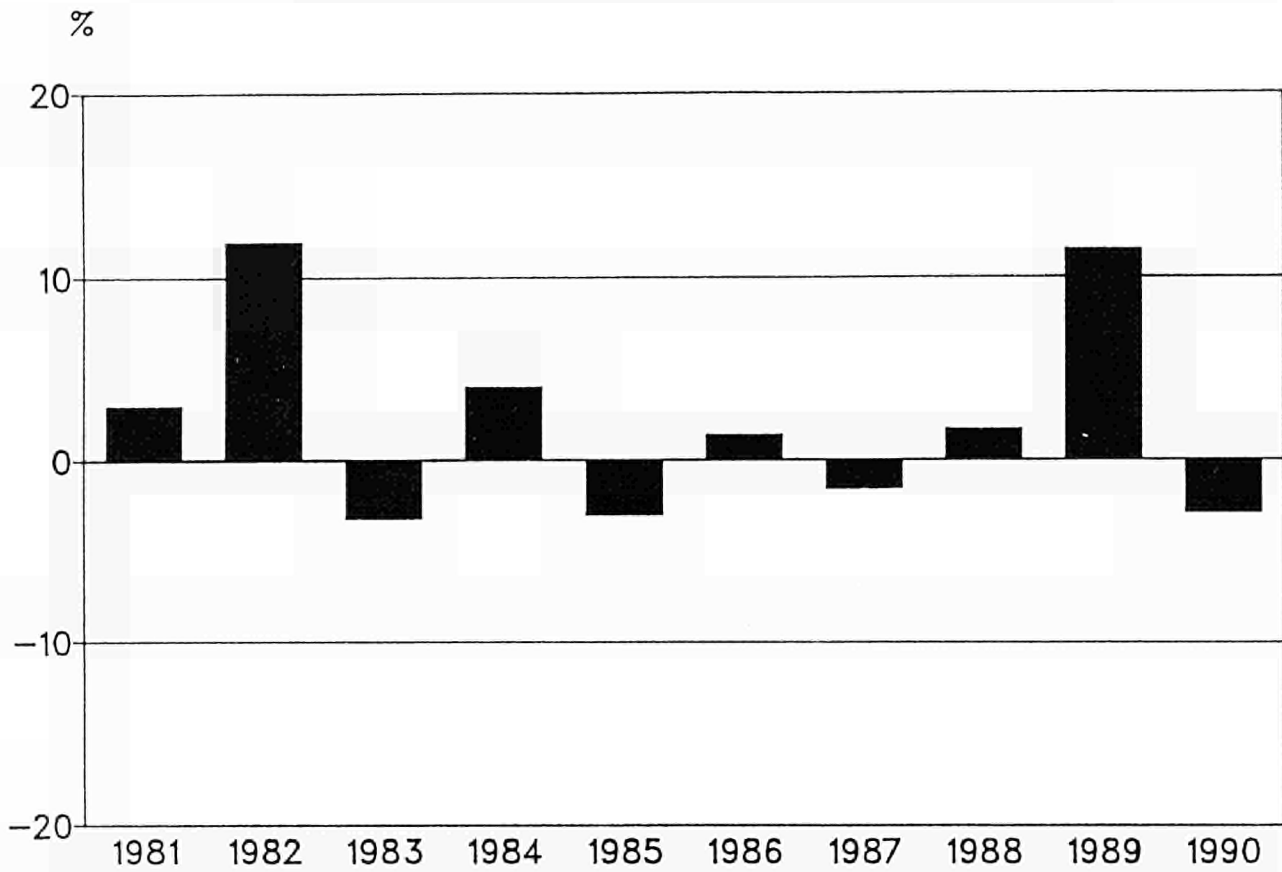
(b) Changes based on number of persons employed (instead of AWU) for Ireland.

Table 2:
Indices of real net value added at factor cost per annual work unit (AWU),
"1985"=100 (1), 1973-1990

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
B	102,5	81,9	85,8	101,2	84,2	90,8	82,2	86,9	95,4	100,4	108,3	104,3	99,4	96,4	90,8	98,8	115,1	97,6
DK	65,4	63,8	53,3	55,2	64,4	70,7	60,9	65,8	75,4	91,3	78,1	104,5	95,7	100,2	79,8	78,7	94,0	89,6
D	123,1	105,3	119,2	123,6	118	113,3	100,9	89,9	90,8	110,8	89,3	102,5	92,5	105,1	87,8	109,4	127,7	115,2
GR	72,9	70,8	72,1	78,4	75,3	85,1	80,6	91,6	97,7	100	90,8	98,9	101,4	99,8	101,3	112,5	121,5	114,5
E	74,3	63,5	71,4	76,4	87	88,1	80,2	86,2	76,6	88,8	89,2	100,2	102,3	97,5	104,7	113,5	115,5	119,7
F	116,2	107,1	99,5	98,6	96,2	99,7	102,1	91,6	94,3	110,4	101,9	100	100,4	100	99,6	94,8	109,6	107,5
IRL	82,8	75,9	92,9	88,8	109	111,5	92,6	77,8	81,6	88,9	93,9	108,7	100,2	91,8	110	127,2	128,9	116,0
I	101,5	94,6	97,4	90,8	95,7	96,8	103,4	96,9	96,4	100,4	110,6	100,7	102,1	97,8	100,5	95,9	101,3	91,2
L	71,5	59,3	65,5	57,2	71,7	72,2	74,3	68,6	76,9	106,7	94,2	97,9	99	103,9	102,4	107,7	124,7	116,0
NL	91,1	77	82,9	90,3	86	84,7	78,7	75,2	92,3	96,9	93,4	100,9	95,6	103,5	99,6	102,5	119,5	116,6
P	:	:	:	:	:	:	:	95,7	89,9	100,5	97,3	99,6	98,4	102,8	99,8	84,4	98,7	109,1
UK	117	106,2	102,1	110,8	103,2	98,2	94,8	88,3	94,7	102,8	93,1	111,8	90,4	97,8	96	86,4	96,5	93,0
EUR 10	104,2	94,5	95,2	95,9	95,2	96,4	95,5	89,3	93,3	103,9	99,3	102	98,3	99,7	97,7	98,7	111,1	105,2
EUR 12	:	:	:	:	:	:	:	87,5	90,1	100,8	97,6	101,5	98,5	99,9	98,4	100,1	111,6	108,5

(1) "1985" = (1984 + 1985 + 1986)/3

ANNUAL RATES OF CHANGE OF REAL NET VALUE ADDED AT FACTOR COST OF AGRICULTURE PER AWU IN THE COMMUNITY, 1981-1990



ANNUAL RATES OF CHANGE OF REAL NET VALUE ADDED AT FACTOR COST OF AGRICULTURE PER AWU IN THE COMMUNITY, 1989-1990

