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FORECASTS FOR EC AGRICULTURAL ACCOUNTS

AGRICULTURAL INCOME 1991

In 1991, agricultural income in the Community ⁽¹⁾, measured by real net value added per annual work unit, is expected to fall by around 4.8%, chiefly because the prices of agricultural products (particularly animal production) have fallen in real terms, whereas production volume has been static. This means that during two years of decline, agricultural income is likely to have lost much of the benefit from the exceptional year of 1989, and in 1991 it will have declined amongst all Member States except Greece, Italy and the Netherlands; this decline even exceeds 10% in Denmark, Germany, France, Luxembourg and Portugal.

The forecasts of **agricultural income** for 1991 are based on provisional estimates which were sent to Eurostat by the relevant statistical departments in the Member States between 20 November and 10 December 1991. There are **three indicators** for assessing trends in agricultural income.

Net value added for agriculture at factor cost, in real terms and by annual work unit (AWU) (independent and hired labour) (**indicator 1**) is expected to fall by -4.8% in the European Community (EUR 12), thereby reinforcing the decrease in 1990 (-2.9%) after a sharp increase in 1989 (+ 12.1%) (see Table 1).

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

Net income from agricultural activity of total labour input (net value added at factor cost less rents and interest payments), in real terms and by annual work unit (indicator 2), is expected to decrease by -5.9% for EUR 12 (1990: -3.6%; 1989: + 12.7%).

Net income from agricultural activity of family labour input, i.e. the holder and the members of his family working on the holding (net income from total agricultural activity less wages), in real terms and per family annual work unit (indicator 3), is expected to fall by -9.8% (1990: -4.5%; 1989: +16.3%).

The following comments give some details and first analysis of the change in agricultural income in 1991.

Trend in final agricultural production at Community level

The main reasons for this further decline in agricultural income at EUR 12 level are much the same as those applying in 1990: the nominal value of final production is expected to remain fairly stable in 1991 (+0.5%, the sum of -0.4% for volume and +0.9% for nominal prices), thanks to an increase of +2.9% in the value of crop production, which offsets a further decline of -1.9% in the value of animal production. However, correcting for inflation⁽¹⁾ produces a reduction of -5% in the value of final production in real terms, mainly as a result of the drop in real prices (-4.6%). Between Member States, however, the rates of change of nominal final production range from -12.7% in Luxembourg to +26.9% in Greece, although this gap narrows somewhat in real terms: negative rates for ten Member States (ranging from -15.5% in Luxembourg to -0.1% in the Netherlands), and positive figures for Italy (+1.1%) and Greece (+5.7%).

The overall volume of crop production is likely to have fallen by only -1.0%, although the figures for Denmark, Germany, France, Luxembourg and Portugal register much greater falls, and there are expected to be increases in Greece and Italy, with the other Member States remaining more or less unchanged. At EUR 12 level, the poor harvests were mainly for sugarbeet (-10%, with all countries recording a fall), fresh fruits (-14%, with sharp reductions in Germany and France but an increase in Spain), grape must and wine (-18%, with even greater falls in Spain, France and Luxembourg) and to a lesser extent oilseeds (-2%, owing to sharp decreases in the southern Member States). On the other hand, good figures were recorded for olive oil (+60%, in the most part from Italy) and cereals (+7%, despite the poor harvests in the Benelux countries and Denmark). Production of fresh vegetables and flowers were relatively stable in most countries and wide national variations for potatoes balanced out at Community level.

An expected 4.0% rise in nominal terms for crop production prices will continue the trend from previous years (less than the inflation rate but more than the rise in intermediate consumption prices) and apply to most Member States. In real terms, however, crop production prices are expected to fall by -2.1% on average at EUR 12 level, with falls of more than -4% in Spain, France and the United Kingdom. The main price reductions in real terms are for oilseeds (-13%, down in all Member States), cereals (-6%, down in all Member States except Denmark), wine (-6%, with very sharp falls in Spain and Portugal, but increases in Greece and Luxembourg) and fresh vegetables (-2%, wide variations between Member States). There are price increases in real terms for fresh fruits (+10%, despite a fall in Spain), olive oil (+9%) and potatoes (+4%, despite falls in the Benelux countries and the United Kingdom).

The nominal value of crop production for EUR 12 should therefore increase by +2.9% owing to the price rises, but it is likely to fall in several Member States (appreciably in Denmark, France and Luxembourg). At EUR 12 level there is expected to be a -3.1% fall in real terms (and falls of -10% or more are likely in Denmark, France, Luxembourg and Portugal) though rises are expected in Greece,

(1) See methodological note 3.

Ireland, Italy and the Netherlands. There are falls in the real value of wine production (-23%), oilseeds (-15%), sugar beet (-10%) and fresh fruit (-5%), and increases only for olive oil (+74%), potatoes (+5%) and to a lesser extent cereals (+1%).

There is expected to be little movement on average in the volume of animal production (+0.4%), and the results of individual Member States are spread fairly evenly around this average: ranging from -1.5% (France) to +2.3% (Spain), with increases of more than 5% being recorded for only Belgium and Portugal. Production has been increasing for poultry (+5%, up in all Member States), pigs (+2%, despite falls in Germany and the Netherlands) and sheep and goats (despite falls in Greece and France), but there has been little change for cattle (reductions in Spain and France but increases in the northern Member States), and milk production is down (-1%, small decreases in all countries except Portugal).

The prices of animal production in nominal terms show a clear downturn (-2.3%), thereby continuing the trend which began in 1990. In real terms the fall in prices is expected to be -7.1%, with all Member States affected (ranging from -2.6% in the Netherlands to -12.0% in Luxembourg) as well as all products (pigs and poultry, -5%; milk and eggs, -6%; cattle, -11%; sheep and goats, -12%). It is these falls which clearly constitute the main reason for the decrease in agricultural income in the Community in 1991.

This is expected to result in a drop in the value of animal production, even in nominal terms (-1.9% for EUR 12), which will of course be even more in real terms: -6.8% for EUR 12, and at Member State level ranging from -0.7% in Belgium to -13.0% in Luxembourg. Increased volumes offset the reduced prices in real terms only in the case of poultry; there are particularly sharp reductions in value in real terms for cattle (-11%), sheep and goats (-10%) and milk (-7%).

Trend in the other components used to calculate agricultural income at Community level

The nominal value of intermediate consumption is likely to rise by +3.1% owing to increases in volume (+0.6%, an increase for animal feedingstuffs but reductions for fertilizers and plant protection products) and particularly in prices (+2.5%, increases for all intermediate consumption products except animal feedingstuffs). However, since these price increases are on average well below inflation, it is expected that the value of intermediate consumption will fall by -2.0% in real terms, with this downward movement being reflected in 11 Member States (ranging from -7.8% in Portugal to -0.6% in France; in Greece there is expected to be a nominal increase of +33.1%, falling to +10.9% in real terms). These developments would lead to a deterioration in productivity (ratio of production volume to intermediate consumption volume) and particularly in the "price scissors" (ratio of production prices to intermediate consumption) in agriculture at EUR 12 level.

Gross value added at market prices (total final production less intermediate consumption) in nominal terms is therefore expected to fall at EUR 12 level (-1.7%) with an even sharper fall in real terms (-7.3%); increases are expected for Greece, Italy and the Netherlands, but falls of more than 10% are expected in all other Member States except Belgium and Ireland.

Adding subsidies⁽¹⁾, which are expected to rise by +6.4% for EUR 12 in nominal terms (i.e. -0.1% in real terms, with sharp variations from one country to another, ranging from -42% in Belgium to +119% in Luxembourg) and deducting taxes linked to production, which are expected to fall by -5.3% for EUR 12 in nominal terms (-9.0% in real terms) produces a slight fall in nominal terms in gross value added at factor cost (-0.8%), corresponding to a reduction of -6.6% in real terms.

(1) In the context of the economic accounts for agriculture, subsidies include only direct transfers to agriculture; they do not include price support, investment aid and assistance to the agro-food industry. The trend for these subsidies is therefore not representative of the trend in overall aid to agriculture, especially as any increase may result from measures to offset the reduced support for markets and prices.

Deducting depreciation, which is expected to increase by +3.4% for EUR 12 in nominal terms (- 2.0% in real terms; ranging from - 20.0% in Spain to + 4.9% in Luxembourg, with most of the other Member States around the average figure), there is expected to be a -1.3% reduction in nominal terms for EUR 12 in net value added at factor cost (1990: + 0.1%). The fall in real terms is likely to be -0.8% (1990: -6.0%) (see Table 1 for the results by Member State).

Interest payments are expected to increase by +3.1% in nominal terms (- 2.4% in real terms) and rents are likely to remain at their 1990 level in nominal terms (+ 0.2%; - 5.0% in real terms). At EUR 12 level, this should produce a -2.0% reduction in nominal terms in net income from agricultural activity for total labour (1990: - 0.3%); a reduction of -9.0% in real terms (1990: -6.7%).

Compensation of employees in agriculture will probably rise by +4.1% (- 1.8% in real terms), causing a -3.2% drop in nominal terms for EUR 12 in the net income from agricultural activity for family labour (1990: - 1.3%); in real terms the fall will be -11.6% (1990: - 7.9%).

Lastly, the total agricultural labour force, which is used in the calculation of indicators 1 and 2, is expected to fall by -3.4% in 1991 for EUR 12 (1990: - 3.2%), with reductions ranging from -0.5% in the Netherlands to -6.0% in Spain, and the other Member States lying very close to the average figure. The family agricultural labour force, which is used in indicator 3, will probably fall by only -2.0% for EUR 12 (1990: - 3.6%), as a result of the surprising stability in Greece, Spain and Portugal, according to the information currently available to Eurostat.

Main trends in agricultural income in 1991 by Member State

A country-by-country analysis reveals contrasting situations due to a) differences in agro-economic trends in 1991, and b) the reference base (year 1990), arising through developments in previous years.

The sharpest drops in agricultural income (indicator 1) in relation to the Community average occurred in the following eight Member States:

- Germany (- 18.0%, following - 14.7% in 1990), owing to poor harvests (fresh fruits, sugar beet and wine) and to falls in nominal prices (with good harvests for cereals but consequent falls in production value for milk and particularly cattle), a situation made worse by a reduction in subsidies.
- France (- 15.5%, following + 4.6% in 1990), owing to poor harvests (wine and grape must, fresh fruits, sugar beet, although price increases offset this in the case of fresh fruits and sugar beet) and to falls in nominal prices (cereals and oilseeds had good harvests, whereas volumes fell for cattle and milk);
- Luxembourg (- 13.2%, following - 6.4% in 1990), owing to a sharp reduction in crop production (especially grape must and wine) but also milk and pigs, and to falls in overall prices (especially for cattle, milk and cereals). The overall fall was partly offset by a doubling of subsidies;
- Denmark (- 12.8%, following + 0.5% in 1990), owing to poor harvests (especially cereals and oilseeds) and to falls in nominal prices (oilseeds, milk and cattle), and despite a reduction in intermediate consumption and a slight rise in subsidies;

- Portugal (- 11.0%, following - 3.3% in 1990), owing to poor harvests (potatoes, olive oil and wine), with sharp variations in nominal prices (reductions for cereals, citrus fruits, wine, cattle, sheep and eggs; prices increased elsewhere, in some cases sharply) which were on the whole influenced by high inflation and reductions in intermediate consumption and depreciation;
- Ireland ⁽¹⁾ (- 8.6%, following - 2.0% in 1990), owing to falls in nominal prices of all animal production, made worse by a reduction in subsidies;
- United Kingdom (- 7.7%, following - 0.8% in 1990), owing to falls in nominal prices (pigs, sheep, eggs and fresh vegetables) and despite slight increases in production volume in most cases (except milk) and an increase in subsidies;
- Belgium (- 6.4%, following - 9.5% in 1990), average volumes increased (thanks particularly to animal production) but nominal prices were down (especially for cattle and milk) and there were sharp reductions in subsidies.

The trend in agricultural income was more favourable in the following four Member States:

- Spain (- 1.1%, following + 5.5% in 1990), reductions in volumes (oilseeds, wine, cattle and eggs) and in prices (wine, sheep and goats, milk and eggs) were offset by good results for cereals, olive oil and pigs and by a rise in subsidies, whilst the agricultural labour force continued to fall very rapidly;
- Netherlands (+ 2.9%, following - 1.0% in 1990), thanks to the overall stability of production volumes (with increases for fresh vegetables, flowers and cattle) and to a slight rise in nominal prices (larger rises for fruits and vegetables, flowers and pigs), and despite the agricultural labour force remaining almost unchanged;
- Greece (+ 6.8%, following - 10.3% in 1990), thanks to good harvests (cereals, tobacco, grapes and wine, olives and olive oil) and to nominal changes in prices corresponding, on average, to the general level of inflation (although there were falls in real terms for cereals, fresh vegetables and animals).
- Italy (+ 8.0%, following - 9.2% in 1990), thanks to good harvests (cereals, citrus fruits, grapes and wine and olive oil) and to average price increases greater than inflation in the crop sector (despite sharp falls in real prices in the animal sector).

Long-term trend in agricultural income

There are wide variations between Member States in the medium-term trends in agricultural income. The downturns of 1990 and 1991 are expected to produce an average EUR 12 figure for indicator 1 which is slightly above (+ 4.2%) the 1984-86 level (see Table 2). The current level of indicator 3, however, is expected to remain at around the level of the mid-80s. Against this background, countries may be categorized into three groups (figures refer to indicator 1, in relation to the 1984-86 level):

- agricultural income has risen sharply (ranging from +15% to +30%) in four Member States (E, NL, GR and IRL);

(1) For Ireland, the change in labour input has been estimated by Eurostat.

- agricultural income has remained roughly the same (ranging from - 2% to + 4% in four Member States (B, F, L and P):
- agricultural income has fallen sharply (ranging from - 7% to - 16% in four Member States (D, UK, DK und P).

A longer-term comparison between the current level of indicator 1 and the level at the beginning of the '80s - using three-year averages in both cases (1989-1991/1980-1982) to eliminate the sharp annual fluctuations in agricultural production and prices - shows that the overall trend in indicator 1 of agricultural income is clearly positive over the decade (+ 14.8% for EUR 12), despite slight falls (- 3%) in two Member States (P and UK). and a sharp fall in Italy (- 10%). Five Member States (B, DK, D, GR and F) had increases ranging from 15% to 20%, with those for three others (IRL, L and NL) between 30% and 40% and in the case of Spain, over 50%.

Methodological notes:

1. The results published here are estimates by the relevant national bodies in the Member States for the current year, although in the case of Italy Eurostat has provided estimates for subsidies, depreciation, rents and interest, and in the case of Ireland, the labour force. The income indicators only cover branch agriculture and do not therefore represent total income of persons employed in agriculture, who may have other sources of revenue (secondary activities, wages, social security payments etc.).
2. The concept of "final production" is applied in the European Community's Economic Accounts for Agriculture. It differs from the "delivery" concept used in certain Member States especially as it includes changes in stocks. This explains certain differences between data published nationally and data published by Eurostat according to a harmonised methodology.
3. The deflator used to calculate prices and values in real terms for each product, in aggregate and at the Member State level, is the implicit price index of GDP. The rates of change (nominal or real) for EUR 12 are calculated as averages of national rates of change, weighted by the national shares in the EC corresponding aggregate for a base year, in ECUs. Thus, in the calculation of indicator 1, the rates of change in net value added (NVA), in nominal or real terms, for EUR 12 are averages of the corresponding rates of change in the Member States, weighted by their share of NVA in the Community in 1985, calculated in ecus of 1985. The rates of change for indicator 1 are obtained by dividing the rates of change of real NVA by the rate of change in the number of AWUs.

Further information:

These are provisional estimates. In March 1992, 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 in the report Agricultural Income 1991 (Theme 5, Series D). Eurostat will also soon publish the annual volume of the Economic Accounts for Agriculture and Forestry 1985-1990 (Theme 5, series C).

Table 1: INDICATOR 1 - CALCULATION OF ANNUAL CHANGES 1990/1989 and 1991/1990 (in %)

	Nominal Net Value Added		Deflator (GDP price Ind.)		Real Net Value Added		Agrl. Labour Input (in AWU)		INDICATOR 1 (Real NVA/AWU)	
	90/89	91/90	90/89	91/90	90/89	91/90	90/89	91/90	90/89	91/90
B	-9.0	-6.4	3.1	3.1	-11.7	-9.3	-2.5	-3.0	-9.5	-6.4
DK	-0.1	-13.2	2.8	1.9	-2.9	-14.9	-3.4	-2.4	0.5	-12.8
D	-14.1	-17.4	3.4	4.3	-17.0	-20.8	-2.7	-3.5	-14.7	-18.0
GR	5.9	25.6	21.0	20.0	-12.5	4.7	-2.4	-2.0	-10.3	6.8
E	8.1	-0.9	7.3	6.6	0.7	-7.0	-4.5	-6.0	5.5	-1.1
F	3.5	-16.0	2.7	3.1	0.7	-18.5	-3.7	-3.5	4.6	-15.5
IRL	-1.7	-9.5	2.4	2.1	-4.0	-11.4	-2.1	-3.0	-2.0	-8.6
I	-4.4	12.5	7.5	7.2	-11.1	4.9	-2.0	-2.9	-9.2	8.0
L	-7.8	-13.9	3.4	3.3	-10.8	-16.6	-4.8	-3.9	-6.4	-13.2
NL	1.2	6.1	3.3	3.6	-2.0	2.4	-1.0	-0.5	-1.0	2.9
P	4.4	-0.4	15.0	14.6	-9.2	-13.1	-6.1	-2.3	-3.3	-11.0
UK	4.8	-4.6	7.7	6.5	-2.7	-10.4	-1.9	-2.9	-0.8	-7.7
EUR 12	0.1	-1.3			-6.0	-8.0	-3.2	-3.4	-2.9	-4.8

Table 2: INDICATOR 1 - REAL NET VALUE ADDED per AWU (1984+1985+1986 / 3 = 100)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
B	86.7	95.2	100.3	108.3	104.3	99.4	96.3	90.6	98.2	122.2	110.7	103.5
DK	65.8	75.4	91.2	78.1	104.0	95.7	100.3	80.0	81.0	97.2	97.7	85.2
D	89.9	90.7	110.7	89.3	102.4	92.5	105.1	87.9	109.1	132.2	112.9	92.6
GR	92.0	97.4	100.0	90.9	98.8	101.3	100.0	102.6	112.5	123.3	110.6	118.1
E	85.8	76.4	88.5	89.0	100.0	102.2	97.8	104.5	119.2	121.8	128.4	127.0
F	88.0	91.1	107.6	100.3	99.4	100.1	100.6	101.6	97.8	112.4	117.5	99.3
IRL	88.2	88.6	96.7	101.0	112.2	97.7	90.1	110.3	128.9	131.2	128.6	117.5
I	108.4	106.2	106.6	111.8	101.0	101.4	97.6	99.0	93.9	99.5	90.3	97.6
L	69.3	77.9	107.3	94.9	98.3	99.3	102.3	101.2	105.7	121.9	114.1	99.0
NL	75.3	92.4	96.9	93.5	100.8	95.7	103.5	99.6	101.4	120.1	118.9	122.4
P	95.7	90.0	100.5	97.3	99.6	98.4	102.1	99.8	84.0	98.1	94.9	84.4
UK	88.5	95.0	103.0	93.1	112.0	90.6	97.4	95.9	85.0	95.1	94.4	87.1
EUR 12	90.2	92.2	102.0	98.1	101.7	98.3	100.0	98.5	100.6	112.8	109.5	104.2

Figure 1: EVOLUTION OF INDICATORS 1, 2 AND 3 FOR EUR 12, 1980-1991 (1984+1985+1986 / 3 = 100)

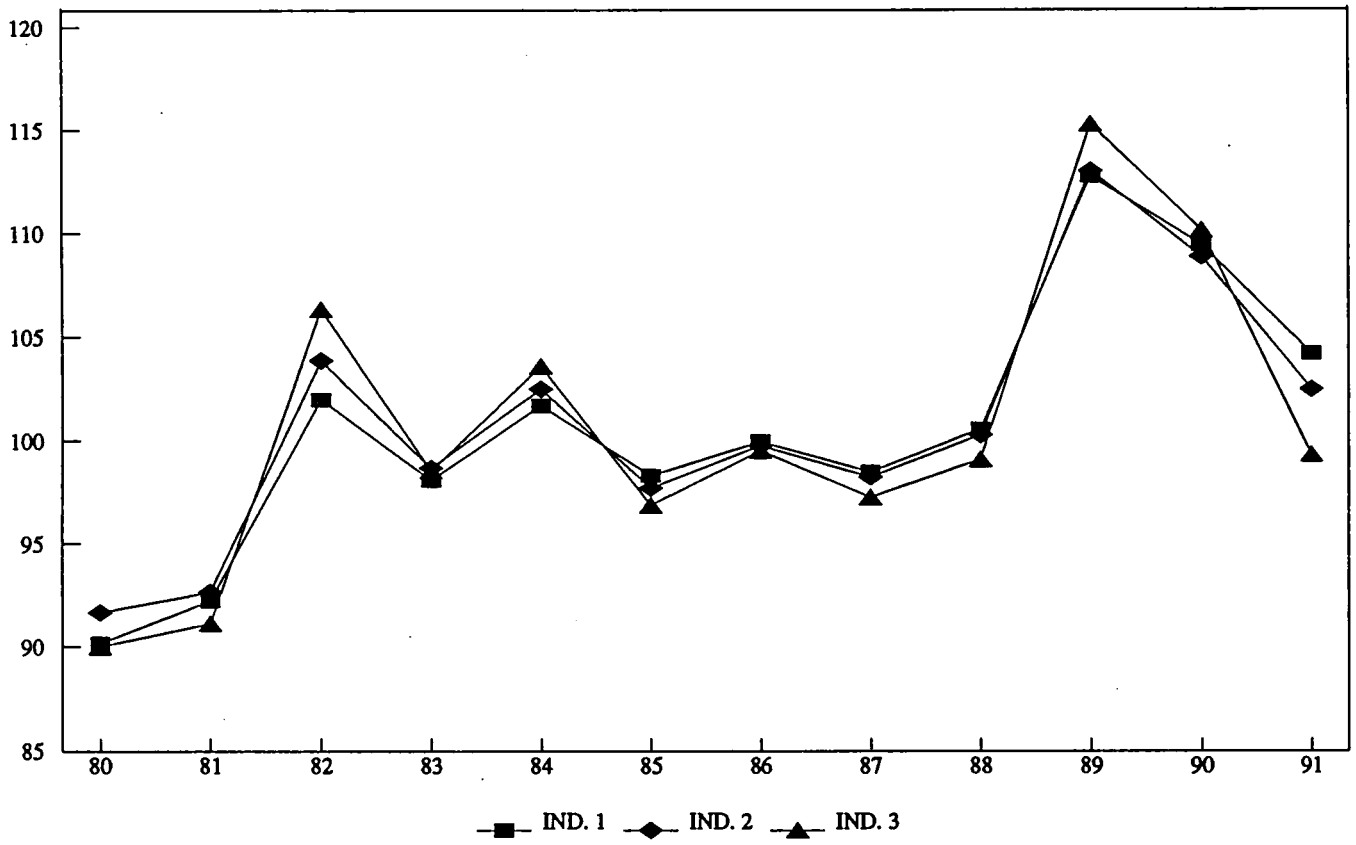


Figure 2: ANNUAL RATES OF CHANGE OF INDICATOR 1, FROM 1988 TO 1991 (in %)

