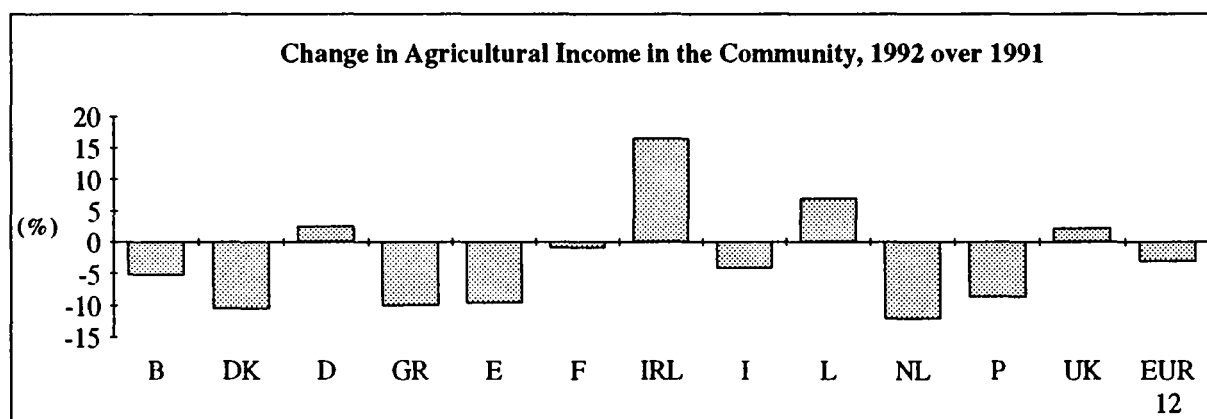


### FALL IN AGRICULTURAL INCOME IN THE COMMUNITY IN 1992

#### FORECASTS OF AGRICULTURAL ACCOUNTS



Agricultural income, measured by net value added at factor cost by annual work unit (AWU), is expected to have fallen in real terms by -3.5% in the Community in 1992. The increase observed in 1991 (+2.3%) did not continue in 1992, therefore, which somewhat reduced the favourable impact on Community agriculture of the exceptional rise in 1989. Agricultural income is expected to fall in 1992 in most Member States with the exception of Ireland, Luxembourg, Germany and the United Kingdom. The decline is even expected to be more than -10% in Greece, Denmark and the Netherlands, the main cause being (at Community level) the fall in crop product producer prices.

Expressed in real (or deflated) terms, the value of total final agricultural production is estimated to have fallen in 1992 by -6.3%, this being made up of -9.0% for real prices and +2.9% in production volume. The real value of crop production fell by -10.7% because of the fall in real prices (-15.2%, a decline affecting all the main products) despite good crops on average (+5.2% in volume). The real value of animal production is expected to have declined slightly (-1.7%), the slight rise in production volume (+0.5%) not being sufficient to compensate for the fall in real prices (-2.2%). The development in the real prices of intermediate consumption (-3.5%) led to a clear deterioration in the "price scissors" of Community agriculture (-5.5%) which was not compensated for by the rise in subsidies (+10.4% in real terms) and the fall in taxes linked to production (-13.6% in real terms). The decline in the real net value added of -7.0% was partially offset by the fall in agricultural labour input (-3.7%). Despite this fall in 1992, agricultural income remains +7.7% higher than its level in 1984-86 for the Community as a whole.

As it does each year at this time, Eurostat is publishing revised data and analyses of the trend in agricultural income in the Community and the 12 Member States during the previous year; this information is based on the official estimates of the Member States which are available in January-February. **Three indicators** are used to assess the trend in agricultural income (see Table 1).

**Net value added in agriculture** at factor cost, in real terms and by total annual work unit (AWU) (self-employed and employed labour force) (**indicator 1**) fell by -3.5% in the Community (EUR12). This fall follows the rise of +2.3% in 1991 (see Table 1). Nevertheless, agricultural income remains at a level which is close to that of 1989 (if slightly lower), which means that there is an upward trend of close to +15% since the beginning of the 1980s.

The **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 -4.3% for EUR12 after +2.5% in 1991. Since the beginning of the 1980s, this indicator has gone up by around +12%.

The **net income from agricultural activity of the family labour force** (net income of total agricultural activity, less the remuneration of employees), in real terms and per family AWU (the holder and members of his family working on the holding) (**indicator 3**), fell by -7.2% after +2.6% in 1991.

**Table 1** Changes in the three agricultural income indicators in the Community and Member States, 1990/1989, 1991/1990 and 1992/1991 (in %)

Member State	Indicator 1			Indicator 2			Indicator 3		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
B	-9,2	-1,2	-5,3	-12,4	-1,8	-8,2	-13,8	-2,8	-9,5
DK	-6,0	-8,4	-10,6	-12,5	-18,3	-28,3	-16,2	-28,9	-52,5
D	-11,0	-6,3	2,5	-14,2	-9,0	2,7	-17,1	-11,9	3,5
GR	-16,0	25,8	-10,1	-17,5	25,7	-10,6	-18,5	25,4	-12,6
E	4,9	1,9	-9,6	6,6	0,0	-13,1	7,7	0,6	-18,4
F	4,4	-3,8	-0,9	5,0	-5,1	-1,2	4,7	-7,4	-2,5
IRL	2,1	-7,4	16,5	-0,7	-7,7	19,6	-1,6	-9,2	21,9
I	-8,2	12,1	-4,1	-8,6	14,6	-4,7	-14,4	29,6	-10,8
L	-6,0	-14,8	6,9	-9,8	-18,8	5,5	-11,6	-18,9	5,5
NL	-4,2	-0,2	-12,1	-6,6	-0,7	-15,4	-9,7	-3,2	-21,0
P	6,7	-8,6	-8,7	3,6	-10,4	-13,4	5,0	-14,9	-15,8
UK	1,0	-3,1	2,2	0,1	0,9	6,7	-1,4	0,3	11,3
EUR 12	-2,9	2,3	-3,5	-3,7	2,5	-4,3	-5,2	2,6	-7,2

#### Trend in final agricultural production for the Community overall

In the Community as a whole, the **nominal value of final production** fell slightly in 1992 (-1.8%, this being made up of +2.9% in volume and -4.6% for nominal prices) owing to a decline of -6.1% in the value of crop production which was only partially made up by an increase of +2.8% in the value of animal production (see Table 2). Taking account of inflation<sup>(1)</sup>, however, the **real value of final production** actually fell by -6.3%, mainly because of the downswing in real prices (-9.0%). For the Member States, the rates of change of final nominal production nevertheless vary from -9.3% in Portugal to +10.0% in Luxembourg, the trend being slightly more contrasted in real terms: negative in 10 Member States (from -19.8% in Portugal to -1.8% in the United Kingdom) and positive in Ireland (+2.8%) and in Luxembourg (+7.6%).

#### Crop production: very good harvests overall but severe price decreases

Crop production volume went up overall by +5.2%, though considerably more in Belgium, Germany, France, Luxembourg and the Netherlands although it fell in Denmark, Spain and Portugal. This rise, one of the highest for the Community since 1980, is accounted for above all by fresh fruit (+30.4% after the fall in 1991 following the spring frosts), wine (+22.8%, a level which is closer to the long-term trend, there being a considerable increase in Germany, France and Luxembourg, but a severe decrease in Portugal), potatoes (+10.6%, increase in areas and yields), sugar beet (+9.1%, increase in most of the Member States, stagnation in surface area but higher yields).

On the other hand, a sharp reduction was recorded in cereals (-6.3%: a slight reduction in areas under cultivation and in yields at Community level, but the relative stagnation in production in France and Italy was unable to offset the

(1) See methodological note number 3.

reductions in the United Kingdom and especially Germany and Spain), oilseeds (-7.3% mainly because of a fall in yield, the production trends vary considerably from one country to another: a sharp decline in Denmark, Germany and France but slight increase in Italy and Spain) and olive oil (-9.5% after the strong growth in 1991, a significant reduction in Italy and Spain in spite of a marked increase in Portugal). Fresh vegetables and flower productions are relatively stable for EUR12, the national differences balancing each other out at Community level.

**Crop production prices in nominal terms** fell by -10.8%, a decline which can be traced in all Member States. In **real terms**, the decline in crop production prices is as low as -15.2% on average for EUR 12, with falls as high or even higher than -20% in five Member States (Belgium, Germany, France, Luxembourg and Portugal). This fall in prices represents a clear break with the trend observed since the early 1980s (-3.2% per year). This is clearly the main reason for the decline in agricultural income in 1992 for the Community. The main reductions in prices in real terms were for oilseeds (-49.1%)<sup>(2)</sup>, potatoes (-34.4%), fresh fruit (-27.6%), olive oil (-14.7%), wine (-14.2%), fresh vegetables (-13.3%), cereals (-9.2%) and sugar beet (-7.1%).

**Crop production** fell by -6.1% in nominal value (corresponding in real terms to a decline of -10.7%) under the effect of price reductions and in spite of the increase in the volume of production. The real value of crop production fell by more than -20% in Denmark and Portugal whereas it increased in two Member States (Germany and particularly in Luxembourg).

#### **Animal production: stagnation in production volumes and slight declines in prices**

The **volume of animal production** stagnated on average (+0.5%), thus keeping to the trend of the past ten years (+0.6% as an annual average). This result has a relatively even geographical spread. In actual fact, production increased in volume for sheep/goats (+4.9%, following the very sharp increase in the United Kingdom of +28.5%), poultry (+2.2%), pigs (+2.0%, with a sharp increase in Belgium, Denmark and France and in spite of reductions in Germany, Spain and the United Kingdom). It stagnated for cattle (+0.5%, for which the situation varied substantially depending on the Member State, it declined sharply in Germany but increased significantly in France) and it fell for milk (-1.4% as a result of Community restrictions in quantity, with a slight decline in all countries except Ireland and Portugal). Consequently, the trend in volumes by type of animal production is estimated to be quite close to what was observed in the previous ten years.

The most significant trend in the animal production sector in 1992 is the decline in real prices which has been held at -2.2% in spite of an increase of +2.3% in nominal terms. This decline is not as sharp as the long-term trend (-3.4% per year) and affected all Member States (from -11.9% in Portugal to -0.1% in the United Kingdom), except Denmark (+0.2%) and Ireland (+0.9%), and all products (eggs -9.8%, poultry -5.2%, sheep/goats -2.6%, milk -2.3% and cattle -0.8%), except pigs (+0.6%). Cattle and pig prices benefited from more buoyant markets in the first half of 1992, which allowed the prices to be maintained in spite of a renewed decline at the end of the year.

The **value of animal production in nominal terms** increased by +2.8% in the Community but **fell in real terms** by -1.7%. Only four Member States recorded an increase in the real value of animal production (Denmark, France, Ireland and the United Kingdom), declines ranged from -9.7% in Portugal to -0.9% in the Netherlands and Luxembourg. Pigs (+2.7%) and sheep/goats (+2.1%) are the only categories whose real value has increased. The fall in real value of other animal productions varies between -0.2% for cattle and -11.6% for eggs.

#### **The real value of intermediate consumption fell less than final production.**

The nominal value of intermediate consumption increased by +1.2% because of the increase in volume (+0.2%, with an increase in animal feedings but a new reduction for fertilizers and plant protection products) and in prices (+1.0%, with increases for most intermediate consumption, except for fertilizers, energy and plant protection products). This increase in prices, however, being on average well below the inflation rate, the value of intermediate consumption declined in real terms by -3.3%, the change being negative for ten Member States (from -18.7% in Portugal to -0.2% in Denmark; there was an increase in Greece and the Netherlands). These trends resulted in an improvement in their productivity (+2.7%) and above all a sharp decline in the "price scissors" (-5.5%) of Community agriculture.

**The gross value added at market prices** (total final production less intermediate consumption) therefore declined even in nominal terms for EUR12 (-4.0%) but even more so in real terms (-8.7%); it only increased in Ireland

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(2) This decline can mainly be explained by the change in the common organization of the market in this sector. It should be almost fully compensated by the granting of direct aid to producers listed under "subsidies".

(+8.5%) and Luxembourg (+15.2%), with the other Member States recording decreases ranging from -0.3% in the United Kingdom to -21.0% in Portugal.

**Subsidies, taxes linked to production and depreciation only had a moderate effect on the value added at Community level but there are substantial national differences:**

The increase in subsidies<sup>(3)</sup> (+16.5% in nominal terms, or +10.4% in real terms) is more substantial in 1992 than the long term trend (+6.7% in real terms). This average trend hides substantial national disparities, with variations between -45.8% for Luxembourg and +173.6% for Denmark in real terms. If we take account of a reduction in the taxes linked to production (-10.4% in nominal terms for EUR12, or -13.6% in real terms) we arrive at a decline in the nominal gross value added at factor cost (-6.5%) which comes out as a decline of -8.7% in real terms.

Depreciation fell slightly (-0.3%) in nominal terms for EUR12 (or -4.7% in real terms), which is not typical compared with the trend of the previous years which has been a nominal increase close to that of the general level of prices, but which can be explained by the new substantial reductions recorded in Spain and Portugal. This led to a slight decrease in the nominal net value added at factor cost of -2.0% for EUR12 or -7.0% in real terms.

Interest and rent charges only have a slight influence on net income. They declined in real terms by -3.0% and -3.8% respectively, thus leading to a deterioration of net real income for the overall workforce which was slightly higher than that of the net value added at factor cost (-7.8%). Compensation of employees in agriculture increased by +4.5% (-0.3% in real terms) leading to a nominal shortfall in net income of family workers of -5.5% for EUR12 or -10.6% in real terms.

Finally, the total labour figures used in the calculation of indicators 1 and 2 fell back once more in 1992 by -3.7% for EUR12 (as in 1991) with variations ranging from +0.9% in the Netherlands (the only increase) to -6.5% in Portugal (all other Member States were very close to the average, except for Spain, with -6.1%). Family labour used for indicator 3 declined by -3.7% for EUR12 (-3.9% in 1991) in spite of relative stability in Greece and the United Kingdom.

#### **Different trends according to Member State**

The analysis on a country-by-country basis shows different situations, first because of the diversity of agro-economic changes in 1992 and secondly because of differences in the basis (1991) resulting from the trend of previous years. Thus, whilst eight Member States recorded declines of -0.9% to -12.1%, the other four (UK, D, L and IRL) recorded increases of up to +16.5%.

**Declines in agricultural income** (indicator 1) steeper than for the Community as a whole were observed in the following seven Member States:

- **Netherlands** (-12.1% after -0.2% in 1991); the decline in the real value of final production, although less than the Community average, was not compensated for, in view of the rise of the real value of intermediate consumption, the lower subsidies, the greater level of depreciation and the only increase in the agricultural labour input in the Community;
- **Denmark** (-10.6% after -8.4% in 1991), the sharp fall in the real value of crop production (due to smaller volumes, particularly for oilseeds and cereals) which was not fully compensated by the higher real value of animal production. Together with a relative stagnation in real intermediate consumption value and real depreciation costs, this led to a fall in NVA<sub>fc</sub>, despite the considerable increase in subsidies;
- **Greece** (-10.1% after +25.8% in 1991); owing to the major falls in real prices (crop production: fresh fruit, oilseeds and olive oil) and despite a gain in volume terms (fresh fruit, oilseeds), the real value of final production fell considerably. Together with the slight increase in the real value of intermediate consumption, this led to a clear deterioration in NVA<sub>fc</sub>;

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(3) For the Economic Accounts for Agriculture, subsidies only comprise direct transfers to agriculture, excluding price support, investment aids and aids to the agro-food industry. The trend in subsidies is therefore not representative of the overall support of Community agriculture. In particular, their increase may correspond to measures to offset the decrease in support for prices and markets. Such is the case, for example, for the reform of the common organization of the market in the sector of oilseeds as applied to the 1992/93 crop year. The resulting change is one of the reasons for the increases observed in 1992.

- **Spain** (-9.6% after +1.9% in 1991); following severe reductions in the real prices of some items of crop production (particularly fresh fruit, oilseeds, potatoes, cereals and wine), and of production volumes (cereals and olive oil), a limited drop in intermediate consumption, and despite greater subsidies and the significant new fall in depreciation and the agricultural labour input;
- **Portugal** (-8.7% after -8.6% in 1991); following poor harvests (cereals and wine) and severe falls in real prices (crop production, -26.6% but also animal production, -11.9%) and despite a substantial fall in the real value of intermediate consumption, increased subsidies, and a major decline in depreciation and in the agricultural labour input;
- **Belgium** (-5.3% after -1.2% in 1991); the fall in the real prices of crop production (potatoes, oilseeds, vegetables and fresh fruit) were partially compensated by much higher volumes (potatoes, vegetables and fresh fruit) and the stagnation in the volume of animal production;
- **Italy** <sup>(4)</sup> (-4.1% after + 12.1% in 1991); owing to the downswing in real prices affecting most products (cereals, oilseeds, wine, fresh fruit) and the stagnation in the volume of production.

On the other hand, Indicator 1 developed more favourably than the Community average in the following five Member States, and even reached a record level in Ireland:

- **France** (-0.9% after -3.8% in 1991); the reduction in the real price of crop production being compensated by the greater production volume (fresh fruit, wines and potatoes), the slight upswing in the real value of animal production and the far higher level of subsidies, whereas the labour input continues to fall steadily ;
- **United Kingdom** (+2.2% after -3.1% in 1991); the fall in the real price of crop production (root crops, oil seeds, fruit and fresh vegetables) being partially compensated by the rise in the real value of animal production (particularly sheep) and accompanied by a greater fall in intermediate consumption and depreciation costs;
- **Germany**<sup>(5)</sup> (+2.5% after -6.3% in 1991); with volumes generally up (major upswing in crop production but fall in animal production), the plummeting of real prices (particularly crop production), "net subsidies" clearly upward and a major reduction in the agricultural labour input;
- **Luxembourg** (+6.9% after -14.8% in 1991); thanks to excellent harvests (fresh fruit and wine) which more than compensated for the unfavourable impact of lower real prices (crop production and milk) and the fall in "net subsidies", there also being a major reduction in the agricultural labour input;
- **Ireland** (+16.5% after -7.4% in 1991); stagnation of the real prices of animal production accompanied by an increase in the volume of production, a major rise in "net subsidies" and a fall in the real value of intermediate consumption and in depreciation.

#### **Development of agricultural income in the longer term**

In the medium term, the development of agricultural income varies greatly from one Member State to another. Taking the Community on average, the fall in 1992 would bring indicator 1 to a level +7.7% higher than that of 1984-86. From this point of view, one can distinguish three groups of countries (the figures corresponding to indicator 1 as compared with 1984-86):

- agricultural income has gone up considerably (+15% to +30%) in four Member States (F, E, GR and IRL);
- agricultural income has risen slightly in five Member States (I, UK, B, L and D);
- agricultural income has fallen steeply (-10% to -25%) in three Member States (P, NL and particularly DK).

In the longer term, it is interesting to compare the current level of indicator 1 with its level at the beginning of the 1980s, taking the averages of three years (1990-1992/1980-1982) in both cases to smooth out the strong annual fluctuations in production and agricultural prices. On this basis, the trend in indicator 1 is clearly positive overall for the ten-year period (+14.8% for EUR 12 which corresponds to an annual rate of +1.4%). It seems, therefore, that

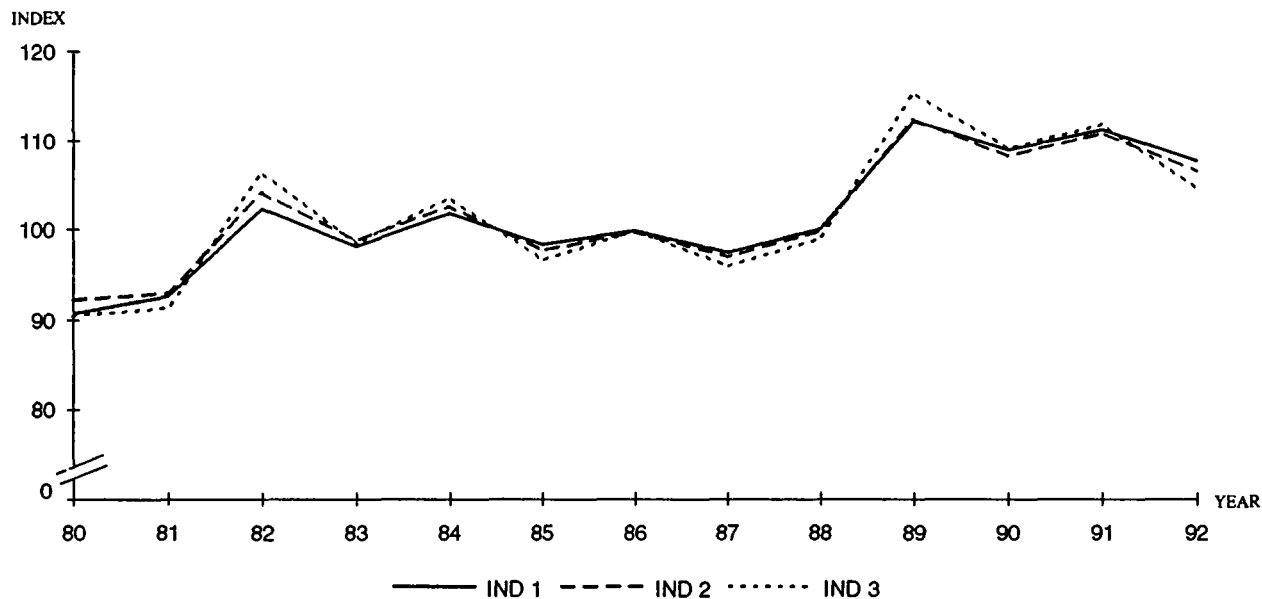
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(4) For Italy, the changes in depreciation are estimated by Eurostat.

(5) Data for the Federal Republic of Germany in its territorial situation before 3 October 1990.

agricultural income as expressed by indicator is at a level fairly close to that attained in 1989. One may also add that a somewhat similar trend is seen for indicators 2 and 3 although this is less clear-cut because of their greater volatility. At Member State level, despite the reduction in Italy and the stagnation in two countries (UK and P), the increases are between +7% and +16% for four Member States (NL, DK, D and B), between +22% and +27% for three others (F, GR and L), and close to +48% for Ireland and Spain.

**Graph Income Indicators 1, 2 and 3 for the Community from 1980 to 1992 ("1985" =100)**



This increase in agricultural income in the 1980s mainly came about at the beginning of the period (particularly 1982) with an even greater upswing at the end of the period (particularly 1989), with a degree of stagnation between 1983 and 1988.

The increase can be explained by several factors:

- improved productivity which led to a rise in final production volume of +1.4% as an annual average, particularly in the crop sector (+2.3% per year, mainly in respect of cereals, oilseeds, fresh fruit and vegetables, and flowers), the growth of the two main animal productions (milk and cattle) having been kept down by restrictive policies (+0.6% per year for the animal sector);
- imbalances on certain agricultural markets where the supply is in surplus for structural reasons, this being reflected in the fall of institutional prices and a decline in real producer prices (-3.3% per year) which applies to almost all the types of crop and animal production;
- a growth in the volume of intermediate consumption which is lower than that of production, together with a very slight improvement in the "price scissors" which led to lower gross value added at market prices in real terms of -1.9% per year on average;
- a clear increase in subsidies (+6.7% per year in real terms, see note (3) above), whereas the effect of the distribution charges turned out to be very moderate in the medium term at EUR12 level;
- a regular decline in the labour force in all the Member States (-3.1% per year for EUR12), which allowed an increase in the agricultural income indicators per AWU despite the decline in aggregated agricultural income.

**Methodological remarks:**

1. The results published in this report have been obtained from data provided by the appropriate authorities in the Member States for the preceding year, supplemented by Eurostat estimates for depreciation in Italy. The income indicators refer only to the agricultural branch and do not, therefore, represent farmers' overall income since these may have other sources of revenue (secondary activities, wages, social benefits, etc.)
2. The concept of "final production" is applied in the Community's Economic Accounts for Agriculture. It differs from the concept of "delivery" used in certain Member States, mainly because variations in stocks are included in production. This explains certain differences between the data published at national level and Eurostat's publications which are based on a harmonized methodology.
3. The deflator used to calculate real values and prices for each product or aggregate in each Member State is the implicit GDP price index. The rates of change (nominal or real) for EUR12 are averages of national rates weighted in the corresponding EEC aggregate in a base year in ECUs. For example, in calculating indicator 1 for long-term (or short-term) analysis, the rates of change, nominal or real, of net value added (NVA) for EUR12 are averages of the corresponding rates of change in the Member States, weighted by their share of NVA in the Community in 1985 (or in 1991) measured in 1985 (or 1991) ECUs. The real rates of change of NVA are then divided by the rates of change of the number of AWUs to obtain the rates of change of indicator 1.

**For more information:**

Detailed data and analysis of trends in agricultural income and its components are given in the publication **Agriculture Income 1992** (Theme 5, Series D) which has just been published. This publication contains an analysis of the variations in agricultural income in 1992 as compared with 1991 in the Community and in each Member State (on the basis of the indicators commented on here as well as a "cash flow" indicator), followed by an in-depth analysis of the corresponding trends for the period 1980 -1992 as well as some comments on the comparative income levels per Member State. Eurostat has also published the **Economic Accounts for Agriculture and Forestry 1986-1991** (Theme 5, Series C).

**Table 2 - Percentage in volume, price and value of the main components of agricultural income of 1992 over 1991 (in %)**

	Volume	Nominal price	Nominal value	Real price	Real value
<b>Final crop output</b>	5.2	-10.8	-6.1	-15.2	-10.7
Cereals	-6.3	-5.1	-11.1	-9.2	-14.9
Potatoes	10.6	-30.9	-23.6	-34.4	-27.4
Sugar beet	9.1	-2.9	5.9	-7.1	1.3
Industrial crops	-2.3	-26.2	-27.9	-31.6	-33.2
Oilseeds and oleaginous fruit (excluding olives)	-7.3	-46.9	-50.8	-49.1	-52.8
Fresh vegetables	1.8	-8.6	-6.9	-13.3	-11.8
Fresh fruit (with citrus fruit tropical fruit and grapes)	30.4	-23.3	0.0	-27.6	-5.6
Grape must and wine	22.8	-10.4	10.0	-14.2	5.4
Olive oil	-9.5	-7.5	-16.3	-14.7	-22.8
Flowers and ornamentals	1.5	-0.4	1.1	-4.4	-3.0
<b>Final animal output</b>	0.5	2.3	2.8	-2.2	-1.7
Animals	1.7	3.1	4.9	-1.4	0.3
Cattle (including calves)	0.5	3.5	4.0	-0.8	-0.2
Pigs	2.0	5.2	7.3	0.6	2.7
Sheep and goats	4.9	4.0	9.1	-2.6	2.1
Poultry	2.2	-0.8	1.4	-5.2	-3.2
Animal products	-1.4	1.1	-0.3	-3.3	-4.7
Milk	-1.4	2.0	0.6	-2.3	-3.7
Eggs	-2.0	-5.1	-7.0	-9.8	-11.6
<b>Final output</b>	2.9	-4.6	-1.8	-9.0	-6.3
Seeds and seedlings	3.9	-4.5	-0.7	-8.1	-4.5
Energy and lubricants	-0.1	-0.9	-1.0	-5.8	-5.9
Fertilizers and soil improvers	-5.1	-2.2	-7.2	-6.5	-11.3
Plant protection products	-4.4	1.9	-2.7	-2.7	-7.0
Feedingstuffs	1.3	1.1	2.5	-3.4	-2.1
Material and small tools	1.2	4.3	5.5	-0.4	0.8
Services	0.5	3.6	4.2	-0.5	0.1
<b>Intermediate consumption</b>	0.2	1.0	1.2	-3.5	-3.3
<b>Gross value added at m.p.</b>			-4.0		-8.7
Subsidies			16.5		10.4
Taxes linked to production			-10.4		-13.6
<b>Gross value added at f.c.</b>			-1.7		-6.5
Depreciation			-0.3		-4.7
<b>Net value added at f.c.</b>			-2.0		-7.0
Rent			1.0		-3.8
Interest			1.8		-3.0
<b>Net income total labour</b>			-2.8		-7.8
Compensation of employees			4.5		-0.3
<b>Net income family labour</b>			-5.5		-10.6