



Assessment of the impact of the heat wave and drought of the summer 2003 on agriculture and forestry



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1. Drought and heat wave affected mainly Southern and Central Europe

The drought and the heat wave had enormous social, economic and environmental adverse effects, such as the deaths of thousands of vulnerable elderly people, the destruction of large areas of forests by fire, substantial losses in certain regions and production sectors of the European Union's agriculture, power cuts and transport problems.

Italian, German, Austrian, Spanish, French and Portuguese agriculture, but also agriculture in the Candidate Countries, have been among the worst hit by the drought and the heat wave in 2003, putting at risk a large proportion of harvests, productivity and markets and leading to increased production costs.

The impact of these extreme climate conditions, with big variations per region, is the biggest on the green fodder supply, the arable sector and the livestock sector (both extensive and intensive (mainly poultry and egg sector).

The fodder deficit varies from 30% (Germany, Austria and Spain) to 40% (Italy) and 60% in France.

With approximately 186 million tonnes (MT), the EU arable sector shows a fall in production of more than 23 MT compared to previous year, i.e. more than 10%.

Most damaged are common wheat with 83 MT compared to 93 MT last year (- 11% or some 10 MT) and maize with 32.5 MT compared to 41 MT (- 21% or approximately 9 MT). Over 3/4 of the soft wheat output and some 55% of the maize output lost at Community level are attributable to the drought in France, while 1/3 of the fall in EU maize production is attributable to Italy.

The livestock farmer will suffer the most and mainly in the coming winter due to lack of green fodder and the possible increase of compound feed prices resulting in the decapitalisation of the herd.

Additional side effects will be felt in the coming months such as problems of soil erosion and flood, effects on the winter sowing and budding of trees etc.

Both upstream and downstream co-operatives are affected by the effects of the drought. Input prices are increasing, orders can not be met as a result of shortage in supplies and variations in product size and conformity and will lead to losses of turn over and market shares.

The forest fires mainly affected Portugal, Spain, France and Italy. More than 25.327 fires were recorded in Portugal, Spain, Italy, France, Austria, Finland, Denmark and Ireland. The estimate today is that some 647.069 hectares of forest are destroyed of which 390.146 in Portugal and 127.525 in Spain

The global financial impact of the drought and the forest fires in France, Italy, Germany, Spain, Portugal, Austria, Hungary, Estonia and Slovakia can at present be estimated to amount to 13,1 billion €

2. Sector assessment

2.1. Arable crops

This year's extreme weather conditions diminish the quantity and quality of the harvests particularly in Central and Southern Europe's agricultural areas.

The winter crops suffered from the effects of a harsh winter and late spring frost. The heat wave starting as early as June caused the crops to develop in advance by 10 to 20 days anticipating ripening and maturity stages. Thus winter-spring cereals entered into grain filling stages under insufficient soil moisture conditions.

The very high values of air temperature and solar radiation, recorded especially in the second part of July and beginning of August, resulted in a notable increase of the crops' water consumption. This, together with the summer dry spell, resulted in an acute depletion of the soil water reservoirs available to the crops.

Copa-Cogeca forecast a reduction in overall cereal yield by 8.6% from 5.60 tons per hectare in 2002 to 5.12 tons per hectare in 2003. The combined effect of the reduction in yield and acreage of cereals (-2.7%), results in a fall in production from 210 Mio tons in 2002 to 186 Mio tons in 2003 (-11.1%).

The forecasts on production per Member State are as follows (in 000 tons): Belgium/Luxembourg 2.493 (+8.3%), Denmark 9.070 (+3.6%), Germany 39.345 (-9%), Greece 4.457 (-7.2%), Spain 19.399 (+1.5%), France 54.981 (-20.9%), Ireland 2.041 (+5.9%), Italy 16.544 (-17.6%), Netherlands 1.822 (+8.3%), Austria 4.072 (-8.3%), Portugal 1.311 (-10.4%), Finland 3.788(-3.8%), Sweden 5.427 (-0.6%) and United Kingdom 21.924 (-5.7%).

2.1.1. Total Wheat (including soft wheat and durum wheat varieties):

Copa-Cogeca's latest figures of the end of September forecast that at EU15 the yield is expected to be lower by 8.4% as compared to last year.

The combined effect of the reduction of the total wheat yield and the reduction in areas (-2.5%) will result in a lower wheat production of about 10.8% (91.6 Mio tons compared to 102.7 Mio tons in 2002).

The most affected countries contributing to the low European yields are Portugal (-37%), France (-16.1%), Austria (-10.4%), Greece (-12.6%), Italy (-4.7%), Germany (-5.9%).

Per Member State the production forecast is as follows (in 000 tons) : Belgium/Luxembourg 1.641 (+7.5%), Denmark 4.720 (+17.6%), Germany 19.268 (-7.6%), Greece 1.828 (-15.9%), Spain 5.818 (-2.7%), France 30.894 (-20.8%), Ireland 740 (+30.5%), Italy 6.412 (-7.9%), Netherlands 1.200 (+20%), Austria 1.187 (-17.2%), Portugal 192 (-56%), Finland 637 (+12.1%), Sweden 2.463 (+16.6%) and United Kingdom 14.639 (-9.1%).

The figures for the Candidate countries predicts drop in wheat production by -40% in Slovenia, -31% in Hungary, -28% in the Czech Republic and 8.5% in Slovakia

2.1.2. Grain Maize

Copa-Cogeca's latest figures of the end of September forecast that at EU15 the yield is expected to be lower by 19.1% as compared to last year (dropping from 9.12 tons per hectare to 7.38 tons per hectare).

The extremely dry and hot summer conditions are even affecting the irrigated varieties.

Yields dropped spectacularly in Germany (-23%), Italy (-26%), France (-20%), Spain (-13.3%) and Austria (-9.7%)

Production is forecasted to fall from 41.4 Mio tons in 2002 to 32.7 Mio tons in 2003 (-21%). Highly affected are France (11.7 Mio tons or -29% resulting in a loss of 265 million Euro), Italy (8.7 Mio tons or -25%), Spain (3.7 Mio tons or -13.1%), Austria (1.5 Mio tons or -9.1%) and Germany (3.4 Mio tons or -8.5%).

2.1.3. Rape Seed:

The Commission's Joint Research Centre (JRC) forecasted in the middle of August that the yield would be lower by 4.2% as compared to last year.

The European yield will be lower than average by about 6.6% (2.9 t/ha instead of 3.1 t/ha). In Germany and France results are expected to be in the order of 11% and 10% lower than average. The crop suffered from the April late frost, during flowering, and from lack of rain during its ripening period.

On basis of COPA and COGECA figures, oilseed production will be down by 30% in Italy, 25% to 40% in Spain, 19 % in Austria, 17% in Sweden, 7% in Germany, 10% in Hungary and even by 72% in Slovakia.

2.1.4. Sunflower:

The Commission's Joint Research Centre (JRC) forecasted in the middle of August that the yield is expected to be lower by 25.0% as compared to last year.

The exceptionally dry summer is hitting especially the non-irrigated varieties and areas resulting in a lower than average yield by about 22%. The areas most affected will be Spain and Italy (-30%).

2.1.5. Sugar Beet:

The Commission's Joint Research Centre (JRC) forecasted in the middle of August that the yield is expected to be lower by 7.2% as compared to last year.

The dry conditions are giving lower yields in terms of weight of roots by about 7% as compared to last year (58.3 t/ha instead of 62.5). However, the sugar content should be higher. The areas of production around the English Channel and the North Sea appear to be the least affected.

Sugar production is estimated to decrease by 25% in Italy, 15% in Spain, 7.5% in Germany and 5% in Austria.

2.2. Potato:

The yield is expected to be lower by 2.0% as compared to last year.

As for the other summer crops, especially the non-irrigated varieties in light soils will suffer from drought conditions. The EU yield is currently forecast at 35.7 t/ha (36.5 t/ha last year). The quality of the product could also be affected.

Copa - Cogeca estimate that the EU potato production will drop by 4.6%. Member States extremely hit are Italy and Spain (-30%), Germany (-25%), the Netherlands and Belgium: -20 and 10 to 12% in France.

The potato area in the EU was lower by 4% in 2003, which is the lowest surface since 9 years.

The calibre of the potato will be smaller and problems for supplying the industry are predicted.

2.3. Fruit and vegetables:

The overall financial loss for the French fruit sector is estimated at around 515 Mio €

- Apples/Pears:

- Apples:

The first figures indicates that EU production will be below 7 Mio tons compared to the 4 last years average of 8 million tons.

The production in the northern countries was especially affected by the late frosts while in the countries of the south; it is the drought, which has the greatest impact.

Hails have also affected the production and can still occur.

French apple production will be down by 25%, 750.0000 young trees are lost and the financial loss is estimated at 310mio €.

Italian apple production will be down by 10%, with a loss of 10%.

- Pears:

On basis of the first figures, the production of pears in the EU is forecasted to drop from 2.5 Mio tons in 2002 to 2.3 Mio tons in 2003.

The drought affected mainly the production in the South with also an effect on the calibre.

French production of pears will be down by 30%, 150.0000 young trees are lost and the financial loss is estimated at 81Mio €.

Italian production of pears will be down by 10%, with a loss of 10%.

- Table grapes

French table grape production will be down by 30%, resulting in a financial loss of 30 Mio €.

Spanish production will be down by 20%

- Stone-fruit (peaches/nectarines)

Peaches production in the EU is expected to be 1 million tons lower, falling below 3 million tons.

Italian production is down by 30%, resulting in a loss of 20%.

Financial loss in France is quantified at 6.4 Mio €

Supply problems for the processing industry and high prices on the fresh market.

- Shell Fruits

Reduction in yields by 25 %.

French Nuts production is down by 50% in 2003 and 30% in 2004 with a financial loss of 65 Mio €.

Italian production of shell fruit is estimated to decrease by 25% and Spanish production by 30%.

2.4. Tobacco

Main affected regions: South West (Aquitaine and Midi-Pyrénées) and Southeast Rhone Valley) of France.

The French tobacco production will be on average 10-12 % lower, Italian production will drop by 3%

2.5. Wine

Copa-Cogeca 's latest figures at the beginning of October forecast the Eu-15 production of wine at 153,37 Mio hectolitres. This is a 11 % decrease compared with average production of the last 5 years (171,9 Mio hectolitres).

The biggest drops in production are recorded in Italy (-18%), France (-17%), Germany ,Luxembourg (both -15%) and Austria (-11%).

In the Southern Member States (except Italy), the impact of the drought has been different amongst the regions. Production increased in Portugal (+10%), Spain (+5%) and Greece (+4%).

It is now the third consecutive year that wine production in the EU-15 is dropping from 182 Mio hectolitres in 2000, to 163,91 Mio hectolitres in 2001, to 158,89 Mio hectolitres in 2002 and 153,37 Mio hectolitres in 2003.

2.6. Forestry

Due to a set of conditions, amongst which the abnormal temperatures occurred in July and August, forest fires had a huge impact and mediatic exposure during the summer period.

Most affected countries are Portugal, Spain, France and Italy.

Nevertheless some other countries also suffered from these abnormal conditions and both the area burned and the number of fires increased vis-à-vis previous years (e.g. Denmark).

These estimates are not final as in recent days (from 11th Sep to present date) several forest fires occurred in Portugal and in Spain.

More than 25.327 fires were recorded in Portugal, Spain, Italy, France, Finland, Austria, Denmark and Ireland. The estimate today is that some 647.069 hectares of forest area (not including agricultural areas) are burned of which 390.146 in Portugal and 127.525 in Spain.

The financial impact of forest fires is very difficult to estimate and the only available data was presented by Portugal whit a financial impact of 1.031 Mio € (official MoA figures updated 2th Oct.).

2.7. Animal production

2.7.1. Pastures

All of the main Member States pasture areas are affected by the excessive lack of moisture. However, the largest reduction in biomass produced will be in the southern countries and the southern half of France (about 17% of the EU pasture areas).

The lack of green forage has serious negative impact in the beef and dairy sector resulting in early slaughtering of part of the herd.

The fodder deficit varies from 30% (Germany, Austria and, Spain) to 40% (Italy) and 60% in France (estimated cost of 625 Mio € for rebuilding the fodder stocks).

2.7.2. Beef

In France alone the loss in the beef sector is forecasted to amount to 1.500 Mio € or a loss of 200 Euro on average per livestock unit. The extra cost generated by the purchase of fodder is quantified on average to amount to 30.000 Euro per holding.

2.7.3. Milk

The impact of the drought will not be limited to the months of June, July, August and September as far as dairy farms are concerned. It will be felt all through winter and until fodder stocks are renewed naturally in spring 2004.

In France, the decrease in the milk collection, with huge variations among the regions during the period (June-September), is estimated at -2.65% across the entire French territory, which represents about 183 Mio litres, i.e. a decrease in receipts of EUR 56 Mio. This decrease in receipts comes in addition to the decrease in the price of milk.

The drought has also affected milk quality quite considerably, particularly by decreasing the level of milk protein and increasing the fat content.

Moreover, there are incipient health problems among the dairy herds and these may continue into the winter.

The losses in the French dairy sector amount to about EUR 1 billion.

2.7.4. Poultry

The eggs and poultry sector was hardly affected in France and Spain.

Almost 4 million broilers died in France due to the heat wave, including approximately 1,5 million in Brittany and 1,3 million in the Country-of-Loire (these two areas accounting for 50% of the French production).

On top of this, productivity decreased by approximately 15% and the loss of 1,5 million layers (approximately 4% of the livestock) and 400 to 500.000 breeding hens will generate a global loss for the sector of around 42 million Euro

The poultry flock is reduced by between 15 and 20% in Spain and productivity decreased by 25-30%.

2.7.5. Pigmeat

55 Mio € loss in the French pigmeat sector and 27 Mio € in Spain

3. Financial impact

The global financial impact of the drought and the forest fires can at present be estimated to amount to 13 billion € in the EU-15 and the candidate countries.

- France: The drought would generate an overall loss of the 4 billion Euro (1,5 billion only for the beef sector, 265 mio € for maize, 515 mio € in the fruit sector and around 100 Mio € for the intensive livestock sector).
- Germany: the overall loss is estimated at 1,5 billion Euro (650 Mio € on fodder, 388 mio € in the arable sector, 275 mio € in the potato sector and 100 Mio € in the sugar sector)
- Italy: the overall loss for the agricultural sector is estimated to vary between 4 and 5 billion € as the combined result of lower production and higher costs.
- Spain: the total financial loss is provisionally estimated at 810-mio € (710 Mio € in the arable sector and 100 Mio € in the livestock sector)
- Austria: the overall loss is estimated at 197 Mio Euro (150 Mio € on fodder).
- Portugal : Direct damage as a result of the forest fires in Portugal is estimated at 1,03 billion €
- Hungary: Estimated loss of 453 Mio €. Most affected sectors: arable crops, wine and fruit sector.
- Slovakia: Estimated loss of 143 Mio €
- Estonia : Estimated loss of 7 Mio €

4. Measures taken at Community level

- In the affected regions, farmers are allowed to use their set-aside land for grazing or for feed purposes; This measure applies in some regions in France, Germany, Italy and Austria.(applicable from 4 July 2003);
- Some sales of rice from intervention stocks to be used as animal feed have been accepted ;
- All Member States have been offered the possibility to increase for all producers the advance payments of the premia in the beef sector from 60% to 80% from 1 September 2003 onwards. The payment of 50% of direct support for arable crops has been advanced from 16 November to 16 October. This possibility is only offered to farmers in areas affected by the drought
- In the cereals sector, the Commission will open tenders to sell on the internal market different quantities of cereals to be used for the production of animal feed. The total quantities covered by the tenders are: 730,000 tons of rye, 610,000 tons of barley and 12,000 tons of sorghum. The first deadline for the introduction of offers will be 18 September.
- The budgetary possibilities within the 2003 budget for this measure are limited to slightly over € 400 million. The distribution of the available budget by Member State concerned is Germany: € 87 million, France: € 225 million, Italy: € 63 million, Portugal: € 25 million and Luxembourg € 1.4 million.
- A grant of €31.6 million from the EU Solidarity Fund to Portugal was proposed by the Commission on 27 August 2003, to help deal with the damage caused by forest fires.

Further possible measures

- Further selling of cereals from intervention on the internal market.
- Member States have the possibility to amend their rural development programmes to strengthen existing measures or create new measures for the restoration of agricultural and forestry production damaged by natural disasters. The Commission is ready to examine and approve rapidly the amendments to such programmes.
- EU State aid rules offer the possibility of compensating farmers for losses suffered because of exceptional drought. Member States can decide to grant them national aid within the limits foreseen in these rules. The Commission will analyse and take a decision on the individual requests for state aid as a matter of urgency

5. National measures introduced

- France: on 22 of August the French Government decided to make 500 mio € available from the national budget.
 - Advance payments will be made starting in September from the agricultural calamities fund (increased by 180 Mio € to 300 Mio €)
 - Fodder transport aid (50 Mio €)
 - Exemption on land taxes and differed payments of income tax
 - Italy : emergency aid of 9 Mio € introduced since July 2003
 - Portugal :
 - 40 Mio € to rebuilt the animal herd
 - 182 Mmio € reallocation from the Structural fund
 - Austria :
 - Federal disaster fund of 3 Mio € for fodder, to be supplemented by 3 Mio € by the Länder
 - Postponement in reimbursement of investment credits
 - Czech Republic: National aid envelope of 107,6 Mio € of which 44.3 Mio € compensation for the frost And 63.3 Mio € for the agricultural intervention fund
 - Hungary :The Hungarian government has released 240 Mio € national aid (40 mio direct support, 200 Mio financial credits).
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| | B | Dk | D | GR | E | F | IRL | I | L | NL | A | P | FIN | S | UK | EU-15 |
|--|-------|---------|---------|---------|---------|-----------|-----------|--------|------------|---------|--------|---------|---------|---------|---------|---------|
| Global financial impact for the agricultural sector in mio Euro | | | | | | -810 | -4000 | | -4000-5000 | | | -206 | -1031 | | | 12524 |
| of which | | | | | | | | | | | | | | | | |
| arable crops | | | | | | -710 | | | | | | | | | | |
| livestock | | | | | | -100 | | | | | | | | | | |
| Effect per sector | | | | | | | | | | | | | | | | |
| Cereals | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | | | | | | |
| total | 8.3% | 3.60% | -9.00% | -7.20% | 1.50% | -2.70% | -20.90% | 5.90% | -17.6% | 8.30% | -8.3% | -10.40% | -3.80% | -0.60% | -5.70% | -11.10% |
| wheat | 6.9% | 17.60% | -7.60% | -15.90% | -2.70% | -20.80% | -20.80% | 30.50% | -7.9% | 20.30% | -17.2% | -55.80% | 12.10% | 16.60% | -9.10% | -10.80% |
| barley | 18.9% | -10.00% | -2.20% | -0.10% | 11.70% | -10.20% | -10.20% | -5.90% | -4.5% | 4.50% | 4.4% | | -5.10% | -15.70% | 5.10% | -1.90% |
| maize | 20.2% | | -8.50% | | -13.10% | -28.90% | -28.90% | | -25.1% | -32.00% | -9.1% | 0.90% | | | | -21.00% |
| rye | | -11.90% | -37.50% | | -4.80% | -11.70% | -11.70% | | | | -18.1% | 42.90% | 4.00% | -2.30% | | -30.50% |
| oats | | 5.80% | 17.10% | | 16.60% | -22.30% | -22.30% | 11.60% | -4.5% | | 7.8% | | -8.60% | -10.60% | -26.10% | -2.80% |
| other | | | -18.80% | | | | | | -2.5% | | | | -10.00% | -32.30% | | |
| Financial impact | | | | | | | | | | | | | | | | |
| total | | | -388,8 | | | | | | -5,00% | | | -30 | | | | |
| wheat | | | -154,9 | | | | -724 | | no change | | | -26 | | | | |
| barley | | | -24,5 | | -88 | | -474 | | -3,00% | | | -2 | | | | |
| maize | | | -31,9 | | | | -112 | | -5,00% | | | 0 | | | | |
| rye | | | -137,3 | | -60 | | | | | | | -2 | | | | |
| oats | | | 17,4 | | | | | | | | | | | | | |
| other | | | -57,6 | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | no impact | | -0,05 | | | | -10,0% | | | |
| Financial impact | | | | | | | | | -0,05 | | | | | | | |
| Sugar | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | -7,50% | | -15% | no impact | | | -20-25% | | -5,0% | | | | | |
| Financial impact | | | -99,5 | | -33 | | | | -30% | | -6 | | | | | |
| Oilseeds | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | -7,00% | | -25-40% | | | | -30% | | -19,0% | | | -17,4% | | 28,00% |
| rape seed | | | | | | | | | | | | | | | | |
| sunflower | | | | | | | | | -30% | | | | | | | |
| Financial impact | | | -64,6 | | -52 | | -45 | | -30% | | -6 | | | | | |
| Olive Oil | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | -25% | | | | -2% | | | | | | | |
| Financial impact | | | | | | | | | -2% | | | | | | | |

| | B | Dk | D | GR | E | F | IRL | I | L | NL | A | P | FIN | S | UK | EU-15 |
|-------------------------------------|---|----|-----|------|---------|----------|---------------|-------|------|----|---|------|--------|------|-----|-------|
| Cotton | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | | | | | | |
| Financial impact | | | | | -30% | -50 | | | | | | | | | | |
| Fodder | | | | | | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | -30% | -30% | -30% | -60% | -40% | -40% | | | | | | | |
| Financial impact | | | | -650 | -625 | -625 | | | | | | -150 | | | | |
| Forestry | | | | | | | | | | | | | | | | |
| nbr of fires | | | 8 | | 5927 | 2858 | | 10710 | | | | 120 | 4279 | 1425 | | |
| Area affected (ha) | | | 250 | | 127525 | 49303 | 841 | 77841 | | | | 200 | 390146 | 663 | 300 | |
| Financial impact | | | | | | | 0,4 | | | | | 1031 | | | | |
| Dairy | | | | | | | | | | | | | | | | |
| % loss in production 2003/2002 | | | | | | -15% | -2,65%(4mois) | -5% | | | | | | | | |
| Financial impact | | | | | -5 | -56 | | -10% | | | | | | | | |
| Beef | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | | -2% | | | | |
| % impact on productivity/production | | | | | -10-15% | | | | | | | -5% | | | | |
| Financial impact | | | | | -22 | -1500 | | | | | | | | | | |
| Pigs | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | | -2% | | | | |
| % impact on productivity/production | | | | | | | | | | | | -5% | | | | |
| Financial impact | | | | | -27 | -55 | | | | | | | | | | |
| Sheep | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | | | | | | |
| % impact on productivity/production | | | | | | | | | | | | | | | | |
| Financial impact | | | | | -2 | | | | | | | | | | | |
| Poultry | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | -15-20% | -4 mio | | | | | | -2% | | | | |
| % impact on productivity/production | | | | | -25-30% | -15% | | | | | | -3% | | | | |
| Financial impact | | | | | -8 | -32 | | | | | | | | | | |
| Eggs | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | | -2% | | | | |
| % impact on productivity/production | | | | | | | | | | | | -3% | | | | |
| Financial impact | | | | | | -1,5 mio | | | | | | | | | | |
| Bees | | | | | | | | | | | | | | | | |
| % reduction of animals | | | | | -30-50% | | | | | | | | | | | |
| % impact on productivity/production | | | | | -20-50% | | | | | | | | | | | |
| Financial impact | | | | | -8 | | | | | | | | | | | |

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| | CZ | EE | CY | LT | LV | H | MT | PL | SK | SI | CEEC |
|---|---------|---------|------|----|----|---|------|----|----|--------|--------|
| Global financial impact for the agricultural sector in into Euro | | | -6,8 | | | | -453 | | | -143 | -602,8 |
| Effect per sector | | | | | | | | | | | |
| Cereals | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| total | | 9,70% | | | | | -30% | | | | |
| wheat | -28,07% | 12,20% | | | | | -31% | | | -8,50% | -40% |
| barley | 14,60% | 16,70% | | | | | -30% | | | | |
| maize | | | | | | | -26% | | | | |
| rye | 28,95% | -47,40% | | | | | -30% | | | | |
| oats | -19,88% | -17,00% | | | | | -31% | | | | |
| other | -13,28% | | | | | | | | | | |
| Financial impact | | | | | | | -405 | | | | |
| Rice | | | | | | | | | | | |
| total | | | | | | | | | | | |
| wheat | | | | | | | | | | | |
| barley | | | | | | | | | | | |
| maize | | | | | | | | | | | |
| rye | | -1,07 | | | | | | | | | |
| oats | | -1 | | | | | | | | | |
| other | | | | | | | | | | | |
| Rice | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Sugar | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | -10% | | | | |
| Financial impact | | | | | | | -8 | | | | |
| Oilseeds | | | | | | | | | | | |
| % impact on production 2003/2002 | | 27,40% | | | | | -10% | | | -72% | |
| rape seed | | | | | | | | | | | |
| sunflower | | | | | | | | | | | |
| Financial impact | | -2,04 | | | | | -12 | | | | |
| Olive Oil | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |

| | CZ | EE | CY | LT | LV | H | MT | PL | SK | SI | CEEC |
|----------------------------------|----|---------|----|----|----|------|----|----|----|----|------|
| Fruit and vegetables | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| apples | | | | | | -10% | | | | | |
| pears | | | | | | -10% | | | | | |
| peaches/nectarines | | | | | | -15% | | | | | |
| fruit in shells | | | | | | | | | | | |
| tomatoes | | | | | | | | | | | |
| others (please specify) | | | | | | | | | | | |
| Financial impact | | | | | | -10 | | | | | |
| apples | | | | | | | | | | | |
| pears | | | | | | | | | | | |
| peaches/nectarines | | | | | | | | | | | |
| fruit in shells | | | | | | | | | | | |
| tomatoes | | | | | | | | | | | |
| others (please specify) | | | | | | | | | | | |
| Wine | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | -10% | | | | | |
| Financial impact | | | | | | -6 | | | | | |
| Potatoes | | | | | | | | | | | |
| % impact on production 2003/2002 | | -13,20% | | | | | | | | | |
| Financial impact | | -1,7 | | | | | | | | | |
| Tobacco | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Hops | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |

| | CZ | EE | CY | LT | LV | H | MT | PL | SK | SI | CEEC |
|-------------------------------------|----|----|----|----|----|---|------|----|----|----|------|
| Fodder | | | | | | | | | | | |
| % impact on production 2003/2002 | | | | | | | -30% | | | | |
| Financial impact | | | | | | | -8 | | | | |
| Dairy | | | | | | | | | | | |
| % loss in production 2003/2002 | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Beef | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | |
| % impact on productivity/production | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Pigs | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | |
| % impact on productivity/production | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Poultry | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | |
| % impact on productivity/production | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |
| Eggs | | | | | | | | | | | |
| % reduction of animals | | | | | | | | | | | |
| % impact on productivity/production | | | | | | | | | | | |
| Financial impact | | | | | | | | | | | |