

# Agrosynergie

Groupement Européen d'Intérêt Economique

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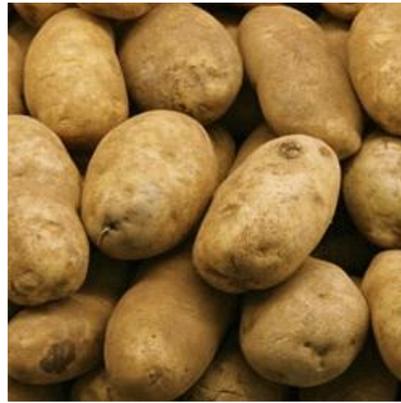
*Evaluation of CAP measures applied to the starch, sugar and cotton sectors*

## EVALUATION OF COMMON AGRICULTURAL POLICY MEASURES APPLIED TO THE STARCH SECTOR

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Synthetic summary



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EEIG Agrosynergie comprises the following partners:



*Consulenti per la Gestione Aziendale*

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The evaluation has two objectives: first to assess the effects of the 2003 Common Agricultural Policy (CAP) measures applied to the starch sector since 2005 and secondly to simulate the effects of full decoupling in the starch potato (SP) sector.

It relates to the 27 Member States, but focuses on the main SP producers.

The ex-post analysis method combined statistical analysis and bibliography with qualitative assessment on the basis of Case Studies in main production regions and a survey.

The prospective analysis is based on a simulation of the effects of a simplified scenario of the “CAP Health Check” on the profitability of the SP cropping systems, using FADN data in the 7 main producing regions. Two hypotheses on the price paid by manufacturers to growers are studied ((H1) manufacturers pay only the price they used to pay in the past and (H2) manufacturers pay the price they used to pay and a complement equivalent to the SP partially coupled aid).

## 1 REGULATION

The starch sector has been historically administered by the Cereal CMO. The SP growers received an aid per tonne of SPs; the manufacturers received a premium per tonne of potato starch and abided by quotas and a minimum SP price; starch end-users were eligible for production and export refunds.

In 2003, the CAP reform resulted in the following:

- In the cereal-starch-sector, cereal coupled aid to farmers was decoupled.
- In the SP sector, 40% of the aid to growers was decoupled; the quotas, the starch premium and the minimum price were maintained. The CAP Health Check clearly established the end of this transition period: from 2012 the aid for SP growers will be fully decoupled and the other instruments of the scheme abolished.

## 2 EX-POST EVALUATION

### 2.1 POTATO STARCH SECTOR

#### 2.1.1 AGRICULTURAL SECTOR

##### ▪ Production and traditional regions

Partial decoupling has been effective in maintaining production in areas suited for SP and close to the mills. However, given that partial decoupling reduced the profitability of the SP farming system, it contributed to a slight decrease in area (-7%) and production (-5%).

The Netherlands (-3%) and Denmark (-4%) have lost fewer hectares compared to Germany (-9%), France (-10%), Sweden (-9%) and Finland (-11%). In Poland, the SP area decreased after accession, when the EU quotas were introduced; since then the area has been stable. In the Czech Republic and Latvia, the SP areas overall followed a decreasing trend.

The high cereal price has indirectly contributed to limiting these effects on the SP area and production because it often incited the manufacturers to increase the price paid to SP growers.

##### ▪ Competitiveness and market orientation

The 2003 CAP reform was a first step towards enhancing the competitiveness of the SP sector and favouring better market orientation of growers.

Before the reform, with coupled aid, the SP farming systems were more profitable than the alternative farming systems studied. Since the 2003 reform, the SP farming systems still benefit from the highest coupled aid, but the profitability of the SP farming systems has been closer to the

one without coupled aid. SP farmers are thus likely to be more market-oriented. This is also reflected in the FADN analysis that showed changes in farm cropping patterns: the recent sharp increase in cereal prices has favoured a trend towards basic COP rotations with oilseeds as starter crop in southern regions and forage crops in northern ones. Farmers do not turn systematically to table potatoes, even though they are more profitable, due to the limited market size and technical constraints. Other profitable alternatives exist depending on the regions, but they constitute market niches.

#### ▪ **Income**

The general change in income indicators shows a rise, especially in 2007 (the analysis stops in 2007). This trend is strongly linked to the cereal price increase that masks the specific effects of the 2003 reform. The CAP supports are very significant: they represent more than 50% of the Farm Net Income and contribute to attainment of positive income level. In Poland, farm income has followed a steady growing trend since accession.

#### ▪ **Structural changes**

Partial decoupling has favoured a reduction in the number of SP farms in Germany, the Netherlands, France and Finland, but not in Denmark and Sweden. In Poland, the EU quota contributed to a decrease in farm numbers. At the sector level, given that SP farmers are already well organised, the transition period did not have effects on the restructuring of the agricultural sector.

### 2.1.2 DOWNSTREAM SECTOR

#### ▪ **Steadiness of supplies**

The partial decoupling resulted in a slight decrease in supplies (-5%), but it has not significantly affected the supply costs which have increased due to the cereal price increase.

Finally, the manufacturers did not use the transition period to take significant measures in order to secure their supplies, given that a large number of the manufacturers are owned by growers and that this already secures their supplies.

#### ▪ **Competitiveness**

The maintenance of the quota, the premium and the partially coupled aid has contributed to a loss of market shares of EU potato starch. It indeed affected the manufacturers' cost competitiveness for several reasons:

- The quotas have contributed to decreasing the EU potato starch production in a context of expanding EU and world starch production.
- Partial decoupling has contributed to a slight decrease in supplies, which increased the manufacturers' operating costs.
- The quotas combined with the premium have curbed the concentration of the processing units required for achieving economies of scale. This combined with structural specificities (high potato water content, short campaign, less value-added co-products etc.) results in over-costs.

The scheme also has an indirect effect on product competitiveness: because of the many small units, the sector on average invests less in R&D and in diversifying their product range than does the cereal starch sector.

Price competitiveness was not directly affected, and the change in production refunds and export refunds had no direct effect.

Finally, potato starch manufacturers did not take significant measures to adjust to new market conditions: at the sector level the AAF failed to adopt a self-financed restructuring fund. In

addition, only some manufacturers have taken significant measures, such as a planned decrease in production in order to anticipate temporary loss of market shares, internal restructuring including closing of processing units, etc.

## 2.2 CEREAL STARCH SECTOR

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### ▪ **Effects on the agricultural sector**

The CAP measure related to starch is likely to have had no direct effect on cereal price, geographical distribution or cereal farm structures. Indeed, the starch outlet is a relatively small outlet for cereals.

### ▪ **Effects on the downstream sector**

The 2003 CAP reform is thus likely to have had no direct effect on the volumes and steadiness of cereal supplies to the manufacturers. However, the 2003 CAP reform is likely to have indirectly contributed to larger cereal price volatility in the EU market, this affecting the supply cost. The progressive reduction in the intervention price and border protection resulted in larger volatility, since the Community prices are now more directly linked to the world prices. As a result, some manufacturers have started using the futures markets.

Overall, the EU cereal starch sector has tended to lose some market shares in the EU and world markets.

The change in production and export refunds (not granted any more since 2008) had no impact on the market shares of the cereal starch manufacturers or on those of end-users.

## 2.3 SOCIAL, ECONOMIC AND ENVIRONMENTAL DEVELOPMENT

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### ▪ **Economic and social development**

The 2003 CAP reform has contributed to reducing on-farm jobs, in reducing jobs at SP farms (in some Member States) and in encouraging growers to turn to less labour intensive crops.

At the manufacturer level, no link between employment in the starch manufacturing sector and the 2003 CAP reform can be established.

The CAP 2<sup>nd</sup> Pillar did not have significant effects in terms of economic and social development in this sector, because SP farmers did not often use it, and starch manufacturers cannot apply for it.

### ▪ **The environment**

The effects of the 2003 reform on the environment are mixed. The GAEC have limited potential negative effects of the SP crop on the environment, but partial decoupling has favoured a switch to other rotations having various environmental impacts depending on the regions.

Manufacturers have improved the use of energy and water mainly in order to reduce their operating costs and comply with, among others, IPPC legislation, carbon quotas.

## 2.4 EFFICIENCY, RELEVANCE AND COHERENCE

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### ▪ **Efficiency**

Overall, the CAP measures applied to the starch sector achieved their objectives related to the agricultural sector in a relatively efficient way. However, the quota combined with the premium in the context of the 2003 reform are inefficient in enhancing sectoral competitiveness, and the transition period was inefficient in allowing producers to adjust.

- **Relevance**

The objectives of the CAP measures with respect to the needs, problems and issues of the potato starch supply chain were relevant, including those of the transition period. However, the measures applied did not achieve all the expected results on issues such as enhancing the competitiveness of the supply chain and encouraging the producers to adjust to new market conditions. In addition, some issues were not dealt with sufficiently, especially the need to set up specific policies for boosting the bio-based products' market, in order to help the supply chain to become viable after full decoupling.

- **Coherence**

Overall, the objectives and the results are coherent, but some incoherence appeared:

- The quotas, the starch premium and the minimum price are not coherent with the objective of enhancing competitiveness.
- Partial decoupling is less coherent than full decoupling with improving the market orientation of farmers.
- Objectives of the Rural Development policy are coherent with the scheme – but not its results, because it is not adapted to the needs of this type of agro-industrial market chain.

## 3 PROSPECTIVE ANALYSIS

### 3.1 STARCH POTATO SECTOR

In the studied scenario:

- **Agricultural profitability**

If manufacturers paid the price they paid in the past, the cropping system with SP would become less profitable than the ones with COP and sugar beets in Germany, France and the Netherlands. Only in Poland would their profitability levels be equivalent.

If manufacturers compensated the loss of coupled aid, the SP cropping system would become more profitable than its main alternative, except in France.

Cropping systems with table potatoes would remain in most cases more profitable. However, table potatoes are a niche market, which could be disrupted if too many growers enter into it.

In Sweden and Denmark, if the producer price were to be maintained, the SP cropping system profitability would drop by 90% in Denmark and be negative in Sweden.

- **Areas, production and structural change**

If manufacturers did not increase the producer price, full decoupling would result in a drastic reduction of the SP production.

If manufacturers compensated the loss of coupled aid, EU SP production and farm numbers would be much less affected, but Germany would still lose 50% of its SP production, Poland and France 25% and the Netherlands 11%. In this case, a cereal price decrease of up to 20% may smooth out these effects, except in France. In the event of a cereal price increase, the simulation results are skewed because they are based on fixed price elasticity, whereas in this case manufacturers should be able to increase producer prices. This would result in a smaller decrease in area, production and farm numbers in all Member States.

In Sweden and Denmark, if manufacturers did not compensate for the coupled aid, this would result in a loss of 14% of production in Denmark and 76% in Sweden. For a price increase of 60%, loss of production could be reduced to a loss of only 4% in Denmark and 30% in Sweden.

## 3.2 MANUFACTURERS

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### ▪ Price and supplies to manufacturers

In order to maintain their supplies, manufacturers would have to increase the SP price by more than 100% in Sweden, 60% in Denmark; 30% in Poland, Germany and France; and only 3% in the Netherlands. In a context of fierce competition with cereal starch, it is unlikely that manufacturers would cope with such a price increase. Indeed, our survey shows that 67% of the manufacturers plan to increase the price, but only up to a level compensating for the lost coupled aid. Their SP supplies are thus expected to decrease.

### ▪ Competitiveness

In the case of full decoupling, manufacturers' operating costs would increase, and this would have to be partially passed on to end-users. This would be possible only when potato starch is not easily substitutable, and thus in the short term market shares could decrease by 30 to 50%. However, any cereal price increase could, at least temporarily, smooth this out.

The manufacturers have planned measures to cope with this, which are commonly related to cost savings and the development of new outlets. However, only few of them have planned to temporarily decrease their production or close processing units in order to adapt to future market conditions. Most of them consider that they will maintain their own market shares, and a minority of small units will not be able to reduce their supplies if they are to reach their breakeven point.

When full decoupling is applied, the whole starch market could thus be temporarily perturbed because: (1) the smallest units may stay in the market longer than expected; (2) a great deal of potato starch units would have to close, and given that the majority consider today that they are able to stay in the market, this may lead during one or a couple of campaigns to overproduction compared to market demand; (3) growers may also produce starch potatoes longer than expected because, being also owners of the manufacturing units, they may accept a greater price decrease than simulated.

### ▪ Socio-economic development and the environment

Even if compensation for the lost coupled aid is paid by the manufacturer, a significant number of SP growers would turn to less labour intensive crops; however, it is difficult to estimate if this would affect regional employment. In the manufacturing sector, a significant number of processing units might close, but the cereal manufacturers will probably create jobs. However, starch potato regions will probably face a loss of jobs in the industrial sector, because cereal manufacturers are usually based in other regions.

The environmental impact of full decoupling is unclear in southern regions, as SP growers might switch to COP rotation. In northern regions, the switch to forage crops, especially grassland area, might have a positive effect.

Concerning the manufacturing sector, the environmental impact of full decoupling should be rather positive, because production is expected to concentrate in larger units which usually apply more efficient energy and waste management techniques and are more constrained by environmental regulations. Furthermore, the development of potato-starch-based bioplastics may have significant impacts, given that comparisons between bio-based and petrochemical plastics in general favour bioplastics.

## 4 RECOMMENDATIONS

1 – **The planned abolition of the potato starch measures and full decoupling:** it can be considered as meaningful for the overall coherence with the CAP and for enhancing the competitiveness of the sector.

2 – **Efficiency of the transition period:** although the transition period was long and very relevant considering the specificities of the potato starch supply chain, the producers did not significantly undertake measures to adjust. Most of them opted for a “wait and see” attitude, which can be interpreted as a lack of effort. If similar cases occur in future, the following recommendations can be drawn for providing a stronger impetus for restructuring:

- Establishing in the Regulation a shorter transition period with a clear ending date and a clear objective.
- Laying down in the Regulation that the sector or the companies have to submit a restructuring strategy and to report on the progress.

3 – **Biobased products:** because of its high starch yield per hectare and its chemical properties, SP is a promising biomass product. Developing outlets for bioproducts could help the potato starch supply chain to be viable after full decoupling. However, this would require time unless policy incentives are set up. Some instruments already exist. At the EU level, the main policy tool is the Lead Market Initiative, which is still in progress. Moreover, few Member States have adopted favourable regulations (e.g. carbon tax). However this seems not sufficient to boost the biobased product market in the short term and the possibilities of dedicating more resources to this and of putting in place a regulatory framework supporting biobased products should be explored.