

## Summary

In this report, to the Expert Group on Public Finance, we are discussing and cataloguing public subsidies to the agricultural sector. The Swedish National Audit Office has carried out three different studies, included in this report. In the first part, we estimate the amount of direct support and market price support to Swedish agriculture. The European Union has extensive border protection which raises the price for agricultural products compared to what they would be on a de-regulated market. The estimates are based on OECD's so called PSE-model (Producer Subsidy Equivalent). The OECD uses this model to calculate the level of subsidies to farmers in different countries. However, the OECD only calculates the average for the European Union.

Therefore, preliminary estimates are reported on the total amount of subsidies given to Swedish agriculture after Sweden's membership in the European Union.

In the second part a survey is presented of all the transfers, registered in the state budget, from the European Union as well as from Sweden. We also include subsidies that farmers receive but that are not specifically directed toward farmers. That means that the survey includes a number of subsidies that are not included in the PSE-model.

In the third part we attempt to estimate potential environmental costs due to agricultural subsidies, based on research results in Sweden. This is a controversial issue, and it is important to note that different views exist in the field of Economics whether it is possible to make realistic calculations of these costs.

## 1.1 The amount of direct support and market price support

Direct support are transfers from the European Union or from the Swedish public sector to Swedish agriculture.

The market price support means that the European Union sets administrative prices within the community, different from world market prices. With customs fee on imported goods and export subsidies on exported goods from the EU, the European Union protects its own production from outside competition.

According to the OECD, the total amount of subsidies in Sweden in 1994, before entering the European Union, was approximately 14 billion SEK or 51 % of the production value. We can compare this to the average level of subsidies in the European Union of 50 % in 1994.

Since Sweden joined the European Union, the OECD has not presented any PSE-figures for Sweden.

According to our preliminary estimates, the average amount of subsidies rendered to Sweden, was around 12–15 billion SEK in Sweden, or 45–51 % of the production value.

The average for the European Union, in 1995, was according to the OECD, 49 %. A decrease is notable for the average of the European Union in 1996, to 43 %, according to the OECD.

The average level of subsidies for Sweden, was according to our estimates between 48–51 % of the production value for 1996.

It is also interesting to note that 9 billion SEK of the total membership-fee was transferred to the agricultural fund in the European Union from Sweden. At the same time around 4–5,5 billion SEK was transferred to Swedish agriculture. This implies a net transfer from Sweden of at least 3,5 billion SEK to farmers in the rest of Europe. It is important to note, however, that the size of Sweden's membership-fee is calculated without any connections to the agricultural subsidies.

It is noteworthy that 18 % of the farmers in 1995 got 71 % of the total amount of subsidies. The average level of support for approximately 16 000 farmers was 625 000 SEK. About 60 000 farmers (2/3 of the farmers) got 9 % of the total support.

## 1.2 The number of subsidies

Our survey shows that there are more than 120 different types of subsidies. The total cost for direct and indirect subsidies (including those rendered from the European Union), registered in the Swedish state budget was about 9,5 billion SEK in 1996. Thus, we have identified a larger number of transfers beyond those normally included in OECD's PSE-calculations. The total amount of these transfers is about 3 billion SEK.

The total cost for the Swedish administration of the agricultural policy is about 800 million SEK. The environmental support requires the highest cost of administration (as a share of the total subsidy), compared to other subsidies.

## 1.3 Environmental costs

We have attempted to quantify the environmental costs due to agricultural support. There can be negative environmental effects from agriculture but a more complex and interesting question is whether agricultural subsidies cause environmental costs. We have only analysed parts of the environmental effects since there is not enough research made in this field. We have not analysed possible positive environmental effects, perhaps as a result of the environmental subsidies. In short, the cost of the environmental effects, due to agricultural support, is around 1 billion SEK. This is probably an underestimation because the analysis is mainly based on the market price support.

In conclusion, it is important to know the extent of the total public support, both market price support and direct budgetary subsidies, i.e. to receive an answer to the reasonable question of how large the total support is, including e.g. R&D and general subsidies to companies. The Swedish Board of Agriculture (Statens Jordbruksverk) or the Swedish University of Agricultural Sciences (Statens Lantbruksuniversitet) should be made responsible for continuously making calculations of the total support to the Swedish agricultural sector, starting with 1995.

Only an average of the support to the agricultural sector in the European Union member states is currently available in OECD publications. An account for each member state is missing. In order to reach a better transparency it is necessary to calculate corresponding figures separately for the other EU member states. Furthermore, there is a need to develop methods and models to make it possible to estimate the environmental costs caused by agricultural support.