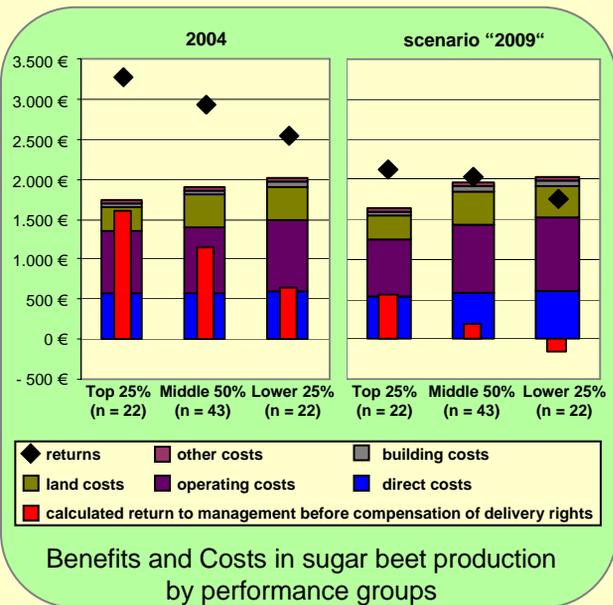


Within the joint project "Environmental effects of sugar beet cultivation" 109 sugar beet growing farms out of all growing areas of Germany are analysed in four subprojects for ecological and economical aspects. Production engineering data and economic data concerning the growing year 2004 were collected from the farms. Additional to the common regard with the environmental effects, cost analysis is important considering the declining sugar beet prices caused by the sugar market reform.



Benefits and Total Costs

The costs of sugar beet production are analysed by full costing for 87 farms. The results of the full costing are shown in the adjoining figure, pooling farms in performance groups.

In 2004, the main influence on performance is given by the returns (mainly determined by yield). The influence of the costs is visible, but small compared to that of the returns.

In the scenario "2009", sugar beet prices are reduced to minimum level of 2009. Nothing else is changed in the full costing. But the **performance groups are newly composed**. Therefore, the scenario shows farmers' returns, costs and profitability in 2004 with sugar beet prices of 2009.

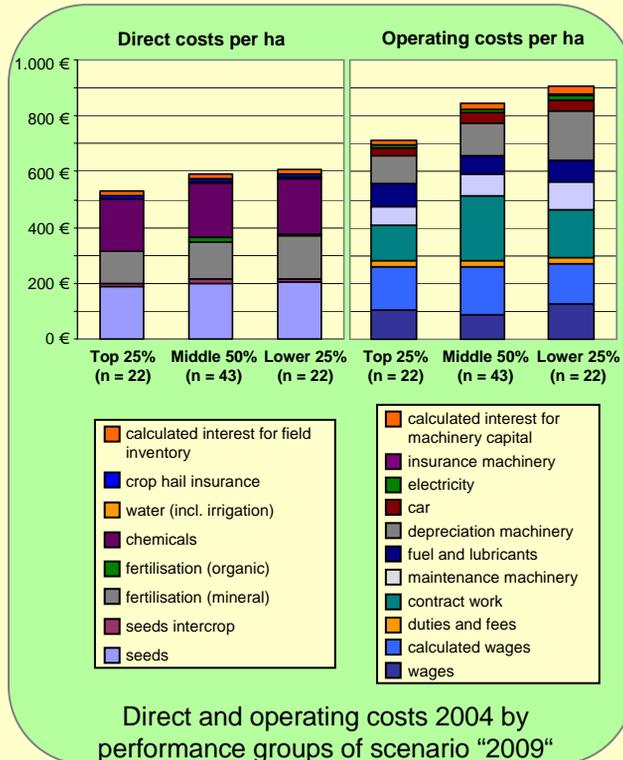
In the scenario "2009", the effect on performance of the returns is diminished. Costs become more important. In fact, the advantage of the "Top 25%" compared to the "Middle 50%" is mainly determined by the cost difference. But, although they have comparable costs to the "Middle 50%", the "Lower 25%" do not manage to compensate their input factors because of much smaller returns.

Direct and Operating Costs

The upper figure shows increasing importance of reduced costs when sugar beet prices decline. Thus, it is interesting to analyse how successful farmers realise lower costs compared to other farmers. Land costs can rarely and hardly be influenced by farmers. Therefore, only direct and operating costs remain as eminent cost positions for analysis.

In the adjoining figure, direct and operating costs of the scenario "2009" are split into their cost positions. Considering the direct costs, the "Top 25%" group realises less than 100 € advantage only, compared to both of the other performance groups. The main effect is caused by fertilisation (mineral plus organic) expenses. The other items differ negligibly between the performance groups.

The operating costs show bigger differences between the three performance groups. The "Top 25%" group spends little more than 100 € less than the "Middle 50%" group and about 200 € less than the "Lower 25%" group for operating. The main causing cost positions are machinery depreciation and maintenance as well as the contract work. The expenses for contract work should be considered on the one hand linked to wages and calculated wages, and on the other hand linked to all costs concerning machinery. For, contract work replaces own work and machinery.



Conclusions

Due to declining sugar beet prices in the context of the sugar market reform, returns lose importance and production costs gain importance for success in sugar beet production. Without adopting, less successful farmers will have problems to cover input costs. Direct costs offer sparse adopting possibilities, namely to save fertiliser, particularly nitrogen. Possibilities to reduce costs are bigger for operating costs: Especially machinery costs like depreciation and maintenance, but also the combination of wages, calculated wages and contract work provides a certain margin for cost saving.