

# Comparative costs

# Comparative costs and minimum extent of utilization

So far, we have gotten to know machinery costs and procedural costs. In order to be able to compare the two varieties of work execution directly, we also have to consider the indirectly resulting costs for the implementation of an operation, in addition to the costs incurred directly by the use of machinery and equipment.

We are talking about **comparative costs**.

In practice, the machinery and equipment that is used on-farm is kept separate from the equipment that is available on an inter-company basis. There will also be other associated factors that, although not directly, but indirectly cause additional costs and need to be considered.

**Comparative costs = Procedural costs  $\pm$  Additions/ Reductions**

Examples for possible additions/ reductions:

- Speeding costs**
- Timeliness costs**
- Technical progress**

Additions/ reductions can concern internal mechanization as well as external mechanization and need to be determined on a case-to-case basis.

# Speeding costs

Increased driving speed means higher area productivity, but may lead to a lower quality of work.

## Example:

*The working depth for cultivation is set too low, so the driving speed can be increased. The result is suboptimal cultivation, which leads to yield losses compared to work performed at correct working depth. The monetarily evaluated difference in yield are the speeding costs of the faultily performed procedure.*

# Timeliness costs

Often, the time frames for cultivation measures are limited. If the work has to be performed outside of the optimal time frame due to organizational reasons, subsequent costs are incurred.

## **Example:**

*An agricultural service provider is hired for the threshing of grains. Due to high demand, the contractor can't harvest at the optimal time. As a result, the grains are harvested at a higher moisture than they would have had at the perfect harvesting time. In order to ensure storability, additional drying of the grains is required. The difference of the drying costs in comparison with the harvest at the optimal point in time are the timeliness costs of the suboptimal procedure.*

# Technological progress

Technological progress can lead to cost reductions and yield increases.

## Example:

*An agricultural company owns an old combine harvester. Compared to a modern machine, the old harvester has a higher rate of corn losses. This means, the modern harvester is harvesting more yield at the same area than the older model. The monetary value of the yield difference are the costs that are incurred for using the old combine harvester in comparison to a new one.*