



LANDBOUW-ECONOMISCH INSTITUUT

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DEVELOPMENTS IN CALCULATING UNIT COSTS ON ARABLE FARMS

We can distinguish 3 phases:

1. The method used until 1949;
2. The method used from 1949 until 1955;
3. The present method.

1. Until 1949

Until 1949 the unit costs of the various arable products were calculated every year in the accounts of each farm separately. This method required very much work and provided no insight into the results of the farm as a whole. Moreover the farms were not all representative of the average size, type, and soil of the well-managed farms in the different farming areas of the country.

The forward price calculation was based on the average costs (adjusted to current prices derived from the cost accounts over a number of years. The yields were determined in a similar way. In this procedure the principle of normalization was present but not to an adequate extent.

In view of all these drawbacks an alternative method of calculating unit costs was sought.

2. From 1949 until 1955

In order to arrive at complete standardization, so called typical-farms were set up. With this method of calculating unit costs there is no need to compute the unit costs of the various products for each farm separately. The very detailed bookkeeping was abandoned and we were able to substitute the fairly simple method of bookkeeping, known as "profitability bookkeeping".

A typical-farm is a hypothetical farm which is taken as being representative for the farming in a certain area. The conditions of production have been chosen on the basis of general statistics available for the region. Firstly by the kind of soil of the typical farm has been chosen, in accordance with the most common type of soil in the region. Secondly the size of the farm, the system of parcelling and, the



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cropping scheme, representative for the chosen kind of soil, has been established. Further a representative labour supply and degree of mechanization for the above defined conditions have been determined. The farm is managed at the average level of well-managed farms in the region. On the basis of this hypothetical farm calculations are made. It should be emphasized that this typical-farm does not exist in reality but corresponds more closely than any existing farm to the average conditions of a particular group. The fictional operations on this typical-farm take place in a completely prescribed way, so that the composition of all quantitative cost-items is determined.

It should be mentioned that no hypothesis about typical-farms could be set up until adequate data had been made available that covered a number of years. This became possible after bookkeeping records were compiled over the years 1946 - 1949.

This basis for the structure of the typical-farm will have to be changed after a few years if changes occur in the production processes.

For the documentation of the economic aspects of these typical-farms, figures of selected farms provided by the profitability bookkeeping are used. As the figures of only one year are influenced by the particular circumstances of that year, several years have to be taken into account. Both costs and returns have to be normalized. The figures of the profitability bookkeeping do not suffice, as the different costs have to be distributed among the separate crops. To meet this requirement, labour records are collected on a certain number of farms.

However, in the following years this method gave more trouble than had been expected at the outset. This was especially true of the necessarily narrow basis of selection of farms. The number of farms which conformed to the requirements regarding soil, size, landuse, supply of labour, pulling power, etc., and which could be used by the inquiry,

turned out to be so little, that by this method the representativeness of the calculations would be got into a corner.

Hence another way of calculation had to be searched.

3. The present method

The method followed nowadays has the advantage that it is relatively easy to revise the normalized costs and returns yearly. This is achieved by using the data of a great number of farms. The basis of the calculations has now become wider, because the new method is not limited to farms of a narrowly defined type and with a very detailed labour-recording.

The difference between the present method and the previous method (typical-farm) is that in the present method the synthetic character is absent.

At present the starting point is the actual data of the farms.

See further: Appendix I: "Framework of unit-cost calculations for arable crops."

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The Hague, August 1956.