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Tasks and Aids in Farm Management

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A farm operator today is often called a manager and as such he is in charge of making decisions, of preparing decisions (gathering information) and supervising their execution [1]. The management task however is still more comprehensive.

Reisch [6] defines the management of a farm as follows: "Today we understand the operating of a farm as a real managerial task. Besides the daily and other short-run arrangements farm management must include:

(1) Formulating the overall and specific farm goals. Without a clear concept about goals no adequate decision-making and action is possible.

(2) Planning and supervising the production programme and selecting, procuring and using the means of production. This must happen in an optimal economic way which is orientated to the law of marginal analyses.

(3) Controlling the success of the inputs, that is analysing their productivity in different production areas.

(4) Stating the degree of realization of the goals with respect to a certain income goal as well as a desired measure of profit or return on capital".

This definition covers the farm management task very well, especially if one underlines the phrase "besides the daily and other short-run arrangements", because it is just these daily and short-run arrangements which have a great influence on success in farming; and it is the ability to perform well in this respect that is the main point of this symposium.

The main factors and directions of efficacy in different phases of long-run decision processes are set up in Fig. 1. The position and function of information, models, research results and book-keeping on the farm with respect to the succession of managerial decisions or the task of operating a farm over time can be derived from there. Beginning with the circumstances before a certain decision at a given point (goals of the farmer and his family, production factors available, outside factors such as government programme, credit limit, rate of interest) a manager uses expecta-

tions, information, certain decision-making schemes or routines, or also formal models to define alternatives, to analyse them and make a decision, namely to select one alternative among all possible alternatives which he thinks best fits the goals and available means. Decisions on the same problem at a later point may be influenced by the light of experience, by

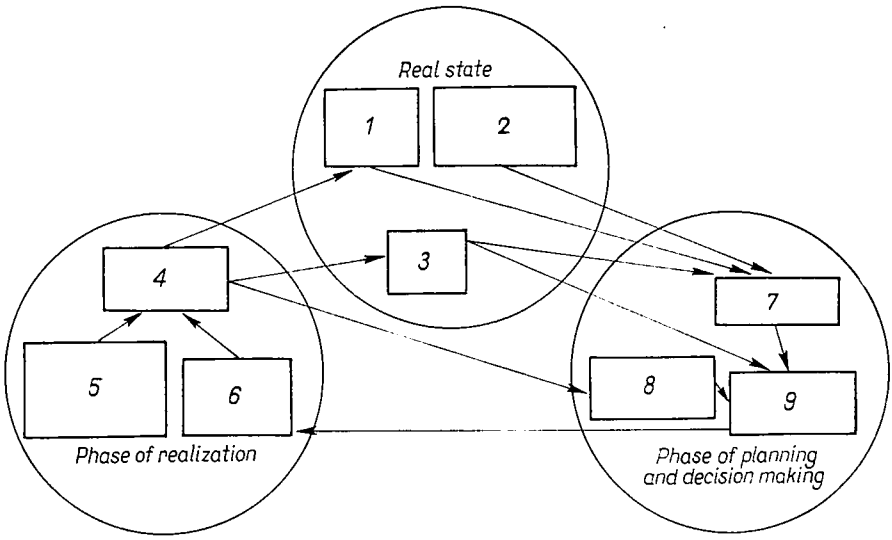

Fig. 1. Circle of entrepreneur's decisions. 1 — productional capacity of the entrepreneur; 2 — external factors (debt, rate of interest, Governmental program); 3 — goal of the family; 4 — results of the realized alternatives; 5 — casual variables (weather, price, etc.); 6 — realization of the chosen alternatives; 7 — setting up establishing creating alternatives; 8 — expectations for the future (price, results); 9 — analysis and evaluation of the alternatives.

changing goals and other changing factors. Medium-term management tasks are directed towards the operating of the farm [8] and they appear in yearly budgets, including land use, fertilizing programme, feed supply, labour and liquidity problems. In such problems factors from outside are less effective and there is also less danger of optimal decisions in a purely economic sense being in conflict with over-all goals. More factors have a higher degree of certainty compared with circumstances valid in long-run decisions. The short-run and daily tasks of a manager are predominantly arrangements concerning the performance of labour tasks. Here the sequence of the jobs, the assignment of workers and machines, is the problem. If weather risk is not important such arrangements can be made with a high certainty. However, with most jobs weather plays an important role and may make it necessary to revise arrangements, thus making it necessary for the farm manager or his executives always to be on duty. This is especially true of larger farms with hired workers, whereas in

family farms the making of decisions and the taking of actions are normally concentrated in the same person.

Reisch [6] makes the tasks still more precise by describing some of the aids of farm management: "To recognize the tasks is not enough. They can be mastered only if, in addition to a good education in agriculture, the manager has the necessary aids. The most important are:

(1) Information from the production records of his own farm, especially input-output figures, productivity and profitability figures.

(2) Criteria to measure his own performance with comparable farms or with standards.

(3) Partial and total planning of a farm to develop certain optimal norms on parts of the farm or on the whole business.

(4) Statement of the current situation in liquidity, income and assets".

Much work has been done in the last decade in agricultural economics institutes concerning the development of methods for planning, especially for planning the whole farm. Problems related to it are normally connected with long-run decisions to develop a farm, such as finding a production programme, and procurement of long-lasting production factors (buildings, land, machines). Such decisions however are seldom called for on any particular farm, because once established a farm must run in much the same way for several years. Despite of all effort by researchers, no methods have been found which satisfy all requirements, which take care especially of the dynamic character of facts and such aspects as integers, non-linearity and so on. However, efforts are going on and first results can be seen in many places (e.g. [5]). It cannot be denied however that farm managers are faced much more with tasks which may be seen as medium or short term, and where adequate tools are necessary. In recent years few research efforts of this kind have been observed. Modern book-keeping and rational use of modern techniques could help. Now, efforts are being made to develop book-keeping systems using modern techniques (data storage, quick access to information, labour saving documentation by optical readers, teleprocessing). Such information systems could facilitate or even initiate many management tasks, because nowadays these tasks are always in danger of being pushed aside too much by the mere performance of jobs.

Totally neglected have been developments of aids to be used in short-run job arrangements. The adoption of new working methods, which in themselves have changed often and rapidly in recent years, has depreciated the experience of many decades in job performance. Up to now only a few examples could be given of efforts to develop aids in planning the work process in time and space and in making job arrangements [2, 4].

Besides the varying tasks and the different aids, the personality of the farm operator, especially on our family farms, is an important factor in

the management of a farm. Nevertheless, in our family farms we do not have only one decision maker but collective decisions made by the individual members of the family. And here extreme talents may be countervailed by the influence of other family members, and this may lead to strained relations within a family.

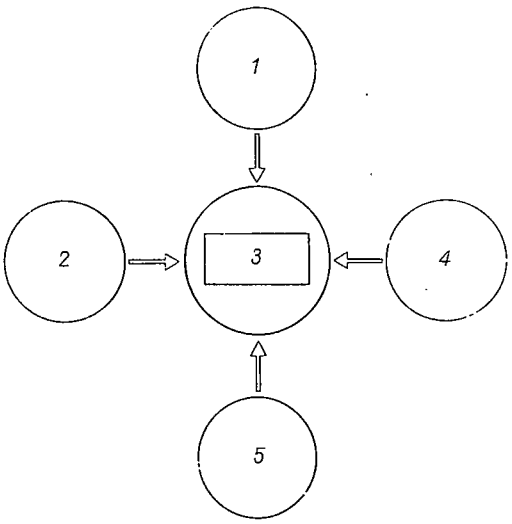

Fig. 2. Types of entrepreneurs in one man-enterprises. 1 — conjuncture man; 2 — player; 3 — ideal type; 4 — innovator; 5 — conservative.

Reisch [7] has made an attempt to classify and characterize different types of manager and to describe some extreme characters (see also Fig. 2). Without explicitly mentioning it he describes the behaviour which results from the most important, though less frequent, decisions about the long-run development of a farm:

"(1) The "conservator", the static manager, is cautious and always intent on high certainty. As soon as a certain level of satisfaction is reached, he will only go further if no risk is involved. He does not aim at maximum profit, lets chances of profit slip, does not like to change anything on the farm; he is not a leading person but follows only proven things. He thinks in terms of assets rather than of income. He is the type of conservative who, although a manager, is really only a conservator of what he took over, and is practically a dependent administrator.

(2) The "Konjunkturritter" is just the opposite. He chases all real and supposed chances of profit. Sometimes he is lucky, but often not. Changes cost time and money, diminish income and sometimes assets. The end of such "management" is often ruin.

(3) The type of manager called a "gambler" is rather similar to the second type, though not to be confused with it. He is characterized by setting very high aims on production with a chance of high profits, but

with high risks to get the profits. If he plays the game with experience and knowledge, remarkable success may result. He may be able to act in such a way that the risk is countervailed by some other possibilities. However this type will fit only a few men.

(4) The "innovator" has a positive and a negative variant. The positive form is the pilot, who also stands at the beginning of some industrial venture. We also find him in agriculture (and call him a pilot farmer; amendment by the author). He tries new ways and promotes new things. If he is successful he, being first, has considerable differential profits, but he also helps other units by his innovations, if they follow him. A certain danger exists for the innovator, however, if he concentrates on his findings too much and eventually overestimates their values and possibilities. If so he no longer deals with it as managerial goal-striving in the economic sense, but as a hobby. This hurts the business. He becomes a fan. In the negative form the innovator is a person who changes the farm just for change's sake and therefore may miss his main goal.

(5) The ideal type of manager lies in the point of intersection of the extreme types. He must possess a certain stability as a basis, but use innovations if they seem rational; he should avoid too much risk but should have a little of the risk-taking manner of the "gambler". And if new production opportunities open up he must have an open mind and, if they are suitable, get in."

The individual elements of the manager types of course influence all their actions, and their medium and short termed arrangements. They also influence the success which hangs on these arrangements. In the past, however, operators' research was not widespread in economic research discipline. Our knowledge in this field therefore is rather sparse.

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