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Farmers' Ages, Their Ages on Starting to Farm, Their Length of Farming Life, and the Level of Their Net Production

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This communication is part of a larger investigation made by the author into the effectiveness of management on individual farms.

More than 250 farms situated in 5 adjoining villages of the Lowicz district were investigated during 3 successive years, i.e. in 1963-1964, 1964-1965 and 1965-1966. After a preliminary investigation some of the farms were rejected, leaving 151 for final investigation. The farms which

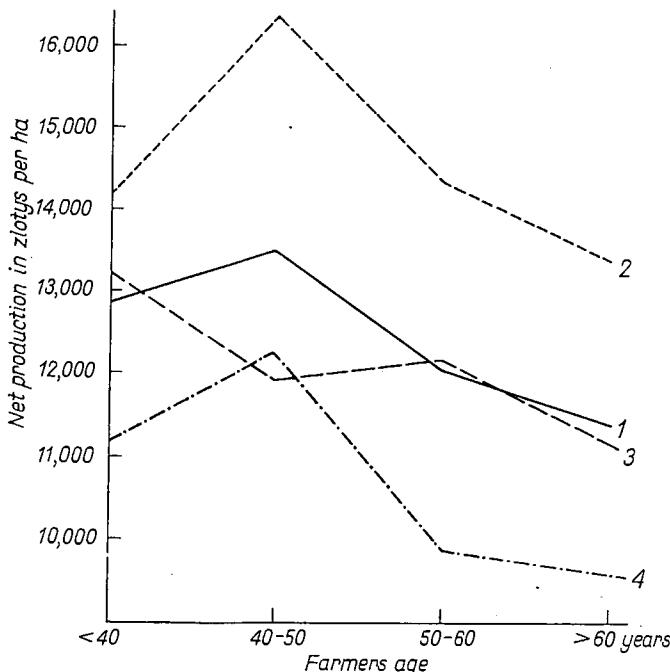


Fig. 1. Mean age of the farmers in the investigated farms together and in area groups, and the level of net production. 1 — mean for all farms; 2 — mean for the farms of 4-7 ha.; 3 — mean for the farms of 7-10 ha.; 4 — mean for the farms of 10-15 ha.

finally qualified for investigation were similar as regards production type. They were in the same natural and economic conditions, had almost the same soils, similar proportions of permanent green crops, and were alike in equipment and manpower. Additional criteria for qualification were:

Table 1. Mean Value of Net Production in Zlotys per ha. by Area Group of Farm and by Farmer's Age

Area groups of farms, ha.	Mean value of net production in zlotys per ha. by age of farmer			
	under 40 years	40-50	50-60	over 60
4-7	14,197	16,375	13,355	13,389
7-10	13,247	11,957	12,202	11,223
10-15	11,211	12,286	9,856	9,612
Mean	12,885	13,539	12,137	11,408

similar and sufficient equipment, similar long-term capital and no essential economic or family losses during the last 20 years. On the whole, all the farms had very similar potential conditions during the 3-year period of the investigation and similar production and economic results. In reality,

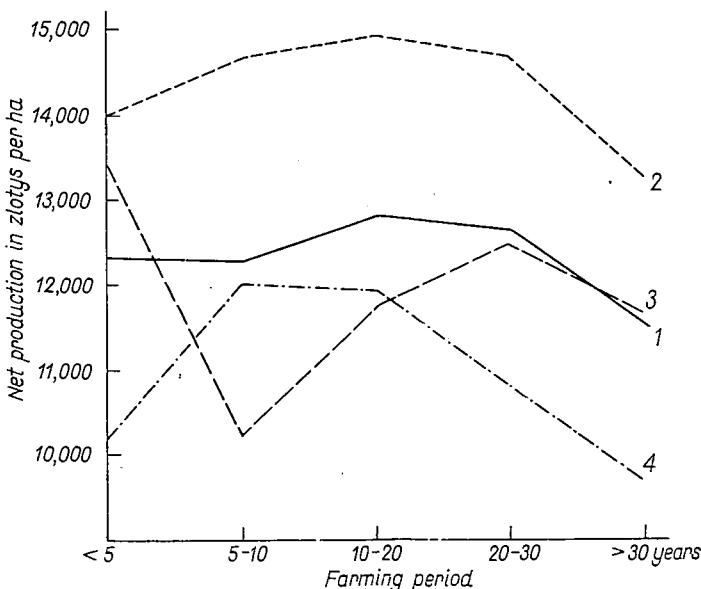


Fig. 2. Period of managing the farm and the level of net production. 1 — mean for all farms; 2 — mean for the farms of 4-7 ha.; 3 — mean for the farms of 7-10 ha.; 4 — mean for the farms of 10-15 ha.

however, the farms were different as to their economic ability, as was disclosed by the level of their net production per hectare of agricultural land, excluding amortization and repairs.

In these conditions the hypothesis was accepted that management and work level had the greatest influence upon the economic potential of the farms. It confirmed that the net production level was greatly influenced

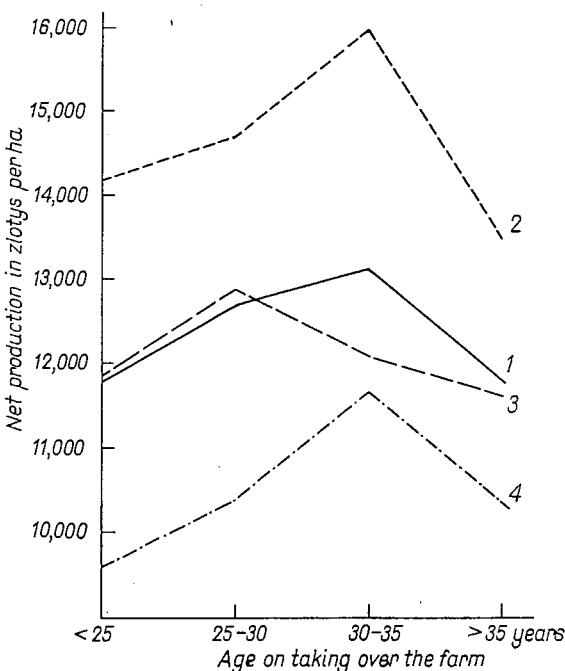


Fig. 3. The age on taking over the farm and the level of net production. 1 — mean for all farms; 2 — mean for the farms of 4-7 ha; 3 — mean for the farms of 7-10 ha; 4 — mean for the farms of 10-15 ha.

by the farmer's age, his age on taking over the farm, and the period during which he farmed it (see Figs. 1-3 and Tables 1-3).

We must emphasize that this region of the Lowicz district where the investigated farms are situated is characterized traditionally by high pro-

Table 2. Mean Value of Net Production in Zlotys per ha. by Area Group of Farm and by Farmer's Length of Period as Manager

Area groups of farms, ha.	Mean value of net production in zlotys per ha. by period of managing the farms by farmers				
	under 5 years	5-10	10-20	20-30	over 30 years
4-7	13,390	14,688	14,885	14,667	13,240
7-10	13,450	10,212	11,649	12,467	11,710
10-15	10,210	11,977	11,883	10,802	9,739
Mean	12,350	12,292	12,805	12,645	11,563

duction and by the diligence and energy of the farmers. In the immediate neighbourhood there are two secondary agricultural schools (Blich and Zdunska Dabrowa), the influence of which is distinct and permanent. The whole number of 151 farms was divided into 3 territorial groups: 4-7 ha., 72 farms; 7-10 ha., 47 farms; and 10-15 ha., 32 farms. The farms in each group were classified in each division by the present ages of the farmers, their periods of farming and their ages on taking over their farms.

Seeing how short this communication must be, I need not describe the

Table 3. Mean Value of Net Production in Zlotys per ha. by Area Group of Farm and by Farmer's Age on Taking over the Farm

Area groups of farms, ha.	Mean value of net production in zlotys per ha. by age of farmer on taking over the farm			
	under 25 years	25-30	30-35	over 35
4-7	14,199	14,698	16,002	13,478
7-10	11,850	12,911	11,876	11,607
10-15	9,404	10,405	11,653	10,378
Mean	11,817	12,671	13,177	11,378

results of this analysis in detail. I think the reader himself can easily follow the tables and figures. I confine myself to underlining the principal results and especially to pointing out the distinct variations in the group of farms of 7-10 ha.

(1) We see clearly in Table 1 and Fig. 1 the correspondence between the age of farmers and the level of the net production in zlotys per ha. The highest net production was reached by the farmers of from 40 to 50 years of age. In the older age groups production was diminishing. It is more distinct in the age group of 50-60 years than in the group of over 60 years. This is explained by the fact that the farmers more than 60 years old had a number of grown up children who worked actively in the management of their farms. These young men were usually better educated. The farmers in the age group up to 40 years had lower production owing to their taking over their farms later in life and consequently farming for shorter periods.

Other results are apparent in this group. A lower production in the group of farmers between 40 and 50 years old resulted from the fact that the farms in this group were larger than the mean of the group. The rise in production in the 50-60 years' age group is due to the fact that these farmers were better educated and had working grown-up-sons.

(2) The data concerning the farming periods and the levels of net production [Table 2 and Fig. 2] show some regularity with the exception of two periods in the 7-10 ha. group of farms.

Generally, the rise in production took place in the periods of 10-20 years of farming. There followed a fall, which is specially distinct in the groups with farming periods of more than 30 years. This last corresponds with the analysis of the influence of a farmer's age. Differing results in the 7-10 ha. farms may be explained as follows: the group of farmers who farmed for 5-10 years, is numerically the smallest of all the groups and contains only 4 farms. Those with from 10 to 20 years of farming is noteworthy because no less than four out of ten had agricultural education. A similar influence appeared in the 20-30 years' group in which 5 farmers out of 17 had agricultural education and three of them had working grown-up sons who also had agricultural education.

(3) Table 3 and Fig. 3 also show a distinct relation between the production level and the age of the farmers who had taken over their farms at the age of 30-35 years. This interesting result is surely accounted for by the fact that through traditional methods, by working on their parents' farms and not at school, they gained sufficient experience at this age. A positive influence had also been the parents' procedure of payments to the family.

A unique irregularity appears in the are group of the 7-10 ha. farms in the age-class of 30-35 years. A detailed analysis shows that other factors had influenced the result, namely, these farmers were larger than the mean of this group, and had a higher percentage of permanent grassland. These characteristics generally cause a fall in the production level of this class of farm.

As I stated in the introduction, all the farms investigated were levelled up by suitable choice and selection. In spite of this, at the detailed classification according to various markings, there were higher markings in some groups which caused deflections from the apparent regularities. This is explained by applying the *ceteris paribus* rule.

(4) In general the data allow the following proposition to be formulated: if the influence of other factors was eliminated from the 151 farms, the highest production level was reached by those on which the farmers were from 40 to 50 years of age, and had farmed from 5 to 10 and from 10 to 20 years, and had taken over their farms at the age of from 30 to 35 years. This signifies that the most active period in farming lasts from 10 to 20 years and occurs between the ages of from 40 to 50 years.