

CORRELATIONS BETWEEN THE PROFESSIONAL TRAINING OF THE FARM MANAGERS AND THE ECONOMIC DEVELOPMENT OF THE FARMS IN OLT COUNTY

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Abstract

The importance of formal and continuous education in every field of expertise is essential, due to the great influence of the human factors in every work activity. The work in agriculture has the distinctive characteristic of being dependent of minor and major disturbances in climate, economic, social and technological factors of the working environment, thus a manager of an agriculture holding is obliged to keep being informed on all these changes in this environment in order to perform on the agricultural activity.

In this matter, the degree of theoretical and practical knowledge of a farm manager is a good precursor of the performance of the farm owned by the manager. In this paper, we will present the results of a statistical research whose purpose consists in the determination of the degree of correlation between the professional training background of the farmers and the performance of the agricultural holding managed by them.

The research consisted in the analysis of a number of responses to a survey that was applied on the farmers in the geographical region of Olt County in southern Romania, with a main focus point on the basic professional training, only practical professional training and full agricultural vocational training. The analysis was performed using the Chi square test and statistical testing of the deviations between the mentioned types of training.

Key words: *education, agricultural holding, correlation, professional training*

INTRODUCTION

According to the literature (Eur lex, 2021), the future of the European Union depends on the way its citizens will take into account lifelong learning, from pre-school education to post-retirement, respectively from formal (Mujuru, Hyams-Ssekasi, & Mushunje, 2022) to informal or non-formal education. Also, studies show that efficient changes in practice and professional behavioural patterns (Casanova-Correa,

Vargas-Vergara, Aragón, & Gómez-Chacón, 2022) come from the educational training of the farm managers (Kilpatrick, 2000). Another important factor is the knowledge of consulting (Marinescu, Stănescu, & Tița, 2016), gained through education (Serin, Bayyurt, & Civan, 2009). There are a multitude of factors that determine the functionality of the agricultural holding (Tița & Necula, 2015)

(Bettinger, Richerson, & Boyd, 2009), taking into account the conceptual and practical representation of the holding as a system (von Bertalanffy, 1968). This paper presents the analysis of the influence of the professional training of the holding manager on the performance of the entire system and the way his professional training is reflected on the physical and economic dimension of the holding agricultural.

Training in the job of head of an agricultural holding is very diversified and takes into account the variety of agricultural products that require different production technologies. Thus, in our country there are vocational schools, secondary schools, universities of agricultural sciences.

In the statistics of the European Union (Eurostat, 1996), the training of the head of the agricultural holding is grouped into three classes of training, according to which the data on the General Agricultural Census and the Agricultural Structural Surveys (INS, 2020) are collected. The methodological guide for completing the RGA questionnaire specifies the way in which professional training is categorized into three types: the elementary or basic training, the only practical professional training and the full agricultural professional training, without specifying the degree of general training of the head of the agricultural holding.

Thus, the type of basic or elementary agricultural training is considered for those who have completed any training cycle in a basic agricultural education school and/or in a training center that is oriented towards certain disciplines (horticulture, viticulture, forestry, fish farming, veterinary science, technological agriculture and related disciplines). The only practical professional

training refers to the experience gained through practical work on a farm (Eurostat, 1996). The full agricultural professional training refers to the completion of courses specific to agriculture, lasting at least two years after the end of compulsory education completed in an agricultural school, college or university (Eurostat, 1996).

MATERIALS AND METHODS

In order to analyze the influence of the professional training of the agricultural holding managers on the activity of the holding, a questionnaire was drawn up that included a number of 100 respondents, aged between 25 and 70 years old from Olt County. From the 100 respondents, 55 had elementary training, 20 had only practical training and 25 had full agricultural training. According to the legal form of the company, 9 of the respondents come from individual enterprises, 18 come from Registered Sole Traders and 73 from commercial companies.

The study was conducted on a sample of 100 respondents, aged between 25 and 70 years old from Olt County, with elementary, exclusively practical or complete agricultural training.

The structure of the respondents is as follows:

- 49 respondents fall into the age category of 25-44 years, of which 27 have elementary training, 7 exclusively practical training and 15 complete agricultural training;
- 48 respondents belong to the age group of 45-65 years, of which 27 have elementary training, 12 exclusively practical training and 9 complete agricultural training;
- 3 respondents come from the over 65 category, 1 from each professional training class.

Table 1. The structure of respondents according to age and professional training

Professional training	UM	Age			Total	
		25-44 years	45-65 years	> 65 years	nr	%
Basic or elementary training	no	27	27	1	55	55,00
Only practical professional training	no	7	12	1	20	20,00
Full agricultural professional training	no	15	9	1	25	25,00
Total	no	49	48	3	100	100,00
	%	49,00	48,00	3,00	100	X

The analysis of the questionnaire was carried out with the help of the Chi-square test, which aimed to evaluate the answers on the three types of professional training and the statistical testing of the deviations between the types of professional training. The study refers to how the professional training of farm heads influenced the management functions in the agricultural farms analyzed (planification, organization, coordination, training-motivation, control) and the performance of the holding related to profit and other performance indicators.

RESULTS AND DISCUSSIONS

In order to establish a context for the study, we have analyzed the main indicators related to agriculture in the geographical area of Olt County. In this matter, Figure 1 presents the number of agricultural holdings established in the Olt County between 2010 and 2020.

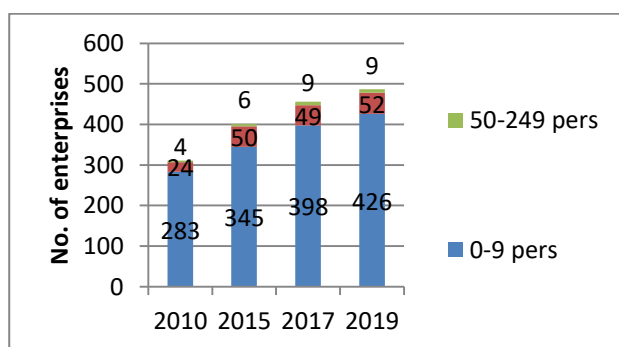


Figure 1. The evolution of the number of active enterprises in agriculture, at the level of Olt County, during 2010-2020

The number of active agricultural enterprises in Olt County showed

increases in the analyzed period 2010-2020, from a number of 311 enterprises in 2010 to 487 enterprises in 2020 with an annual rate of 2.5%.

Regarding the education indicators in the agricultural domain, agricultural high school education, which is the most important in terms of numbers, experienced a decrease of almost 14 thousand graduates in 2001/2002 compared to 1989/2001, which means that the numerical reduction was almost 3 times in a decade. A major cause of the decrease in the number of graduates from high schools with an agricultural profile is the reduction in the number of high schools from 129 in the 1995/1996 school year to 100 agricultural high schools in the 2002/2001 school year.

The continuous education showed also a slight decrease, in Romania the participation rate in continuing education showing an increasing trend until 2019, but in the following year decreasing by 1.6 percentage points.

Table 2. Profit obtained on the farm, expressed in euro, depending on the training of respondents

Professional training	UM	Profit obtained by exploitation (euros)				Total	
		<2000€	2000-7999€	15 la 250000€	> 250000€	nr	%
Basic or elementary training	nr	5	4	14	32	55	55
Only practical professional training	nr	1	1	2	16	20	20
Full agricultural professional training	nr	2	1	6	16	25	25
Total	nr	8	6	22	64	100	100
	%	8	6	22	64	100	X
Indicators	Test χ^2	Significance					
	\leq	0,2	0,1	0,05	0,01	0,001	
CHITEST (val Sig)	0,757						
CHIINV (Chi t); GL=6	\geq	8,56	10,64	12,59	16,81	22,46	
CHIINV (calculated Chi)	3,4	Coef Pearson		0,181			

The profit obtained in most farms, namely 64, exceeds 250,000 euros, in 22 farms it is between 150,000 and 250,000 euros, in 6 farms it is between 2,000-2,799 euros, and less than 2,000 euros were obtained by 8 farms. The profit in the studied farms is not influenced by the vocational training of the respondents, as indicated by the calculation of the Chi-square test in Table 2.

Expressed as a percentage, the profit obtained in the farms represents more than 30% for 20 farms, between 10-30% for 44 farms, between 2-10% for 19 farms and less than 2% obtained by 17 of the farms. It is found from the type of elementary vocational training, that 24 respondents have profit from 10% to 30% and 13 respondents have profit greater than 30%.

The analysis showed that the planification function is manifested intensively, through the attention given to the objectives of the exploitation (73%), the appreciation of the degree of achievement (75%), but which does not differentiate statistically according to the type of professional training. The organizational function analyzed through the existence of personal files, the frequency of meetings, repeating the content of a task, obtaining quality certificates does not reveal significant deviations in the answers, while

the time for the duration of a task (weekly, daily) significantly differentiates the three types of training professional of farm managers. The coordination function studied in the questionnaire through the importance of teamwork (91% considering it to be very important), forms of communication (65% direct) with the staff did not reveal significant deviations. Likewise, the staff motivation function (59% material, 41% moral) did not reveal significant deviations between the three types of professional training. Instead, the control function, through the frequency of control (weekly, daily), highlights significant deviations between the three types of vocational training (94% daily for elementary vocational training and 76% for complete agricultural training).

The organizational function analyzed through the existence of personal files, the frequency of meetings, repeating the content of a task, holding quality certificates does not reveal significant deviations in the answers, while the time for the duration of a task (weekly, daily) significantly differentiates the three types of training professional of the heads of holdings.

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CONCLUSIONS

The evaluation of the results of the questionnaire, regarding the influence of the professional training of the heads of agricultural holdings on the management functions of the analyzed agricultural holdings (planification, organization, coordination, training-motivation, control), highlighted that the function of foresight is manifested intensively, through the attention granted to the objectives of the exploitation (73%), of the appreciation of the degree of achievement (75%), but which does not differentiate statistically by the type of professional training.

Also, a priority of those active in the agricultural sector should be investments in digital technologies, both for better use of resources and improving labor productivity, as well as for data analysis regarding customer preferences and other operational issues.

Regarding the educational influence on the agricultural holding performance, a good point in development is the establishment of partnerships between agricultural companies / farms and agricultural vocational and technical education units in the rural environment.

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