

RESEARCH REGARDING THE METHODS OF VALORIZATION OF VEGETABLE PRODUCTION AT THE LEVEL OF AGRICULTURAL HOLDINGS IN ROMANIA

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Abstract

Perhaps one of the most difficult stages in the entire production process is the sale of vegetable production at a price high enough to cover production costs, and especially profitability which is a key factor contributing to the continuation of the activity. In this sense, the present study aims to identify the main ways to capitalize vegetable production of agricultural holdings in Romania. In order to identify the ways of capitalizing the production, a questionnaire was applied to 180 respondents, represented by the managers of some agricultural farms from all over the country. The purpose of the application of this questionnaire was to identify the aspects that hinder the capitalization of vegetable production. According to the study, the majority of farms in Romania are still run or managed by mostly men. At the same time, according to the analyzed sample, young people have the highest share of total respondents, so that the measures pursued through the two Rural Development Programs, namely to rejuvenate generations of farmers, we can say that they have achieved the goal.

Key words: agriculture, capitalization, vegetable production, Romania

INTRODUCTION

Conventional agriculture is a broad term, it is generally associated with high consumption, which includes the use of synthetic chemical fertilizers, fungicides, insecticides and herbicides [2, 6].

Conventional agriculture involves maximizing yields through the use of industrial products, based on monoculture. monoculture has a significant impact on soil fertility and viability. The use of chemicals makes the maintenance of conventional systems relatively easy for farmers, requiring a higher ratio of energy and money. Because this production system aims to maximize profits, biodiversity and environmental health are often neglected [3, 7].

Biodiversity can be protected by reducing the amounts of chemicals and energy used, by adapting soil conservation practices and adapting sustainable practices [1].

Organic farming is the production system that maintains soil health and soil sustainability of ecosystems, promoting a better quality of life and ensuring equity for all actors involved in the food chain [9, 10, 14].

Organic farming is based on specific and clearly established objectives and principles that maintain the health of fauna and flora, contributing to the fight against subsidence and soil erosion. Ecological practices prohibit the use of fertilizers, pesticides, hormones, as well as growth stimulants and antibiotics. At the same time, the use of complementary substances, chemicals and additives is excluded in food processing [8].

Recognition of this type of agriculture around the world shows that traditional agriculture is not enough to meet the challenges of world food security. Traditional agriculture faces the problem of low yields and high input costs [10].

Intensive agriculture has contributed to some extent to yields and poor quality land,

preventing further deforestation. Intensive agriculture requires less land than a large farm, making a similar profit, and the optimal use of these products and mechanization are used to reduce capital and labor [14].

Organic farming generates a positive impact among consumers who become more aware of the implications of consuming healthier products, but also of the fact that this type of agriculture uses more responsibly the resources involved in the production process [17].

Regardless of the production system used, agriculture plays a crucial role in food production as well as in protecting the environment.

Organic food production uses techniques that combine the rational use of resources with animal fertilizers, respectively a biological control of diseases and pests. To maintain soil fertility, farmers use in addition to natural fertilizers from animals, green manure obtained from plants, which is also a natural alternative, but much more expensive [15].

Organic farming takes time to increase productivity, but it is a perfect alternative to conventional farming, as organic farming practices do not cause pollution problems and do not compromise human health [16].

The new "organic" label is a recent phenomenon, which has grown to illustrate the expansion of organic surfaces, but this mechanism has been used for thousands of years, rooted in traditional practices.

Organic farming is based on 3 principles [16]:

- The cyclicity principle;
- The precautionary principle;
- The closeness principle.

The principle of cyclicity is the oldest and is based on the interaction of crops with nature. The second principle is based on caution in technological and practical changes, promoting clean, safe and risk-reducing techniques. The last principle aims at the correct distribution of information between consumers, inter-consumers, producers, researchers and other actors involved, in connection with the systems and techniques used. All stakeholders should be actively involved in the process of developing organic

farming, transparency and cooperation being important principles in this process [18].

The two-way influence of agriculture on the natural environment refers primarily to dependence on environmental conditions, variations in climatic conditions and environmental factors [19, 11].

Conventional agriculture limits these factors, contributing to the control of environmental conditions using mechanized techniques and new forms of engineering of seeds, irrigation and phytosanitary products.

Organic farming aims to develop sustainable and productive farms, while maintaining the natural balance of the environment. The main objective of organic farming is to obtain organic products that meet the specific principles, being controlled and then to obtain certification by a specialized body. Consumer confidence in organic products is ensured by European legislation [5, 4].

In this sense, the present study aims to identify the main ways to capitalize vegetable production of agricultural holdings in Romania.

MATERIALS AND METHODS

This study was conducted on a sample of 180 respondents, consisting of representatives (managers, associates, individuals) of agricultural holdings throughout Romania, in order to identify ways to capitalize on production obtained in agricultural holdings.

The data collection was performed between 27.08-26.09.2021, and the data collection method was a field survey based on structured questionnaire submitted in electronic format (unassisted). The questions that the respondents had to answer were closed, with a single answer selected.

The objectives of this research have been the following ones:

- Identification of average productions obtained in a conventional and ecological system;
- Identification of the average cost of production in conventional and ecological system;

- Identification of direct expenditures in conventional and ecological system;
- Identification of indirect costs in a conventional and ecological system;
- Identification of the selling price of the products obtained in a conventional and ecological system;
- Incomes obtained by farmers in the period 2018-2020;
- Identification of the degree of processing of the raw material obtained at farm level;
- Identifying the way to capitalize on the production obtained;
- The importance of subsidies on the continuation of activity;
- Identifying the profitability of the activity it carries out.

The main social and economic characteristics of the respondents based on the structural analysis of the sample are:

- Gender: men - 81.67%; women - 18.33%;
- Age: 18-35 years - 52.78%; 36-50 years - 30%; over 50 years - 17.22%;
- Education: secondary school education - 5%; high school education - 40%; university studies - 55%;
- Legal status: SRL - 35%; II - 22.22%; PFA - 19.44%; NFP - 16.67%; I.F - 5%; others 1.67%;
- Economic dimension: 2,000 - 7,999 SO - 23%; 8,000-49,999 SO - 27%; 50,000-999,999 - 44%; over 1,000,000 - 6%.

RESULTS AND DISCUSSIONS

Analyzing the income registered by the farmers who answered the questionnaire, it can be noticed that 57.22% register an income of over 100,000 lei from the capitalization of farm products, while 19.44% registered incomes between 50,000 lei and 100,000 lei (Fig.1).

Those who registered an income of less than 10,000 lei represent 5%, while those who have an income between 10,000 lei and 50,000 lei represent a percentage of 18.33% of the total respondents (Fig. 1).

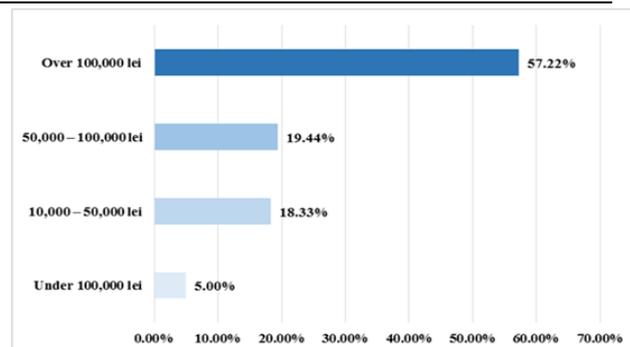


Fig. 1. Distribution of respondents according to the income registered as a result of the capitalization of agricultural products obtained on the farm

Source: Own results [13].

Regarding the percentage of raw material processed in the farm, it was observed that 77.22% of farmers process less than 10% of the amount of agricultural products obtained in the farm, 10% of farmers process between 10% and 30% of the quantity of raw material obtained at farm level, while 3.33% process between 71-100%. The explanation of these figures is highlighted by the situation in Romania regarding the existence of the raw material processing component directly on the farm. At the national level, raw materials such as cereals, oilseeds and other agricultural products are generally exported and finished products are imported at higher prices (Fig. 2).

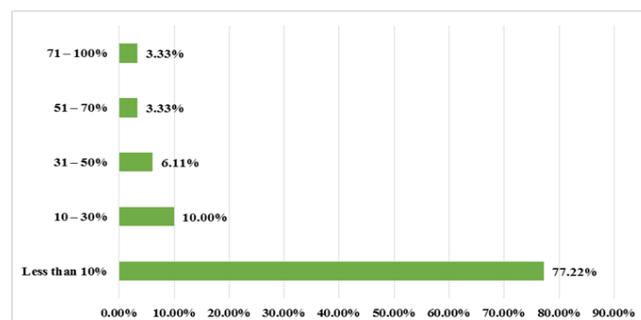


Fig. 2. Distribution of respondents according to the percentage of raw material processed at the farm level

Source: Own results [13].

Analyzing the quantity of raw material used directly from the farm, it is noted that 62.22% of respondents directly use the production in a percentage between 71-100% of the total amount of raw material obtained at farm level. 22.78% of farmers sell less than 10% of the amount of agricultural products obtained in the farm and 15% of farmers sell between 51-

70%. The high percentage of raw material used directly from the farm can be attributed to the fact that farmers fail to capitalize the production of cereals obtained in the farm either by processing in the form of finished products or integrated into the animal feed. This is closely related to the lack of processing capabilities at the farm level and the lack of integration of plant production in the animal husbandry process (Fig. 3).

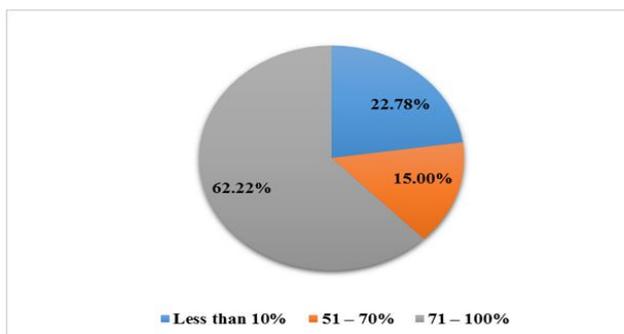


Fig. 3. Distribution of respondents according to the percentage of raw material processed at the farm level
 Source: Own results [13].

Regarding the way of capitalization of the production obtained at the farm level, it is observed that 68.89% capitalize the products from the farm to intermediaries and only 9.44% realize the capitalization of the production directly to the consumers.

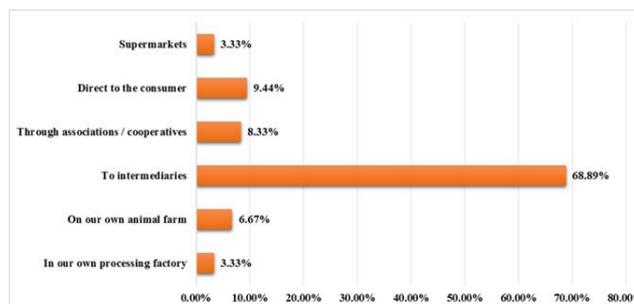


Fig. 4. Distribution of respondents according to the way of capitalizing on the production obtained at farm level
 Source: Own results [13].

Only 8.33% of farmers realize the joint capitalization of production, through farmers' associations and cooperatives and a percentage of 6.67% capitalize the raw material obtained from the cultivation of plants in their own animal farm. Only 3.33% of farmers sell their products directly to a supermarket (Fig. 4).

According to the data obtained, the structure of the respondents depending on the extent to which production costs are covered by income from capitalization shows that 67.22% of farmers manage to cover production costs without problems, 27.78% barely manage to cover the production costs from the incomes registered from the capitalization of the production, while 5% fail to cover the production costs (Fig. 5).

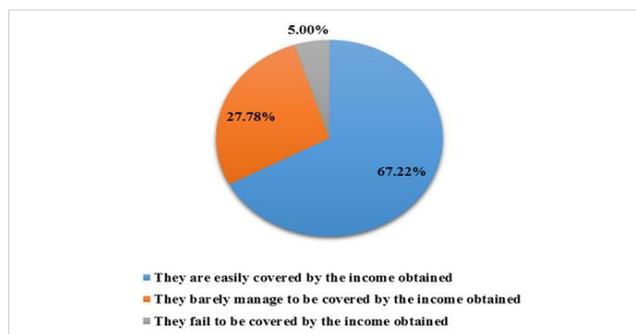


Fig. 5. Distribution of respondents according to the percentage in which production costs cover the income obtained from the capitalization of production on the farm
 Source: Own results [13].

Analysis of the financial resources used to procure the necessary inputs (seeds, plant protection products, fertilizers, etc.) in the agricultural activity is presented in Figure 6.

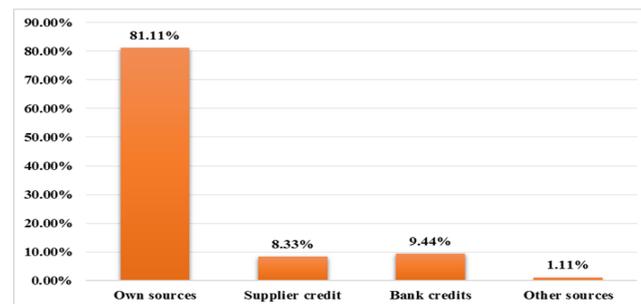


Fig. 6. Distribution of respondents according to the financial resources used to purchase the inputs needed for agricultural activity
 Source: Own results [13].

From Figure 6 we may see that 81.11% farmers use their own funds to buy the necessary inputs, 9.44% access bank loans to ensure the necessary products for development of the production activity, while 8.33% farmers resort to loans to the supplier so as to carry out their production activity under normal conditions (Fig. 6).

Analyzing the obtained data taking into account the ways that farmers develop their business, 56.67% would choose for accessing European funds provided through the National Rural Development Program, 24.44% would use their own sources to develop the farm, while 15.56% take into account a bank loan to properly endow their farm (Fig. 7).

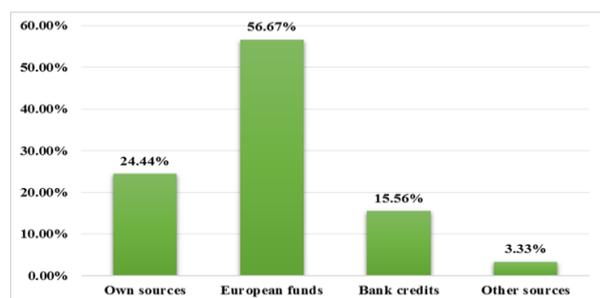


Fig. 7. Distribution of respondents according to the financial resources used for business development
 Source: Own results [13].

Regarding the opinion of the respondents regarding the extent to which their business would remain profitable even in the absence of European funds, it is found that 84.44% of farmers consider that their business would go bankruptcy in the absence of subsidies, while 15.56% believe that their business would remain profitable even in the absence of subsidies (Fig. 8).

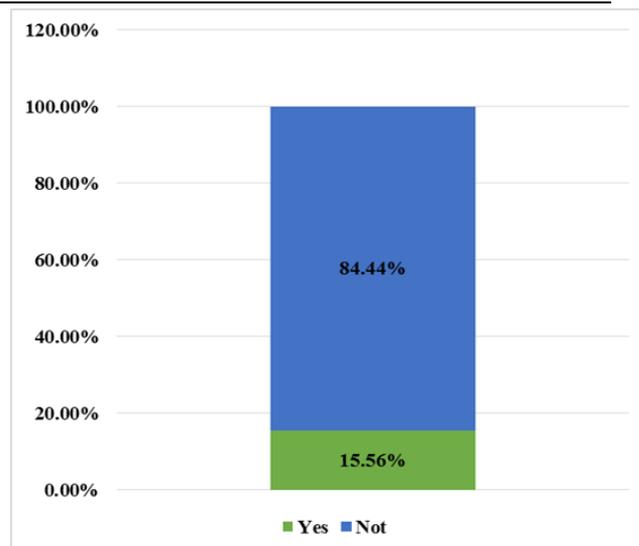


Fig. 8. Distribution of respondents according to the trends in their business
 Source: Own results [13].

Regarding the problems that farmers are facing in the current activity, the answers highlighted that 22.78% farmers consider the lack of the sales market, 19.44% state that they are facing the climate change mainly in terms of extreme pedological drought of the year 2020, which affected production performance, and 16.11% concern the endowment with agricultural equipment (Fig. 9).

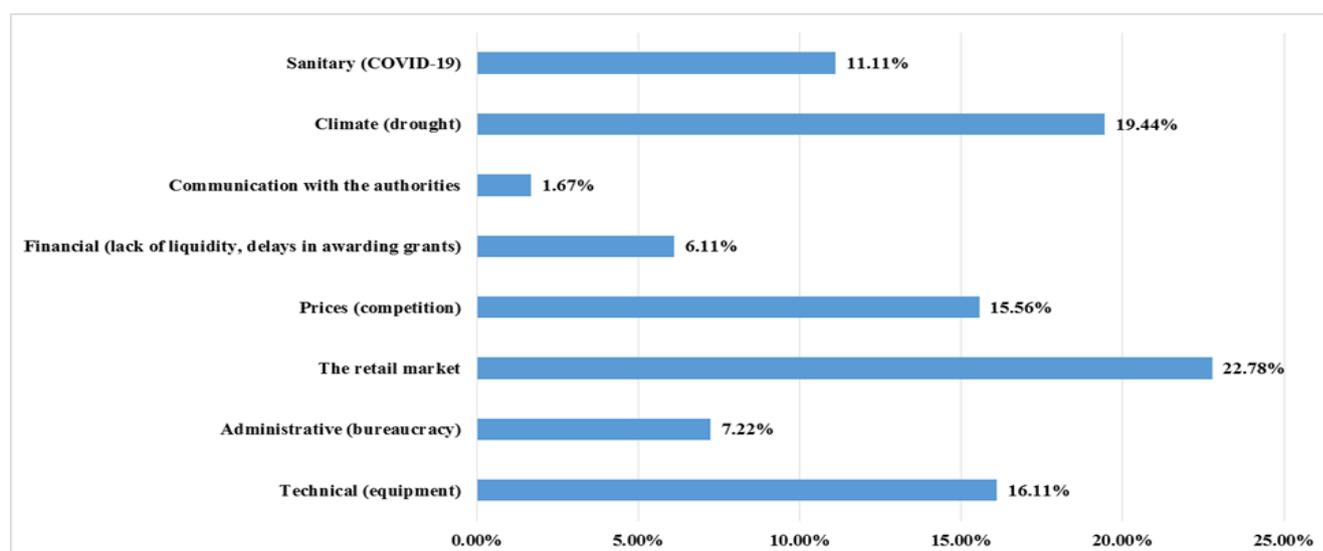


Fig. 9. Distribution of respondents according to their opinion on the main problems facing the agricultural sector
 Source: Own results [13].

CONCLUSIONS

According to the study, most farms are still run by males. At the same time, according to

the analyzed sample, young people have the highest share of total respondents, so that the measures pursued through the two rural development programs, namely to rejuvenate generations of farmers, we can say that they have achieved their goal.

Farmers specializing in large crops, suffered from extreme pedological drought, which affected a significant part of agricultural land worked by them, identifying significant decreases in production. These decreases in production, also recorded in European countries, led to increases in the selling price for these products, including the buyer.

The high percentage of raw material used directly from the farm can be attributed to the fact that farmers fail to capitalize on the production of cereals obtained on the farm either by processing in the form of finished products or integrated into the animal feed. This is closely linked to the lack of processing capacity at farm level and the lack of integration of plant production in the animal husbandry process.

Access to European funds is the first option to develop the farm, mainly due to the fact that these sources of financing are safe options for business development in the agricultural sector, whether the purchase of equipment and machinery is considered, or whether the farmer wants to invest in processing or storage spaces for the production of cereals and oilseeds. Both lines of development are covered by the funds included in the National Rural Development Plans implemented at national level in each financial year.

ACKNOWLEDGEMENTS

We thank the referees for all the data provided for this paper. The publication of this article was possible thanks to the sectoral project ADER 23.1.1: "Technical-economic basis of production costs and estimates regarding the prices of capitalization of the main plant and animal products, obtained in conventional system and in organic farming" Subcontract no: 23.1.1./2-03.10.2019 contracted with the Ministry of Agriculture and Rural Development.

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