

Influence of the Energy Crisis on Prices and the Performance of Agricultural Holdings

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Abstract

Agriculture is a complex science, made up of a number of factors that help the proper functioning and development of a society. In Romania, the agricultural sector has a strategic importance because it produces substantial income for the country, and the performance of this branch also depends on its Gross Domestic Product. The energy crisis imposed a new strategic approach on farmers in order to survive. The energy crisis triggered by the war between Russia and Ukraine generated an economic instability that also affected the price of cereals and implicitly agriculture throughout the world. The objective of this work is to observe what are the factors that direct the price of cereals on the main trading exchanges.

Key words: performance, agricultural holding, energy crisis, cereals, costs

J.E.L. classification: J43, O13, Q10

1. Introduction

The performance of agricultural holdings must be considered in accordance with the risk, because natural factors can influence the financial structure and balance, as well as the price of agricultural products.

Our country has the necessary natural resources to help it revive the national economy, but it does not have the necessary infrastructure and strategic thinking to use these resources to their maximum potential.

The motivation for starting this research study resides in the fact that agricultural activity is a basic pillar in the Romanian economy, but the lack of sustainable management and a sustainable strategic vision lead to a decrease in the performance of this activity and implicitly to an increase in production costs and an increase in the price paid by the final consumer of agricultural products.

2. Literature review

The specialized literature presents agricultural holdings as those forms of organization whose main object of activity is the exploitation of the land with the help of mechanized equipment and the raising of animals to obtain agricultural products with the aim of providing food for the population.

We can affirm that the agricultural holding is a component of an economic branch, which cultivates the land by sowing with different plants and raises animals with the aim of obtaining raw or technologically processed agricultural products, which is where its social, demographic and ethnological importance resides.

In the specialized literature, the agricultural entity has the following characteristics:

Table no. 1 The table of activities specific to the three types of form of organization

Types of activities specific to agriculture	Agricultural holding	Agricultural enterprise	Agricultural unit
Production of green vegetables	yes	yes	yes
Animal production	yes	yes	yes
Providing agricultural services	no	yes	yes
Primary processing of production	no	yes	yes
Technical, scientific assistance	no	no	yes
Promoting agricultural interests	no	no	yes

Source: Authors' projection

Agricultural holdings are grouped by Romanian legislation according to a multitude of criteria, but the most important are related to profit, form of land ownership, human resources, destination of finished products and other economic or legal criteria.

In Romania, the most widespread form of organization in the agricultural field is the family farm, which represents the basic cell of Romanian agriculture that capitalizes on both the land and human resources, developing the social environment. This type of organization obtains products for its own consumption, and if there is a surplus of products, they are capitalized on the agri-food market.

3. Research methodology

The author Constantin Enachescu reports in his work "Treatise on the theory of scientific research" that ideas cannot appear without having a study basis or a period of observation of the phenomenon, being the starting point for the development of an informational system. If we start from this statement and analyze the entire management system of all methods, processes and techniques that lead to the development of these works, we will notice that the stages completed are the following: studying the specialized literature, establishing the research objectives, processing the data and establishing the conclusions.

The central objective of this literary research is the analysis of the influence of the energy crisis generated by the armed conflict at the borders of our country, on agricultural performance, followed by specific objectives such as:

- the positioning of agriculture in the Romanian economy;
- identification of internal and external factors that influence agricultural performance;

The paper combines qualitative research with quantitative research through the theoretical and practical approach to the elements that make up economic performance, offering a faithful image of the studied phenomenon.

In order to achieve the objectives proposed in the research, I used the descriptive method used in the review of specialized literature, in the analysis of economic phenomena and in the formulation of conclusions and personal opinions.

4. Findings

The agricultural activity is an integrated part of the economic activity that aims to produce food for the population by exploiting the land or raising animals. The place of agriculture in the Romanian economy is given by one of the most important attributions of this branch, namely the supply of agro-food products that aim to satisfy the needs of consumers on the domestic market, establishing an economic-social balance that ensures a healthy development of the population. In the context of the war between Russia and Ukraine, but also as a result of the liberalization of the electricity and gas market, agriculture in Romania and throughout the world suffered. In the reference year 2022, the price of gas is simply prohibitive to produce sustainably economically, many companies in the agricultural field being forced to reduce or suspend their activity, although from a technical point of view all measures are taken to remain operational, either whether we are talking about maintenance works, technical inspections or the development of new production

lines, from an economic point of view, the evolution of the energy market negatively influences the development process.

In Romania, the situation of the energy crisis should be felt differently compared to the other European states because it has its own gas resources, but the management of the situation is disastrous. In a negative scenario in which the energy crisis will deepen, along with the perpetuation of the war, the Romanian government must intervene to protect the national interests and the agricultural industry.

Agricultural inputs have a negative influence on agricultural performance, which together with the energy crisis and the coronavirus pandemic led to the formation of a supply crisis and the temporary closure of factories in Europe producing these inputs. The demand for these imputations is decreasing because they cannot be purchased at a feasible cost, and in the short term the goal is to maintain cohesion and implement a vision that stabilizes a sustainable development accessible to farmers.

Next, we will analyze the price quoted on the international stock exchanges of the most important cereals, wheat and maize, price set in dollars per ton for the reference period October 24-28, 2022.

Table no. 2 The table with cereals prices quoted on the stock market

Category	Place	24.10.22	25.10.22	26.10.22	27.10.22	28.10.22
Grain	Chicago Stock Exchange	315	317	319	321	323
Grain	Kansas Stock Exchange	343	345	347	349	350
Grain	Argentina Stock Exchange	379	381	383	385	383
Grain	France Stock Exchange	317	319	321	323	341
Maize	Chicago Stock Exchange	265	267	269	271	269
Maize	Argentina Stock Exchange	273	275	277	285	281
Maize	France Stock Exchange	325	323	327	333	337

Source: Authors' projection

This table illustrates how the price is influenced by the energy crisis triggered by the war between Russia and Ukraine. The price trend is a positive one, being in continuous growth during the reference period studied, missing small negative influences of decrease in the last analyzed day due to the trading of large quantities of cereals from the territory of Ukraine. The reference price shown in the table is expressed in dollars per ton, and the cereals delivery period is November.

5. Conclusions

Starting from the premise that agricultural exploitation is a component of the economic branch that aims to obtain agricultural products through the use of land, plants and animals, we can affirm that it also has a social role of community integration in daily activities.

The performance of agricultural holdings is deeply influenced by the political and social events that take place in civil society, but also on the geographical location and demographic density.

We can say that Romania's agricultural potential is huge, because it has unique natural resources in the world that, if they were exploited at their true value, would generate a substantial and sustainable economic development.

Increasing the performance of agricultural holdings also requires their development, which can only be obtained by combining land and creating farmer associations that can access European funds much more easily, they can develop much more easily and having higher productions at the association level, they can also negotiate the price sale of the obtained products. the price in the food market is generated by the ratio between demand and supply, but quality can make the difference between a low price and a fair one.

In recent years, we could observe how the corona virus pandemic and the war in the neighboring garrison shook the agri-food market all over the world from its foundations and generated a global energy crisis. the lack of procedures for regulating this crisis and a faulty management led to the halting of many activities in the agricultural field, but also to the reduction of the activity of even the most profitable companies, putting future development visions under the sign of danger.

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