

## RESEARCH ON THE INFLUENCE OF THE ROMANIAN AGRICULTURE ON THE GROSS DOMESTIC PRODUCT

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**Abstract:** *The primary goal of this research is to provide and analyze some economic indicators of Romanian agriculture in the years 2020-2021, as well as its contribution to GDP. Agriculture is a substantial part of the national economy, accounting for a significant portion of GDP. Unlike most European Union countries, agriculture has been and continues to be a vital sector in Romania, both in terms of economic output and the percentage of the workforce engaged.*

**Keywords:** *gross domestic product, agriculture, production, development*

### INTRODUCTION

Agriculture is the most basic human economic activity. Agriculture has existed since ancient times and remains an important human activity today. It is still the only food source, a major provider of raw materials for the industry, and a large market for its products. [5]

Agriculture's relative importance varies by country, but it remains the most important sector of the national economy in all countries, including the most developed. The last few decades have demonstrated that the world economy's issues cannot be handled by ignoring agriculture. [1]

A characteristic phenomenon for all countries is, in the contemporary economy, the increasing role of agriculture, although the share of agriculture's contribution to formation of the gross domestic product is declining and the number of the agricultural labour force is declining, too. This phenomenon becomes explicable as soon as the place of agriculture in the gear of the general economy is approached not only according to certain weights in the structure of some macroeconomic indicators, but also through an analysis of overall functions of agriculture in general economic growth. [2] Agriculture is a branch of resources that is based on continuous self-renewal, towards unlike other industries that use natural resources (oil, coal, ores, etc.), which depletes as it is exploited.

### MATERIALS AND METHODS

The key research methods employed were analysis and synthesis, analogy, and graphics to resemble the results.

### RESEARCH RESULTS

The special importance of agriculture compared to other branches of the national economy derives from the following:

- first of all, it is the only branch of production capable of accumulating energy with the help of work, while all other branches consume energy;
- secondly, agriculture was the primary branch of material production from which the other branches were derived; this very detachment and independent existence of all the other branches are conditioned by the existence of agriculture as the only provider of means of vital subsistence;
- thirdly, the favorable action of biological factors makes that at any level of capitalization the share of goods and services consumed in agriculture to be lower than in other branches

of the national economy; therefore, for the same gross domestic product, it is obtained in agriculture a higher gross value, which leads to an increase in national wealth;

- fourthly, agri-food products have a safe market on the world market, in a continuous shortage, favoring in most cases the increase of product prices on the world market, thus ensuring a high efficiency of agricultural product exports. [3]

Agriculture, like the other branches of the national economy, develops according to the same economic laws, but with specific forms of manifestation, determined by the existence of some technical and economic aspects, which give a special complexity to economic phenomena in agriculture compared to the same economic phenomena in industry. [9]

In agriculture, unlike other branches of the national economy, the activity of production is directly or indirectly influenced by natural soil and climatic conditions. If in the industry the obtained results depend directly on the work quantity and quality, in agriculture is organized and conducted under the same technical endowment, at the same level of organization and management of production, yields per unit area and per animal will be higher in favorable pedoclimatic conditions and lower in case of existence less favorable pedoclimatic conditions. When we talk about economic development, we're referring to the springs of agricultural development, which are inextricably linked to other areas of the economy, particularly the industrial sector.

The role of agriculture in accessing development is fundamental, because it is the sector that its development should be a condition of economic growth. [6] Adding what some researchers ignore is the fact that according to the different historical circumstances the functions of agriculture are not always compatible with each other, the functional configurations of agriculture must be analyzed in relation to their temporal and spatial specificity.

Within the national economy, which is itself in our country in a general process of restructuring, agriculture fulfills several functions, determined by its contribution to the development of the national economy as one of the branches with the greatest capacity for regeneration. The main function of agriculture is that of suppliers of agri-food products for the internal consumption of the population or simply to provide food for the population. [10]

This vital role of agriculture has a special status, recognized in all societies. This function of agriculture is the basis of the efforts to achieve in our country a desire to ensure food consumption close to that of some Western European countries.

The second function of agriculture is that of a supplier of raw materials for the manufacturing industries. There is a direct dependence between them and agriculture, but also relationships of conditioning and mutual influence. Level of development and diversity of industries processing plants depend directly on the volume and assortment of raw materials supplied by agriculture.

Agriculture is at the same time an important market for the means of production created upstream as well as for industrial goods for long-term use, necessary to improve living conditions. In the process of modernizing agriculture, of improving the technical-material base, it takes place a continuous consumption of means of production: agricultural machinery and equipment, tractors, fertilizers, herbicides, insecticides and various material. At the same time, the level of rural population increases the demand for consumer goods of industrial origin. In this way agriculture is a vast market, stimulating industrial production and overall economic growth. Agriculture has been and will continue to be an important source of accumulations growth of the state through the system of taxes, fees, tariffs, prices, etc. Agriculture also fulfills a social function of great importance for growth from other branches of the national economy, as it is still a source of strength for work.

Although there have been spectacular changes in the structure of the population employed by branches in our country, agriculture together with industry will contribute to the provision of labor resources for services in both urban and rural areas. [4]

By creating production surpluses for export, agriculture is a significant source of currency. Through this function agriculture contributed to the import of cars and high-tech equipment as well as the import of raw materials for industry. In recent years there has been a declining trend in the contribution of agriculture to exports in our country, to provide additional foreign exchange resources necessary for the development of the country. Increasing agricultural production will allow agriculture to participate to a large extent in the development process of the country's foreign trade in conditions of competitiveness and high efficiency, but only after the full satisfaction of the food consumption needs of its own population. In the conditions of accentuating the tendencies of pollution of the environment agriculture fulfills an important ecological function, contributing to the restoration and maintenance of the surrounding environment. Harmonizing the development of agriculture with environmental protection requires measures aimed at increasing the positive contribution of agriculture to the environment, reducing pollution caused by environmental agriculture, the adoption of some environmentally friendly agricultural policies. [7] This fundamental function of agriculture is seldom included in the role of the agricultural growth. It is gaining a growing strategic role as pollution and desertification of rural areas reach intolerable thresholds for society, for itself productive systems.

Regarding the relationship between the two major branches of the economy: industry and agriculture, the industry ensures the technological modernization of agriculture, creates conditions for superior capitalization of agricultural production. World practice shows that based on the industry development, especially that of modern means of production for agriculture, a real agricultural explosion took place and the technical modernization of agriculture led to a strong growth of labor productivity, even exceeding the rate of increase of labor productivity in industry. [11] The functions of agriculture require a balanced, mutually supportive growth of the two branches: agriculture and industry. For our country, the interdependence of industry-agriculture, in a period when the industry is conditioned in its development and by the expensive imports of materials raw materials and energy, turn agriculture into a real basis of economic growth. [8]

The correct assessment of the relationship between industry and agriculture can be made only in the conditions for establishing the relations between the two branches on economic principles. In this regard the relationship between prices in industry and agriculture can provide a conclusive picture. Romania is one of European states that enjoy a good endowment in what concerns land, water and human resources.

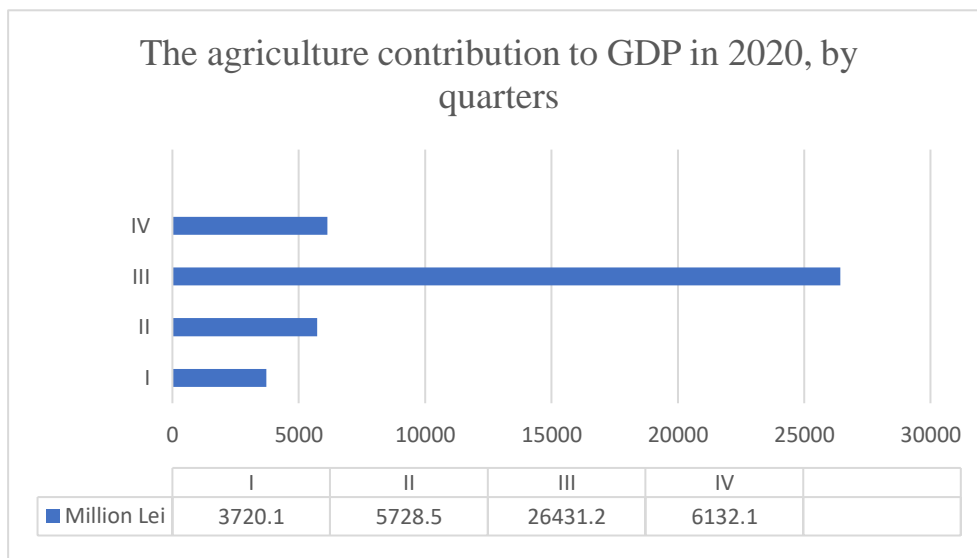
Only ten million hectares of Romania's 14.7 million hectares of fertile land are used for agriculture. About three million Romanians work in agriculture, about 30% of the total employed (August 2021), compared to only 4-5 percent in Western countries. In terms of both output and technology, Romanian agriculture lags behind that of Europe. Products made in Romania are present in small quantities on the foreign market, while imports increase from year to year. Romania's major agricultural problems are land fragmentation, property disputes, and bad technology all contribute to a lack of big agricultural investments, which is due to a lack of finance more than a lack of access. Romanian items do not always match EU quality criteria, which explains their absence from international markets, while imported goods have infiltrated domestic store shelves. [14]

The year 2021 was one with record grain production, compared to 2020, when they were affected by drought. But Romania still has lower crop productivity compared to other technologically advanced agricultural countries. Among the factors contributing to this

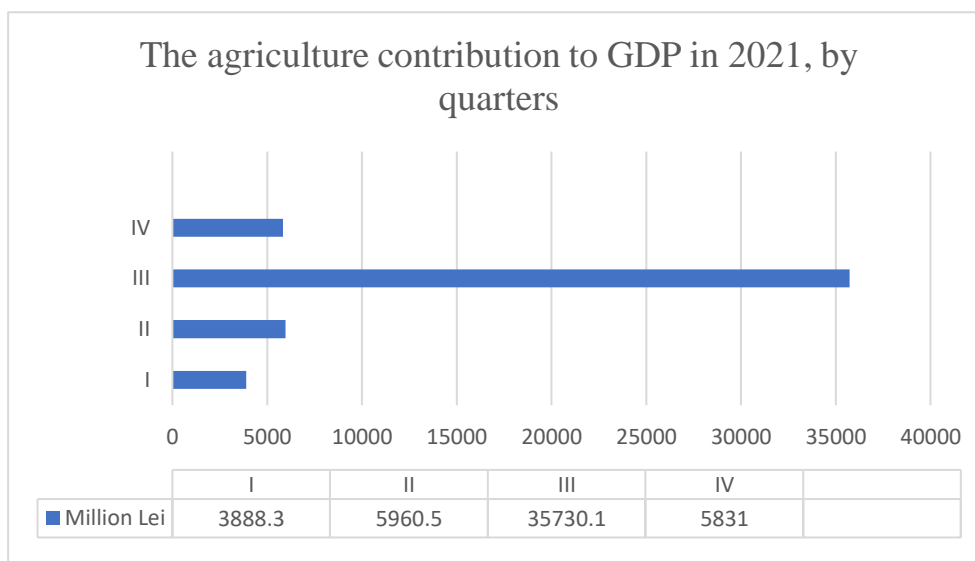
evolution are the still highly polarized farm structure, with an enormous number of small, subsistence individual farms, poor infrastructure of the irrigation system and the underdevelopment of the logistics segment. We are surrounded by technology and whether we like it or not, we have to keep up, otherwise we become irrelevant and lose to the competition. From the field to the field, the entire cycle of agricultural cultivation - production, distribution - goes through technological transformations that improve agricultural yields, reduce the carbon footprint, crops become organic and protect the environment, ensuring a healthier diet.

Agriculture has always been a traditional and strategic branch of the domestic economy. Romania is currently an important agricultural producer in the European Union, with significant shares in the production of wheat (6% -7%), corn (25%), sunflower (34%) and soybeans (14%). [12]

The agricultural sector had in 2021 one of the best developments since Romania's accession to the European Union, but it was also an area that faced major problems related to rising prices for inputs, gas and energy, decapitalization of farmers and lack of concrete measures to support agricultural producers. The contribution of agriculture to GDP in 2021 was estimated at 4.4%. Despite all these records, Romania continues to import food and deepen its deficit in trade in agri-food products. Romania's cereal production has quadrupled since joining the European Union until now. In the statistics of the European Union and the Commissioner for Agriculture of the European Commission for the year 2021, Romania appears with an estimated production of 28 million tons. [13] For the first part of the year it announced a straw cereal harvest of over 15 million tons, wheat and barley setting record figures this year, respectively 11.4 million tons and 1.9 million tons. Grain production of 1.5 million hectares - almost 60% of the area sown in spring - exceeded 8.4 million tons at the end of October, while the sunflower harvest totaled 2.97 million tons from 97% of the harvested area, respectively 1.21 million hectares. [15]



**Figure 1. The agriculture contribution to GDP in 2020, by quarters**  
(data provided by the National Institute of Statistics)



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Last year, a weak agricultural year, agriculture contributed 4.2% to GDP, while its contribution to economic growth was minus 0.4%. In terms of volume, agriculture (agriculture, forestry, fishing) decreased by 9.4% due to the drought that mainly affected maize crops. Maize production decreased by almost 3.2 million tones in 2021 compared to 2020 (-26%), while wheat production increased by 3.5%. Thus, agriculture has contributed by only 4.2% to GDP formation - the slowest pace in 10 years.

### CONCLUSIONS

Accelerating the development of agriculture will be possible through the contribution that technology could bring to this industry, digitalization and new modern ways of selling products and thus agriculture will have a high dimension in the coming years. Agriculture could increase significantly as a share of Romania's GDP, and producers should invest much more in processing than they do now, if the state had a long-term strategy, not a short one. More than that, agriculture needs new generations to look to this industry. Finally, we can state with certainty that Romania's agricultural industry has stabilized and risen modestly in the country's economy. Although Romanian agriculture is well-structured, it is not profitable. It is important to convert a portion of the largest manufacturing plant to animal products, making it a safe and cost-effective strategy to boost agricultural production profitability overall. After examining certain major indicators and aspects, we can conclude that the Romanian agricultural industry still has many flaws that prevent its long-term development and contribution to GDP.

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