



Bulgarian Agriculture - Principles, Traditions and Development of the Organic Agriculture

Kristina Petrova-Hristova¹

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Abstract: *Agriculture as a traditional branch has a strategic importance for Bulgaria, not only because it ensures food security, and creates raw materials for many other industries and sectors of the national economy, but also provides work and income for a significant part of the population in rural areas. When we talk about agriculture as an economic activity we must always consider it in direct correlation with rural areas and their vitality. The sector is among the most dynamically developing in terms of modernization, robotization, digital transformation, also provoked by the ambitious goals related to climate and green challenges on a global scale. Precisely the agricultural sector is at the center of the circular economy and bio-based societies, preservation and development of the regions, and is in close connection with the development of science - from applied to the top - called to carry humanity into the next era. Bulgarian agriculture has deep traditions in society, its history can be traced back in time. But in the circumstances of globalization, facilitating access to imported food, it is important to increase the competitiveness of Bulgarian agricultural products. In recent years, there is more and more talk about ecologically clean production, and Bulgaria is no exception because it is making serious attempts to develop organic agriculture in the country.*

1. INTRODUCTION

Agriculture is a branch of the economy for the production of plant and animal products to meet the needs of the population and industry. Agriculture is traditionally one of the most important sectors of the Bulgarian economy. Regardless of all the problems and contradictions in its development after 1990, the sector remains one of the pillars of Bulgarian socio-economic life. The stable positive development of the country's economy in recent years has reduced the relative weight of agriculture in terms of the gross domestic product it creates and the level of employment; but, despite this, the agricultural sector will continue to play a significant role in the Bulgarian economy in the future and will determine to a significant extent the general state of the country. The main branches of agriculture are crop and stock-breeding.

The agricultural sector, both globally and in Bulgaria, faces many challenges - climate change, the attitude towards the environment, the development of the economy and trade, social and demographic changes, the health status of people, the rural economy and regional development and the development of science and technology.

A new stage in the development of Bulgarian agriculture is the development and popularization of organic or ecological agriculture. As an agricultural practice, it is related to the evolutionary development of traditional agricultural practices and the new attitude of producers to the environment in which they carry out their activity, i.e. to natural resources.

¹ Sofia University "St. Kliment Ohridski", Faculty of Geology and Geography, "Socio-Economic Geography" Department, Tzar Osvoboditel 15, Sofia, Bulgaria

2. STAGES OF DEVELOPMENT OF BULGARIAN AGRICULTURE

Traces of agricultural activity have been found on Bulgarian lands since prehistoric times. Many artefacts found in different parts of present-day Bulgaria reveal that domesticated animals provided food, skins, wool, and bone material for agricultural implements. After the establishment of the Bulgarian state, the cultivation of a number of cultivated plants, mainly cereals - wheat, barley, rye, oats, millet - emerged as the main livelihood for the Bulgarians. After Liberation (1878), agriculture in Bulgaria was enriched with new agricultural crops - sugar beet, tomatoes, alfalfa, sainfoin, etc. Vegetables were mainly grown for own needs. Fruit nurseries and gardens are established in agricultural schools. Valuable fruit species and varieties from the European range are imported and propagated. The state takes care to improve stock-breeding. The first state livestock farms and scientific units were opened, which assisted in the importation and distribution of more productive breeds, in the improvement of local ones and the creation of new breeds, in their nutrition and breeding, etc. In general, however, during this period, agriculture in Bulgaria was extensive and low-productivity. After September 9, 1944, the Bulgarian communist party, using the resources of the state dominated by it, made a spectacular attempt to implement a complete change of the model of Bulgarian agriculture. Pursuant to the Law on Agrarian Reform adopted in 1946, over 200 decares of land was nationalized. Obviously, agriculture has been affected by many negative consequences of an economic and political nature, as a result of which the production of agricultural products of both plant and animal origin has greatly decreased.

Since 1984, the country has been forced to import large quantities of wheat. The permanent import of agricultural products traditional for Bulgaria, such as: wheat, corn, sunflower, beans, garlic, potatoes, soybeans, etc. has started. The export of fruits and vegetables, of grapes for fresh consumption is greatly reduced. The country spent more than 800 million dollars on the import of agricultural products. As a result of this incorrect economic policy, during the period 1944-1989, the number of people employed in agriculture decreased to 17% of the active population (750 thousand people), and this very important agricultural sector provided only 11% of the national income in 1990. Of all goods exported from Bulgaria, only 1,8-2,2% are unprocessed agricultural products, not because the export of industrial products was high, but because the necessary amount of fresh fruits and vegetables was missing. A large part of our agricultural products have a very high content of nitrates, and this makes them uncompetitive in world markets. Concerning the development of agriculture in our country during this period, it is worth clarifying some of the frequently encountered terms in specialized literature - extensive and intensive development. The extensive path of development is expressed in an increase in agricultural production by increasing arable land and the number of farm animals. The intensive path is associated with an increase in average yields per hectare and the productivity of domestic animals. This can be achieved by using intensive methods of work in agriculture, expressed in mechanization, chemicalization and irrigation (artificial watering). The excessive use of fertilizers and pesticides, to which the agricultural production in Bulgaria was subjected, although it led to a significant increase in the average yield per hectare of cultivated area, which reached a record 480 kg wheat and in places even 850 kg corn, led to many environmental problems that adversely affected the development of this industry.

In general, Bulgarian agriculture has always been, and continues to be, polycultural - i.e. numerous cultivated plants and various types of domestic animals are grown.

When we talk about agriculture as an economic activity we must always consider it in direct correlation with rural areas and their vitality. And to be aware of its two important aspects,

economic and social – ensuring food/nutrition security and maintaining biodiversity on the one hand and maintaining the vitality of rural areas on the other.

Agriculture is of strategic importance for Bulgaria, not only because it ensures food security, and creates raw materials for many other industries and sectors of the national economy, but also provides jobs and income to a significant part of the population in rural areas. At the same time, the sector is among the most dynamic developments in terms of modernization, robotization, and digital and digital transformation, also caused by ambitious goals related to climate and green challenges at the global level. It is precisely the agricultural sector that is at the center of the circular economy and bio-based societies, the preservation and development of the region, and is closely related to the development of science - from applied to the top - that is called to carry humanity into the next era.

3. DEVELOPMENT OF ORGANIC AGRICULTURE IN THE COUNTRY

Bulgarian agriculture has a long historical development, passing through different paradigms, to reach the modern stage of development and the introduction of the so-called organic or ecological farming.

Unlike the developed countries, however, in our country, we move from one paradigm to another without a clear transition, without the old paradigm being finished, and in recent times the transition from one paradigm to another is connected with an imported influence. The example of Bulgarian agriculture from the 70s of the 20th century is a recent one. Under Soviet influence and for the first time in Eastern Europe, an attempt was made to create a socialist agribusiness. However, the attempt was unsuccessful. The application and acceptance of Bulgaria into the EU bring Bulgarian agriculture to a new development - acceptance and implementation of the so-called “green” paradigm (Boyadzhiev et al., 2021).

The first agricultural paradigm from a historical point of view is the pre-productivist one. This is a natural product, in which the vast majority of what is produced serves the self-satisfaction of the immediate producers. The goal is to meet nutritional needs and fight hunger. The main problem is uneven production, which in its primitiveness and low productivity is entirely dependent on seasonality, while consumption is much more uniform over time.

The second paradigm is the productivist one. With it, industrialization and the market economy push agriculture so far that unprecedented changes in its proportions and structure occur, and the system of agribusiness and the global common market are created. All kinds of policies, and reforms are implemented, and the concept of “green revolution” is born. The goal is ever-increasing production in the hope that its outpacing consumption rate will mitigate and combat hunger. The change in the geography of agricultural plants and animal breeds continues. Each new variety and breed spread in just a few years all over the world. At the end of the period of filling this paradigm, the greatest social changes occur world wars, socialist states, the collapse of the colonial system, the binding of international relations with world organizations, including the FAO, as well as binding treaties. Industrial society is exhausting itself, and along with the eternal problems of hunger and thirst, of peace and health, there are problems with waste and various violations of nature and the environment. The third agricultural paradigm is the post-productivist one. It corresponds to post-industrial society. The share of those directly employed in agriculture is negligible, an ever greater part of agricultural production undergoes ever more in-depth processing and processing,

and trade is looking for new and new forms for the realization of overproduction. The next paradigm, the fourth, in which we are at the moment, is associated with the concepts of ecology, green economy, territorial approach, circular economy, strategies, etc (Boyadzhiev et al., 2021). Organic farming is such a production system that does not allow or completely exclude the use of synthetic fertilizers, pesticides, growth regulators and feed additives, and in which the crop and crop residues are relied upon to maintain and improve the soil's nutritional status, manure, green manure and biological plant protection. It is important to realize that organic farming is much more than the exclusion of pesticides and mineral fertilizers. This is a different manufacturing method, which is non-holistic in nature, involving the implementation of many preventative measures. Organic production can only be successful if its overall concept is understood and applied (Mitev, 2019).

The organic sector in Bulgaria has been rapidly developing during the past years. According to Eurostat data, in 2017 Bulgaria had a total area of 136 618 ha (2016 – 160 620 hectares) of cultivated as organic, up 13 646 ha. In 2017 the organic area in Bulgaria has increased 10 times compared to 2007. For example, Romania has an increase of only 2 times. The above absolute figures tell us only part of the story. Although this is a big increase, the whole organic area represents only 2.72% of total utilized agricultural area (UAA) in Bulgaria (in EU – 7.03%).

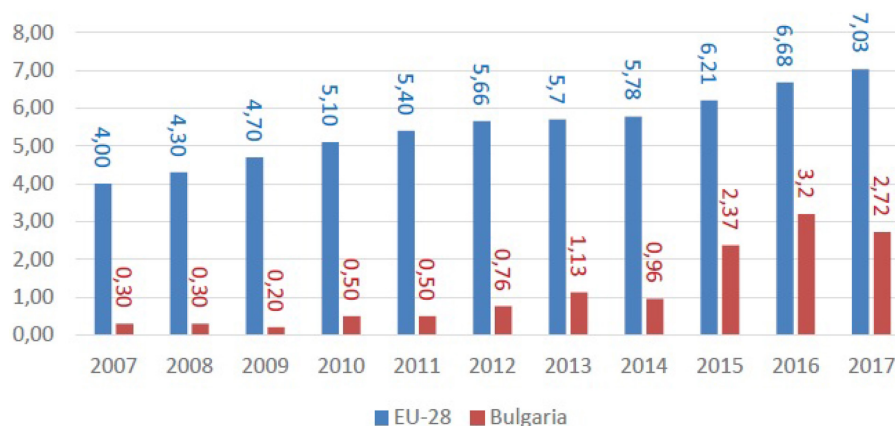


Figure 1. Share of areas in total utilized agricultural area (UAA), %

Source: Mitova (2021) by Eurostat

Of the total number of operators, producers seem to take the lead. When analyzing the number of organic holdings in comparison to the total number of holdings in Bulgarian agriculture, a diverging trend is observed. Available data shows that the number of organic farms is increasing while there is a consolidation of conventional agricultural holdings in the country (Mitova, 2021).

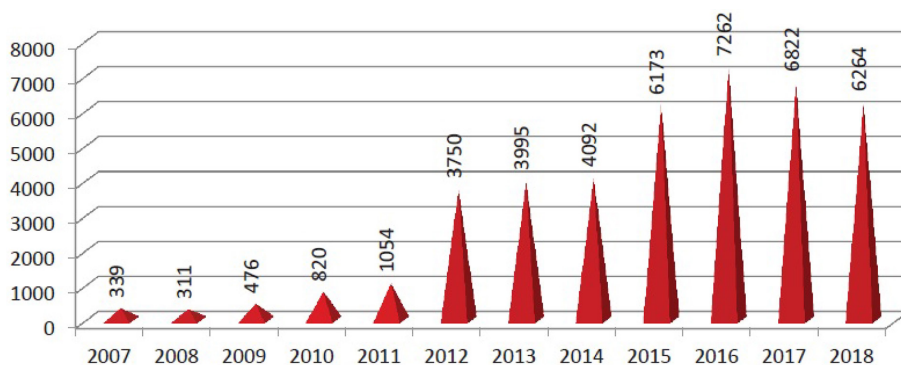


Figure 2. Certified registered organic operators in Bulgaria

Source: Mitova (2021) by Eurostat

Bulgarian organic products are quality and competitive - according to unofficial data, more than 90% of Bulgarian organic products are exported to EU countries, the USA and Japan. By size of certified areas for the collection of wild fruits, herbs and mushrooms, Bulgaria ranks second in the EU, and fourth in number of certified bee families. Bulgaria is the largest producer of organic rose oil in the world. National regulation for organic farming is harmonized with the requirements of the European Union (Mitev, 2019).

An important aspect is the type of production (arable crops and perennials) of organic farms. The choice of type of production in the regions and Member States depends on various factors (including the technical aspects of organic production and the structure of consumer demand). A large part of the land is used for permanent meadows and pastures, but also for perennials (such as fruits) and for cereals. When considering the organic farming area compared to the total area of the different agricultural holdings in Europe, the available data show that organic crops (in total) account for 5% of the total area cultivated in the EU-28. The comparison of the main categories of use for the biological sector shows interesting features. The share of permanent crops is high in the organic sector (15%), as the demand for fruit and vegetable products is among the highest in the organic market. The share of permanent meadows and pastures represents more than 50% of the total area occupied for organic production.

Conversely, cereals cover more than 30% of the total EU farmland, but a lower percentage of organic land use. The explanation lies in the fact that organic farming systems are wider than conventional farming (greater dependence on grazing on permanent pasture). Permanent meadows and pastures are often eligible for agri-environment payments and are easier and less risky to transform into the organic sector than other crops (e.g. field crops). Depending on the national characteristics of agri-environmental and/or environmental payments for rural development and the characteristics of land use at regional level, this could lead to preference for the development of permanent meadows and pastures for organic production (Branzova, 2019).

4. CONCLUSION

The development of Bulgarian organic agriculture is among the priorities of the state policy, especially the Ministry of Agriculture and Food. Their work is aimed at maintaining the trend of increasing the number of organic operators and the size of the areas, as well as increasing the species diversity of organically grown crops and farm animals. The benefits of biologically produced foods and products for human health, as well as the biological method of production as sparing the environment and conserving natural resources, are increasingly popularized. Therefore, the fact that the issues of healthy eating and sustainable use of natural resources concern increasingly large groups and communities of people both in the EU and in our country, also contributes to this.

In conclusion, we can formulate several more important conclusions about organic production in Bulgaria - first of all, it marked a noticeable growth after the country acceded to the EU; organic farming is more profitable than conventional farming; the development of organic vegetable production and fruit growing shows a permanent trend of growth in the regional aspect; organic production is highly dependent on local markets and the solvency of the population.

Unfortunately, producers of organic products are also faced with some problems, mostly related to the high prices of biological preparations and fertilizers and the high risks of losses, which partly hinder the future development of more producers. With the help of the implemented policies in the field, as well as the different types of subsidies, solutions are sought to reduce the threats to organic producers.

References

- Boyadzhiev, V., Veselinova, N., Patarchanov, P., & Zarkov, V. (2021). Agricultural paradigms and return to nature, Proceedings of the scientific forum with international participation “Ecology and agrotechnologies – fundamental science and practical realization”, Vol. 2, Nikola Pushkarov Institute of soil science, agrotechnologies and plant protection, Sofia, p. 109, ISSN 2683-0663
- Branzova, P. (2019). Organic farming in Bulgaria and EU – comparative dimensions, *Economic studies*, Vol. 28, 1, pp. 183-187
- Eurostat. (2022). <https://ec.europa.eu/eurostat/>
- Mitev, G. (2019). Organic farming – the future of the agricultural economy of Bulgaria, *Trakia Journal of Sciences*, Vol. 17, Suppl. 1, pp. 572-576, ISSN 1313-3551
- Mitova, D. (2021). Development of organic farming in Bulgaria – highlights, *Bulgarian Journal of Agricultural Economics and Management*, 1, pp. 87-96.
- Additional reading
- Boyadzhiev, V. (2012). Economic-geographical priorities of Bulgarian agriculture, Sofia, ISBN 978-954-479-039-4
- <https://www.mzh.government.bg/bg/sektori/rastenievadstvo/biologichno-proizvodstvo/>
- Nikolova, M. (2013). Biological agriculture - status and potential for development, Academic publishing house “Tzenov”, Svishtov, ISBN 978-954-23-0813-3