



SUSTAINABLE DEVELOPMENT OF BULGARIAN ORGANIC AGRICULTURE

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ABSTRACT

Bulgarian organic agriculture is developing rapidly ever since the accession of the country to the European Union. The major factors affecting its growth are the accumulated professional experience in the sector as well as the social support available through the Common agricultural policy funds. The organic production as part of Bulgarian agriculture has been developing even faster than the average for the sector. In the latest years, the sector has reached its limits and the question about its sustainability must be further researched.

The goal of this study is to analyze the sustainability of Bulgarian organic agriculture and its impact on the development of the sector overall. In order to achieve its goal, the study must focus on a few important topics: to analyze the base for the development of organic agriculture in the country; to study the productive capacity of Bulgarian organic agriculture and its development; to draw conclusions and offer development policies focused on sustainability.

Key words: agrarian sector, agrarian policy, agriculture, traditional (conventional) production, organic production.

INTRODUCTION

According to the FAO and the WHO Codex Alimentarius (1): organic farming is "a comprehensive system of production management that maintains sustainability in agro-ecosystems, incl. biodiversity, biological cycles and soil biological activity". The emphasis is on mobilizing the farm's internal resources while minimizing external investment. The biological system considers the fact that regional (local) conditions require agro-systems adapted to the specific region. This is achieved through agronomic, biological and technical methods as opposed to investment of synthetic factors.

Organic farming is a specific method of production that maintains ecological balances and produces products that cover the principles of ecological cycles "plants - animals - soil". Organic farming contributes to the sustainable development of rural areas, the protection of the environment and guarantees good conditions for animal welfare.

The need for the development of organic farming is relevant to the following problems in modern Bulgarian agriculture:

- ✓ Concentration and specialization of production – in some cases in violation of the biological balance in nature;
- ✓ Reduced biodiversity and destruction of beneficial species;
- ✓ The resistance of pests to chemicals and aggravation of environmental problems;
- ✓ The fragmentation of the arable land;
- ✓ Obsolete equipment and buildings that do not meet the requirements of EU standards;
- ✓ Lack of or excessive use of plant protection products without considering the soil and climatic features of the area;
- ✓ Inability to absorb EU funds to support farmers - lack of information and training.

FOUNDATION FOR DEVELOPMENT OF ORGANIC AGRICULTURE IN BULGARIA

The consolidation of the Bulgarian agricultural sector and the specialization in the production of cereals and technical crops determine the leading role of large agricultural holdings. This contributes to the small share of organic farms

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in the total agricultural production of the country. Strict regulatory requirements do not allow the deployment of large farms, and in some cases the legal framework makes this completely impossible. Due to this fact, organic production faces several problems typical of small farms - regulated opportunities for direct supply of small quantities of raw materials and food products cannot have a

significant positive effect on small farms, as the requirements imply significant additional costs (2).

Despite these problems the base for the development of organic productions on Bulgaria is improving on a yearly basis as evident in **Table 1**.

Table 1. Organic crop area by agricultural production methods and crops

	2012	2013	2014	2015	2016	2017	2018
Total agricultural area for production of organic products	39 138	56 287	47 914	118 552	160 620	136 618	128 839
Converted	11 974	15 161	15 170	21 539	36 137	48 453	84 150
Under conversion	27 164	41 126	32 744	97 013	124 484	88 164	44 689
Arable land	20 222	23 926	26 383	60 810	88 711	66 211	65 648
Cereals	7 532	7 669	10 795	22 191	30 940	16 602	17 675
Root crops	96	98	63	103	86	342	705
Industrial crops	6 765	9 336	9 876	20 873	30 512	22 998	23 868
Aromatic, medicinal and culinary plants	3 378	6 536	5 577	11 456	18 089	16 859	14 729
Plants harvested green from arable land	451	1 055	944	1 164	1 741	4 601	438
Vegetables	1 308	877	1 000	1 605	3 432	2 648	3 014
Permanent grassland	:	15 476	12 089	31 796	38 736	39 921	33 713
Permanent crops	10 959	16 885	9 442	25 946	33 174	30 485	29 478
Grapes	2 058	3 872	2 914	4 199	5 390	4 092	3 990

Source: Eurostat database

The total area for the production of organic products in Bulgaria has grown over three times during the studied period. The most rapid growth was calculated in aromatic oil production. The rose oil production is traditional to the region and organic production has created new market opportunities for producers that have maintained mostly traditional production methods and were quick to convert their production and certify the finished products.

The growth of the amount of organic pastures and their significant part in the overall areas of organic production (over 26%) creates a base for organic animal husbandry that allows for significant value to be added to organic crop production. Due to certification and administrative requirements the organic animal husbandry in the country has undergone a period of base building in the beginning of the studied period in order to create the opportunity for production of animal products that can be certified as organic.

The sector continues to struggle to find its footing as shown on **Figure 1**, mainly due to

market restrictions and certification issues. The production of beef has increased significantly in the last year of the studied period, while milk production has decreased. This process is largely based on the restructuring of production in the sector and is evident for the struggle of individual producers to predict market trends and consumer needs. The increase in processed dairy products production is a positive trend for the implementation of value chain in some of the organization in the sector. The overall significant fluctuations in produced quantities in organic animal husbandry do not allow us to draw significant conclusion for the sustainability of the sector in the future. Producers still face many obstacles in their knowledge acquisition as well as market awareness and access to social support for many important supplementary activities in organic productions, such as certification of production technology, certification of finished products and so on.

During the same period the organic crop production in the country has shown a steady rate of improvement as evident in the data presented in **Table 2**.

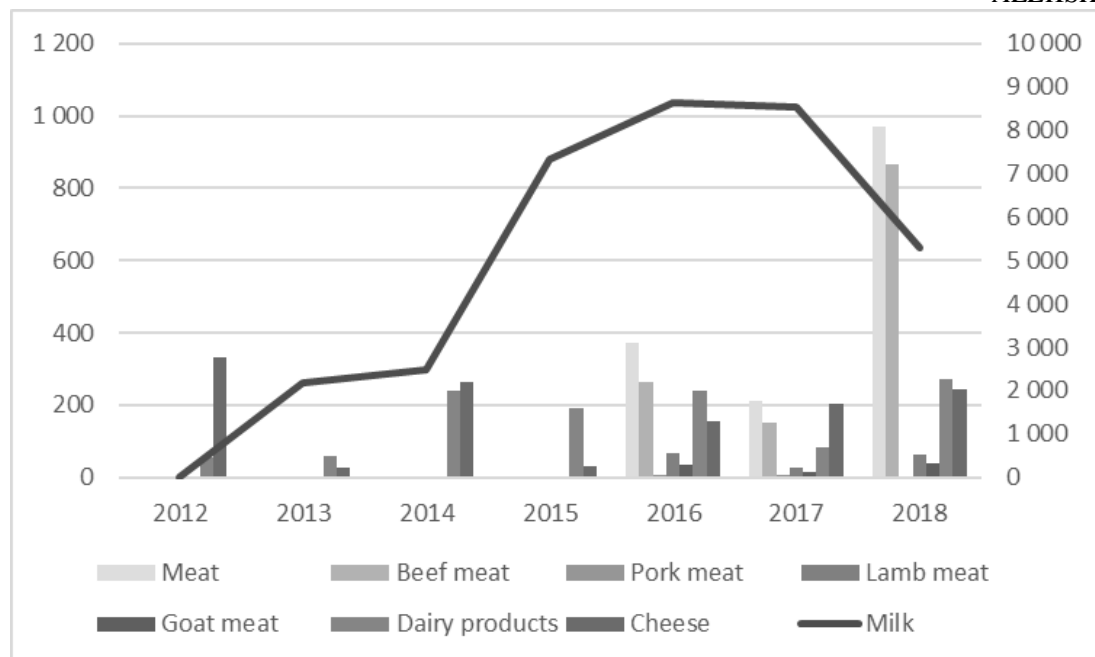


Figure 1. Organic animal husbandry production in Bulgaria

Source: Eurostat

Table 2. Organic crop production in Bulgaria

	2013	2014	2015	2016	2017	2018
Cereals	3 548	7 671	5 619	5 943	16 152	36 904
Wheat and spelt	2 366	3 014	3 452	3 264	11 135	25 188
Dry pulses and protein crops for the production of grain (including seed and mixtures of cereals and pulses)	0	337	1 078	177	1 596	30 154
Root crops	0	41	87	51	1 430	3 826
Industrial crops	2 504	6 572	7 845	8 205	13 794	26 825
Vegetables	5 428	9 705	12 112	13 121	6 026	18 344
Fruits	1 408	3 622	4 889	10 366	7 725	14 758
Grapes	3 428	2 623	6 388	7 690	5 245	12 209
Aromatic, medicinal and culinary plants	1 149	5 614	5 813	6 628	9 321	14 799

Source: Eurostat database

The organic crops production in Bulgaria has increased rapidly in the period, since 2013, and for some specific cultures, such as cereals in general, wheat and fruits that increase are tenfold by 2018. Such rapid development has led to significant improvement on logistics and market access for Bulgarian product domestically and internationally. The production of aromatic oils is again in the lead when measuring the rise in production as the market for these products has been with an increased level of demand that the productions have yet to meet.

Bulgaria has favorable opportunities for the development of organic farming (3), and the main ones can be summarized as follows:

- Suitable soil and climatic conditions;
- Existing set of knowledge and skills;
- Functioning system of scientific, educational and consulting units;
- Good image of Bulgarian agricultural products (food) on the domestic and foreign markets;
- Availability of production capacity in the food industry;
- Growing demand for organic products.

In order to realize these opportunities in a timely manner, it is necessary to implement appropriate measures, some of which may be:

- reduction of value added tax on organic products;
- stricter control and sanctions for unfair competition from products labeled "eco";
- support of promotional activities and other marketing initiatives for distribution of organic products;
- providing information and expanding the knowledge of producers and consumers about organic food, etc.

Organic farming has a future - it directly contributes to the preservation of the environment and ecosystems, restoration of natural resources and rural development (4). It can stabilize the incomes of Bulgarian farmers through the ability to provide healthy food products on existing and emerging markets. Thus, the competitive advantage of the natural and climatic conditions in our country and the support from the European funds to be rented for economic benefits from the agricultural producers will be optimally used.

CONCLUSION

As a result of the analysis, we concluded that the level of institutional support allows organic livestock in the country to undergo significant development and public support has a positive role in this process. At present, the available base of pasture areas in the control system has not been fully utilized, which will additionally have a positive impact on the development of the sector.

Bulgarian organic agriculture has developed rapidly during the studied period. Although the organic crop production has shown a steady increase in production levels the same is not true for the organic animal husbandry. The sustainability of the sector is also impacted by the problems that have arisen among producers in the sector. Certification is a long and expensive process. Indeed, the number of registered certification organizations operating is very small in number and operates at an

extremely high rate of profit, which makes the certification of production and products impossible for small producers.

In the local and international market, domestic producers face stiff competition from Italian, Spanish and Turkish producers, which already have products in place on the market.

The current social support policy for the sector is not comprehensive and needs to be developed in order to stimulate higher value-added industries.

After the peak of areas in the control system in 2016, there was a retention and a slight decline.

Despite the reached limit of the areas, the production continues to develop, and the tendencies are positive

Bulgarian organic farming is developing rapidly, which may hinder its sustainability due to the willingness to take greater risks from entrepreneurs in order to timely join the sector.

REFERENCES

1. Van der Meulen, B. (2018). Codex Alimentarius: The Impact of the Joint FAO/WHO Food Standards Programme on EU Food Law. European Institute for Food Law Working Paper Series, 4.
2. Balieva, G. N., M. Huliyan (2015). Production and supply of regional food products – incentives and challenges for the small holdings in Bulgaria. *International Journal of Science and Research*, Online ISSN 2319-7064, Volume 4, Issue 2 February 2015, 576-580.
3. Petrova, N., (2017). Sustainable management of land resources and organic farming. *Trakia journal of science*, ISSN 1313-3551, Vol. 15, Suppl. 1, pp 177-180
4. Nikolova, M. (2019). Problems and opportunities for realization of Bulgarian organic production. *Trakia Journal of Sciences*, 17(1), 259-267.
5. Eurostat Database

