

Challenges and Opportunities for Development of Organic Production in Bulgaria

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Abstract. *The paper examines the development of the organic production sector in Bulgaria in recent years, particularly emphasizing the main challenges and problems and the need for close monitoring, support and re-energisation of the sector. Its potential, trends and multidimensional implications for the environment, society and local communities represent an important research subject and are the focus of the INVEST Regional Living Lab in Bulgaria, established by the University of Agribusiness and Rural Development. The Living Lab applies the quadruple helix approach to work on open innovations that fits very well the research task of identifying challenges and opportunities for the development of organic production in Bulgaria. Combining primary data, case studies and facticology from the terrain that highlight the most pressing issues for regulation and funding, the research provides a two-level view of trends on organics at EU level and the local photography. The results suggest that improving the capacity of chain operators, access to organic markets and research on fast-growing ones can expand the potential of opportunities, integrating this research with other research tasks in the INVEST Living Laboratory in Bulgaria, especially those related to alternative food networks and relationships between urban and rural territories, climate change, agriculture and tourism. Good practices, green innovations and expertise within the ecosystem to implement efficient solutions remain essential for the vision and expansion of the sector.*

Keywords: *Organic Production, Organic Farming, Organic Marketing, Living Labs.*

I. INTRODUCTION

The Annual Report on the state and development of agriculture in Bulgaria 2023 states that organic agriculture contributes to the objectives the European Green Deal, the EU Farm to Fork strategy and the EU Biodiversity strategy 2030 because of its positive impact on the environment and climate in terms of improving carbon sequestration and soil health, protecting biodiversity and animal welfare, as well as the additional ecosystem services it provides. Organic production represent a sustainable management system that preserves elements of the natural landscape and uses energy and natural resources responsibly and operates within a strict regulatory framework. The set rate of increase in areas in organic agriculture, combined with agro-ecological measures, leads to high and multi-aspect benefits, both for achieving the goals of biodiversity protection and for mitigating the impact of climate change and for improved water and soil quality and soil biodiversity, due to the non-use of mineral fertilizers and chemical pesticides. The application of organic production practices has an indirect effect on improving or maintaining the good condition of natural habitats and Natura 2000 species.

The development of organic production in Bulgaria is favoured by the availability of quality land resources, climatic conditions, and traditions in the agrarian sector. Defining the organic farming sector is the specific method of production that maintains ecological balances and produces production covering the principles of ecological

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cycles for the continuous movement in nature by converting substances such as water, minerals, nitrogen, oxygen and carbon into different forms between living beings, water, air and soil [1].

According to the project of the National Action Program to contribute to the goals of the Farm to Fork strategy by 2030 organic production meets the objectives and priorities of the Farm to Fork strategy as the type of production with the greatest contribution to the protection of environmental components, the highest opportunities for market realization, due to the ever-increasing demand and the highest social responsibility (in terms of the safety of the manufactured products, response to the desire of consumers to eat healthy and care for the environment) [2]. The purpose of the program is to contribute to the implementation of the goals of the Farm to Fork strategy, and particularly to update and upgrade the strategic framework for the management of the agrarian sector, regulated in the National Development Program Bulgaria 2030, as outlined instruments, measures, and activities related to the implementation of specific goals and commitments contributing to the protection of climate, environment, biodiversity and natural resources. The program is aimed at promoting green investments, sustainable management of natural resources, adaptation to climate change, and mitigation of its consequences in agriculture. In addition to reducing the footprint of the food system on the environment and climate, the program also focuses on producing food in a sustainable manner that meets high standards of safety and quality, plant health, animal health, etc. The goals are in line with the policy implemented in the agricultural sector in recent years, based on environmentally friendly production and building sustainable food production systems. Their achievement is closely related to the Common Agricultural Policy (CAP) which promotes sustainable agricultural practices that are aimed at protecting the environment with appropriate interventions and schemes within the framework of the new Strategic plan for the development of agriculture and rural areas of the Republic of Bulgaria for the period 2023–2027.

Support from the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD) aims to further improve the sustainable development of agriculture, food and rural areas and contribute to the achievement of the following general objectives [3]: 1) to promote the development of a smart, sustainable and diversified agricultural sector guaranteeing food security; 2) to support environmental care and climate action and contribute to the Union's environment and climate objectives; 3) to strengthen the socio-economic structure of rural areas. These objectives should be complemented by the cross-cutting objective of modernizing the sector by stimulating and sharing knowledge, innovation and digitalisation in agriculture and rural areas and promoting their wider use.

In that relation, the Strategic plan for the development of agriculture and rural areas for the period 2023–2027 is structured around nine specific objectives of the Common Agricultural Policy (CAP) and one EU cross-sectoral objective, which is related to the modernization of agriculture and rural areas by stimulating and sharing knowledge, innovation and digitization and promoting their use in – largely by farmers through better access to

research, innovation and knowledge exchange and through training. In order to further improve the sustainable development of agriculture, food industry and rural areas, the general objectives of the CAP are aimed at the economic fabric of rural areas, the sustainability and income of agricultural holdings, the better quality of performance in the field of environment and climate and strengthened socio-economic structure of rural areas.

The transition to a more performance-oriented policy requires the establishment of a robust performance quality framework that, based on a set of common indicators, will allow the Commission to assess and monitor the quality of policy implementation. The overall quality of policy implementation will be subject to a multi-annual assessment based on impact indicators, while the annual monitoring of the quality of policy implementation will be based on the full list of result indicators. Through the output indicators each year, expenditure will be linked to the quality of performance in implementing the policy; this annual process relies heavily on a list of final product metrics.

For the current Strategic Plan for the Development of Agriculture and Rural Areas for the period 2023–2027, more than 406 million Euros have been earmarked for organic farming (compared to only 168 million Euros for the 9 years from 2014 to March 2023), of which 331 million Euros for organic crop production, 41 million Euros for organic production of ruminants, permanent pastures and fodder crops, as well as 34 million Euros for organic beekeeping. Another 40 million Euros are planned for investments in organic processing. Organic farming maintenance payments will range from €177/ha for legumes and €257 for oilseeds to €1,182/ha for fruit and berries and €1,679/ha for heated greenhouses for vegetables.

With the joint initiative of several stakeholders in the field of organic agriculture (including the Bulgarian Association of Organic Products), the Ministry of Agriculture and Food intends to support the market of organic products through a program for feeding organic products in kindergartens in the period 2023–2027. The budget provides for 30% of government subsidies for those kindergartens that have signed contracts for organic food. The number of kindergartens included in this program is expected to grow by 100 each year. Significant benefits are expected as: planned sales for producers and changing the perception of consumers that organic food is only something for the upper-class.

This is just one of several measures developed by stakeholders in the field of organic production in recent years. As part of the National Action Plan for Organic Production until 2030, one of the first activities under this plan is a Bulgarian stand of BioFach 2023.

The Action Plan for the development of organic production is directly linked to the Farm to Fork strategy and the Biodiversity strategy, with which the Commission introduces the requirement that food production be combined with environmental protection and biodiversity conservation, a key factor for which is organic farming. In this regard, the strategic goal set by the European Commission (EC) is to increase organic areas, assuming that by 2030 at least 25% of the agricultural land of the

European Union (EU) should be cultivated according to the rules of organic farming, Agriculture [4].

The European Commission emphasizes that the member states should engage all interested parties – state institutions, operators involved in organic production, relevant associations, local and regional authorities, wholesalers from the food industry sector, consumer representatives, the sector – the hotel and restaurant industry, including catering service providers and nutrition education associations, as well as citizens, to adopt, review and implement their national plans for the development of organic production to achieve the best opportunities for increasing areas and to stimulate demand for organic products.

With the adoption of the National Plan for the Development of Organic Production until 2030, the implementation of the acts of the EU institutions and their strategies will be ensured, as well as the implementation of a long-term national policy for the development of the organic production sector in the country.

The strategic goals in the National Plan for the Development of Organic Production until 2030 are: 1) Organic food and products for all: stimulating demand and ensuring consumer confidence; 2) Stimulating the transition and strengthening the entire value chain towards 2030; 3) Organic production as a role model: improving the contribution of organic farming to the sustainability of the sector.

Financial assistance is provided for interventions that contribute to achieving the specific objectives of the Strategic Plan [5]: 1) improving market orientation and increasing the competitiveness of farms in the short and long term, including a greater focus on research, technology and digitization; 2) stopping the loss of biological diversity and reversing this trend, improving ecosystem services and protecting habitats and landscapes.

II. MATERIALS AND METHODS

The research presented is part of the research tasks of the INVEST Regional Living Lab in Bulgaria established by University of agribusiness and rural development – Plovdiv (UARD). As part of the European University Alliance Innovations of Regional Sustainability (INVEST), UARD participates in Invest for Excellence in Regional Sustainability (INVEST4EXCELLENCE) project. Targeting the research efforts towards sustainable regional development, the INVEST Regional Living labs apply the quadruple helix approach to work on open innovations. The research is based on several case studies embracing the strategic framework for organic sector development and encouragement in Bulgaria, recent initiatives of the Ministry of Agriculture and Food, the activities of the non-governmental sector, including projects work, and the fast dynamics of recent years based on the facts according to the experience of family organic farms, as well as sharing opinions of key stakeholders in the sector, organization of events and discussions, etc.

III. RESULTS AND DISCUSSION

The development of organic farming in Bulgaria was first initiated by initiatives of academic institutions and international projects, although the relevant national legislation appeared in 2001. One of the projects led to the establishment of “Bioselena Foundation” or “Organic Farming” (1997), still functioning as one of the main drivers in the sector. The “new culture” in the attitude towards land, environment and food was difficult to develop because of various problems connected to the obstacles of the transition to a market economy in the country in this period, changes in the property, and private property in particular, access to finance and markets, lack of demand and legal protection, etc. [6]. The subsidy system has been characterized by its bureaucracy, strong control measures and too many sanctions.

The period is characterized by hesitations and uncertainties about the profits for the development of organic production in Bulgaria. In addition, there was a widespread belief that based on the specifics of organic production, techniques, certification and the realization of the product in the market, that organic operators are competitors for the limited amount of subsidy than allies in similar problems and needs.

The first National Action Plan for organic farming put the goal till 2013 to embrace 8% of agricultural land but the result was only 1,1%. Now, with the EU goal of 25% organic land, Bulgaria has only 1,7%. In the years since 2010 the organic land increases mainly because of big producers of sunflower and grain interested in the subsidy. There were evidences in which if the subsidy was not rendered in time, the producers quit organic. At the same time, essential oil plants and beekeeping were more reliable in organic sector development in the country. Although the rise in next year’s reported, the decrease followed in the number of operators (after 2016), organic land (after 2018) and the number of organic apiaries (after 2019), mainly because unpredictability and uncertainty in the subsidy, as well as the systematic problems related to the low competitiveness of organic farms and enterprises, low-developed markets and non-functioning supply chains (Fig. 1) [6]. For the beginning of 2023 the country reported 4 841 certified organic operators, about 86 000 ha land, 230 000 apiaries, 10 000 cattle and 20 000 sheep.

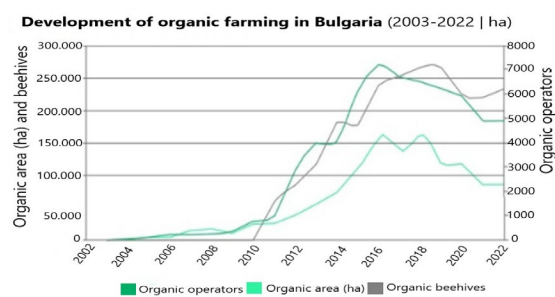


Fig. 1. Development of organic farming in Bulgaria [6].

On the other hand, it should be noted that the way of the supervision of controlling is characterized by a heavy burden on documents, administrative requirements and excessive sanctions that has led to a decrease in their

number since 2016. The research also has revealed that the control system has absurdities described as: the organic certification is connected to the application for subsidy; three different systems for land identification in force with many disadvantages in functioning; shortages in the time of control requirements and risk assessment; minor omissions in documents can lead to decertification and unpaid subsidy; a very big number of checks, incl. by the ministry and the paying agency, etc. A controversial issue, however, was that the state policy in supporting organic farming is not consistent and fails to balance the vulnerable points. Experience shows that the subsidy (as an unfair public policy) is not the trigger to organic transition, but it can also turn into the biggest obstacle for the organic sector development [6].

The data presented in the project of the National Action Program to contribute to the goals of the Farm to Fork Strategy by 2030 [7], show that in the period 2013–2016 the relative share of organic crops increased and reached a maximum value of 3.2% (in 2016). After 2016, the share of areas occupied by organically grown crops began to decrease and reached the levels 1.71% (2021), i.e. after a period of expansion, a gradual shrinking of the areas of crops cultivated according to the principles of organic production is observed. During this period (2015–2021), the total number of operators covered by a control system decreased. Analogously and related to a decrease in the number of operators included in the control system with organic crop production, after 2016 a tendency to decrease the areas in the control system, including the areas in transition and the organically certified areas, was observed (Table 1).

TABLE 1. ORGANIC FARMING IN BULGARIA 2015–2021 [7]

Year	2015	2016	2017	2018	2019	2020	2021
Number of organic operators	6099	7164	6822	6478	6216	5844	4913
Areas in the control system (total, ha)	118552	160621	136617	128839	117780	116252	86310
Areas in transition (ha)	97013	124484	88164	44689	22225	19776	15887
Areas after transition (ha)	21539	36137	48453	84150	95555	96476	70423

Currently, while organic producers (+3.3%) and processors (+3.4%) are growing steadily in EU, in Europe they occupy on average about 3.43% of the total agricultural land and in the EU about 9.16% (2022), and Bulgaria is among the top European countries (Table 2.) for land use in organic agriculture with permanent crops (mainly grape) [8]. Among the main markets of organic products in Europe, Denmark is presented with the highest level of 13.0% (globally), Austria 11.3% and Switzerland reached 9.3% and with the fastest growth is ranked Germany with 22.3%.

TABLE 2. EUROPE LAND USE IN ORGANIC AGRICULTURE WITH PERMANENT CROPS – TOP 10 COUNTRIES [8]

Countries	Land use in organic agriculture, permanent crops	Countries	Land use in organic agriculture, permanent crops
Spain	662K	Portugal	66K
Italy	480K	Poland	32K
Turkey	205K	Germany	25K
France	194K	Bulgaria	25K
Greece	68K	Romania	22K

Note: Hectares (K=thousands)

While the markets and units of organic livestock production in the EU grow and become sophisticated (eg.

systems of mixed plant and animal production) through new tools, policies and funding with a focus on eco-farmer and organic farming (eg. Organic Farm Knowledge – YouTube Channel), the sector of organic animal husbandry in our country is developing at a slower, but stable pace, compared to plant breeding. In 2022, the trend of weaker development of the organic livestock sector compared to organic crop production will be maintained. Bees, goats, cattle and sheep are raised organically in the country [7].

According to the Agrarian Report 2023, at the end of 2022, a total of 4,863 organic operators registered in the Ministry of Agriculture – 50 less than a year earlier, of which 4,260 are agricultural producers. There are 386 certified operators with the main and/or additional activity of processing, 693 with the activity of trade, 101 with the activity of import and 86 with the activity of export. In 2022, the number of organic operators in a control system represents 5.9% of the total registered farmers according to Ordinance No. 3 (January 29, 1999), on the creation and maintenance of a register of farmers, at 6.4% in 2021. In 2022, the trend of weaker development of the organic animal husbandry sector in Bulgaria compared to organic plant breeding will continue. Bees, goats, cattle and sheep are raised organically in the country. Compared to the previous year, there was an increase in the number of sheep, cattle and buffaloes in a control system and a decrease in the number of goats and bee colonies [1].

From Campaign 2023, the implementation of the new Common Agricultural Policy began with the introduction of interventions included in the Strategic Plan for the development of agriculture and rural areas 2023–2027 in Bulgaria, including a special intervention: Ecoscheme for organic farming (animal husbandry). Measure 11 Organic farming covers two sub-measures: 11.1 Payments for transition to organic farming and sub-measure 11.2 Payments for maintaining organic farming. Support is provided in three directions – organic crop production, organic beekeeping and organic animal husbandry. For the period 2015–2022, under measure 11 Organic farming, payments in the amount of BGN 330,180,793 were made. The funds paid out in 2022 amount to BGN 34,774,415. In 2023, financial support is planned for the interventions from the Strategic Plan for the development of agriculture and rural areas 2023–2027, including organic crop production and organic beekeeping [1].

For the academic year 2021–2022, under the “School Fruit” scheme, deliveries of fruit and vegetables were made by 111 approved applicants. Products were received by 428,268 children in 3,407 institutions in the system of preschool and school education. Apples have the highest share of fruit and vegetable supplies (over 1,600 tons, including 288 tons organically produced), followed by pears (668 tons, including 50 tons organically produced). Under the “School Milk” scheme, deliveries of milk and milk products were made by 101 approved applicants. Products were received by 428,154 children in 3,411 institutions in the system of preschool and school education. From the 2021–2022 academic year under the “School Milk” scheme, at least 4 of the supplies, but no more than 6, must be of organically produced fresh pasteurized milk and milk products. For the year 2021–2022, among the delivered organically produced dairy

products, yogurt (204 tons) and fresh milk (50 tons) have the main share [1].

According to the project of the National Action Program to contribute to the goals of the Farm to Fork Strategy by 2030 [2] financial support for organic production through measure 11 within the 2014–2020 RDP plays a key role in attracting the interest of producers, including young farmers. During the implementation of measure 11 of the PRDP 2014–2020, payments were made for BGN 295,400,250.11 which is an average of BGN 42,200,029 per year and implies the presence of problems for the applicant farmers or problems from systematic errors made by farmers.

Data presented in the Agrarian Report 2023 show that the main place during 2022 was occupied by consultations under the 2014–2020 RDP – 31,444 (about 46% of all consultations). Compared to 2021, they marked a decrease of 16%. This type of consultation is mainly related to the possibilities of support under sub-measure 6.3 Start-up aid for the improvement of small farms, sub-measure 6.1 Start-up aid for young farmers, sub-measure 4.1.2 Support for investments in agricultural holdings, measure 9 Creation of producers' groups and organizations and measure 11 Organic agriculture from the 2014–2020 RDP. Specialized consultations are in second place with 16,526, and compared to the previous year, they also saw a decrease of 18%. The topics of the specialized consultations indicated in 2022 can be summarized in the main directions: agrarian economy – 5,872; crop production (including organic crop production) – 4,803; animal breeding (including organic animal breeding) – 2,968; rules for good agricultural practice (GAP) – 1,178; statutory requirements for management – 919; conditions for maintaining the land in good agricultural and ecological condition – 781; and others (agro-statistics, fisheries and aquaculture, forest management) – 5. Consult group “Direct Payment” schemes, “Market Measures and National Support” schemes numbered 8,152 in 2022. The greatest interest in this group was shown for consultations concerning: Single Area Payment Scheme; The production support linkage scheme for fruit and vegetables; National Beekeeping Program; National support schemes and state aid and payments for agricultural practices that are favourable to the climate and the environment [1].

A report to 2016 [9] states that the market for organic products in Bulgaria is relatively new and still too small, but at the same time rapidly developing. In the last few years, there has been a boom in the organic products market in the country. The number of specialized stores is increasing, as well as the number of large retail chains that are involved in the distribution of organic foods. Most of the Bulgarian organic foods and products are intended for foreign markets. Bulgaria is a traditional producer of various types of organically certified honey with excellent quality indicators, and a large part of the production is exported to the world market. Bulgarian organic fresh fruits and vegetables, milk and milk products, sweets, lyutenitsa, dried fruits and nuts, have excellent taste qualities and are highly valued on the European and European markets. Bulgaria mainly imports exotic products that are not produced in the country and raw materials used in the production of organic food, such as:

cocoa, cocoa butter, various types of quinoa seeds, dates and date paste, coconut oil, coconut flour, etc. The third countries from which the country mainly imports are Peru, China, Tunisia, India, Sri Lanka, etc.

According to the project of the National Action Program to contribute to the goals of the “Farm-to-Fork” strategy by 2030 [7] most of the organic food in our country is exported, mainly to the European market. In 2022, the continued increase in the number of specialized stores for the sale of organic food, as well as the commercial establishments that are included in the distribution of organic food, is reported. The Ministry of Agriculture and Food carries out effective supervision and control in the field of organic farming which makes Bulgarian organic products legitimate on the common EU market. The development of the sector is promoted through information and explanatory activities about the benefits and advantages of organic farming.

Recently (November 7, 2023), the Ministry of Agriculture and Food launched the information campaign “Vocation: BioLogical!” [10]. The initiative was carried out jointly with the National Agricultural Advisory Service, the General Directorate of Agriculture and Regional Policy and the Regional Directorates of Agriculture. The information campaign aimed to promote organic production and attract more farmers to switch from conventional to organic production. During the events, the participants were introduced to the basic rules for organic production and the opportunities for support under the Strategic Plan for the Development of Agriculture and Rural Areas 2023–2027. Farmers were informed in detail about the differences between conventional and organic production, about its basic principles, regulations and obligations that should be observed when growing different crops and animals. During the campaign, the need for certification and the advantages it gives in the realization of production in the sector was explained, and good practices from the organic production of other countries were presented [10].

The initiative of the Ministry of agriculture and food “Vocation: BioLogical!” is becoming annual and aims to attract more new organic operators [11]. Over 500 new operators in the control system have been attracted to organic production after the information campaign of the Ministry of Agriculture and Food. We hope that during the campaign for submitting applications for support in 2024, they will be included in the implemented interventions for organic crop production, organic beekeeping and the eco-scheme for organic animal husbandry, said Deputy Minister of Agriculture and Food, Tanya Georgieva. The information campaign "Vocation: BioLogical!" of the Ministry of Agriculture and Food brought together nearly 2,500 participants. The events covered 56 settlements, half of which are in rural areas.

Despite the challenges, we expect that in 2024 we will be able to report an upward trend in organic production in Bulgaria, said Deputy Minister of Agriculture and Food Tanya Georgieva [12]. According to her, the European Commission (EC) already understands that the inflated green ambition of the EU is making it difficult for farmers, which is why the farmers' protests in many EU countries are. From 2020, when the legislative package

for this policy was prepared, to the start of its implementation in 2023, the effects of the “Green Deal”, the Covid pandemic and the conflict in Ukraine should be taken into account, in terms of value and impact on the sustainable development of the sector, noted Deputy Minister Georgieva. In the negotiation processes, it was very strongly demanded by all national authorities that the Commission make a comprehensive assessment of the impact of the “Green Deal” on agriculture and food production. Also, to what extent the Common Agricultural Policy funds embedded in the EU Multiannual Financial Framework could compensate farmers and food producers so that they recognize the "green" objectives of the agricultural policy and have the motivation to contribute to their achievement, she commented. Deputy Minister Georgieva pointed out that from the standpoint of time and in the context of the Strategic Dialogue already launched by the EC, it is imperative at the European level to take into account the repeated appeals regarding whether a given ambition has been assessed fairly in the context of the new challenges.

The involvement in these initiatives of the non-profit organizations in the country working for organic production encouragement, such as the Bulgarian Association of Organic Products and “Bioselena Organic Farming” foundation, is very important. They join also efforts in projects funded by other sources.

Bioselena (2022), started the implementation of its new project “The Future of Farmers' Markets in Sofia” which is being implemented with the financial support of the Sofia Municipality – Europe 2021 Program. For 5 years, the foundation has been organizing a farmer's market “Produced on the Farm” in front of the building of the Ministry of Agriculture in Sofia. While in the process of holding the market, the facticology from the terrain, revealed that there is a great interest in such events in every location of the capital, it became clear that there are significant difficulties and problems in organizing and conducting farmers' markets. The project, aimed a dialogue between interested parties to reach an agreement regarding the conduct of farmers' markets [13].

Lastly (March, 2023), Bioselena launched a new project aimed at micro-enterprises in the food sector with the main goal – to provide opportunities for introducing energy efficiency measures and reducing food waste in them by means of: needs analysis; training and demonstration of good examples, and on-site training and mentoring in enterprises. The foundation's team will try to support enterprises through the project in increasing their capacity to implement measures for efficient use of resources. In the medium term, efforts are aimed at increasing the knowledge of managers and staff of enterprises regarding energy efficient production. In the long term, the project will aim to increase the number of enterprises implementing such innovative measures and ultimately reduce production costs and increase their profits. At least 60 micro-enterprises should be included in the project. Curricula and learning content in 2 modules will be developed: “Energy Efficiency” and “Circular Economy” with a focus on micro-enterprises from the food industry. The target is to train and inform owners and staff of micro-enterprises – a total of 80 people from 50 enterprises, as well as to provide individual support (mentoring and coaching) with at least 15 entrepreneurs

starting projects to improve energy efficiency or introduce circular economy measures. Bioselena is implementing the project in partnership with the Norwegian non-governmental organization – Norges Vel [14].

The engagement of organic farmers in such initiatives and projects is very crucial. Below some examples will be presented, along with the experience of organic farmers.

The owners of the Wild Farm (where the circular economy challenge becomes a reality) are well-known to people all over Bulgaria [15]. For television viewers, they are stars of a popular reality show, and for their colleagues – an example of tireless work in the farm, processing and realization of the production. Betty and Niki Vasilievi close the circle on their farm from the meadows to the processing of the last animal bone. The farm has a processing unit and it is a successful example of integration agriculture and tourism activities [15, 16]. Wild Farm started with five or six cows (1994), with hard work and persistence today Blagovesta and Nikolay Vasilievi raise more than 1,600 cattle in an environmentally friendly way and cultivate 1,000 decares of land. Their farm is an example of energy efficiency and circular economy. The farm is organic and has Bulgaria's first certified organic slaughterhouse and plant for organic beef, where since 2018 over 45 products have been produced: raw-dried and sterilized delicacies, freshly chilled specialties and premium products without preservatives. All the raw material is used in the processing process, and finally the bones are boiled and beef stock is produced. What remains after boiling is fed to the vultures, one of the tourist attractions in the area that brings many tourists to their guest house. This is how a complete closed cycle is achieved: quality products without polluting the natural environment. Wild Farm can now say that it uses completely waste-free technologies in the production of its beef products [17].

A geographer has created a farm of the future [18]. The autonomous biodynamic farm Versol was established by a young family (2012) – a French graduate in geography, and his wife, a lawyer. Today, the family cultivates 140 decares of land, including about 3 decares of modern greenhouses and produces a wide assortment of quality organic certified fruits and vegetables: pepper, tomatoes, cucumbers, lettuce, spinach, alabash, courgettes, pumpkins, melons... They have fresh produce 10–11 months of the year. The farm supplies its produce online and also in several specialty stores. For the development of the farm, three projects under the Rural Development Program were of great importance but they were only a catalyst for its development, not a quest for subsidy. The farm has introduced significant innovations in production, such as 13 tunnel greenhouses, autonomous photovoltaic power plant, and automation of a drip irrigation system, irrigation water heating system with thermal solar panels, specialized agricultural software for management and planning of production processes (ERP system). The farm is one of the few in Bulgaria certified as biodynamic: production and work with biodynamic preparations, irrigation with structured water, treatment of plants with homeopathy, production of own compost, etc. In the farm, visitors can see innovative technologies of applying the principles of energy efficiency and the circular economy. Versol represents a completely energy independent farm. The owners of the farm are also

socially engaged. Their goal is to become a social enterprise. They also deliver their produce to a home for mentally retarded children in the area [17]. Initially with the help of placing the produce at farmers' markets, today there are between 200 and 250 active customers, including people with a subscription and organic chains in the capital [18].

The idea of a group of entrepreneurs created the first trust store: Where and how it opened its doors and why no one steals the goods [19]. For the first time in Bulgaria, an organic fruit and vegetable farm opened not one, but two stores without a salesperson. And despite fears that the turnover from the cash register and the goods will not remain intact, there are no thefts. The experiment turned out to be extremely successful. Shopping at the stall is done in the following way – the customer chooses the product, writes it down in a special notebook, noting the kilograms and the value. Then he/she leaves the money in a box. If he/she is owed change, he/she takes from the money already left.

According to the representatives of the organic business, the potential for its development is high and that operators often encounter ambiguity in terms of knowledge rather than financial resources [20]. “Bulgaria can become Europe's organic oasis”, said Zdravka Smilenova, owner of an organic farm, the biohotel “Moravsko Selo” and a company for preparations and technologies Amititsa. “Interest in organic is increasing. We started doing this 18 years ago. At first only foreigners came. They gave us a great incentive, because then we felt how much this production and this food is valued. For the Bulgarians, it was something strange and foreign. Of course, the picture has already changed a lot. Many Bulgarians are coming. They appreciate nature, clean food. We have both long-standing regular customers and more and more new ones who are interested in healthy food”. According to Zdravka there are main misunderstandings “people associate organic with high prices which is not true; they say that organic is difficult to do, there are no yields, it's ugly or it's perishable and expensive... but now the science is very advanced, especially regarding biological protection of plants. Here's our chance. But much knowledge is still needed on how to apply this science in practice. Amititsa has a complete closed system. In Amititsa we have a complete product, a unique know-how – we have the production, we have knowledge, and marketing and realization – agrotourism. This is a mini version of what Bulgaria can become” – shares Zdravka. It works exclusively for the domestic market. It produces everything – spices, vegetables, fruits, etc. “Moravsko Selo” brand is very well established in retail chains. Zdravka thinks that the control issue is sick. Some things have to change. There must be people in the control bodies with the knowledge and desire to make it work. The mindset needs to change. Zdravka says: We must have knowledge, technology, and consistency in actions. All this is happening here and now, not in five years. By doing the right things, we reduce costs and thus have higher quality, lower cost output... Farmers need to be supported with knowledge to have high yields from their own production.

Despite the good examples, the organic sector is experiencing serious problems. Dr. Stoilko Apostolov, manager of Bioselena and advisor to the Minister of Agriculture and Food shared the following opinion: There are no problems with the quality of organic products in our country. Disadvantages are related to administrative burden, support, payments and reporting [21]. Apostolov says that “We persistently pretend that the European initiative Green Public Procurement does not exist...because it is not mandatory”. According to him, “Bulgaria can benefit in order to include Bulgarian food and producers in these public procurements, without violating the competition rule, but...certain interests hinders the implementation of the initiative” [22].

On its website, Bioselena tries to answer the question: can Bulgarian kindergartens, schools, hospitals and others buy organic food products from local producers [23]. For years, the version was circulated in the public space that when conducting public procurement, Bulgaria, as a member of the European Union, is obliged to ensure equal access to products produced in the Union. The other important parts are the so-called “Green Public Procurement” that the European Commission promotes. For now, they are voluntary for implementation by the member countries. Countries where politicians at national and local level are concerned about local communities have been successfully implementing the European Commission's Green Public Procurement guidelines for local food producers for years. Thus they stimulate local development, keep the regions alive and the livelihood of the local people alive.

In Brussels in translation: Bulgarian organic agriculture – running with obstacles to the European goal [24] Stoilko Apostolov shares: “The EU wants 25% organic areas, but we cannot exceed 2%”. According to him, Bulgaria's goal is to reach 5% organic areas by 2025. If this does not happen, sanctions will be imposed on our country. Our longer-term ambition is to reach 10% organic areas by 2030, which seems even more difficult against the background of trends in our country. Europe wants 25% organic areas, and we cannot exceed 2%, argued Apostolov. Even if we do not have sufficient consumption of organic products in our country, we have perfect conditions for export, believes the manager of the Bioselena foundation. According to him, there is a real danger that the 400 million Euros set aside for the support of organic production in the National Strategic Plan will not be fully utilized. In this case, this money will not be lost, but will be redirected to other directions, Apostolov pointed out.

In the comments on the project of the National plan for the development of organic production until 2030 [25], Bioselena proposes: 1) Local (Bulgarian) organic products in kindergartens, nurseries and kitchens in stages from 100 sites in 2024 (pilot testing) to 700 sites in 2030; 2) Step-by-step increase in supplies of organic dairy products, fruits, vegetables and honey under the “School Fruit” and “School Milk” schemes from 10–12 supplies for the 2023–24 school year to 40 supplies in the 2029–2030 school year. The association of controlling persons in organic production also supports these ideas.

Among the events, the annual Organic Farming Day during the International Agricultural Exhibition AGRA at the International Fair of Plovdiv organized by University of Agribusiness and Rural Development is one of the most significant annual meetings discussing the organic sector development, challenges and opportunities and possible solutions. The Organic Farming Day 2024, was organized as a workshop family business and succession in organic production in which good practices were presented but also the main obstacles in family organic farms and the most pressing problems in the organic sector in Bulgaria were discussed, particularly those connected to the financial support and the burden of the procedures [26]. The discussion concluded that organic needs no subsidy but markets.

According to Albena Simeonova, head of the Bulgaria Association of Organic Products, the main priorities in the sector are the National Action Plan, Bulgarian organic food in kindergartens, schools, hospitals, public establishments, etc, and changes in the national legislation and improvements in organic registries, etc. At the opening ceremony of the Organic Farming Day 2024 [26], Albena Simeonova said that they are “the voice” of the organic sector in Bulgaria and Europe and their protests are not on the street but on paper and in working groups at the Ministry of Agriculture and Food.

University of Agribusiness and Rural Development is working on several research tasks connected to organic production development, especially considering the opportunities of alternative food networks and integration of agricultural activities with tourism and other specialized services. In its research priorities organic production is also considered in the context of climate change mitigation [27]. Finally, the issue of the interconnections and relations between urban and rural territories are examined, particularly focusing on the social and cultural dimensions of sustainable development.

IV. CONCLUSIONS

Currently, when the increased consumer interest in healthy food with proven quality is reported, for the development of organic production in Bulgaria special attention should be paid to measures encouraging processing of raw materials (to add value) and promotion of short supply chains and organic farmers markets. While in the picture of the future, an increase in international food prices and conventional agriculture may be expected, and perhaps organic markets and prices remain uncertain, within the local–national landscape (and regionally) organic can provide multiple benefits [28] and the possibilities for the inclusion of organic products as a mandatory element of the menu of public catering facilities, state and municipal facilities, hospitals, schools, military departments, public services, etc. should be strengthened. “Greens” (eg green public procurement, etc.) promote and advance in many ways the organic ecosystem in the EU and policy neologisms (including standards and directives within Acquis) according to the Commission's methodology, should be carefully examined by the researchers of the field [29].

“Organics” should also address some of the challenges, such as (1) new and stronger community rules on organic; (2) strong competitive pressure of imported

food; (3) still existing mistrust in consumers, misunderstanding; (4) incorrect labelling; (4) payments and subsidies under different financial schemes and measure with all their complexity, requirements, obligations and administrative burden; (5) growing cost for certification, control, sampling, analyses, etc. Raising awareness and capacity building and advisory services in organic production is an issue in a special focus along with consumers' trust. Building easier access to organic products and markets is related to shortening the supply chain and direct sales, but also with the establishment of associations/cooperatives in organic production and marketing. The good practices and green innovations in the country and the developments recently launched in the EU [30] are essential for sector expansion and efficiency to challenging processes, improving knowledge and organic management methods.

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