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BULGARIAN AGRICULTURAL STRUCTURE AND PROSPECTS POST-2023

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Abstract

The CAP 2013 reform aimed to achieve ambitious goals - more equality in the distribution of financial support, better targeting and „greening" of direct payments. The aim of the study is to outline the changes in Bulgarian agricultural structure and to formulate recommendations for the post-2023 period. The results show that in Bulgaria, during 2010-2020, the number of agricultural holdings decreased by 64%, and the farm structure was seriously transformed. The trends of land concentration and polarization are continuing, although the European and national policy priorities are directed at overcoming the imbalances and differences. These land concentration processes are accompanied by accumulating a significant share of direct payments in large holdings. The transformations in farm structure could lead a significant challenge in the context of future Bulgarian agricultural development, food security and livelihood in rural areas. The flexibility and subsidiarity proposed by the CAP allow the EU Member-states to set their priorities and direct financial support to crucial sectors according to national specifics. However, financial aid should be better targeted, and the capping and payments reduction need to be more efficient.

Key words**:** *farm structure, land concentration, direct payments*

INTRODUCTION

The development of the Bulgarian agricultural sector in the last thirty years has been going through significant structural transformations. The accession to the EU and the implementation of the CAP are related to political and socio-economic changes in Bulgaria that impact the production, the sectorial and organizational structure of agriculture [3]. The restructuring process generated a number of consequences that affected rural areas' development.

The CAP 2013 reform aimed to achieve ambitious goals - more equality in the distribution of financial support, better targeting and "greening" of direct payments. However, some studies [11, 12, 22, 23] show issues associated with direct payments distribution, converges process, climate change combat and biodiversity maintenance.

In the context of the 2021-2027 programming period and the development of rural areas after 2023, several challenges have to be addressed. The aim of the study is to outline the changes in Bulgarian agricultural structure and formulate recommendations for the post-2023 period. The paper is structured as follows: First, the methodological framework is presented. In the second part, the main trends in farm structure and the dynamic in direct payments allocation is observed. Based on the analysis conclusions and recommendations are outlined.

MATERIALS AND METHODS

The study is based on data from the Farm structure surveys carried out in all Member States of the EU. The paper applies EUROSTAT common methodology that provides comparable and representative statistics [15]. European Commission reports [7, 8] are used for direct payments distribution.

RESULTS AND DISCUSSIONS

Farm structure trends and evolution

The scientific literature defines structural changes as „a complex, multifaceted phenomenon, not only because economic

growth leads to subsequent changes in various sectors of the economy, but also because these changes affect the growth process "[16].

Brinkman and Warley [5] outline the main components that may be affected by structural change. Structural changes in the agricultural sector are often related to the transformation of farms number, the concentration of economic activity and changes in the attitudes, preferences and motives of the farmers [29]. The production factor allocation is considered as key driver for these processes. [17].The structure of agricultural production in the EU has changed seriously since the beginning of the XXI century.

As a result of these structural transformations, the concentration of land in a relatively small number of large farms also increased. Therefore, structural changes also affect resource allocation and financial support, as well as regional development and rural employment, maintenance of rural landscapes, biodiversity and environmental protection [23].

The changes in key structural features are registered. Figure 1 presents the variations in the number of farms and utilized agricultural area (UAA) for the period 2005-2020.

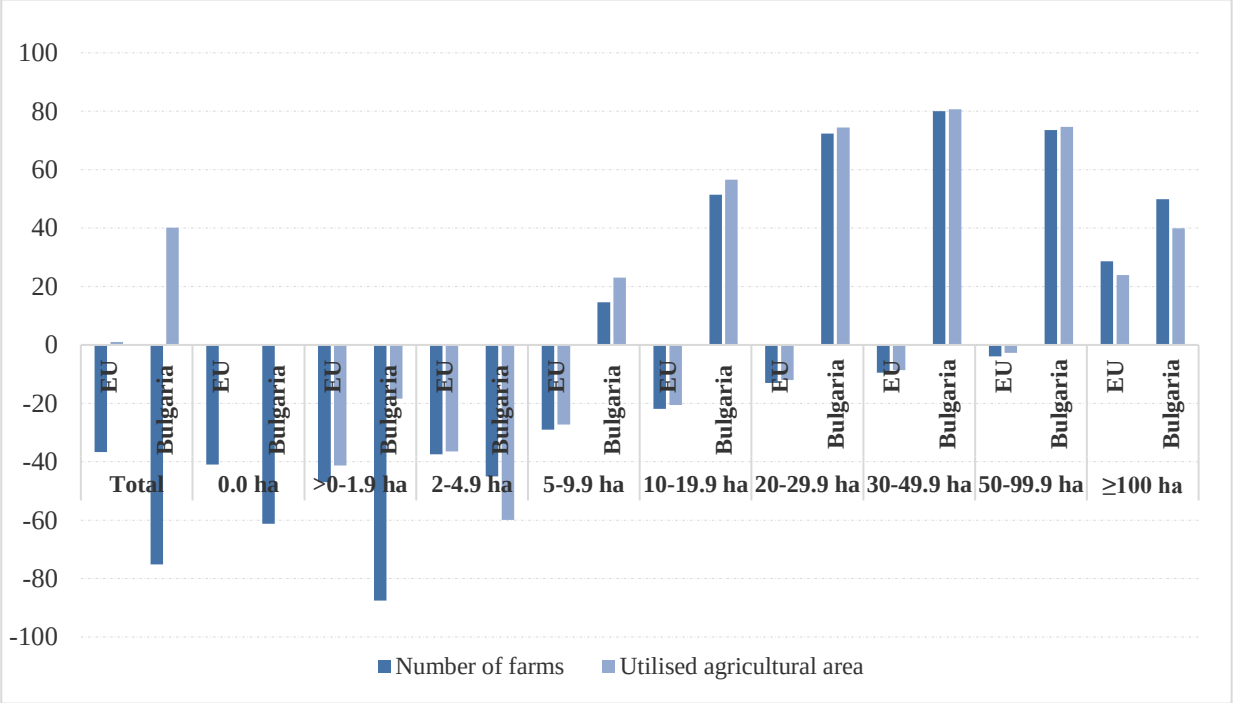

Fig. 1. Number of farms and concentration of UAA by class (2005-2020), %
Source: [14].

In order to observe the trends in farm structure evolution, a base for the survey is the year 2005, before the accession of Bulgaria to the EU.

According to Eurostat FSS data [14], in 2020 around 9 million agricultural holdings are concentrated in the EU. The highest share is in Romania (32%), followed by Poland and Italy with 14% and 12.5%, respectively.

According to Eurostat classification [13] majority of the farms (94.8 %) are considered family farms on which family members provide 50 % or more of the labor force. Bulgaria registers similar results to the observed in the EU-27. Family farms are the most common farm model in all Member States except Estonia and France.

In addition, the small farms remain the main agricultural farm structure. Farms with less than 5 hectares represent 63.7% of all holdings in the EU and 64.5% in Bulgaria. The highest share of small farms is in Malta (96.6%), followed by Romania (90.3%), Cyprus (87.5%) and Greece (74.0 %). Based on the data, it can be concluded that these farms could be an important factor in poverty

reduction and income generation and can address the emerging global challenges with food security and biodiversity.

By contrast, over 7.5 % of the EU's farms are 50 ha or above. In Bulgaria, the share of these holdings is 6.6%, similar to the EU trends. Large farms form the majority of holdings in Luxembourg (53 %) and in France (46%).

Different trends are observed in terms of utilized agricultural area. In the majority of the countries in the EU farms with sizes more than 50 ha accumulate the highest share of UAA. In the Czech Republic and Slovakia these farms concentrate more than 93% of the UAA. On the other hand, in Romania, the farm structure is unbalanced – less than 1 % of all farms are in the 50ha and above cluster. However, they account for around 54% of the UAA. In Bulgaria, the share of these holdings increases by 83%. In addition, the largest holdings by size, above 100ha, represent 75% of the UAA in the country. The observed trends show polarization and disbalances in farm structure in Bulgaria and Romania.

The comparison between Bulgaria and EU-27 shows that the changes in farm structures follow a different development path. The decline in the number of holdings in Bulgaria is 75%. These results indicate a significantly higher reduction than the observed trends in EU-27, which show a decrease of almost 37%. On the other hand, the utilized area in Bulgaria increased by 39%, while in the EU-27, the size of UAA is almost the same for the period under review.

The number of farms in the smallest group (up to 2 ha) decreased by 87%. In addition, the reduction of the UAA concentrated in them is around 18%. In Bulgaria, the results indicate growth in the number and UAA of farms above 10 ha with more than 50%. While in the EU-27, relative share in the total number of the farms and UAA, respectively, decreased by around 21%.

The highest increase in number of holdings in Bulgaria is associated with those between 50 and 99 hectares. Regarding UAA, the most considerable growth is registered in farms between 30 and 50 hectares.

Based on the data it can be concluded that there are positive changes in Bulgarian agricultural structure. The size of the utilized agricultural area is increasing. However, the results indicate some structural imbalances. The accession to the EU and implementation of CAP could not help in resolving some of the issues related to polarization and “land grabbing” in Bulgarian agriculture. The last farm structure survey shows that the challenges associated with overconcentration are not overcome.

Based on the results, it can be summarized that the EU holdings can be divided into three main groups: The first group consists of semi-substance farms for self-sufficiency. In Bulgaria, these holdings play a crucial role in rural areas, especially for low-income families and retired people [1, 2, 19]. The second group are small and medium-sized holdings that are mainly family farms with possibilities to grow and have an important role in sustainable agricultural development. The third group is formed by large businesses and enterprises which accumulated a high share of financial support under Pillar I.

The different farming models among Member-states can also be analyzed by observing the economic size of the holdings.

A comparison between EU Member-states shows their role in standard output (Figure 2). Italy, France, Germany and Spain are the countries that produced the biggest share of standard output. On the other hand, Romania, which is the country with the highest share of holdings (31%), generates less than 4% of the standard output. By contrast, the Netherlands represents less than 1% of farms but concentrates almost 7% of the SO.

Malta and Luxemburg have the lowest share of the standard output. Bulgaria accounts for 1.1% of the agricultural outcome and represents 1.5% of the holdings.

According to Eurostat data, in the EU, the farms with standard output below 2,000 EUR are more than 3 million but account for only 1% of the EU standard output. These holdings can be defined as semi-substance farms. More than 2 million farms are between 2,000-8,000 EUR. In Bulgaria, the share of these holdings is 35%, similar to the EU-27 trends (36.6%). In the country, they concentrate 1.1% of the agricultural output.

The changes in the agricultural structure show a significant decline in the share of these holdings in Bulgaria. For 2010-2020 the farms below 2,000 EUR decreased by 30 percentage points.

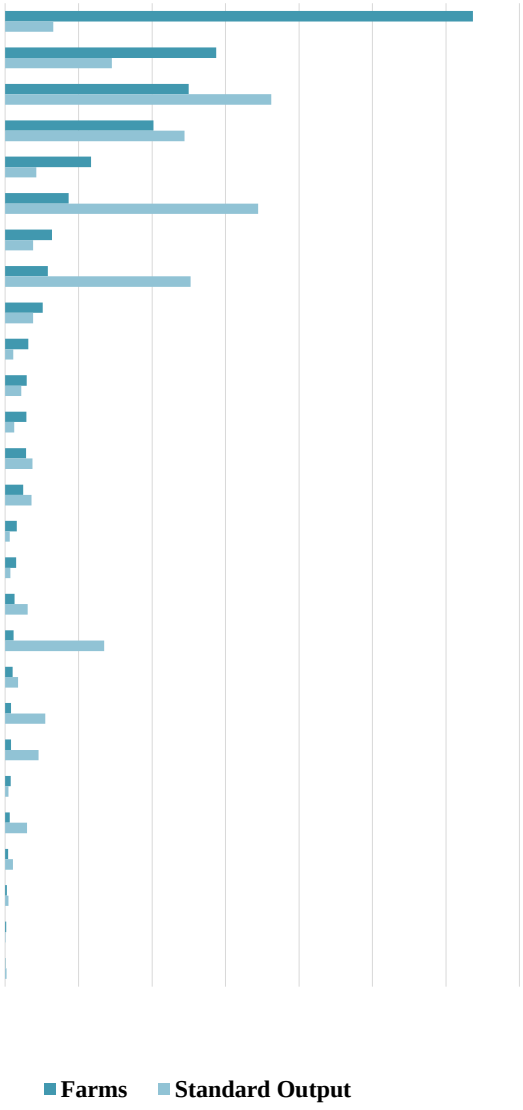

Fig. 2. The share of farms number and standard output, 2020 (%)
Source: [14].

On the other hand, around 3% of the farms in EU-27 generate standard output of more than EUR 250 000. However, it should be noted that these holdings accumulate 57% of the total economic output. In Bulgaria, they form 2.4% of the holdings, accounting for 59% of the agricultural output. The share of these farms increases by 1.4 percentage points in the number of holdings and 17 percentage points in terms of generated output.

Based on the data, it can be concluded that Bulgaria has a dual agricultural structure. Large holdings are growing, while the significance of small farms is declining. Medium-sized farms have a minor role.

On the other hand, small farms play a crucial role in rural areas and help reducing issues such as depopulation and poverty. These trends clearly show that Bulgarian agricultural remains dominated by larger structures.

The CAP was established and designed to "ensure fair income and improve the livelihoods of the rural population" [20]. The CAP reform 2013 set an ambitious goal to resolve issues such as land and financial support concentration, environmental protection and food security [4].

Direct payments are mainly used to support farmers' incomes, which accounted about 70% of the total CAP expenditure [8].

The share of direct payments in farm income varies widely – from around a third, for the lower income classes, to more than half, for the higher income classes [8]. In this way, the income support provided is progressive - farmers with relatively high incomes receive high payments, which contradicts the basic principles of support. [31]. In Bulgaria, the distribution of direct payments is considered as serious issue in terms of land concentration and "land grabbing". Similar results are registered in the surveys of number of authors [26, 27, 30].

The distribution of direct payments in EU-27 and Bulgaria are presented (Table 1) in order to explain the structural changes in Bulgarian agriculture.

The results show a significant difference in direct payments distribution in the years under review, on one hand, and between Bulgaria and EU-27 on the other hand.

In 2010 the share of the farms in the group receiving up to 1,250 EUR is 79%, accumulating only 7% of the support. In EU-27 the share of these holdings in number is lower than in Bulgaria (46%). In 2020 the role of this group declined in Bulgaria, representing 31% of all holdings and concentrating only 1.5% of the financial aid. Although the number of beneficiaries in this group decreased by 15 percentage points for

2020-2021, their role in the received support remains almost the same.

On the other hand, the share of holdings that receive more than 50,000 EUR is increasing in parallel with the concentration of financial support. In Bulgaria, the farms that received more than 100,000 EUR in 2020 accumulated more than 38% of the support compared to 11% in 2010. The share of concentrated financial aid in these holdings in EU- 27 was around 11% for the analyzed years.

The results show that the share of classes between EUR 5,000- EUR 50,000 in the number of beneficiaries and the received financial aid is increasing in Bulgaria and EU-27. However, in Bulgaria, they accumulate support similar to those registered in the above 1,000,000 EUR classes.

Table 1. Distribution of direct payment by classes (%)

Classes	2010				2021			
	Number of beneficiaries		Amount paid to beneficiaries		Numberof beneficiaries		Amountpaid to beneficiaries	
	Bulgaria	EU-27	Bulgaria	EU	Bulgaria	EU-27	Bulgaria	EU
Between € 0 and € 500	63.06%	41.43%	3.95%	1.90%	11.16%	21.21%	0.25%	1.05%
Between € 500 and € 1,250	16.01%	19.50%	3.64%	3.08%	20.35%	25.30%	1.31%	3.05%
Between € 1,250 and € 2,000	5.21%	8.09%	2.38%	2.51%	11.20%	10.85%	1.43%	2.58%
Between € 2,000 and € 5,000	6.98%	12.12%	6.36%	7.59%	20.75%	17.21%	5.38%	8.24%
Between € 5,000 and € 10,000	3.26%	7.25%	6.62%	10.08%	16.01%	9.94%	9.32%	10.58%
Between € 10,000 and € 20,000	2.00%	5.46%	8.14%	15.20%	9.86%	7.51%	10.94%	15.96%
Between € 20,000 and € 50,000	1.83%	4.55%	16.99%	27.44%	5.68%	5.99%	14.02%	27.51%
Between € 50,000 and € 100,000	1.04%	1.21%	20.88%	15.98%	2.48%	1.45%	14.07%	14.46%
Between €100,000 and €150,000	0.34%	0.22%	11.93%	5.26%	1.06%	0.27%	10.50%	4.86%
Between €150,000 and €200,000	0.15%	0.08%	7.45%	2.56%	0.58%	0.10%	8.08%	2.61%
Between € 200,000 and €250,000	0.06%	0.04%	4.14%	1.60%	0.31%	0.06%	5.63%	1.85%
Between € 250,000 and €300,000	0.03%	0.02%	1.90%	1.19%	0.21%	0.03%	4.71%	1.34%
Between € 300,000 and€500,000	0.03%	0.03%	2.47%	2.38%	0.25%	0.05%	7.43%	2.70%
Over € 500,000	0.01%	0.02%	3.15%	3.23%	0.09%	0.02%	6.94%	3.21%

Source: Own calculation based on European commission.

Inequality in farm support contradicts the established principles of justice (the principle of the EU Single Market) [28], as some farms are favored over others. Therefore, the financial support is not well-targeted and distributed. Some supported agricultural holdings do not need such considerable support, while others struggle to stay in the farming business. Moreover, such allocation of funds raises land prices and creates barriers for young farmers to enter farming. Small farms are key in maintaining biodiversity using ecological processes and balances [24, 25]. In addition, they are crucial in poverty reduction. The disappearance of small farms could lead to issues with the rural landscape and social exclusion [21].

In addition, it could be noted that in Bulgaria, the share of farmers that receive support is much lower compared to the EU-27 level. According to European Commission data, the share of holdings receiving direct payments in Bulgaria is 29.7% compared to 58% in EU-27 [10]. The results indicate that the country does not benefit enough from the opportunities presented by the CAP.

There is an investment gap between different farms, which hinders modernization, diversification, and implementation of new technologies and affects competitiveness and sustainability in these holdings [1, 32]. These issues affect the ability to fully explore the potential of new value chains, such as clean energy and the emerging bioeconomy.

Prospects in Bulgarian agricultural structure post 2023

The transformation in agricultural holding in the EU, particularly in Bulgaria, will be

influenced by the new measures and financial support proposed by CAP after 2023. The 2014-2020 programming period and the reform after 2013 could not address a number of issues. Matthews [18] pointed out that the CAP could not meet the expectation of environmental activists with the results of the greening as a new measure that was directed to green growth. The convergence and better targeting and distribution of financial aid are also major challenges.

The new CAP 2021-2027 proposals are oriented to more ambitious goals [6]. More flexibility and subsidiarity are proposed by the new CAP. The strategic plan models increase the responsibilities of the Member-States. Generation renewal and social challenges are also addressed. Three out of ten CAP objectives are linked to the environment and climate. Local development is also recognized as a priority, with 7.7% of the European agricultural fund for rural development budget [9].

On the other hand, despite these ambitious priorities, the lack of serious changes in the First Pillar raises the question about the impact of these measures on European and especially on Bulgarian agriculture.

CONCLUSIONS

Based on the analysis, the following conclusions could be drawn:

(1) After the accession to the EU, Bulgarian agricultural structure transformed significantly.

(2) The average size of the holdings, utilized agricultural area and standard output are increasing. There are imbalances in the farm structure. Large holdings are growing, while small farms – disappearing. Medium-sized farms have an insignificant role. Considering the important role of small farm in maintaining biodiversity, the abovementioned trends do not correspond withnew CAP goals.

(3) There is a concern that the lack of serious reforms of direct payments which accumulate the most significant part of the CAP budget could lead to further concentration and polarization of Bulgarian agricultural holdings.

(4) Considering that one of the main goals of the CAP is ensuring fair income for farming families, there is a question whether these financial supports could benefit the profit of larger enterprises instead. In this regard, the CAP post-2023 implementation should be associated with better targeting and reducing support for large structures.

(5) In addition, the links between the Green deal and the CAP could only be achieved if serious changes in direction of direct payments are made.

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