# The Bulgarian model of land ownership: the "white plot" phenomenon

# Angel Sarov<sup>1\*</sup> and Diana Kopeva<sup>2</sup>

<sup>1</sup>Agricultural Academy, Institute of Agricultural Economics, 1113 Sofia, Bulgaria; University of Agribusiness and Rural Development, 4000 Plovdiv, Bulgaria <sup>2</sup> University of National and World Economy, 17000 Sofia, Bulgaria

\*Corresponding authors: angel.sarov@gmail.com; diana kopeva@yahoo.com

# Abstract

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More than three decades after the democratic changes in Bulgaria, the reforms in land use and land ownership continue. In these transitional stages of the development and reform of the institutional environment, globalization, and destructive competition, land ownership continues to provoke debate among politicians, practitioners, analysts, researchers, and society.

The purpose of this paper is to underline on the Bulgarian model of land use and land ownership, the phenomenon of , white plot" in Bulgaria. The phenomenon of "white plot" has no formal definition. This concept has become necessary over the years in practice and the possibility of turning agricultural land into a ,,white plot" is regulated in the Law on the ownership and use of agricultural land. The price of a white plot is not determined on the basis of a market price but is normatively determined by the municipal administration. Based on a regression analysis, the relationship between the change in the average prices of "white plot" and the average land rental prices have been checked. The conclusion is that the average price of "white plot" follows the change in the average rent, but with a delay that harms the owners. The phenomenon of ,,white plot", a consequence of the "formal rules" is a government policy.

*Keywords:* land ownership; property rights; ,,white plot"; Bulgaria

# Introduction

Undoubtedly, the Bulgarian agrarian reform is one of the most discussed topics with contradictory political and socio-economic impacts (Bueno, 2007; Kopeva, 2012; Yovchevska, 2016). In these transitional stages of development and reform of the institutional environment, globalization, and destructive competition, land reform continues to be a central topic for discussion and consultation between politicians, practitioners, analysts, researchers, and society at large.

More than three decades after the democratic changes in Bulgaria, discussions on land use (Yanakieva, 2007) and land ownership continue. Despite the formally completed agrarian reform in 1999, issues of the land market (Falcoa et al., 2010), land ownership, and fragmentation continue.

Statistically, the restoration of private land ownership took place in 1991. At the same time, there were many challenges related to frequent political crises, land consolidation (Kopeva, 2001; Stanimirova, 2009; Yovchevska, 2021), land fragmentation (Kopeva, 2000; Boliari, 2013), property rights, farmland rental rates (Kaneva, 2018) and more. According to sociological research, many factors influence the functioning of the market and the purchase and sale of agricultural land. Most landowners live in remote areas and are unable to care for and cultivate their land for agriculture. All this further deepened market uncertainty and created some difficulties in property management.

The purpose of this paper is to underline and provide an understanding on the Bulgarian model of land use and land ownership, the "white plot" phenomenon in Bulgaria.

Property rights are a starting point from which to identify some "phenomena" in land ownership and land use and practice in Bulgaria. Challenges are identified that cause difficulty in the functioning and sustainability of agricultural structures.

# State of the Art

The property rights on land use and land tenure in Bulgaria are regulated in accordance with the Law on the Ownership and Use of Agricultural Lands (Promulgated SG No. 17 of March 1, 1991); The Law on Lease in Agriculture (promulgated in SG No. 82 of September 27, 1996) and in other normative acts. The fact that these two laws have been amended and supplemented more than forty times (last amended, SG No. 79 of 8 September 2020) present that a balance of interests between stakeholders – policymakers, state, and municipal – has not yet been achieved. administration, owners, and users of agricultural land (sole traders, trade companies, agricultural cooperatives, etc).

The phenomenon of "white plot" has no formal definition. This term has become necessary over the years in practice, and the possibility of turning agricultural land into a ,,white place" is regulated in the Law on Land Acquisition. According to Art. 37b of the Law on Agricultural Land, "the area of agricultural land for which no contracts have been concluded and no declarations have been submitted by the owners shall be distributed among the users in proportion to the area and according to the manner of permanent use of own and/ or leased agricultural land in the respective land." According to the law, by July 31 of each year, the owners of agricultural land must submit a declaration to the Municipal Agricultural Service, stating that they do not want their land to be included in the general array of agricultural activities. Otherwise, by official order, it can be included, as a ,,white plot" and other farmers (sole proprietorships, companies, agricultural cooperatives, etc.) to process it, even without the knowledge of the owner. If the owner of agricultural land has concluded a lease agreement with agricultural producers and has registered it with the Municipal Agricultural Service, a declaration should not be submitted every year. Very often, however, the owners forget the term of the lease and do not file a declaration.

From the application of this procedure, an average of 237 thousand owners of agricultural land in Bulgaria annually receive income from it, without management costs. According to the regulations, entrepreneurs who cultivate from the allocated agricultural land declared a "white plot", must pay rent to the account of the relevant Regional Directorate of Agriculture. Within 10 years, these amounts are paid to the owners, only if they know and seek them. The refund of rent payments for "white plot" is legally regulated, according to Article 37c, paragraph 7 of the Law on Land Acquisition.

The percentage of these areas (Table 1) in relation to the total arable area decreases over the years as follows:

After the integration of Bulgaria into the EU in 2007 and the possibility of EU subsidies, entrepreneurs using "white plot" without owning agricultural land benefit from the support.

According to the administrative authorities, rent is guaranteed. It is determined on the basis of real market prices in the region by independent appraisers. In practice, however, the price of white plots does not fully correspond to the market rental prices but is determined by normative. This is confirmed by data from the Ministry of Agriculture, Food and Forestry (MAFF) and the National Statistical Institute (NSI). The report on the paid average prices in "white plot" shows deviations from the average rent payments on agricultural land by years and by regions in Bulgaria. The difference is in the range from 5 to 35 BGN/da depending on the region. According to the Ministry of Agriculture and Food, there are regions in which the rent for a "white plot" is 75% lower than the market rent, and in others, it is almost twice as high. The municipal services reassure that the "white plot" cannot be acquired by prescription and that the maintenance of the quality of the agricultural lands by the users is protected.

Practice shows the following: The Municipal Agricultural Service has no obligation to inform the owners that their lands have been declared "white plot" and that there is a transferred amount in their name. However, in order to receive this amount, the owner must be proactive and submit to the relevant Regional Directorate a set of documents to certify his ownership. Many heirs require a power of attorney and the completion of multiple declarations.

Table 1	. Share	of white	plots in	relation t	o the total	l arable land	in Bulgaria

Period	Arable area, da	"White plots", da	% of "white plots" in relation to the total arable area, da
2018-2019	32 542 980	1 305 020	4.01
2017-2018	32 505 190	1 410 770	4.34
2016-2017	32 425 120	2 289 128	7.06
2015-2016	32 218 530	1 983 440	6.16

Source: Ministry of Agriculture, Food and Forestry (MAFF), Department of Agrostatistics

Naturally, this precedent in world practice is explained by officers that this act is done in "protection of smallholders and reduces the share of uncultivated agricultural land". The state defines "white plot" as "abandoned properties".

World practice shows that some countries have better functioning institutions than others. In our time, the transformation of institutions, not only in terms of property rights, reflects differences in the beliefs of political leaders about the benefits to society

# **Material and Methods**

The analysis is based on available statistical information, census of agricultural holdings in Bulgaria for the period 2013-2020, case studies, in-depth interviews with stake-holders. A review of the scientific literature, laws, by-laws, and regulations related to land use and agriculture has been made. Qualitative and quantitative approaches are used.

A regression analysis was tested with a comprehensive check of the relationship between the change in average white plot prices and average land rental prices. An answer is sought to the question of whether there is a statistically significant relationship between the average price of ,,white plot" and the average rent of land intended for agricultural activity in Bulgaria. It is assumed that the average price of ,,white plot" is the dependent variable -y, and the independent (factor) variable is the average rent of the land -x. It is checked whether the change in the average prices of ,,white

#### Table 2. Model Summary

Regression Statistics					
Multiple R	0.885918				
R Square	0.784851				
Adjusted RSquare	0.776883				
Standard Error	5.38356				
Observations	29				
Courses own colculations					

Source: own calculations

### Table 3a. ANOVA

plot" follows the change in the average rent on the land. The purpose of using regression analysis is to describe the relationship between x and y using a function and to determine the strength of this relationship with correlation analysis.

On the other hand, the decision will provide an answer as to whether the agricultural landowners are harmed when their land falls into the group of ,,white plot".

The level of dependence between the average prices of ,,white plot" and the average rent on the land will be checked by a linear function:

$$y = a + b.x + \varepsilon$$
,

where:

y – dependent variable equal to the average prices of "white plot";

x – independent (explanatory) variable, meaning the average rent of the land;

a - intercept;

b - (slope) coefficient showing the change of the dependent variable (y) when changing the independent variable (x) by 1;

 $\epsilon$  – residual (error).

### Results

The coefficient of determination shows what percentage of the change in the result is due to the factor (Table 2). In other words, the extent to which a change in the independent variable affects changes in the dependent variable. In this case, it must be assumed that 78% of the change in average prices of ,,white plot" is due to the change in average rents on the ground. The correlation coefficient R shows a strong relationship between the average prices of ,,white plot" and the average land rent (.886). It must be assumed that in this case, the average rental prices have a strong influence on the average prices of ,,white plot". The value of Sig. F = 1.67E - 10, is less than 0.05, therefore the relationship is statistically significant (Table 3a).

	df	SS	MS	F	Significance F
Regression	1	2854.639	2854.639	98.49452	1.67E-10
Residual	27	782.5334	28.98272		
Total	28	3637.172			

Source: own calculations

### Table 3 b. ANOVA

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.72299	2.549377	-0.28359	0.778886	-5.953876	4.507905	-5.95388	4.507905
X Variable 1	0.598375	0.060293	9.92444	1.67E-10	0.4746635	0.722086	0.474664	0.722086

Source: own calculations

The interpretation is as follows: The free term a – minus 0.723 shows what the value of y will be if x assumes zero value (Table 3b). In other words, the average price of rent is not affected by the average price of ,,white plot". Rather, the inverse relationship must be sought. The coefficient b – 0.5984 shows the change of the dependent variable y at the 1st change of the independent variable x. The increase of x (in this case the average rent) by BGN 1/da will increase the average price of ,,white spots" by about BGN 0.60 da.

Figure 1 shows the trend model of the relationship between the average price of the "white plot"



Fig. 1. Choreogram of the relationship between the average price of "white plot" and the average rent. Trend model Source: own calculations

The regression equation looks like this:

 $y = 0.5984 \cdot x - 0.723$ , or

Average price of ,,white plot = -0.723 + 0.5984. rent of the land.

### Conclusions

In the Bulgarian model of land use and land ownership, the right of ownership over agricultural land, i.e. the right to use and dispose provokes discussions. Based on regression analysis, the relationship between the change in the average prices of "white plot" and the average prices of land rent was checked. The average price of a "white plot" follows the change in the average rent of land, but with a delay. The average damage to agricultural landowners is 40%. This means that for every potential rent of BGN 100, in case their lands fall as a "white plot", they lose BGN 40.

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