

THE ROLE OF GROUND RENT IN ESTABLISHING THE AGRICULTURAL LAND PRICE

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Abstract

The present paper aims to demonstrate the role that ground rent has in establishing the agricultural land price. In order to be able to prove the connection between the ground rent and the agricultural land price, there are submitted to debate indicators that are part of ground rent such as the positioning of the land, the distance between the land and the access roads and water source, the intrinsic qualities of the land soil, the type of land and the manner of exploitation. The debate is intended to show how and in what manner the indicators part of ground rent may influence the price of an agricultural land. The final purpose of this study is to prove that a justified land price may contribute to encourage the agricultural land transactions and therefore to develop the land market. To fulfil the purpose of this paper it is necessary to understand what land ground means, why it is important the land price and how can the agricultural land price influence the agricultural land market and the development of the agriculture overall. The main methods utilized are collecting, analyze and interpreting data and information from the specialized literature. The conclusions formulated at the end of the study allow seeing the influence of ground rent on agricultural land price, the influence of the agricultural land price on agricultural land market and the influence of agricultural land market on the development of the agriculture.

Key words: agricultural land price, development, ground rent, land market

INTRODUCTION

The importance of establishing the agricultural land value is given by the necessity to fix a right and equitable price of the agricultural land. A right price encourages the land market transactions and furthermore helps at developing the agriculture overall. The necessity to establish the agricultural land value in a state such as Romania, which is characterized by an excessive fragmentation, gets a particular importance. The ground rent, due to its components, may prove as a very useful instrument in establishing the agricultural land value. It is very important to establish a reasonable price for the land both for the owners and buyers. It also helps to protect the owners because the agricultural land owners are suffering a loss when the value of their property decreases. [6]

To understand the role of the land owner it is essential to establish the legal limits. Proprietary right is that subjective right of appropriation which gives expression to a good as allowing the owner to possess, use, and dispose of that property in its own power and self-interest and in compliance with existing legislation. [1]

MATERIALS AND METHODS

In order to highlight the role that ground rent has in establishing the price of the land, it is described the concept of land, its specificity and the ground rent components. The agricultural land is analysed separately according to its use. Also, a comparison between the category of use in Romania and UE 27 is made in order to establish the similarities and differences able to help prove that the components of the ground rent are useful in establishing the land rent. The material of the present paper is collected, analysed and interpreted from speciality studies. The statistical data are collected from the EUROSTAT for the period 2005-2010. [9]

RESULTS AND DISCUSSIONS

The notion of land is found in the definition of land fund through Law no. 18 of 19 February 1991, also called Land Law, republished in the Official Gazette no. 1/5 January 1998 which states that land of all kinds, regardless of destination, the title under which are owned

or private or public domain they belong, is the land use in Romania. [5]

According to the Explicative Dictionary the land is defined as expanse of land area (considered by relief or by its location in space). [4]

Land, in his acceptance of Rogoz Chiva is a free good, which by its characteristics is manifested in two forms:

- Free running condition of production in agriculture, forestry, fisheries, aquaculture, construction, shipping, etc., hypostasis in which is expressed by the notion of fixed capital (means of labor);

- Raw material, labor object of some agricultural and non-agricultural activities, and is identified with the concept of capital. [2]

Agricultural land

According to the definition included in the Law 18/1991 agricultural lands are those lands that make part in the agricultural circuit. These lands are those which are differentiated in the urbanism plan and there are found both in intravilan and extravilan. These lands include:

- productive agricultural land that refers to arable land, vineyards, orchards, vineyard and fruit nurseries, hops and mulberry plantation, greenhouses and solariums, pastures and hayfields and other similar plantation;

- agricultural land with forestry vegetation which refers to forested pastures that are not part of the arrangements of forestry;

- lands occupied by constructions and agrozootechnical installations, fishery facilities, land improvements, technological and agricultural exploitation roads, platforms, warehouse and storage places which aimed at serving the needs of agricultural production

- unused lands that can be landscaped and used for agricultural production;

The mode of use of agricultural land

Depending on the mode of use the land with agricultural destination can be classified:

- Arable land - is the area that is plowed every year or once every several years and is cultivated with annual or perennial plants.

- Pasture – represent land that is completely covered with herbaceous vegetation, installed or naturally regenerated, by seeding, destined

for grazing animals.

- Meadows – represent land covered with grass vegetation, installed or naturally regenerated by seeding, destined to harvesting for the production of hay.

- Vineyards and vine nurseries - are areas with vineyards, nurseries and land preparing for vineyards.

- Orchards and tree nurseries - is the surface occupied with orchards and land preparing for orchards.

At European Union level the following types of land are met:

- Arable land which include cereal crops for the production of grain (including seed), protein crops for the production of grain, industrial crops (tobacco, cotton, soybeans, sunflowers, hops, rape, hemp, other oilseeds, in, herbs medicinal and other plants), fresh vegetables, ornamental plants and flowers (protected by law and inaccessible, cultivated and accessible, fodder plants), other arable crops, uncultivated land.

- Kitchen garden [9]

- Permanent pasture and meadow

- Permanent crops (fruits and shrubs of temperate and subtropical climates, nuts, citrus, olive groves for oil or table)

Vineyards and nurseries (vineyards for obtaining quality wine and another type of wine, grapes and raisins)

- Other permanent crops

- Other types of land which includes unused agricultural land (agricultural land which is no longer used for economic or social purpose, which are not used in the crop rotation system), wooded area and other land (land occupied by buildings, annexes of farms, roads, ponds, land with infertile soils or rocks).

Land use in the European Union is very diverse and depends on climatic zones, geography and culture. Regarding climate zones, land use together with different soil fertility and even once with tradition and culture existing in EU Member States.

Evolution of agricultural land according to the category of use

Agricultural land is different depending on its category of use. Each category of use has a different economic value. The economic value

of the land may be used in establishing the land price. This signifies an equitable trade for both buyer and seller.

Table 1. Agricultural land according to the category of use in Romania

		Romania	
		Surface (thousand ha)	Share in total surface
Utilized	2005	14,815.2	100
Agricultural Area	2007	14,709.3	100
	2010	13,298.0	100
Arable land	2005	9,335.4	63.01
	2007	9,423.3	64.06
	2010	8,305.0	62.45
Kitchen garden	2005	-	-
	2007	-	-
	2010	182.0	1.37
Pasture and meadow	2005	4,812.1	32.48
	2007	4,861.4	33.05
	2010	4,494.0	33.79
Vineyards and nursery	2005	667.5	4.51
	2007	424.6	2.89
	2010	317.0	2.39

Source: www.europa.eu

Table 2. Agricultural land according to the category of use in EU 27

		EU 27	
		Surface (thousand ha)	Share in total surface
Utilized	2005	171,996.200	100
Agricultural Area	2007	172,485.050	100
	2010	172,194.350	100
Arable land	2005	103,599.680	60.21
	2007	103,281.990	59.88
	2010	103,691.230	60.22
Kitchen garden	2005	425.810	0.25
	2007	390.430	0.23
	2010	359.450	0.21
Pasture and meadow	2005	55,970.020	32.54
	2007	55,175.150	32.17
	2010	55,558.110	32.26
Vineyards and nursery	2005	11,178.630	6.50
	2007	10,839.710	6.28
	2010	10,928.290	63.46

Source: www.europa.eu

Regarding agricultural area both at EU 27 and Romania level during the analyzed period 2005-2010 is observed a reduction of it. This fact has meant changes in the structure of the land fund depending on the category of use. Beside the physical diminution of the occupied surface depending on the category of use it can be observed modifications regarding the structure of the land fund.

Agricultural area ranges from 14,815,200 hectares in 2007 and 13,298.0 thousand hectares in 2010 in Romania. To this change in downward, bring their contribution surfaces decreases in all categories of use. In the case of vineyards and orchards is observed a decrease with approximately 50% in 2010 compared to 2005. This is explained by the nature of permanent crops involving

regeneration in a longer period of time compared to the other categories of use.

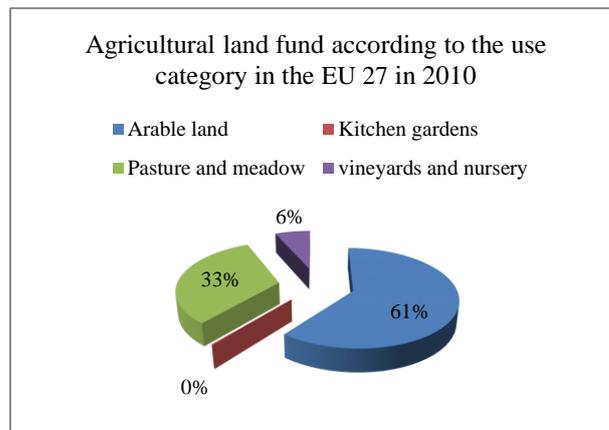


Fig. 1. Category of land use EU 27

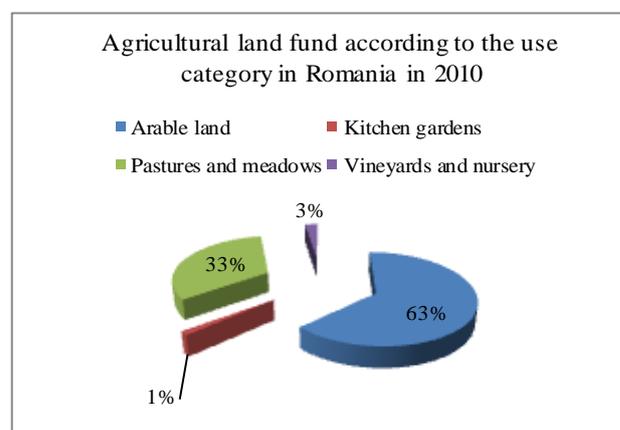


Fig. 2. Category of land use Romania, 2010

The graphic representations highlight the fact that structures regarding the agricultural land fund are similar. Therefore, both in Romania and EU 27 the largest share is held by the arable land with approximately 60 percent of the utilized agricultural area. The second category as share is represented by pastures and meadows with approximately 33 percent in Romania and 33 percent in EU. A percent of 6 for EU 27 and of 3 for Romania is held by vineyards and nurseries. Kitchen garden hold the lowest share, about 0.27 percent in EU 27 and 1.37 in Romania. In the period 2005-2007, in Romania, the kitchen gardens were not included in the structure of the agricultural land fund due to the too small surfaces they held.

Also, in the analysed period 2005-2010 it can be observed that even if the share is oscillating the agricultural land fund remains

the same; there are not registered important changes neither for EU 27 nor Romania.

Differentiation of the agricultural land according to the property structure

Another kind of highlights the land fund structures is differentiation by property structure. Both in Romania and in EU land may be the subject of public property or private property.

Starting with the year 1990, the changes that occurred in the Romanian society by the collapse of land belonging to the former totalitarian socialist state properties have been the subject property as follows:

- Domain of national interest of the country
- Public domain of local interest
- State's private domain. [7]

Private domain consists of property owned by private individuals or legal entities, goods which, irrespective of ownership, are used to produce income and cannot and alienated. [8]

Agricultural land specificities

The agricultural land, same as other types of lands is characterized directly through the territory and ground specificities. Agricultural land is the only stock of which price cannot be established starting from its costs, because this cost does not exist as in the case of other stocks that can be produced these particularities has an important influence on land exploitation and therefore on the obtained results.

Land particularities are as follows:

-Spatial limitation. This particularity is drawn by the limitation bounds imposed naturally, by its own dimensions, which make that agricultural land to be impossible to multiply or replicate as necessary. However, it can be discussed a reduced possibility to increase the agricultural potential (by draining, for example), under the circumstances of progressively reducing the agricultural land due to removal from the agricultural circuit of large areas of land as a result of soil degradation or due to the change of destination use.

Immobile character. The land represents a mean of agricultural production and this fact implies consequences on organizing the production process and requires not only a immobility of others production means but

also a specific utilization, depending on land types. In order to increase the fertility and economic quality it can be discuss about cropping system and crop rotations.

Unlimited productive potential. This particularity imposes a rational use of land in the purpose of practicing some correct agricultural system which are adapted to each type of soil and in this manner the production potential of the land is not consumed and the effects are felt at the level of the increasing the production capacity. An incorrect utilization of the land leads to a progressive exhaustion which reduces the regenerating capacity and has serious implication over the land productivity potential by diminishing the energy and nutritive, organic or mineral accumulated in the soil substance reserves

Requirement to invest the land with labour force (human or mechanical). In order to obtain material goods, beside the utilization value with which it came along, are added mechanical, chemical and biological means work by the instrumentally of labor force that acts on it. The degree of development and improvement of production means, the qualification of labor force which acts on land determines the quality and level of obtained results and efficiency.

Impossibility to replace or substitute represents a particularity because if in the case of others production factors it can be discussed the substitution or replacement, in the case of the land it is known the fact that it is the only one who cannot be changed, produced or multiplied. Therefore in order to fulfil the population necessity it is imposed as primordial condition the preservations and rational utilization of the agricultural land.

Difference of fertility. As consequence of the production process the results may be different. These variations are influenced by a number of factors which targets the natural potential and fertility degree. By the clear defining of the different categories of land, according to their effective capacity of production, on which it is act with correct stimulation means better results can be obtained

Legal personality. This characteristic defines land as a mean through which specific

relations and phenomena can be generated. Therefore, land is considered by legal point of view subject of law, object of property and object of agricultural exploitation.

Elements of ground rent that influence the agricultural land value

In order to understand the changes in the real value of the agricultural land the following elements must be considered:

- The distance from the main road
- The distance from the water source
- Plot surface
- Plot *arrondissement*
- Soil quality and fertility
- Climatic specificity of the region on which the land is positioned
- Utilization and prior results

The distance from the access road. The importance of considering the distance from the access road is given by the facility of exploitation of the land and at the same time reducing the exploitation cost. It is obvious that a land situated at a shorter distance from the access road supposes lower expenses regarding the transportation. This fact marks a higher value of the land and therefore the lands situated in the proximity of the access road have a higher price than the ones situated at a longer distance

The distance from the water source. Considering the specificity of the agriculture and its dependency towards the environmental factors, especially the water, it is necessary to explore the irrigation possibilities of the agricultural land in order to obtain the best results from the exploitation of the land. Therefore, an agricultural land situated at a shorter distance from the water source has a higher value due to the cost required to constructing the irrigation system, which are lower in the case of those situated at a shorter distance. The higher price of the land situated to a shorter distance from the water source is justified by the higher value of the agricultural land given by its exploitation facilitation.

Parcel area. The importance of this element in establishing the agricultural land value is highlighted by the ulterior exploit possibility. On one side, a larger area of land may signify a higher value due to the fixed costs, which are increasing with the decrease of the

surface. But, a larger surface demands a higher price which obligates to the verification of the potential buyers availability to pay that amount of money for the entire surface and considering the decrease price to sell / lease the entire surface.

*The *arrondissement* of the parcel.* This element refers to the land found in the proximity of the parcel for who it's established the value. A parcel situated near lands with similar characteristics offers the possibility of extension in time. Also, if the parcel is found at a reduced distance from the intravilan it is taken into consideration the possibility of transforming the land from extravilan in intravilan.

Qualities and fertility of the soil. The qualities of the soil represent an element of great importance worth to consider in order to establishing the land value due to its influence on the results obtained in agriculture. The fertility of the soil has a higher influence regarding the yields. Also, a higher level of soil fertility implies the reducing of cost with artificial fertilizers.

At the European Union level there are found the following quality of soil class:

Class I: arable land suitable for intensive cultivation where other means of sustaining a high level of production are minimal or absent;

Class II: ordinary arable crops of grain, but who are not suitable for continuous cultivation. It has a large capacity support to agriculture but due to edaphic (soil factors) or environment conditions are reduced the production levels.

Class III: land suitable for grazing and land improvements. These lands can be cultivated or planted pastures wheel. The overall level of output is moderate due to edaphic and environmental constraints such as erosion risk, soil structural breakdown or other factors, including climate. These constraints may limit the ability cultivation and soil conservation. In these lands cases drainage works may be required.

Class IV: land suitable for grazing but not for cultivation. Agriculture in this case is based on native pastures or improved by respecting some minimum soil works techniques.

Production can be seasonal but production levels are decreased due to important environmental constraints.

Class V: land unsuitable for agriculture or more suitable for weak pasture. The agricultural production is very low or zero due to the severe constraints, including economic factors that impede land arrangements.

An additional class that can be used occasionally is the one in which the land has specific characteristics that allow the cultivation of particular species (bananas and other tropical horticultural crops).

Class specialist: land which due to the combination of soil, climate and other features is most appropriate to intensive production or which are suitable for narrow category of crops whose special needs require such a soil culture. This class includes soils that are described as unique.

Classification in quality classes requires knowledge of soil quality and helps determine what crops shall be practice and technologies that are to be applied.

Specificity climate of the region in which the agricultural land is located. Another factor in establishing the value of agricultural land is the climate of the region in which agricultural land is located. Specificity of agriculture, and more specifically its dependence on climatic factors gives a particularly importance to this element in establishing the value of the land area. So a land located in a region whose climatic factors are favorable for practicing agriculture gets a value higher than a land located in a region whose climate factors are less favorable. Explanation from the economic point of view, in this case is explained by the reduction of operating expenses, for example in an area with heavy rain irrigation are less necessary than in an arid zone, consequently lowering the cost of irrigation.

Utilization and previous results. In order to determine the fair value of agricultural land, another important element to consider is the use and results of previous exploitation. Thus, an exploiter can identify potential exploitation opportunities and simultaneously can have a clear vision on how to use the land in question in order to obtain the better results. The

previous results also reflects a subjective side, the results being correlated to the manner in which the exploiter choose has chosen to use his land according to his level of experience and knowledge gained from training in this regard. Due to the evolution of the national economy overall a higher interest should be designated to this indicator. Agricultural production has not been outstanding as a result of what happened in 2000-2008 by reduction in agricultural employment and then its increase by seasonal labor in response to crisis events. [3]

CONCLUSIONS

The elements of ground rent have an important contribution to establishing the value of the land. The elements of the ground rent have a major influence on the results obtained from exploiting the agricultural land and this is the main reason why it becomes so important. A correct value of the land helps to formulate a fair price attractive for the buyer and profitable for the seller. This supports the land market transaction and furthermore the development of the agriculture and rural space overall. The importance of knowing the elements of ground rent that helps to establish the land value is highlighted by the fact that through them can also be discovered a series of opportunities for obtaining better results and also helps to identify the threats and makes easier to find solution for the problems caused by the threats.

The role of ground rent in establishing the value of the land is essential in a country such as Romania characterized by an excessive fragmentation of the agricultural land.

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