# CONSIDERATIONS CONCERNING THE VALUATION AND ACCOUNTING OF AGRICULTURE COMPANY LAND

**BĂNUŢĂ MARIANA**[1]
[1] ***University of Pitesti, Pitesti, Romania, e-mail: mari.banuta@yahoo.com***

***Abstract:*** *Land is one of the most important assets that form the material resources of business entities. For this reason I deemed that it is necessary to present the value attributed to land in accounting at the for specific moments. In my opinion more complex problems occur concerning land valuation when it is contributed to capital, when it is received for free, when one chooses to record it in the balance sheet at the fair value determined following the revaluation and when the overall value of the company is assessed, as it represents one of the assets of the company. The land valuation is a complex process, performed by specialists trained in the real estate valuation field, which involves, in many cases, resorting to specialists from other fields. The article presents the land valuation methods and their applicability, depending on the purpose of the valuation and its characteristics. The article is focused on the valuation of land owned by agriculture companies.*

***Key words****: valuation, land, valuation approach, valuation methods, accounting, International Valuation Standards (IVS)*

## INTRODUCTION

This topic arouses permanent interest, mainly derived from the fact that real estate owners (legal entities or natural persons), potential investors, insurance companies, financial and credit institutions, in other words the beneficiaries of the valuation services, are increasingly interested in the value of real estate and implicitly land. Land value is an economic concept, which is born in the mind of the person who is to pay a certain price for the purchased property, while the price is formed freely by negotiation, depending on the supply and demand. Thus, land is part of the fixed assets within the assets owned by the entity and are those assets owned by the company in order to be used in the production of goods or provision of services, to be rented to third parties, or to be used for administrative purposes and are used throughout a period longer than one year.

As shown in specialized studies (Anghelache, C.,2013), Romania is one of the countries with a strong agrarian character, among the European Union countries. This does not implicitly mean there is a corresponding contribution of agriculture to the GDP formation, or, all the more so, a high level of efficiency, as level of productivity resulted from comparing the sector with other sectors in our economy, as well as with yields in various crops and animal species recorded in the other EU countries. The work presents the method of valuating land, in general, highlighting the peculiarities of agriculture company land valuation.

## MATERIALS AND METHODS

The objective of any type or research, the objective of any type of research, including in the valuation and accounting fields, is the systematic investigation of a problem by using professional reasoning in all the phases of the investigation. In this article, the research is theoretic and applicative. It aims at investigating the valuation and accounting of land owned by trading companies, including agriculture companies. Research methods in accounting information systems can be classified according to various criteria, but the most important criterion is the distinction between quality and quantity research methods. This article is based on quality and quantity research methods (the research of the practice in the field, examination methods and measurements of phenomena), and the data sources used

are: the observation of phenomena, documents and texts, researcher's (author's) impressions and reactions).

## RESEARCH RESULTS

Agriculture is the branch of the material production whose object is represented by crops and livestock in order to obtain food products and raw; all the works and methods used for this purpose (Institutul Naţional De Dezvoltare Profesională Continuă - the National Institute for Continuous Professional Development, 2012). The volume, structure and manifestation of these resources in the process of their use distinguish agriculture from other branches of the economy. Agricultural activity is, according to IAS 41 "Agriculture", he management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets. Companies that carry out activities in order to obtain agricultural and food products are currently referred to as units, farms, or agricultural entities. The concept of agricultural unit has a broad sense, denoting any entity which obtains agricultural products. The agricultural unit (Bănută, M., Rădulică, M., 2014) is the place where the farmer combines production factors in order to obtain agricultural products. The farmer can use **land** as landlord, lessee, manager or entrepreneur.

Accounting land valuation (including the accounting of agriculture companies) is necessary when the company owns that land. The value of the land in accounting is influenced by the accounting regulations in the field. For example, currently, in Romania, in the case of trading companies, two different accounting references are applied:

- Unlisted agricultural companies apply, from the financial year 2015, the accounting regulations stipulated in Order no. 1802/2014 approving accounting regulations on annual individual financial statements and annual consolidated financial statements;
- Listed agricultural companies apply, from the financial year 2013, the International Financial Reporting Standards (IFRS), regulated by Order no. 1286/2012, of the Minister of Public Finance applicable to trading companies whose securities are admitted to trading on a regulated market.

I will highlight the main values given to land in accounting, depending on the moment of their valuation.

**a) The value determined in the moment of the first recognition**, or on the date when it **enters** the entity is called book value (or entry value) which is determined as follows:

- If it is purchased, the land acquired for good and valuable consideration is valuated at the purchase value, also referred to **as purchase cost** which is equal to the purchase price, non –recoverable taxes, as well as all the direct expenses related to the purchase;
- Land representing contribution to the equity capital of the entity is valuated at its **contribution value** determined following the valuation process, carried out in compliance with the laws in force;
- Land obtained free of charge is valuated at **fair value** (determined following the valuation process, usually carried out by specialized valuators).

**b) Land valuation in the moment of its recognition** or when it **exits the entity,** is made, in general, at its entry value, which means writing it off.

**c) The valuation of land on the occasion of the inventory** is made at the (current) inventory value, determined according to the utility of the goods, its condition, and the market price;

**d) Land valuation when the financial year is closed** or the valuation of tangible assets in the balance sheet is made at the entry value, or the book value reconciled with the results of the inventory (the net book value entered in the balance sheet, VNC = entry value – depreciations and adjustments for depreciation or value loss. I am mentioning that the land in itself is not depreciated, unlike land improvements). Under the alternative valuation regulations, provided in the accounting provisions in force, entities may proceed to the revaluation of tangible assets, and thus to the revaluation of land existing at the end of the financial year, presenting the results in the accounting records. Tangible assets revaluation is made at **fair value** on the day of the balance sheet, the value usually set by specialized, authorised valuators.

In the analytical accounting, land can be highlighted in the following sub-categories: agricultural land, forest land, land without constructions, land with deposits, land with constructions, and others. In my opinion, in the accounting of agriculture companies, most of the above-mentioned types of land can be identified. Depending on the purpose and use of land in the operating activity, it can be accounted for either in the "Land" category (account 211 Land and land improvements), or in the "Real estate investments" (account 215 Real estate investments). The real estate investment is a property (land or a building) owned for incomes from rents or to increase the capital value, or both, rather than to be used for the production or supply of goods or services, or for administrative purposes, or to be sold during the normal course of the activity.

In my opinion, there are moments when the accountant of an economic entity cannot determine the land value for the accounting records, without resorting to a professional valuator, for example: when land is brought as contribution to the equity capital, when it is received free of charge, for the determination of its current value on the occasion of the inventory, for the determination of the fair value if a revaluation is made. Land valuation is also necessary on the occasion of the overall valuation of the company, if the asset-based approach is applied (the value of the company is determined using the Adjusted Net Asset method – and the total debt amount is deducted from the sum of the asset marked value, which includes land).

**The valuation mission can be performed** only by authorised valuers. The competent authority, which organizes, coordinates and coordinates the authorised valuer activity in Romania and represents the interests of the authorised valuer profession, both at national and at international level, is Asociatia Natională a Evaluatorilor Autorizati din România (National Association of Authorised Romanian Valuers) – a non-profit legal entity, of public interest. The valuation mission is based on the compliance with, and application by the valuator, in addition to the principles and provisions of the code of professional ethics, of the provisions of the international valuation standards, starting with 2004. The International Valuation standards (IVS) issued by IVSC [1], and reviewed on a regular basis, aim at setting principles and procedures related to the valuation mission field, the implementation of the valuation and its reporting, thus harmonising the general valuation rules. ANEVAR develops national valuation standards (under the name of SEV) and methodological valuation guides (under the name of GEV) which include recommendations concerning the professional practice and ethics cumulated so far in

[1] IVSC coordinates the activity of International Valution Standards Board (IVSB), which develops international valuation standards and which, together with the IVSC council, sets valuation methods and techniques specific to various types of assets and liabilities.

Romania, in valuation, and take into account the provision of their compatibility with the European standards -EVS, and the international ones, IVS.

The valuator can be called to valuate land without improvements (used in agriculture, for development or not), the valuation of land which is a site (and therefore has interior and exterior improvements) or to valuate the land component of a built property. The valuator's objective is to find the use that will maximize the value of the property and implicitly, the land value.

The following elements are considered in the valuation of land or of a site:

***A. Physical characteristics of the land***

These are: the size, surface, form, location, topography, access to utilities, corner influence, local weather conditions. The land size, surface and form are presented in land parcel maps and it is useful to be identified by the valuator on site, with the help of a professional geodesist or topographer.

***B. Location***

Land analysis from the perspective of its location takes into account the purpose of the building or the use and condition of the land (with or without improvements).

*The topographic analysis* is useful in determining the site characteristics. For example, making a foundation on sloping ground implies additional anchoring costs. The same is also applicable for land subject to infiltrations caused by the proximity of ground water or natural moisture in excess.

*The access to the utilities* have a significant influence on the value of land which is to be the location of buildings.

*The corner influence* can be advantageous for land located at a high traffic street intersection if a building will be erected on it for commercial purposes, or can be a disadvantage if the building is erected for residential purposes.

Other information is also required: *soil and subsoil characteristics*, *the corner period* (a technical notion used in the earthquake engineering which is the period of time between two successive earthquakes).

Several methods are used for land valuation, their applicability being different, depending on the estimated value and information available (Dragotă, V., Dumitrescu, D., Ciobanu, A., 2002). The valuation standards define, use and recommend for land six valuation methods, which are, at the same time, the best practice.

**Table no. 1**

**Land valuation methods**

| ***Direct comparison method (sales method)*** |
|---|
| This method *is applicable for valuation of free land or which is deemed free* for valuation purposes. The information concerning similar plots is analysed, compared and adjusted depending on similarities and differences. In the comparison process, the following aspects are considered:<br><br>a. The transferred ownership right (its completeness if verified);<br>b. Finding conditions (the trading method– cash, carry, or attracted sources);<br>c. Conditions of sale;<br>d. Market conditions;<br>e. Legal restraints (the best land use implies, first of all, to be allowed by the law to use it for a certain purpose;<br>f. Physical and geotechnical characteristics;<br>g. Available utilities (land improvements); |
| ***Method of the allocation proportion*** |

This method is based on the balance principle, indicating that there is a typical ratio between the value of the property and the land value, for certain properties and certain locations. The assessment is rough because expensive or cheap buildings can be erected on plots with an equal value. This *can be used to estimate land value when the number of transactions is very low or no transactions are made.*

**The extraction method**

This is a relatively simple technique, *applicable especially to constructions in the rural environment*, consisting in the extraction of the land value from the property price, by deducting the building price, taking into account the tear and wear, from the total value of the property.

**The plotting method**

This method is recommended for the valuation of land for which CMBU (the best use) is the plotting, and is characteristic to big plots. Real estate development by plotting creates a value additional to the value of the agricultural land.

**The residual method**

This method is used when the data or information available concerning the similar free land is not sufficient. The final assessed value is closer to reality if the value of the construction attached to the land and the net income generated by the property can be assessed more accurately, and the capitalization rates, for the land as well as for the building, can be extracted from the market.

**The ground rent capitalization method**

The rent is defined as being the amount paid for the right to use and occupy the land. It is applied if there is information from the renting market, related to rent and rate. The ground rent capitalization method is adequate especially in the case of the valuation of agricultural and rented land.

I will exemplify the assessment of the value of agricultural land using the ground rent capitalization method, the purpose of the valuation being to know the land price offer, as an agricultural company is interested to buy it.

The ground rent capitalization method provided in the "International Valuation Standards 1, namely –GN 1, in chapter "Land valuation methods", where it is mentioned that "land can also be valuated by the ground rent capitalization method", by means of the formula:

$$Vt=[R(rent)x\ 100]/Cc$$

Where: Vt= value of a hectare of land,

R = annual ground rent per hectare,

Cc= capitalization coefficient (approximately equal to the interest rate).

Cc<at least 0.5% of the interest rate for the most stable bond issued by the government;

For example, if the agricultural land for which the offer is made has a surface of 15 hectares and the rent is 450 RON per hectare, at a capitalization coefficient of 5.4%, the value of the agricultural land will be:

Vt (value of a hectare of land) x15 =8334 x15 =125 010 RON

where Vt=[R(rent)x 100]/Cc=450 /5,4%=8334 RON

## CONCLUSIONS

Agricultural company land valuation is necessary both in the accounting, as well as for other purposes, for example the overall company valuation, setting a selling/purchase price, etc.. In my opinion, there are there are moments when the accountant of an economic entity cannot determine the land value for the accounting records, without resorting to a professional valuator, a specialist authorised to carry out such missions.

Given that agricultural companies can own various types of land, with different characteristics and utility, I believe that all the methods used for the valuation of land mentioned in this article are adequate for the valuation of agricultural company land valuation. From the methods presented in this article, agricultural lands can be best valuated through the direct comparison method, the plotting method, and the ground rent capitalization method. In addition to the methods presented in this paper, I am mentioning that other agricultural land valuation methods can also be used. For example, administrative methods – regulated by laws in force which compel the expert to observe them, an aspect clearly stated in the application of the International Valuation Standards (IVS)- one of the normative acts regulating the assessment of agricultural land value is Government Decision no. 1546/2004 –approving the Methodological norms on the assessment of the arable and forest land value, the financial sources and the methods of payment to former owners. At the same time, it is deemed that the profit-based method of determination of the land value highlights the real value of agricultural land in Romania, but it is conditional upon the accuracy of the processed data, which result from the compliance with the factors of the agricultural production.

## REFERENCES


1. **ANGHEL,** I. (coord.), 2010, Evaluarea întreprinderii, Editura Economică, Bucureşti;
2. **ANGHELACHE, C.,** 2013, România 2013. Starea economică sub povara efectelor crizei, Editura Economică, Bucureşti;
3. **BANUȚĂ MARIANA, RĂDULICĂ MARILENA**, 2014, Aspects of the stock valuation and accounting in agricultural units in Romania, Scientific Bulletin, Economic Sciences,Vol. 13 (2)/2014,http://economic.upit.ro/repec/pdf/2014_2_11.pdf ;
4. **DRAGOTĂ, V., CIOBANU ANAMARIA., DUMITRESCU DALINA**.,2002, Evaluarea întreprinderilor, Ediţia a II-a, Editura Economică, Bucureşti;
5. **STAN, S., ANGHEL, I.,** 2013, Evaluarea întreprinderii, Ediţia a cincea revizuită, Editura IROVAL, Bucureşti;
6. **TOMA, M**., 2011, Iniţiere în evaluarea întreprinderilor, Editura CECCAR, Bucureşti;
7. **Institutul Naţional De Dezvoltare Profesională Continuă**, 2012, Ghid de aplicare a reglementărilor contabile naţionale în domeniul agriculturii, Editura CECCAR, Bucureşti;
8. http://pifca-aef.ro