

## THE IMPACT OF WORLD EVALUATION STANDARDS ON ASSESSMENT OF AGRICULTURAL PROPERTY IN UKRAINE

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*Analyzed the basic principles of the assessment of agricultural property within the major world evaluation standards and their impact on evaluation standards in Ukraine..*

**Keywords:** *real estate, property, agriculture, property appraisal, assessment standards.*

### **Problem statement.**

At this stage of Ukraine's way to more economically developed countries one of the steps to improve the functioning of the economy is to introduce a full market of agricultural land. It is obvious that one of the conditions for the transaction of sale of agricultural land is their previous economic and monetary assessment, based on data supply and demand in the market.

It's very important is the study of global trends assessment of agricultural property, which can then become the basis for valuation of agricultural land in Ukraine.

### **Analysis of recent research and publications.**

Research in the field of real estate valuation in Ukraine and abroad in re-

cent years engaged in V. Kucherenko, A. Zakharchenko V. Tokar, V. Ulybina, E. Horoshayev, N. Smentyna.

In the field of land evaluation study carried out recently D. Dobriak, V. Zajac, A. Martin, A. Koshel, V. Smolyak.

**The purpose of the article.** The article is an analysis of the main international standards assessment of agricultural property, their comparison with the evaluation system in Ukraine and suggesting ways to develop agricultural property assessment based on international experience.

### **The main material.**

In 2002, as part of the World Bank Program an American organization «The Appraisal Foundation» conducted comparative characterization of 7 international valuation standards, namely:

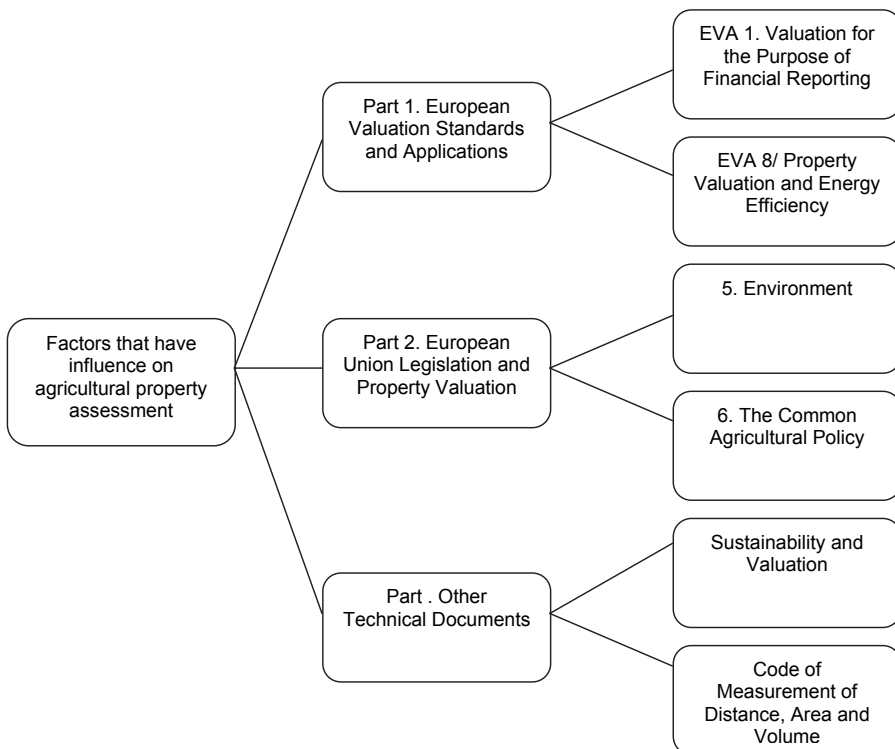
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- International valuation standards;
- Universal standards of professional appraisal practice;
- Standard Chartered Institute of Certified Appraisers;
- European valuation standards;
- Australian Institute of Standards ownership;
- Malaysian valuation standards;
- Singapore assessment standards [5].

For an effective comparison of the Ukrainian valuation standards with world standards, authors consider to choose ones that are individually distinguished in its structure real estate valuation for agricultural purposes, namely European standards of assessment and Australia and New Zealand (Australian Institute of Standards ownership).

It should be noted that the lack of separation of agricultural property assessment in other international standards is not evidence of their incompleteness or imperfections. On the contrary, agricultural real estate is estimated at the level with other types of real estate, but carefully elected evaluation framework and methodological approaches to evaluation.

**European standards for evaluation** in paragraph 1 section 1 EVA (Valuation for the Purpose of Financial Reporting.) link to International Accounting Standards (IAS) that set apart agricultural property as one that has features scores in one form or another. Although the standard IAS 41 (Agriculture) indicated that most farms do not require special



**Fig. 1. Sections of European Valuation Standards where there are characteristics that influence the assessment of agricultural property [1].**

requirements when assessing agricultural property, so it can be assessed using standard IAS 40 (Investment Property) or IAS 16 (Real Estate, Plants and Equipment), depending on situation. This includes growing crops for the production or conversion to other crops.

If the area is grown in of annual crops (wheat, potato) or perennial plants, they are classified as biological assets and should be valued at fair value. This cost will be lower when selling these crops separately from land.

The standard IAS 41 states that the assessment of areas of crops is difficult task and appreciates the different measurement in similar situations, including those based on the distribution of income or the value of land sales with existing crops. Also indicates that the inability to determine the fair value of the property recommended base price.

The next thing that has some impact on the assessment of agricultural property is a standard EVA 8 (Property Valuation and Energy Efficiency), which states that some farm buildings (non-residential c-d buildings with low energy demand, pig, poultry) may require certificates of energy efficiency. Such certificates are necessary for real estate, built, sold or rented, and for buildings intended for public use. However, this is not a set standard and is specific to the European countries.

Section 5 (Environment) of Part 2 (European Union Legislation and Property Valuation) indicates that the Nitrates Directive in 1991 identified ways to deal with water pollution by nitrates in agricultural areas by implementing «Good agricultural practice». These measures also affect the value of land defined as «dangerous» for water pollution by nitrates.

In Part 2 of EVS section 6 (The Common Agricultural Policy) states

support the Common Agricultural Policy of the EU farmers produce, especially meat and dairy products and crops grown which in turn increases sales and rental value of land, used in the aforementioned activities.

In addition, as part of CAP there are funds for: the development of rural areas under pressure, agri-environmental schemes and measures to strengthen and expand the economy of rural areas. This, of course, affects the assessment of land falling within the above categories.

As part of EVS in Section 3 and Sustainability and Valuation, stated that at this stage applies Ecosystem Assessment, which determines the value of certain natural resources, which include the territories for agricultural land.

Nevertheless, the assessment of ecosystems differs from the standard economic methods of valuation of real estate and is usually based on an eco-landscapes and assumptions about the cost.

Section 3 of the (Code of Measurement of Distance, Area and Volume) indicated that among the determination of the value of land, topography influences that affect the use of land in a particular area of production [6].

On standards developed by **The Australian Institute of Property**, it should be noted that the structure of the document present section common to Australia and New Zealand, as well as separately for both Australia and New Zealand.

Part 8.10 (Valuation of Agricultural Property) of Valuation Guidelines present a separate section devoted to assessing agricultural property, which is common to Australia and New Zealand. This section shall include recommendations for the assessment of agricultural property. The factors that affect the determination of the value of agricultural property are shown in Figure 2.

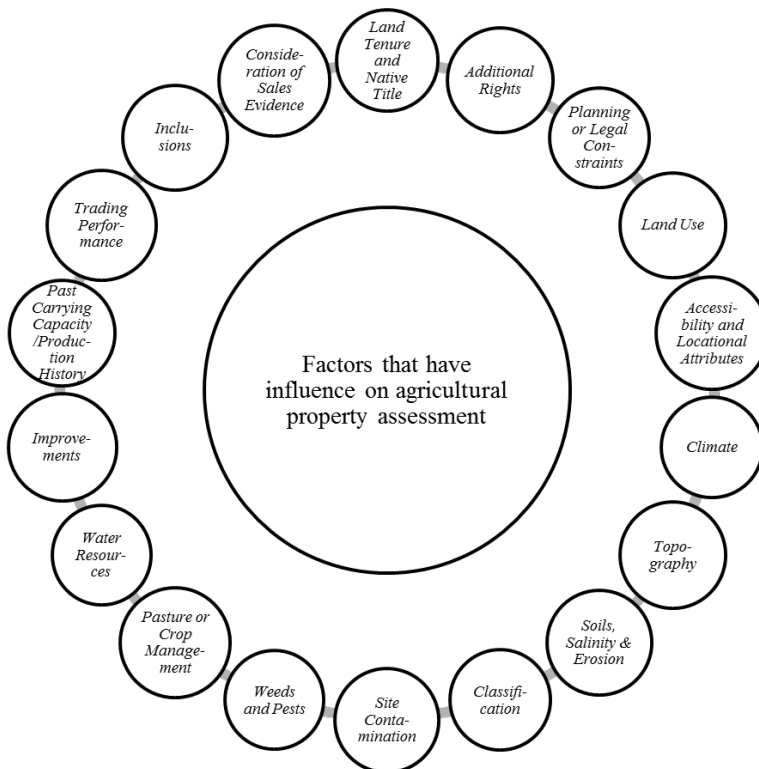
In the paragraph of *Land Tenure and Native Title Rights*, we recommend to take into account the shape of land parcel and the fact that the parcel can be provided for use by the local authority. In the latter case assessment should be classified accordingly, given that such a right of use has no market value.

For *Additional Rights*, here we mean any additional rights to the partial use of land, such as rights to irrigation/drainage, excavation, mineral resources and more. Usually the rights to mineral resources not included in the valuation of land, unless they know the exact or possible availability.

Examples of *Planning or Legal Constraints* that also affect the cost of land, include:

- prohibitions on subdivision
- prohibitions on construction of dwellings
- coastal and landscape protection policies
- forest or conservation reserves
- emissions
- water use
- effluent disposal and leeching
- possible need for planning approval of change in agricultural useage in some jurisdictions.

As for the *Land Use*, in this case indicates that the current form of land use is not always the best and most effective that should be considered in the assessment of the land. Examples are: grazing on land that is more suitable for afforestation; dry pasture on land with ac-



**Fig. 2. Factors by Australian Property Institute, which influence the assessment of agricultural property [1].**

cess to water needed for irrigation in the cultivation of cereals; transformation of pastures into more intensive agricultural production, such as gardening.

Under the *Accessibility and Locational Attributes* meant its proximity to social services and transport infrastructure, if we consider the agricultural land as a place for living, farming or appeal.

As Australia and New Zealand are in a place where there are various long-term adverse *Climate* (rains) that affect the productivity of agricultural land, the buyers are mostly consider it necessary to include a description of the climatic conditions in the report on the evaluation of real estate.

*Topography* can have a significant impact on productivity and, consequently, the value of agricultural land. These factors are: latitude, altitude, orientation on the compass, access to water, resistance to flooding, slope, continental or coastal locations. In addition, flooding can have significant consequences in terms of reducing performance by flushing the top layer of soil, water erosion, loss of equipment, products or animals.

However, the impact of flooding depends on the form of use of agricultural land. It can bring great harm to crops, at a time when pastures are affected by the floods much lesser.

The recommendations on *Soils, Salinity & Erosion* stated that in determining of the value of agricultural land have a direct impact on soil profile, soil salinity as a result of excessive irrigation, groundwater level, soil erosion. The appraiser should indicate existing soil conditions and their impact on agricultural production in the existing form of land use to the owner to carry out measures to deal with the negative consequences of the existing soil conditions.

*Classification* is a major factor in the assessment of agricultural land. General classification of agricultural land based on the form of land use and includes land for horticulture, arable land for intensive and extensive grazing, natural shrubs, preserved land etc. In addition, factors such as zoning, access to water sources, easements are taken into account in determining potentially the best and most efficient use of land. The appraiser should apply consistently land classification to analyze reasons sales area and assess its value.

Some agricultural land uses are causing *Site Contamination* areas that require appropriate pollution control or recovery areas. Examples of components of agricultural activities that may cause a threat of pollution include: sheep, cattle, wastewater, chemicals that existing fertilizers, pesticides, fungicides, fuel storage tanks, landfills, plant disease and animals. The appraiser must consider the impact of existing or possible causes of contamination of surrounding areas and cover it in property value, respectively.

Of great importance are also methods to deal with Weeds and Pests. The presence or absence of such methods should be validated by natural conditions, which in turn has an impact on the value of agricultural property.

*Pasture or Crop Management* with cultivation of crops has a significant impact on determining the value of agricultural property as unmediated impact on productivity of agricultural land.

*Water Resources* are of great importance in the management of agricultural activities. If water provided by the owner of the land it can be considered as a private property. In this case, it is a significant advantage in determining property value. In addition, the need for agricultural activities without available of

water supply sources, it is necessary to conclude an agreement on the supply of water, which also affects the value of agricultural property.

The added value of Improvements is an important factor in the assessment of agricultural land. Typically, the cost of land is actually remarkable when assessing agricultural property, but also assessment of improvements can be significant.

The cost of land improvements, however, is limited to the degree of economic and functional obsolescence. Appraisers should do a thorough study of the effect of land improvements in agricultural activities.

*Past Carrying Capacity or Production History* and the volume of the previous performance can greatly help in the evaluation of agricultural land in terms of their performance, despite the fact that productivity often depends on climatic conditions and forms of management of agricultural production. In assessing of the production history is recommended to take into account the following parameters:

- comparison of long term averages to recent productivity may indicate a decline or improvement in soil quality or farm management practices
- long term averages may be useful as a form of direct comparison with sales evidence on a productivity basis (eg rates per dry sheep equivalent)
- the life cycle of trees and yields from orchards or other intensive agricultural operations
- the sustainability of the current use of the property and potential to be used for alternative uses

In general, most agricultural property is assessed based on a comparison of the prerequisites for sales, but in some cases past and/or current Trading Performance may be relevant in determining the mar-

ket value of specialized farms. For example, if the current market conditions are estimated at poultry farm net income will cover the cost value of the company only in the near future. In this case, such an assessment is not appropriate for the purposes of determining the value for mortgage lending should therefore be made on other approaches.

In assessing agricultural property can also determine the value of other assets (*Inclusions*). For example, biological asset (crops, animals, timber) types of real estate such as: equipment, irrigation and drainage systems, plants, movable property, etc. In assessing such assets evaluators recommended to follow the next classification to avoid confusion:

- Land resources;
- Improving the (real estate);
- Biological assets;
- Movables.

The presence of the above factors, which may affect the determination of property value agricultural land, may or may not be reflected in the value of land.

Usually analysis of Consideration of Sales Evidence of agricultural property includes an analysis of the cost of land per hectare, value added improvements Performance [4].

Turning to the **assessment of agricultural property in Ukraine**, is to focus on that market agricultural land actually closed due to a full moratorium on sale of most of agricultural land.

As for determining the value of agricultural land, it is obvious that the market value determined on currently impossible. But according to the Resolution of Cabinet of Ministers of Ukraine «On approval of a national standard №1 «General principles of property valuation and property rights»» № 1440 from 10.09.2003 in Ukraine, as in most developed countries it is possible to deter-

mine non-market value of the property. Paragraph 20 of the Regulation specifies that *non-market types of value as a base assessment determined using valuation methods and procedures based on an analysis of the utility or **purpose of the assessment** and study of the effects of the use or method of alienation of assessment [2].* To the authors, this article has a direct impact on the rules of property valuation of the land for agricultural purposes.

According to Paragraph 51 of National Standard №1 “General principles of property valuation and property rights” valuation generally carried out in the following sequence:

1. contract for valuation;
2. familiarization with the object of assessment, collection and processing of data and other information necessary for evaluation;
3. identification of the assessment and related rights, analysis of possible restrictions and caveats that may accompany the process of evaluation and use of its results;
4. selection of appropriate methodological approaches, methods and evaluation procedures that best correspond to the purpose of evaluation and selected basis set out in the contract for the evaluation and their application;
5. coordination of evaluation results obtained using different methodological approaches;
6. making a report on the evaluation of assets and the conclusion of the assessment value on the valuation date;
7. revision (actualization) of the report and conclusion on the value of the assessment on the new date (if necessary) [2].

Given the fact, that this standard does not indicate any features in assessing agricultural property, we can conclude that

the main difference between the assessments of agricultural property is the 4th point of evaluation sequence.

Cabinet Resolution №1442 from 28.10.2004 «On approval of a national standard №2 «Real Estate Valuation»» the peculiarities of methodological approaches used in determining the cost of items such as: land (or parts thereof) that do not include land improvements, land (or parts thereof) containing land improvements and land improvements [3]. These approaches may be used in evaluation of the property for agricultural purposes. The basis for this conclusion is the comparison of National Standard №2 of Ukraine and section «Assessment of Agricultural Real Estate» of Australian Institute of Standards ownership.

In addition, Paragraph 24 of the National Standard №2 noted that *for the assessment of land used as farmland, gross income to determine the rental value calculated based on the analysis of the dynamics of a typical harvest crops (...) and prices of its implementation on the market. The costs taken into account when determining rental income include production costs and profit producer, which is typical for the regional market [3].*

Also, according to the authors, since the valuation of real property can be used as one or several methods for determining the value, the cost approach, under Paragraph 6 of National Standard №2, which is appropriate to use in assessing the real estate market of sale which is limited (...) [3], is extremely important in assessing agricultural property under the conditions of the moratorium on the sale of agricultural land.

Considering that most of distributed land in Ukraine is leased, the assessment of agricultural land may use the income approach or method of direct capitalization. Under the income approach gross

income can be calculated based on the assumption of the assessment of the provision in the lease [3]. But according to the method of direct capitalization forecasting gross income is based on the analysis of the information collected on the lease of such property for the purpose of analyzing the terms of the lease [3].

### **Conclusions.**

Ukrainian national standards for real estate appraisal largely meet world valuation standards. Considering the features that are available on the market for agricultural real estate at the time, namely a moratorium on the sale of agricultural land, according to the authors, it would define guidelines on the assessment of agricultural land under existing standards.

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**Аврамчук Б. О.**

### **ВПЛИВ СВІТОВИХ СТАНДАРТІВ НА ОЦІНЮВАННЯ СІЛЬСЬКОГОСПОДАРСЬКОЇ НЕРУХОМОСТІ В УКРАЇНІ**

*Проаналізовано основні принципи оцінки сільськогосподарської нерухомості в рамках основних світових стандартів оцінки та їх вплив на оціночні стандарти в Україні.*

**Ключові слова:** *нерухомість, нерухоме майно, сільське господарство, оцінка майна, стандарти оцінки.*

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**Аврамчук Б. О.**

### **ВЛИЯНИЕ МИРОВЫХ СТАНДАРТОВ НА ОЦЕНКУ СЕЛЬСКОХОЗЯЙСТВЕННОЙ НЕДВИЖИМОСТИ В УКРАИНЕ**

*Проанализированы основные принципы оценки сельскохозяйственной недвижимости в рамках основных мировых стандартов оценки, а также их влияние на оценочные стандарты в Украине.*

**Ключевые слова:** *недвижимость, имущество, сельское хозяйство, оценка имущества, стандарты оценки.*