

Anastasiia Nevesela¹

Aspects of Agricultural Real Estate Management in the Value Approach in Ukraine

Abstract: The paper discusses aspects of agricultural real estate management according to the value approach in Ukraine. The paper also characterises agricultural lands in reference to their soil classes and acreages. It also discusses the term of tenancy as one of the forms of management of agricultural real estates. The procedure of the determination of the value of agricultural real estates in Ukraine has been also discussed. The paper also presents the conditions of agricultural lands in Ukraine, their acreages and the amount of lands owned by the state and by private owners. The procedure of leasing agricultural lands has been also described.

Keywords: agricultural lands in Ukraine, agricultural land market, leasing of agricultural lands, value of agricultural real estates

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¹ Warsaw University of Technology, Faculty of Geodesy and Cartography, Warsaw, Poland, email: anevesela01@gmail.com

1. Introduction

Even before the appearance of any production area, man had mastered agriculture, the most available and required to sustain life of humans. Regulations of agricultural conditions in reference to farming and acquisition of lands has been started. Agricultural reforms became one of the basic tools of state policy, directed towards solutions to economic and political issues in different countries, including forms of ownership of agricultural real estate, the property structure and use of lands.

2. Characteristics of Agricultural Lands in Ukraine in the Spatial and Property Approach

Agricultural lands play an important role in the structure of the Ukrainian fund of lands; they are closely related to the sphere of agricultural production.

Following Article 22 of the Land Code of Ukraine of October 25, 2001:

Agricultural lands include lands allocated for agricultural production, carrying out agricultural scientific research and training activities, placing relevant production infrastructure or designated for these purposes, including wholesale agricultural markets [1].

Ukraine is divided into 24 regions (oblasts) and the Autonomous Republic of Crimea. The size of the country amounts to 60,362,800 hectares. Agricultural lands occupy 41.5 million hectares (or 68.7% of the entire country). Arable lands cover 32.5 million hectares or 78.4% of all agricultural lands. Compared to other European conditions, Ukraine agricultural land use amounts to approximately 19% and Ukrainian arable lands – approximately 27%. The same factor does not exceed 35% in developed European countries (ploughed areas) (Fig. 1) [2].



Fig. 1. Division of Ukraine into districts

Ukraine is one of the states where chernozems cover between 15.6 to 17.4 million hectares, totalling 8% of the entire area [2].

Property relations have been formed in Ukraine in reference to agricultural lands since 1991; it is one of the most problematic issues of the state agricultural policy. The legal act "On the land market" was adopted as the answer to those problems; it will allow to formulate legal basis for introduction of the agricultural land market. The forecasted price of one hectare of land in Ukraine amounts to \$1100, while in Poland it is \$8000.

Considering the lack of the market, which exists in Ukraine, the price of lands is calculated using the formula:

$$V_{\text{land}} = \frac{P_{\text{land}} - (Pr_{\text{abs}} + I_{\text{dif}})}{R} \quad (1)$$

where:

V_{land} – the value of lands,

P_{land} – the price of lands,

Pr_{abs} – the absolute profit from lease (i.e. the amount obtained by the land owner, independently on the soil fertility and location),

I_{dif} – the differentiable income from lease (it is an amount additionally paid for exceptional soil features (chernozems) and valuable location close to sales markets,

R – the real interest rate (is the nominal interest rate corrected for the level of inflation – in the Ukrainian legislation, it is set as 3.3% annually).

Prices of agricultural lands in Ukraine are the lowest in Europe; however, they will grow when the land sales market opens (Tab. 1, Fig. 2) [3]. These are conclusions drawn by economists basing on the analysis of the dynamics of prices after the elimination of the prohibition of selling agricultural land in Central and Eastern European countries [3]. For example, the market for agricultural land in Bulgaria started to grow at the end of the 90's. It was relatively underdeveloped until 2004 and the prices of the agricultural land were extremely low. Currently, the legal framework and infrastructure of the market for agricultural land is modern and stable and fulfills all requirements of the European Union. The well-functioning land register, records services and notary offices guaranty the safety of real estate property deals execution, including transactions with agricultural land [4].

Agricultural reform has been conducted since 1991 in Ukraine; it was completed in 2000. As a result, 7 million Ukrainian citizens acquired the right to privatise 28 million hectares of agricultural lands. However, due to the lack of modern regulatory tools, a moratorium on selling agricultural lands was introduced as early as January 1, 2002 [5].

According to this moratorium, owners of agricultural lands were forced to give back their leasehold shares for much lower prices than in other European countries, although the quality of Ukrainian chernozems is a highly respected “brand”. On the other hand, lessees are not motivated to perform long-term investments, such as the development of an expensive water melioration system or setting aside of lands.

Table 1. Variations of prices of agricultural lands in selected European Union states

| | Poland | Romania | Bulgaria | Lithuania |
|----------------------|--------|---------|----------|-----------|
| Initial | 1310 | 1000 | 1150 | 390 |
| 1 st year | 1464 | 972 | 1202 | 406 |
| 2 nd year | 2051 | 1408 | 1595 | 536 |
| 3 rd year | 2388 | 1500 | 1519 | 734 |
| 4 th year | 3210 | 1727 | 1420 | 831 |
| 5 th year | 3668 | 1891 | 2092 | 1075 |
| 6 th year | 4083 | 2182 | 2820 | 971 |
| 7 th year | 4333 | 3000 | 2930 | 1138 |
| 8 th year | 4833 | 3182 | 3832 | 1605 |
| 9 th year | 6150 | 3364 | 4558 | 1608 |

Source: own work basing on the IMF Group Ukraine data

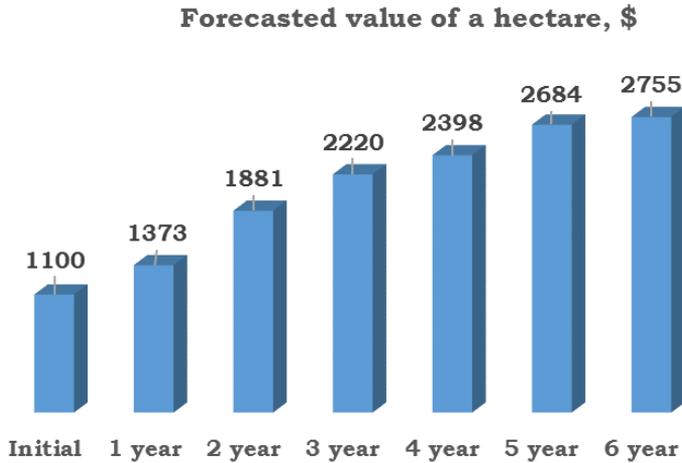


Fig. 2. Dynamics of variations of prices after elimination of moratorium on selling agricultural lands

Source: own work basing on the IMF Group Ukraine data

A similar situation can be discerned in the case of lands owned by the state. The state property lands are managed and registered by the State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre). The state owns 10.4 million hectares of agricultural lands. Approximately 3 million hectares were transferred for rental, 7.4 million hectares (or 72%) are used by state companies and research institutes (e.g. NAAN Bank – Nacionalna Akademia Agrarnykh Nauk Ukrainy is the owner of 478,000 hectares) [6].

A sad image has been appearing for the last decade – as an average, Ukrainian chernozems lost about 0.1% of their biological humus. It has been estimated that nature needs 25 to 30 years to compensate for this loss of humus [7].

3. Leasehold as a Form of Management of Agricultural Real Estates

Leasehold of agricultural lands is a common practice in Ukraine. Following the Act on leasehold of lands since October 6, 1998:

The contract-based leasehold of lands is the periodical, payable possession and use of a land parcel, required by the lessee to maintain business and other activities. The subjects of leaseholds are land parcels, which are owned by private owners, by legal entities and by municipal or state bodies. Lessees of land parcels are legal entities or individuals, who – basing on the leasehold contract – acquired the right to possess and use a land parcel [8].

Following Article 93 of the Land Code of Ukraine of October 25, 2001:

The right to lease a land parcel – is the contract-based, payable possession and use of a land parcel which is needed by a lessee to maintain business and other activities. Land parcels may be transferred for lease to individuals and to legal entities from Ukraine, to strangers, to foreign legal entities and to international organisations [1].

To define the term of leasehold of agricultural lands, its specific features should be specified that are different than in the case of the leasehold of other types of lands. The basic features which determine leasehold of agricultural lands result from the natural properties of an agricultural farm. Acquisition of lessees is an important feature of the leasehold of agricultural lands. Lessees of agricultural lands may become clearly specified subjects who gained land parcels for specially defined purposes.

Leasehold of agricultural lands is a specific form of agricultural land use; its content refers to payable possession and use of a land parcel within the limits specified by law and by a contract that meets requirements specified by law [9]. The terms of land lease agreements are from 7–50 years by law and yearly payments

are based on a percentage of their cadaster value and depend on the region and competitive landscape. Lessors have the first right of refusal when lease agreements expire. This leasehold model greatly reduces the cost of land consolidation and allows the flexibility to pay in cash or in commodities, depending on desires of the lease holder [10].

Following article 22 of the Land Code of Ukraine of October 25, 2001:

- agricultural lands are transferred for the property and to be used:
- by citizens – to run their own farms, orchards or gardens;
- by agricultural companies – to run the commodity agricultural production;
- by agricultural scientific and research institutions and schools;
- by non-agricultural companies, institutions and organisations and by religious organisations;
- by wholesale agricultural markets – to locate existing infrastructure.

Agricultural lands cannot be transferred as a property to foreigners, to individuals who do not possess citizenship or to foreign legal entities [1].

According to the Act on leasehold of lands in Ukraine since October 6, 1998:

A leasehold contract is a contract which obligates a lessor to transfer, against the payment, a land parcel to a lessee, for possession and use for a specified period and a lessee is obliged to use a land parcel according to the leasehold contract and to legal requirements. The leasehold contract is made in a written form; following the conclusion of a party it may be certified by a notary. Important conditions of the leasehold contract concern the rent, including specification of its value, indexing, terms and forms of payment, modes of payment, revision and responsibility in cases when the rent is not paid. All contracts must be officially registered by the state. The leasehold contract enters into force after its official registration [8].

Due to the lack of prohibition in reference to the free trade of agricultural lands, land consolidation works are not performed at present and processes of urbanisation are leading to the further division of land parcels and to unjustified changes in their designation.

At present, almost 1.4 million hectares of land parcels are not used according to their initial designation. About 1 million individuals do no work in the fields they own and they do not give their land parcels for lease. Parts of lands of the total area of 4.8 million hectares (12% of total agricultural areas) (pai) are not used [2].

Considering the limited funds of owners of some lands (pai), as well as the lack of possibilities to sell parcels, transfer of lands for lease is practically the only method for the existence of small owners in villages. This is exploited by lessees who determine conditions and low value of rent (the average value of rent equals to 1093 hryvnia (34 euros) for 1 hectare) (Tab. 2).

Table 2. The average rent value for lease of 1 hectare

| Oblasts | Rent value for 1 hectare [hryvnia] | Rent value for 1 hectare [euro] |
|--------------------------------------|---------------------------------------|------------------------------------|
| Kiev | 533 | 17 |
| Zakarpattia | 596 | 19 |
| Ternopil | 672 | 21 |
| Zaporizhia | 721 | 23 |
| Kherson | 763 | 24 |
| Donetsk | 790 | 25 |
| Mykolaiv | 820 | 26 |
| Luhansk | 835 | 26 |
| Odesa | 877 | 28 |
| Ivano-Frankivsk | 919 | 29 |
| Dnipro | 950 | 30 |
| Volyn | 990 | 31 |
| Zhytomyr | 1054 | 33 |
| Chernihiv | 1079 | 34 |
| Vinnytsia | 1091 | 34 |
| Chernivtsi | 1111 | 35 |
| Lviv | 1132 | 36 |
| Kropyvnytskyi | 1168 | 37 |
| Sumy | 1308 | 41 |
| Rivne | 1372 | 43 |
| Khmelnyskyi | 1398 | 44 |
| Kharkiv | 1603 | 50 |
| Cherkasy | 2216 | 70 |
| Poltava | 2243 | 71 |
| The average rent value in Ukraine | 1093 | 34 |

Source: own work basing on the IMF Group Ukraine data

There is no possibility to perform inspections of lessees during the transfer of parcels for long-term lease; this leads to the loss of soil value by chernozems.

The concentration of agricultural land by lessees will soon lead to the depletion of the most fertile soils transferred for lease. The rent for agricultural lands in the world is high; these concerns, in particular, Germany, the Netherlands and Denmark where it exceeds 200 euros per hectare of arable land. According to previous settlements, underestimated rent for agricultural lands in Ukraine result in budget losses of oblasts which exceed 1 billion hryvnias every year (31 436 655 euros) [2].

4. Rules of the Determination of Agricultural Real Properties in Ukraine

In the real estate-valuation practice in Ukraine, the following methodical approaches are used:

- comparative approach (sales analogs),
- investment approach,
- cost approach.

Within the comparative approach, it is assumed that that transaction data for analogue objects to the valued real estate are known, and the value is determined as a result of the characteristics of the real estate sold to the property valued comparison. Such an approach is based on the substitution rule, saying that a buyer will not pay a higher price for a property than for another property with the same characteristics [11].

According to the Order of the normative monetary valuation of agricultural lands since May 23, 2017, No. 262:

I. General provisions

- 1) This Order defines the procedure of conducting a normative monetary valuation of agricultural lands: agricultural lands (arable lands, perennials, grasslands, wastelands) and non-agricultural lands on arable lands.
- 2) Information from the State Cadastre is an information basis for the normative monetary valuation of agricultural lands, including lands under commercial buildings and yards (quantitative and qualitative characteristics of lands, soil classification, economic assessment of lands), land management documentation.
- 3) The normative monetary valuation of land parcels is maintained by legal persons who are the creators of land management documentation, developed in accordance with the Ukrainian Law “On land management”.

II. The normative monetary assessment of agricultural lands

- 1) The normative monetary valuation of agricultural lands is maintained in accordance with the Methodology for normative monetary valuation of agricultural lands, approved by the resolution of the Cabinet of Ministers of Ukraine since November 16, 2016, No. 831 (hereinafter – Methodology).
- 2) The normative monetary valuation of agricultural lands is determined according to the standard of the capitalized income on agricultural lands of natural, agricultural regions of the Autonomous Republic of Crimea, of oblasts, Kiev and Sevastopol cities, in accordance with the appendix and soil classification indexes, using the normative scale for monetary valuation of agro-production groups of natural, agricultural lands (for agricultural lands).

- 3) When agro-production groups of agricultural lands have not been determined on the land parcel, the standard of capitalized income related to the appropriate agricultural field within the natural, agricultural region of the Autonomous Republic of Crimea, oblasts, Kiev and Sevastopol cities, is applied.
- 4) When art. 277 of the Tax Code of Ukraine is applied with reference to setting tax rates for the normative monetary valuation of a unit of arable lands in the Autonomous Republic of Crimea or in an oblast, for land parcels located outside the built-up areas, for which the normative monetary valuation has not been performed, the normative monetary valuation of the unit of lands in the Autonomous Republic of Crimea or in an oblasts is adopted in accordance with the data specified in the Annex.
- 5) For indexes of the normative monetary valuation of the unit of arable lands in the Autonomous Republic of Crimea or in the oblasts, as well as for the standards of the capitalized income on agricultural lands of natural and agricultural regions of the Autonomous Republic of Crimea, oblasts, Kiev and Sevastopol cities, indexes of the normative monetary valuation of lands are applied, in accordance with the Tax Code of Ukraine.

III. Documentation of the normative monetary valuation

- 1) As a result of the normative monetary valuation of arable lands within the oblasts, technical documentation is developed which concerns the subject of the normative valuation of agricultural lands of the oblast; this documentation is then approved according to binding legal regulations.
- 2) Technical documentation of the normative monetary valuation of agricultural lands includes:
 - an explanatory note describing the purpose of their valuation, the subject of the valuation, calculation of the normative monetary valuation for the lands within the region;
 - description of works, including the conditions and deadlines;
 - the decision concerning the maintenance of the normative monetary valuation of agricultural lands, made in accordance to binding regulations on land valuation;
 - a copy of cadastral maps (plans) presenting natural and agricultural areas within the region;
 - a cartogram presenting distribution of agro-production land groups of the region;
 - extension of the normative monetary valuation of agro-production groups of agricultural lands in the region [12].

Valuation of agricultural lands depends on the soil classification index. According to the Act "On land valuation", since December 11, 2003:

Soil classification – a comparative assessment of quality of lands, based on their main natural properties of permanent nature which significantly affect the yields, cultivated in specific climate conditions. Soil classification data is an integral part of the State Cadastre and it is the basis for economic assessment of agricultural lands; it is taken into account in the process of determination of the ecological suitability of lands for agricultural cultivation, as well as losses in agricultural and forestry production [13].

The basic purpose of the soil classification is the quantitative determination of the relative soil quality in reference to their fertility, with consideration whether particular classes of soils are able to better or worse meet ecological requirements of arable crops [14].

5. Final Remarks and Conclusions

The agricultural reform in Ukraine and elimination of the moratorium on the market for the purchase and sale of agricultural land assume the development of a transparent and understandable land market which will revive the economy of oblasts and the entire state and indicate “fair” prices of real estates.

The creation of a favourable market environment by introducing a fully-fledged agricultural land market will increase the attractiveness of agriculture and establish an objective market value of lands in land transactions. However, it is still too early to say if the opening of the agricultural land market will become a breakthrough in the economy of the state but there are positive signals of such a change.

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Aspekty gospodarki nieruchomościami rolnymi w ujęciu ich wartości na Ukrainie

Streszczenie Artykuł przedstawia aspekty gospodarki nieruchomościami rolnymi w ujęciu ich wartości na Ukrainie. Zawarto w nim charakterystykę gruntów rolnych z uwzględnieniem ich jakości bonitacyjnej i powierzchni oraz rozpatrzono dzierżawę jako formę gospodarki nieruchomościami rolnymi. Pokazano także procedurę określania wartości nieruchomości rolnych na Ukrainie. W artykule scharakteryzowano również stan gruntów rolnych na Ukrainie, a także podano informacje o zajmowanej przez nie powierzchni i stosunku ilościowym gruntów rolnych znajdujących się we własności państwa do gruntów rolnych należących do osób prywatnych. Opisano procedurę dzierżawy gruntów rolnych.

Słowa

kluczowe: grunty rolne na Ukrainie, rynek gruntów rolnych, dzierżawa gruntów rolnych, wartość nieruchomości rolnych