

UDC 332.28:504.062(045)

Tetiana Kozlova<sup>1</sup>  
Darya Syvyck<sup>2</sup>

## ECOLOGICAL AND ORGANIZATIONAL ASPECTS OF RENTALS OF AGRICULTURAL LAND IN UKRAINE

<sup>1,2</sup>National Aviation University  
1, Kosmonavta Komarova avenue, Kyiv, 03680, Ukraine  
E-mails: <sup>1</sup>t\_kozlova@ukr.net; <sup>2</sup>dasha.syvyck@yandex.ua

**Abstract.** *The article deals with ecological and organizational problems of agricultural land lease. It is noted that under the situation of absence of proper land market the leasing relations have taken the dominant position in Ukrainian agriculture. It is determined that development of leasing relations of land should be concentrated on a competitive rental environment, the optimal level of rent forms of payment, terms of the lease and management of land leasing relations. The set of priorities of the state policy of agricultural land lease is worked out. On the base of the realized analysis the following proposals have been formulated: to strengthen the legislation control of the use of land leasing, to establish the environmental audit of agricultural land usage in order to minimize negative impacts on land, to develop the effective mechanisms for sustainable land use, to introduce mandatory agrochemical examination of soil before and after renting land, to introduce the appropriate incentives for owners and users in order to improve the quality characteristics of soils.*

**Keywords:** agricultural land; landlord; land usage; lease; land share; lease contract; rent

### 1. Introduction

Agricultural land usage is one of the main forms of negative impact on the environment. Extensive land use characteristic of agriculture in Ukraine does not improve the ecological situation and could lead to further destruction process of the unique farmland. In Ukraine most manufacturers use agricultural land for production of agricultural products under land lease agreements. Land lease is a form of land tenure in which the owner transfers its land for a specified period to another person (the lessee) to do business for a fee.

According the State Agency for Land Resources of Ukraine 75% of agricultural land owners rent out their land (pays) for rent farms. A large number of agricultural producers do not comply with scientifically based crop rotations, soil-protecting technologies in growing crops, has the required number of organic and mineral fertilizers, which causes depletion of land, reducing soil fertility, their degradation.

As international experience shows, the basic form of transactions with land is rent. For example, in the UK about 40 % of agricultural land rented in Sweden – 43 % in the US – 50 %, and in Germany – about 70 % [1]. That is, regardless of whether the established market of agricultural land (currently a moratorium until 2016) and how fast it will operate and lease the land will remain an important part of forming productive potential of agriculture in Ukraine. So, for this state of affairs, a significant part of the land fund of Ukraine is in the area of high

environmental risk, because objective necessity was a combination of the economic interests of agricultural production with environmental requirements.

### 2. Analysis of research and publication

The analysis of scientific sources suggests that if in the next quarter-century land policy in Ukraine do not change in the future land resource potential will be exhausted, and soil degradation will take irreversible character.

Special attention to dedicated analysis and development of land rental relationships provide O.A. Bredikhin [2], A.E. Dankevich [3], O.M. Martin [4], Z.P. Pankiv [5], A.M. Tretiak [6], M.M. Fedorov [7], O.V. Shebanin [8], P.I. Yukhimenko [9] and many other researchers.

Recognizing the scientific and practical value development of domestic scholars, it should be noted that both organizational and environmental problems of the lease of agricultural land are far from solved and require further study, as the legal property relations, internal and external conditions of the Ukrainian village's activity were fundamentally changed. This has resulted in the choice of the research topic.

The aim of the article is to analyze the environmental and organizational problems of rent of agricultural land and provide suggestions on areas of further reform to eliminate potential threats in the future both for the environment and for the economy of Ukraine.

### 3. Analysis of ecological and organizational issues and identifying trends and areas for further development of land lease relations

High land and resource potential of Ukraine determines the leading role of the land fund as one of the most important resources of the state and acts as a key ingredient of agricultural production, a positive factor in the competitiveness of the agricultural sector. On the other hand, our government has excessively high level of mastery of agriculture (63.8 %) and tillage (56.1 %), excessive involvement in land use in the agricultural sector [10]. Increasing anthropogenic pressures on them to a critical level do not contribute to reducing soil processes and cause degradation and environmental pollution.

The causes of environmental problems of land use in Ukraine due to the influence of both subjective and objective factors. The transformation of socio-economic system, which takes place during the last decades, instituted economic and land issues, and the creation of new infrastructure land use does not account for changes that occur.

As a result of land reform, more than two thirds of the population have received parcels of land for commercial agriculture – is retired (at the end of 2012 the number of pensioners, holders of land shares amounted to 44.3 %) and the elderly who are not able to engage in productive activities, because, as a rule, do not have this or physical ability or economic resources or education. According to the survey, conducted by the USAID «AgroInvest» at the end of 2012, almost about one-third of the units have never seen their land, and over 40 % have never stood in my country [1]. Most of the farmers exercise their right to the land by means of lease relations with newly-created agricultural enterprises and peasant (farm) as the only really active segment of the agricultural land market is to rent land.

In Ukraine the absence of proper land market leases occupied a dominant position in agriculture. According to the Information Resource Center «Land Reform Policy in Ukraine», about 85% of agricultural land is the subject of the lease. The attractiveness of leasing land relations is that they allow farms to increase the size of land, and the owners to get a guaranteed income from their property.

The owners of rights to a land plot (share), certified certificate for a land plot (share) or a state act on the

ownership of the land on 01.01.2014 year concluded 4767.5 thousand. Leases [11]. The analysis of the structure of farmers signed lease agreements for 2002-2013 biennium shows that (tab. 1):

- the part of leases with holdings with allocated land share, or with their successors in title was significantly reduced;
- the part of lease agreements with farmers was increased;
- the part of lease agreements with other entities Was increased almost twice.

So, in the agricultural sector of the national economy the importance of farms, private agricultural households and other incorporated and unincorporated businesses is increases.

Table 1

**Dynamics of the structure of leases of land shares for 2002-2013 years**

Signed agreements/ year	2002	2009	2011	2013
from the holding of land are allocated land share, or their successors	64,3 %	42,2 %	39,8 %	35 %
of farms menage	9,4 %	14,0 %	14,3 %	14,1 %
with other entities menage	26,3 %	43,8 %	45,9 %	50,9 %

Lack of opportunities for competitive sale of land increases the supply of land landlords, hence the low price of rent (in 2013 – 616.5 UAH / ha in 2012 – 539 UAH / ha in 2011 – 348.5 UAH / ha per year). As a result, landowners are not interested to lease land because of the agricultural lands can not find tenants and never used. Rent as a form of market transactions with the land should contribute to the efficient movement of land owner. This corresponds to modern requirements in terms of optimal formation of economic structures in agriculture. In Ukraine, this pattern is not fully observed [12].

As a result of complex sociological research subjects of land relations in rural areas held by the Social Expertise of the Institute of Sociology of NAS of Ukraine, it was determined that 24 % of rural communities have noted cases of non-units, so a lot of resources are not used efficiently. At the same time, unclaimed and neuspakrovani units rented rural community, which is certainly a positive development, as it promotes local revenues.

A characteristic feature of the land market in Ukraine is that for a long time short-term leases dominated. One reason for the dominance of short-

term land lease agreements is that a significant number of occupants expects full implementation of the land market and, consequently, the possibility of buying land from its current owners. After the period of use occupants are able to not only examine the qualitative characteristics of the rented land, but practically have the right to repurchase preferred property shares that form the production infrastructure (ie buildings, machinery, finished products, livestock, etc.) reformed collective farm enterprises.

By 2012 more than half of all land lease agreements were concluded for a period of five years, which does not meet the technological requirements rotational crop rotation, does not encourage the tenant in the rational use of land for investment projects of land protection, conservation and restoration of soil fertility and leads to the risk of exhaustion a large part of the most fertile land. Focus on crops with high export potential leads to a reduction in land under forage crops, elimination of unprofitable units (eg, livestock), increased acreage crops, which increases the effects of erosion processes and depleting land degradation contribute to farmland, reduction of employment in agriculture. According to the research project of the United States Agency for International Development (USAID) "AgroInvest", only 21 % of leases privately owned land fixed position on the need for compliance with crop rotation, and none of these contracts is not defined specific type of rotation. Moreover, only certain land lease agreements of private property (less than 1 %) recorded restrictions on the cultivation of certain crops.

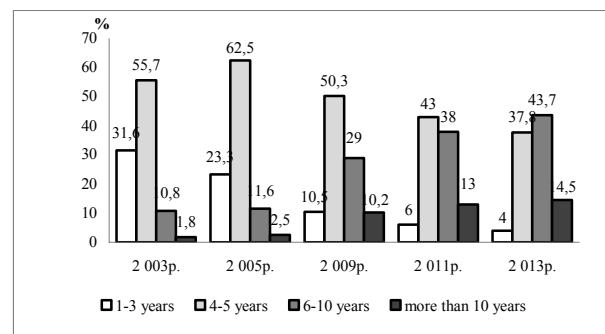
To environmental and organizational challenges in the lease of agricultural land we can also include the following:

- lack of optimization of the structure of certain types of land and agricultural cropping;
- frequent negative practice of growing crops that significantly deplete the soil, at one and the same field;
- the potential need for creating competitive advantages Ukrainian agricultural products in an environmentally sensible markets;
- removal of fertile land for indirect use (construction, dumps, landfills);
- inappropriate land use;
- failure to comply with the conditions of removal, storage and application of topsoil;
- increased pressure on land resources (use of chemicals in agriculture, destruction of soil);

- lack of implementation of soil farming systems of organization contour and reclamation areas;
- defaults on payments (payments for land, pollution charges within limits (vehicles);
- neglect of environmental effects in determining the effectiveness of the company;
- destruction or erosion damage of hydraulic structures, protective plantations;
- placing livestock farms without treatment facilities.

Both landlords and local and central government are often unable to control the use of their land and deprived of effective means of influencing the efficiency of lessees of land resources.

Lately you can see some changes in lease agreements in respect of the lease term, the number of leases of 6 years has increased, while the number of leases of 5 years decreased. Comparing the terms of the lease agreements for the 2003-2013 biennium (Fig. 1), it can be seen that the proportion of leases for 1–3 years decreased by 8 times, for 4–5 years decreased by 1.5 times, for 6-10 years – increased 4-fold and more than 10 years – has increased 7 times.



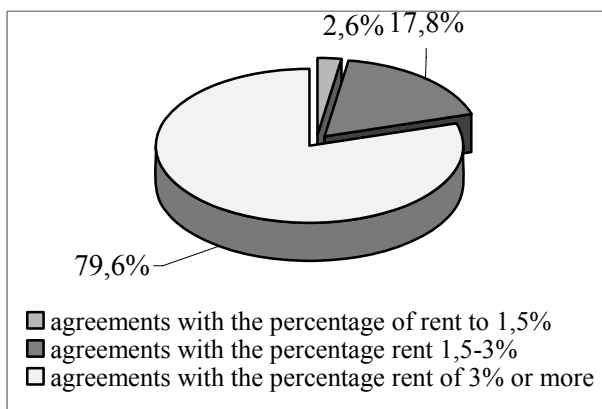
**Fig. 1.** Number of leases of land shares for a period of, % (according to the State Agency for Land Resources of Ukraine)

Only in recent years has begun restoring land planning forecasting and planning the use and protection of land, developing land management projects that provide environmental and economic assessment of crop rotation and streamline land. However, even long-term lease can not guarantee sustainable use of agricultural land.

Most of the agricultural land on the Ukrainian market is rented by large farms. The consequence of the monopoly of large agrarian enterprises in the land market is that the average amount of rent per year is negligible in 2013 amounted to 616.5 UAH/ha, while it is almost two times more than in 2011.

According the State Agency for Land Resources of Ukraine, in the structure of contracts prevail the contracts with percentage rent of 3 % or more from the normative value of land (share) (fig. 2). However, this level of rent is negligible, as a basis for calculating the set normative monetary land valuation that does not reflect their actual market value. Low rent for the land causes the under-pricing of land.

Development of land lease relations should focus towards a competitive rental environment, the optimal level of rent forms of payment, terms of the lease and management of leased land. Provision should be made of the phased increase in the level of rent over the lease term. In this case, the contracts will be reflected serious intentions tenants and small landowners understand their own benefit from the transfer of their property to rent long term.



**Fig. 2.** The structure of leases of land shares interest of the normative value of the land (share) in 2013, %

Besides, in order to increase the price for land and the rent, the qualitative characteristics of land should be preserved and improved. That is why it is necessary:

- to develop national and regional programs of grants to improve the characteristics of the land;
- to promote integration of agricultural crop and livestock areas to provide organic fertilizer;
- to stimulate long-term lease that will encourage tenants to improve soil fertility;
- to set rents based on expert assessment of agricultural land.

Among the forms of rent prevailing kind, whose share was on 01/01/2014. Was 55.1 %, in 2012 – 62.3 %, in 2011 – 65.2%. In this case, the calculation of prices for agricultural farmers set of tenant and were largely above market and are often not adequate to the actual quality of the products.

That is, three-quarters of land parcels that receive the rent in kind, at risk of, firstly, fewer agricultural products than they expected, and secondly, the production of poor quality because of the possibility of manipulation of prices of agricultural products by unscrupulous tenants .

According to these projects USAID «AgroInvest» in the land lease agreements of private property, which provides a natural form of payment of rent is not fixed place of supply of agricultural products for the calculation of the landowners. That is, in all cases, land lease, there are risks that landlords could be forced to get the rent «in kind» in awkward places for them, such as in other villages than those inhabited by landowners and around which are rented land. Especially these risks are increased for owners of land shares if the tenants are large farms (agricultural holdings) whose land geographically dispersed.

In order to improve the ratio form of payment of rent is expedient to introduce agricultural enterprises providing services to farmers on account of payment of rent. It will be beneficial both to tenants through maintaining the integrity of tracts of land, and landlords through solving the problems of unemployment and social security in rural areas.

The following problems should be solved:

- determining the optimal lease term of land that would ensure their rational use and protection;
- to strengthen the requirements for the conservation of soil leased land included in the lease agreements farmland provisions for limiting the frequency of cultivation of certain crops on the leased area;
- by law provide for the tenant responsible for the decline of soil quality characteristics, including changes in the amount of rent;
- the creation of unions landlords as organized actions of owners of land shares (shares) will help them protect their property and increase their income and consolidated position when negotiating with tenants contribute to a better consideration of the interests of landowners and the establishment of a balance of interests between owners and tenants.

In practice the above mentioned measures will protect and enhance soil fertility, the economic attractiveness of land rights. Today it is necessary to combine the economic interests of agricultural production with environmental requirements, to build the foundations of land use and land management on the basis of a balanced agro-ecological principles of sustainable use of land resources.

This, in turn, will create competition among tenants and land owners and stimulate the price rise, which will positively affect the level of rent. Providing that the rents are high, we can expect the stabilization of lease relations.

#### 4. Conclusion

Further development of land-lease relations needs improvement of existing and creating an appropriate legal framework. At this stage it is necessary to establish an effective mechanism of state regulation of land-lease relations and development of land market toward sustainable and efficient agriculture, rationalization of land use structure, based on environmental requirements.

The legislation is necessary to tighten control over the use of leased land, establish an environmental audit of agricultural land use in order to minimize negative impacts on land, develop effective mechanisms for sustainable use of land, to introduce mandatory agrochemical examination of soil before and after renting land, introducing appropriate incentives for owners and users in order to improve the quality characteristics of soils.

Based on the above, the priorities of state policy on land lease agricultural land must be:

- development and implementation of legal mechanisms of control over the proper use of leased land;
- improvement of the legal remedies of land parcels leased by the introduction of a typical lease agreement, establishing a clear transparent communication between rent and received in the current year income, free choice of the landlord rent receipt forms;

- Implementing state control over the execution of the tenant of contract and strict liability tenant for breach of lease;

- formation mechanisms for monitoring ecological condition used land;

- development and implementation of system information programs for landowners of the existing laws and their rights and opportunities to transact land, land prices, land auctions and more.

The implementation of all these measures to create favorable conditions for sustainable and efficient development of land rental relationships that promote rational and efficient land use.

#### References

[1] *Vernygora M.* Lease agricultural land - is it possible balance of interests? – 2013. – Available from Internet: <http://cure.org.ua/ua/novini/orenda-slskogospodarskoi.html>

[2] *Bredikhin O.O.* Economic aspects of the control of the preservation of soil fertility in the lease of land shares (shares) [electronic resource]. – 2012. – Mode of access: <http://zsu.org.ua/oleksandr-bredikhin>.

[3] *Dankevich A.E.* Problems and prospects of roscrolls lease of land relations in agriculture // Land management and cadastre. – 2004. – № 1-2. – P. 88-92.

[4] *The economic prerequisites for the formation of land lease in the implementation of national regional policy / O.M. Martin // Scientific Bulletin of Lviv National University of Veterinary Medicine and Biotechnology name of S.Z. Gzhytsky: collection of scientific works. – 2007. – Vol 9. – Part 2. – № 4 (35). – P. 172-175.*

[5] *Pankiv Z.P.* The land rental market in Lviv region / Z.P. Pankiv, V.I. Pyazynyak // Bulletin of Lviv. state. agrarian. Univ: Land planning and cadastre. – 2008. – № 11. – P. 187-193.

[6] *Tretiak A.M.* Financial regulation of use and protection of agricultural land in the market turnover / A.M. Tretiak // Economy APC. – 2007. – № 5. – P. 52-56.

[7] *Fedorov M.M.* The transformation of land relations to market conditions / M.M. Fedorov // Economy APC. – 2009. – № 3. – P. 4-18.

[8] *Shebanin O.V.* Lease land relations: present situation and main directions of improvement / O.V. Shebanin // Housekeeper APC. – 2008. – № 7. – P. 7-13.

[9] *Yukhimenko O.M.* The development of leasing relations in the agricultural sector / O.M. Yukhimenko // Economy APC. – 2010. – № 1. – P. 18-21.

[10] *Tretiak A.M.* Administration of Land resur dumplings / A.M. Tretiak, O.S. Dorosh. – Kyiv: LLC "TSZRU", 2006. – 462 p.

[11] *Information* about the results of Derzhzema-hentstva Ukraine and its territorial bodies to bers by 2013. [Electronic resource]. – Available from Internet: <http://land.gov.ua/zvitnist/statystyka.html>.

[12] *Semeryak Y.A.* Lease land relations in the agricultural sector and areas of improvement / Y.A. Semeryak, M.G. Moscow // Scientific Bulletin NLTU Ukraine. – 2010. – № 20.13. – P. 247-253.

Received 15 October 2014.

**Т. В. Козлова<sup>1</sup>, Д. О. Сивик<sup>2</sup>. Еколого-організаційні аспекти оренди сільськогосподарських земель в Україні**

<sup>1,2</sup>Національний авіаційний університет, проспект Космонавта Комарова, 1, Київ, Україна, 03680

E-mail: <sup>1</sup>t\_kozlova@ukr.net; <sup>2</sup>dasha.syvyck@yandex.ua

Досліджено екологічні та організаційні проблеми оренди земель сільськогосподарського призначення. Зазначено, що за відсутності повноцінного ринку земель орендні відносини зайняли в Україні домінуючу позицію в сільському господарстві. Визначено, що розвиток орендних земельних відносин має бути зосереджений у напрямі формування конкурентного орендного середовища, встановлення оптимального рівня орендної плати, форм її виплати, термінів оренди та раціонального використання орендованих земель. Окреслено коло пріоритетів державної земельної політики в питаннях оренди земель сільськогосподарського призначення. Запропоновано на законодавчому рівні посилити контроль за використанням орендованих земель, запровадити екологічний аудит сільськогосподарського землекористування з метою мінімізації негативного впливу на земельні ресурси, розробити дієві механізми раціонального використання угідь, запровадити обов'язкове агрохімічне обстеження ґрунтів до і після оренди земель, ввести належне стимулювання власників і користувачів задля покращення якісних характеристик ґрунтів.

**Ключові слова:** договір оренди; землекористування; земельна частка (пай); орендодавець; оренда земельних ділянок сільськогосподарського призначення; орендна плата.

**Т. В. Козлова<sup>1</sup>, Д. О. Сызык<sup>2</sup>. Эколого-организационные аспекты аренды сельскохозяйственных земель в Украине**

<sup>1,2</sup>Національний авіаційний університет, пр. Космонавта Комарова, 1, Київ, Україна, 03680

E-mail: <sup>1</sup>t\_kozlova@ukr.net; <sup>2</sup>dasha.syvyck@yandex.ua

Исследованы экологические и организационные проблемы аренды земель сельскохозяйственного назначения. Отмечено, что при отсутствии полноценного рынка земель арендные отношения заняли в Украине доминирующую позицию в сельском хозяйстве. Определено, что развитие арендных земельных отношений должен быть сосредоточен в направлении формирования конкурентного арендного среды, установление оптимального уровня арендной платы, форм ее выплаты, сроков аренды и рационального использования арендованных земель. Очерчен круг приоритетов государственной земельной политики в вопросах аренды земель сельскохозяйственного назначения. Предложено на законодательном уровне усилить контроль за использованием арендованных земель, ввести экологический аудит сельскохозяйственного землепользования с целью минимизации негативного воздействия на земельные ресурсы, разработать действенные механизмы рационального использования угодий, ввести обязательное агрохимическое обследование почв до и после аренды земель, ввести надлежащее стимулирование собственников и пользователей для улучшения качественных характеристик ґрунтов.

**Ключевые слова:** договор аренды; землепользование; земельная доля (пай); арендодатель; аренда земельных участков сельскохозяйственного назначения; арендная плата.

**Kozlova Tetyana** (1963). Candidate of Sciences (Technical). Associate Professor.

The Land Surveying Technologies chair, National Aviation University, Kyiv, Ukraine.

Education: Kyiv Institute of Civil Aviation Engineers (1985).

Research area: the tendencies of development and improvement of leasing relations in Ukraine.

Publications: 98.

E-mail: t\_kozlova@ukr.net

**Syvyck Daria** (1994). Student.

National Aviation University, Kyiv, Ukraine.

E-mail: dasha.syvyck@yandex.ua