

# UKRAINE AGRICULTURAL LAND MARKET FORMATION PRECONDITIONS

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## Abstract

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The theoretical land relations reforming principles were reviewed. Land relations in agriculture transformation process was studied. The land use features were detected and agricultural land use efficiency analysis was conducted. Ukraine land market formation research problems results have been shown. It was established that private land ownership institution ambiguous attitude, rent relations deformation, lack of the property rights ensure mechanism inhibit the land market development. Sociological research of Ukrainian Polesie region to determine the prerequisites for agricultural land market formation preconditions has been conducted. 787 respondents from Zhytomyr, Rivne and Volyn regions were interviewed. Land shares owners age structure, their distribution by education level, their employment, land shares owners and agricultural enterprises executives to the agricultural land sale moratorium cancellation attitudes, land purchase financial resources, directions of Ukrainian Polissya region land shares use, shares owners land issues level of awareness have been determined during the research. Was substantiated that agricultural land market turnover includes not only land sale moratorium cancellation but also the adoption of the legislative framework and the appropriate infrastructure development, one of the key elements of which is land relations regulation specialized state agency – State Land Bank.

Keywords: agricultural land market moratorium, efficiency, rent, land shares, State Land Bank

## INTRODUCTION

The Ukraine's economic performance effectiveness, the nation's well-being and health, production and its scale development are closely connected with land use. Land is the main resource of production in farming, an important component, both the level of the national economic development and the well-being of an individuals depending to a considerable extent on its use efficiency.

Ukraine has 42.8 million ha of agricultural land that is 71 % of the country's total area, of which 32.5 million ha is arable. Ukraine is richly endowed with black soils, which is one of the most fertile soils worldwide. Ukraine accounts for about 25 % of the global black soil area [4]. Exceptional arable land

and favorable climate give Ukrainian agricultural producers strong competitive advantages. Given the size of its population and its feedstock needs, Ukraine is one of the few worldwide countries that can substantially fully meet its domestic and export agricultural products needs.

The formation of civilized land market is one of the most significant problems of today's Ukrainian economy. Ukraine is considered worldwide as a country with the most significant agricultural potential because of the largest black soil world reserve. Land is the significant productive forces component which has not yet integrated into the market exchange. It should be noted that the Ukrainian private land ownership formation process had become protracted, uncertain

and covert nature. Ukrainian fair land market formation proper conditions are still missing. Many unresolved land relations issues and unformed market infrastructure cause another agricultural land sale moratorium introduction in Ukraine.

Under the modern economic conditions, despite the significant land resources, because of the lack of competitive small and medium agribusiness rural areas are gradually declining. The main agricultural reform which due to imperfect instruments for Ukraine land relations regulating lasts more than two decades goals and objectives are still remain unresolved (Budzyak, 2008). It should be noted that there is a number of economic, environmental and social issues restraining factors. The prerequisite for their overcome is the land reform completion, an important component of which is the agricultural land market introduction, that include appropriate institutional support for its effective functioning formation.

In accordance to designed legislation, Ukraine agricultural land market formation and development envisages a land relations fundamental change (Gorlachuk, 2007). One of the most urgent problems of Ukraine property ownership rights reform is the land market model which would correspond to the economic interests of society taking into account social and environmental factors, creation. Thus, there are both supporters and opponents of the land market introduction.

Market relations supporters determine that the agricultural land market should function because private ownership encourages land effective use and contributes rural areas investments attraction. Opponents of agricultural land market formation affirm that land attraction in economic turnover at the present stage of development is inexpedient because it can cause a number of negative consequences. International corporations and financial institutions are the most interested in land market creation. Therefore, do the financial monopolistic structures, which are going to buy land under favorable economic conditions while keeping artificially low land prices. Land market implementation under current conditions may deny the land ownership rights of those who work on and cultivate agricultural lands.

## MATERIALS AND METHODS

Ukrainian land market formation and development problems research demonstrated, that nowadays there is no experts views unity on the content and essence of the land market concept. Budzyak V. considers the agricultural land market as the economic and legal system, organizational, economic and administrative relations between private entities, state and municipal ownership in order to transfer or sale at certain circumstances agricultural land plots property rights (Budzyak, 2008). Sabluk P. defines the land market as agreements on land purchase, sale, lease and

mortgage. Fedorov M. determines land market as the process of its value determination, and land as capital recognition. Nowakowski L. considers the land market concept as the economic relations that arise in the land turnover process. In the narrow sense of the land market Dobriak L. understands commercial land transactions (Danilishyn, 1999). Paskhaver B. understands the "land market" term as the set of land relations that allows landowner title implementation to obtain market benefits.

Among the latest overseas research in the field of land relations transformation we should highlight the studies of G. Green, A. Haines (2015), J. Plewa (2015), D. Ahner (2004), D. Acemoglu, James A. Robinson (2012), P. Ciaian (2012), J. Swinnen, d'Artis Kancs, K. Van Herck, L. Vranken (2013), who concentrated on land management issues, land cadastre maintenance and also to the land relations regulation approaches. Much attention is paid to the agricultural sector structural transformation in Central and Eastern Europe that primarily mean the collective and the state farm land ownership liquidation. In most CEE countries that goal was achieved through the land ownership restitution and farms establishment.

However, complexity and diversity of the land reform problem, the need of the agricultural sector development strategy justification and rural areas as a social state level reproduction issue requires continuation and intensification of scientific research in this area.

The aim of the paper is to study the land relations development in terms of Ukraine agricultural sector transformation and agricultural land market formation preconditions research. The study hypothesis is the assertion that the agricultural land market would be opened and will be effectively functioning only at the conditions of appropriate institutional support formation, specialized infrastructure development.

Study object is the process of the agricultural land market formation under the Ukrainian Polesie region conditions. Systematic method of land relations patterns cognition, number of general and specific methods, which together enable detail study of agricultural land market implementation prerequisites are the methodological basis of the research.

The theoretical and methodological basis of the research are works of Ukrainian and foreign scientists on land relations development under agricultural sector transformation conditions issues. This research is conducted involving methodology: the scientific abstraction – theoretical generalizations and conclusions on land relations development and the agricultural land market formation preconditions formation; the analysis and synthesis to study the nature cause and effect relationships of land relations transformation, by ownership patterns structural changes of Ukraine land fund research; the historical to study the land relations transformation during the historical

period of time; the retrospective to disclose the studied object genesis; the systematic approach to justify rational land resources use under market fluctuations conditions organization; sociological survey method to determine agricultural land market prerequisites implementation under Ukrainian Polesie region conditions. The research has being conducted during 2012–2015.

## RESULTS

Land reform is a part of the national agricultural policy. Historically the basis of the content of any land reform is laid in redistribution of land with simultaneous transfer to the private and collective property to create attractive institutional conditions for equal development of different forms of management, the formation of a mixed economy, sustainable land use and development of rural areas. The transformation of land relations in Ukraine at each of presented stages of agrarian reforms had its own institutional peculiarities. The first stage included the privatization of land and free transfer of the ownership to collective farms and citizens of Ukraine for householding. The main objective of transformation of land relations was the increase of efficiency of land use by changing its owner. The second stage of land reform, which was practically completed by 1998, provided division of land between workers of the former collective farms and retired people with the following allocation of the share that was confirmed by the receipt of certificate for the land share. As a result, based on the collective farms there were created 7.3 thousand agricultural enterprises, 600 joint stock companies and over 100 cooperatives (Pashaver, 2009).

In the initial stages, the land reform was largely of procedural nature, caused by a simple updating of documents. Collective ownership of the land at that time functioned as the most direct ownership of agricultural enterprises, so that most of their employees actually remained alienated from the ground and from the results of economy and business management. The main institutional priorities of the third stage of land relations transformation was to guarantee the right to private

ownership of land shares and property share to all members of collective farms. Landowners, at their request, were given the possibility of allocating land in kind and ensured the right of free exit from existing enterprises with their land and property shares, to create other entities based on private property on their basis.

During the period of land transformation in Ukraine, there still was present a process of abolition of the state monopoly on land, as evidenced by the data (Tab. I). In particular, if at the beginning of 1990 all the land fund of Ukraine was in the public domain, then at the same period of 2014 the share of state ownership was 48.2 %, private – 51.9 % and collective (according to national regulations) – 0.1 %. As of 01.01.2015, 6.8 million people of the country received state certificates of ownership of land with an average size of the share about 4 ha. The average size of the land share depends on: firstly, the size of the land areas of agricultural land in the agricultural enterprise, and secondly, the number of people eligible for land share.

Land reform in Ukraine was declared as being made first of all in the interest of workers employed in agriculture and other rural residents and aimed to create a private owner in agricultural production. However, a common problem is that people who received land shares for the purpose for agricultural commodity production could not cultivate the land personally. In modern terms, citizens for their own needs and commodity production use a very small number of land shares. The bulk of land shares are leased to agricultural enterprises.

A new type of agrarian formations of holding type, created on the basis of lease relations, involves short-term rental in the vast majority of cases. However, this leads to a depletion of soil fertility and to general deterioration of the land quality. The problem of consolidation of agricultural land for the implementation of advanced technologies for growing crops also requires solving. The result of inefficient institutional relations between the owners of capital, land and businessmen-lessees is inefficient use of this asset. This is caused by existing institutions or “rules of the game” that encourage the lessee to irresponsibility, and

I: *Restructuring of land resources of Ukraine by ownership*

Year	Land owned					
	state		private		collective	
	thousand ha	%	thousand ha	%	thousand ha	%
1990	60354.8	100.0	-	-	-	-
1995	36310.5	60.2	1925.4	3.2	22118.9	36.6
2000	30166.5	50.0	29109.2	48.2	1079.1	1.8
2005	29595.6	49.0	30642.1	50.8	117.1	0.2
2010	29246.5	48.5	21035.7	51.4	72.6	0.1
2015	29071.3	48.2	31324.1	51.9	40.6	0.1

Source: UkrStat.

the peasant forms for himself a stable stereotype of indifference to his own property as a source of income. The reason for the lack of effective institution of trust, protection of the farmer is a perception of business temporality that is primarily based and operates not on the own, but on borrowed land and property assets (Malik and Shpykulyak, 2010).

The structure of acreage has a significant transformation by reducing crop of forage crops 4–5 times while the proportion of sowing crops is growing at almost 3 times, namely sunflower at almost 19 %, with optimal value of 10–12 % (Tab. II). Significant expansion in the structure of energy-acreage crops (sunflower, corn, soybean, sugar beet etc.) encourages the cultivation of a crop, and hence – introduction of maleficent organisms, which reduces productivity and obliges to use additional plant protection products.

As a result, this trend is accompanied by violation of rational land use and crop rotation requirements, neglecting of measures to protect agricultural land and adversely affects the ecological status of farmland, leading to soil depletion, reduction of qualitative indicators of agricultural land. At the same time, small and medium agribusiness feels particularly difficult access to infrastructure and logistics facilities, which greatly limits its export opportunities.

The essential development and effective sustainable development state functioning condition, ensuring high quality of life and population environmental safety is the creation and implementation of citizens land ownership right. The introduction of modern land use models based on the market relations focus on the effective domestic science achievements use in the field of land resource management are the integral part of

Ukraine as a modern state development strategy (Kovtunovych, 2007; Prutska, 2003). In order to study potential prospects and possible adverse of agricultural land market implementation effects the sociological survey of enterprises heads and land shares owners within Ukrainian Polissya regin was being conducted. During the research 787 respondents of Zhytomyr, Volyn and Rivne regions have been interviewed.

It should be noted, that the studied region feature is that it is characterized by higher, comparatively to other regions, level of agricultural production territorial concentration. It concentrates 11.2 % of capital assets, 11.8 % of the population that are engaged in agriculture and 13.9 % of countries agricultural product gross volume (Pashaver, 2009). Therefore, in some food and agricultural commodities production in Polissya it plays an essential role. Thus this region has got a number of land use problematic issues which can be solved due to the land reform completion and land market formation taking into account the economic, environmental and social components of rural development.

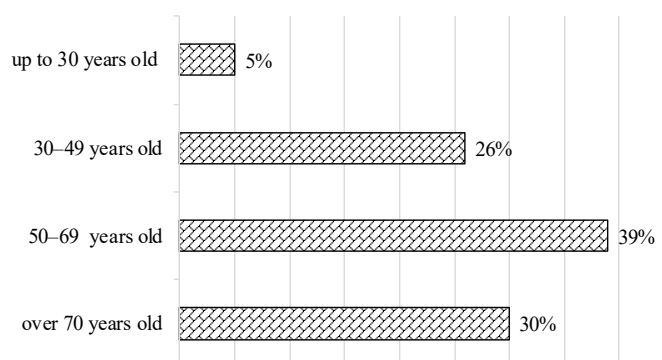
Analyzing the age structure of Polissya regin land shares owners it should be noted that according to the survey in the studied area, 69 % of respondents are aged over 50 years old, 39 % of them are the owners of land shares, whose age ranges from 50 to 69 years. In the age structure between 30 and 49 only 26 % of respondents are land shares owners. Conducted analysis shows that only one third of respondents refers to working age individuals, while people of retirement age significantly predominate in this structure (Fig. 1):

Established age structure of respondents shows that the majority of land owners can not use their land shares in proper way, or use modern

## II: Composition and structure of sowing areas under agricultural crops in Ukraine

Indicator	1990	1995	2000	2005	2010	2015	2015 to 1990, + –
<b>Total lands million hectares</b>	60.35	60.35	60.35	60.35	60.35	60.35	0
<b>The sown area of agricultural crops, hectares</b>	32.41	28.11	27.17	26.95	27.67	27.80	–4.61
<b>cereals and legumes, in thousand hectares</b>	14.58	14.22	13.65	15.09	15.72	15.45	0.87
<b>industrial crops</b>	3.75	4.0	4.19	7.30	7.44	7.85	4.1
<b>including: sugar beets</b>	1.61	0.95	0.86	0.50	0.53	0.46	–1.15
<b>sunflower</b>	1.64	2.87	2.94	4.57	4.74	5.19	3.55
<b>forage crops</b>	12.00	8.33	7.06	2.60	2.48	2.48	–9.52
<b>Level of plowed lands, %</b>	79.5	78.1	77.9	78.1	78.2	78.3	–1.2
<b>The structure of acreage, %</b>							
<b>a) cereals and legumes</b>	45.0	48.5	50.2	56.0	56.8	55.6	10.6
<b>b) technical cultures</b>	11.6	13.2	15.4	27.1	26.9	28.3	16.7
<b>including: sugar beets</b>	5.0	3.2	3.2	1.9	1.9	1.6	–3.4
<b>sunflower</b>	5.0	7.3	10.8	17.0	17.1	18.7	13.7
<b>c) the forage crops</b>	37.0	30.1	26.0	9.6	9.0	8.9	–28.1

Source: UkrStat.



1: Polissya region land shares owners age structure

technologies. That is why they offer their land shares on lease. It should be noted most of arable Polissya region lands have a low natural soil fertility, which restrains leaseholders to engage this lands in cultivation. As a result, in some Zhytomyr, Volyn and Rivne regions areas almost a third of the land shares remains out of cultivation. Conducted researches have confirmed, under the condition of the moratorium cancellation, significant part of Polissya region lands will be placed for sale, because the owners are not able to carry out effective agricultural production.

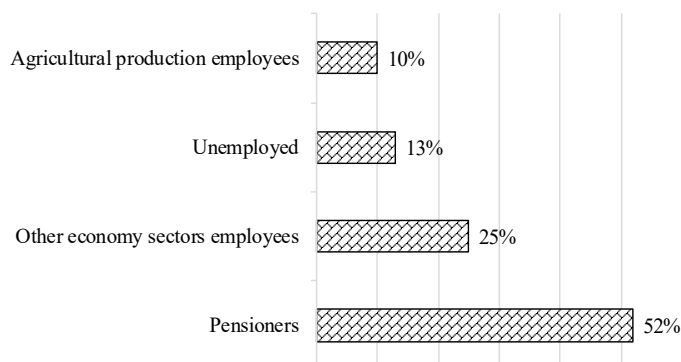
Considering the current market price, land shares holders can not obtain appropriate funds from the land shares sale transactions. Currently the land price in Ukraine is quite low, as well as the rural resident's living standards. For example, the average price per agricultural land hectare in the EU is 16 thds. \$, Spain – 15 thds. \$, France – 7 thds. \$, Poland – 8 thds. \$, while in Ukraine – 1 thds. \$. That is despite the fact that black soil areas in the Ukraine among the largest and most fertile soils in the world (Malyj, 2008). In other words, with significant potential we have a negligible cost, and this gives reason to think about if it is advisable to open land market at this moment. Indeed, money received from land shares holders sales, is not enough to the start of their own business, obtain a land secured loan, or city housing purchase.

Land shares holders employment has deteriorated due to production reduce and lack of circulating assets funds for their own economic activity (Fig. 2). Only 10 % of respondents that belong to the working population are agricultural production employees, 25 % are other economy sectors rural areas employees. At the same time 12 % of land shares rural areas owners remain unemployed. When conducting the survey we found that 52 % of Zhytomyr, Volyn and Rivne regions respondents, who own land shares, are pensioners. This category of the population, considering their age, can not independently cultivate their allocated land shares. That's why they lease them.

It should be noted that in the analyzed period has developed a tendency of employers for involved in agriculture workers need reduce (Tab. III).

So in 2014, this need was just 1.6 thsd., people, which is only 59 % of demand in 2010 (2.7 thsd., people). In addition, there was a decrease of agriculture-employed workers– from 768.3 in 2010 to 628.9 in 2014, which indicates jobs reduction and have a negative impact on rural development. The establishment of agricultural land market and production consolidation under conditions agribusiness corporatization could exacerbate this negative trend.

According to respondent's data, Considering the age of land shares owners and their financial and economic condition, only 8 % of them are able to



2: Polissya region land shares owners employment



## III: Labor resources, involved in agriculture, forestry and fisheries analysis

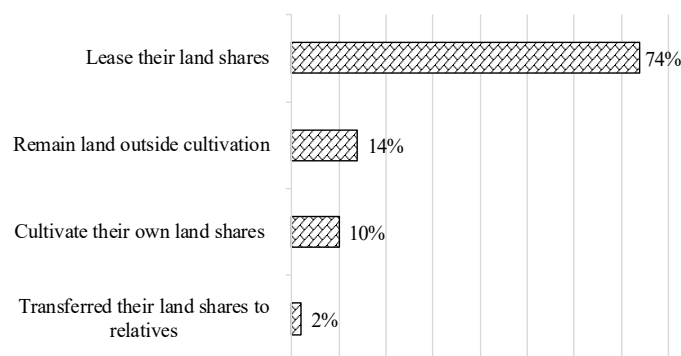
Indicator	Year					Deviations 2014 to 2010	
	2010	2011	2012	2013	2014	+/-	%
<b>Demand for workers, thsd.</b>	2.7	2.9	2.5	2.3	1.6	-1.1	59.3
<b>Number of employees, thsd.</b>	768.3	714.6	712.0	687.2	628.9	-139.4	81.9
<b>Staff costs, mln UA hryvnias</b>	14352.9	18050.3	22300.6	23128.6	23558.3	9205.4	164.1
<b>Average monthly wages pay, UA hryvnias</b>	1467.0	1852.0	2094.0	2344.0	2556.0	1089.0	174.2

cultivate their own land shares, 2 % of respondents transferred their land shares to relatives (Fig. 3). At the beginning of 2015, 74 % of land shares owners lease them. At the same 14 % of respondents remain land outside cultivation. Mainly, those lands consist of sod-podzolic low fertile and acidic soils, which are requiring special care and cultivation conditions in order to increase their fertility. Under the current economic conditions, costs, undertaken on these soils crops growing, are not always covered by income and are not profitable. The respondents note that for the effective use of Polissia region land the government soil fertility improving program considering this region agricultural production and environmental conditions of features, is needed.

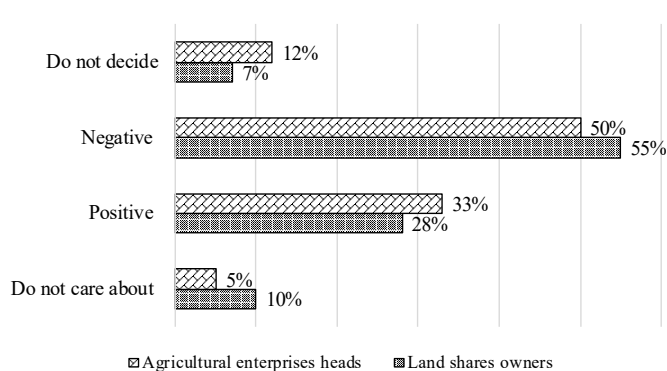
Analyzing the respondents attitudes to the agricultural land sale moratorium cancellation, it was found that only 28 % of land shares owners and 33 % of agricultural enterprises executives are positive about land sale moratorium cancellation

(Fig. 4). Respondents are motivated by the fact that investment funds will be involved in agriculture, land will be used as loans pledge and only mortgage banks will benefit from this situation. However, state-level regulatory framework is still insufficiently tested, there are constant state land cadastre failures, and there are significant delays in documentation. These aspects are questioning the efficiency of land use after moratorium cancellation. Thus, over 50 % of surveyed land shares owners and agricultural enterprises executives are negative about the agricultural land sale moratorium cancellation. Among the respondents there were those who do not care about the land market relations future development. Such land shares owners in relation to land issues inactivity promotes the shadow exchange relations.

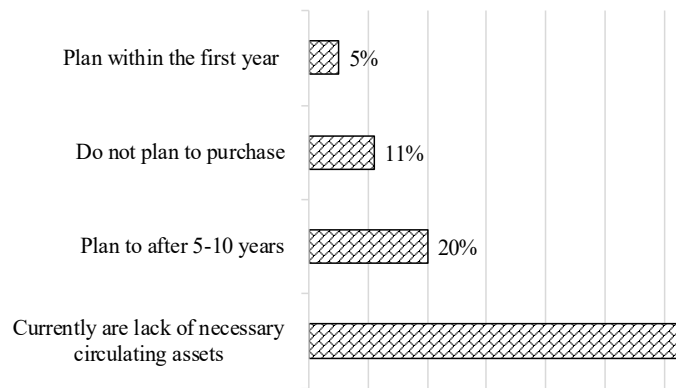
Conducted survey analysis shows that not all of leaseholders have the opportunity to buy land immediately after moratorium cancellation



3: Directions of Ukrainian Polissya region land shares use



4: Land shares owners and agricultural enterprises executives to the agricultural land sale moratorium cancellation attitudes



5: The lessees land buying after moratorium cancellation willingness

(Fig. 5). Therefore, 64 % of Zhytomyr, Volyn and Rivne regions respondents currently are lack of necessary circulating assets, 20 % could do so only after 5–10 years, while 11 % of respondents do not plan to buy land at all. Only 5 % of respondents have the opportunity to purchase small land shares during the first year after moratorium cancellation. In this situation, potential buyers could be the enterprise that are not related to agricultural production and foreign investors, whose purpose is financial portfolio diversification.

As conducted poll analysis shows that the respondents are not willing to buy land as well as sell it (Fig. 6). Rural population about the future of sold agricultural land unawareness, the lack of proper legal framework and information and consulting activities cause 55 % of respondents to refuse the land sale. The 19 % of respondents predict to sell their land shares after 5–10 years. The 8 % surveyed were undecided on this issue. With 18 % of land shares owners, considering their financial condition and existing social problems, ready to sell the land in the near future, even at a lower price.

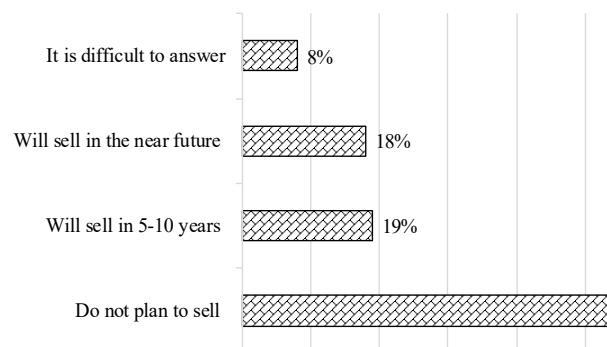
Conducted poll revealed that the majority of respondents prefer agricultural land to domestic farmers and agribusinesses repurchase (Fig. 7). This opinion is shared by 52 % of land shares owners and 65 % of agricultural enterprises executives. Respondents believe that exactly these categories of

producers will be the most efficient in land use will create jobs in rural areas, will develop infrastructure, will improve rural areas social development, will promote soil fertility increase.

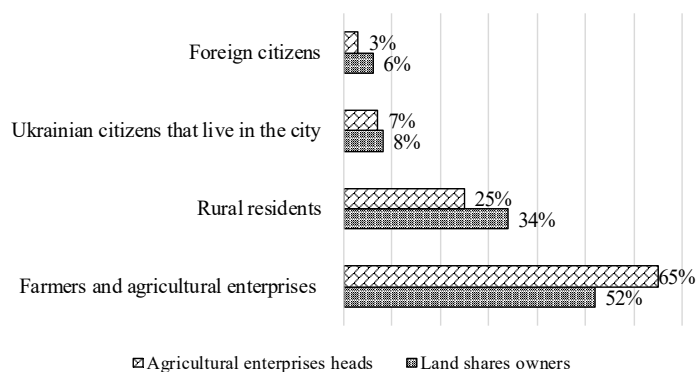
More than 34 % of land shares owners and 25 % of agricultural enterprises executives consider that it is appropriate to give agricultural land purchase right to rural residents, at the same time to involve young people to this process giving them preferential loans and state subsidies for housing construction and material and technical means purchases. The majority of respondents are absolutely against of foreigners land purchase.

Conducted survey has demonstrated that only 27 % of respondents have satisfactory financial and economic position to attract and cultivate more agricultural land (Fig. 8). The limited number producers now have the opportunity to use private individuals and credit unions funds. According to the agricultural producers opinion the main source of the funds (62 %) for the land purchase should be bank loans. The important role is assigned to the state regulation of this process in the form of providing support for subsidized credit cost reduction, interest rates reduce, which are now significantly high for the majority of domestic agricultural enterprises.

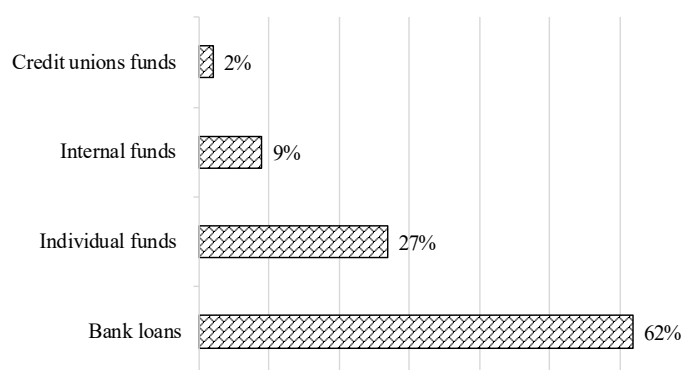
At the present stage it is necessary for Ukraine to create a range of measures for agriculture



6: Ukrainian Polissya region land shares owners land sell immediately after moratorium cancellation readiness



7: In the case of moratorium cancellation agricultural land priority buyers

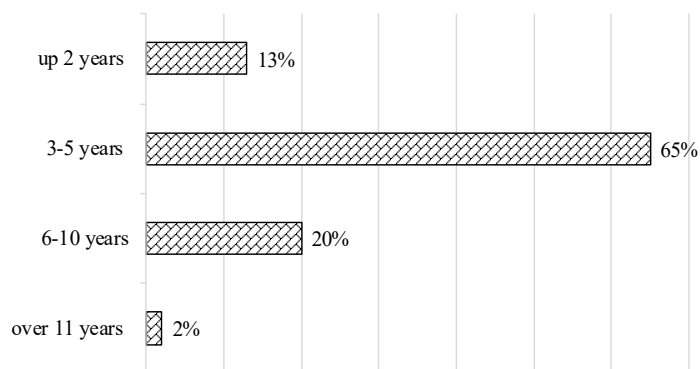


8: Sources of financial resources for the agricultural land purchase

lending within the context of reform and transition from subsidized to the market support agriculture financing system. However, the vast majority of commercial creditor institutions are not interested in agricultural producers lending because of their seasonal business activities, their current international requirements and standards discrepancy, lack of liquidity provision, etc. The existing agricultural land mortgage moratorium as well slows the growth of agricultural sector enterprises crediting (Danilishyn, 1999). So in 2015 Ukrainian agricultural enterprises have attracted 32 % less credit funds compared with 2014 (Pashaver, 2015).

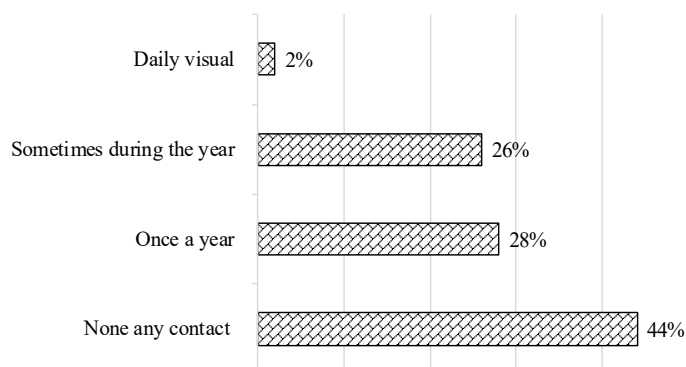
Lack of appropriate state regulation of rental relations does not allow the land share owners and leaseholders to sign a long terms contracts, maximally taking into account the interests of each party (Fig. 9). Thus, 65 % of lease agreements are concluded for a 5 years period according to the respondents. Most of them are for a less then 2 yrs period. In this case, it should be noted, that effective crop rotation cannot be implemented in the production in such a short period of land use.

In Ukraine the main focus should be on competitive environment among the potential land leaseholders forming; rural lessors rights protection; rent for the land increase; ecological



9: Duration of Ukrainian Polissya region land share lease contracts





10: Ukrainian Polissya region land shares owners with their land shares visual contact

monitoring and control implementation, which are aimed at leaseholders ecologically safe agricultural technologies use. It is reasonable to implement the land lease mortgage right mechanism, because this process does not change the landowner, but it is significantly profitable for leaseholder – will attract significant funds for further production development. Medium- and long-term land lease model could be focused on further lease agreements renegotiation, land inheritance or purchase.

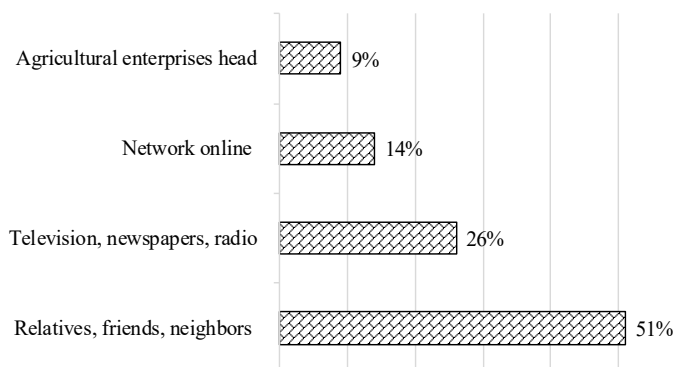
Significant present problem of land ownership is that in most cases, land owners (44 %) do not even know where their land shares are located (Fig. 10). In Polissya region there are cases when land shares are not processed for a long time, are overgrown with shrubs and weeds, becoming a reservation for pests and diseases. Conducted research showed that only 2 % of respondents know the boundaries and the cultivation state of their own land shares. In such a situation shadow land market regulation appears, where land transactions are informal and are still uncontrolled. Their owners and the local community face economic losses.

At the current economic conditions with the purpose of land use efficiency increase rural population information support became extremely important (Fig. 11). According to respondents, information and advisory work at the level of village councils is conducted at a low level. The survey

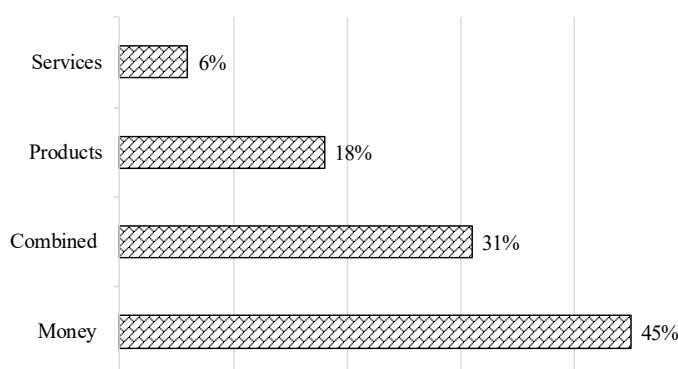
revealed, that 51 % of land shares owners find out about land issues news from relatives, friends and neighbors, a quarter of them receives information through TV, newspapers and radio, 9 % – from agricultural enterprises managers and only 14 % through the Internet.

The consequence of imperfect of institutional and information support of land relations currently is a considerable amount of uncoordinated issues between land users and land shares owners. In most cases, the cause of disputes that arise around land shares is unregulated at the state level regulatory legislation. Thus, according to the poll, a significant number of disputes arise about the land shares boundaries (37 %). On the second place (29 %) is uncoordinated issues around land lease, namely discrepancy of rent to the actual land value, rent payments delays, payments with natural products at inflated prices, disproportionate of benefits to the natural soil fertility. At the third place of disputes (23 %) respondents are attributed the order of land rent transfer and in the state land cadastre contracts registration. At the fourth position, respondents placed uncoordinated issues around land lease contracts and unclaimed land shares use (11 %).

Under modern conditions land sales moratorium in Ukraine does not prevent the agricultural land transactions realization, but generating their shadow turnover in the absence of transparent



11: Ukrainian Polissya region land shares owners about land relations information sources



12: Ukrainian Polissya region land share rent form

market. As a result, rural population – land shares owners, receiving lower than compared to a competitive market price for their land, suffer losses. Shadow transaction does not envisage tax payment and deductions to the state or local budgets. For moratorium cancellation, that is complete agricultural land market establishment, several measures that would ensure transparency and efficiency should be taken.

In terms of the tariff and food prices increase, an important issue for land shares owners is a form and amount of rent charge calculation (Fig. 12). According to the respondents, 45 % of respondents rent for land shares is made in monetary terms. A significant respondent's proportion confirmed that rents are made with products (18 %) and a combined charge (31 %). Thus, there are disputes between leaseholders and land shares owners related to the natural products overstated prices, lessors' needs disparity and low quality, supply delays and delivery inconveniences. The majority of respondents do not cooperate with leaseholders considering the economic shift method of most of them. Therefore, rural residents require technical means, varietal seeds, breeding cattle, machinery systems, crop protection means, veterinary service services.

There is such a situation in Ukraine, when on the one hand, there is a desire to cancel the land

sale moratorium, and on the other – fear, that this process will take speculative nature, considering the absence of appropriate legislative land transactions justification. Conducted poll has revealed that majority of domestic producer's unprofitability makes impossible their land purchase chances. Thus the Ukrainian Polissya region rural population, much of which currently are retired people (55 %), have no possibility of effective land cultivation. In case of the moratorium cancellation this category of population is the most sensitive under uncontrollable market conditions, can be remained without land shares for low prices.

Before entry into force of the law "On agricultural land circulation" but not before January 1, 2018, agricultural land of state and municipal property sale and purchase are not permitted. However, currently the economic justification of agricultural land market introduction advisability is important. For this purpose we conducted the forecast of possible outcomes (revenues and expenses) of land relations regulation specialized state agency – State Land Bank, which is similar to BVVG in Germany or SAFER in France (Tab. IV).

At the initial level of Ukraine agricultural land market introduction it is planned at the legislative level the transmission of 10 million hectares of land

IV: The State on land relations regulation specialized agency – State Land Bank forecasted activity performance indicators

Year	Operating activities funds, mln. US dol.	Forecasted market value of 1 ha, thsd. US dol.	Private land area that is planned to be bought by the State Land Bank, thsd., ha	Agricultural land under management area, min. ha
2018	127.00	2.13	59.68	9.468
2019	136.00	2.26	60.30	9.528
2020	144.87	2.39	60.59	9.588
2021	153.63	2.53	60.62	9.649
2022	162.31	2.69	60.42	9.709
2023	170.90	2.85	60.02	9.770
2024	179.44	3.02	59.45	9.830
2025	187.94	3.20	58.74	9.889

Source: own research.

V: *The estimated State Land Bank cost calculations, mil. US dol.*

Year	Land tax to the local budget payment, 0,1 %	Maintenance expenditures	Funds to the state budget transfer, 30 % of income	Other expenses, to 10 % of income	Total
2018	6.70	7.00	70.35	23.45	107.5
2019	7.16	7.13	75.14	25.05	114.48
2020	7.61	7.25	79.86	26.62	121.34
2021	8.05	7.38	84.53	28.18	128.14
2022	8.49	7.50	89.15	29.72	134.86
2023	8.93	7.63	93.73	31.24	141.53
2024	9.36	7.75	98.28	32.76	148.15
2025	9.79	7.88	102.80	34.27	154.74

Source: own research.

to the State Land Bank management jurisdiction which now is state property. Its mission to organize effective long term land lease. To finance the work of this institution it is planned the involvement of 3.7 million US dollars of United Nations support programme, 10.12 million US dollars – the European investment funds, and the the greatest sum – 500 million euros – from European banks. Furthermore, there is one more important source of income – land lease payments that the State Land Bank will give for the agribusinesses use. It is expected that the institution will receive at least \$ 187.5 million US dollars annually for this activity. Money received from the lease will go to crediting farmers. It is planned to involve other banks. Through them the institution wants to credit small farmers, assuming 80 % of the risk. The estimated State Land Bank cost calculations are presented in Tab. V.

Taking into account Ukraine national features it is expedient to take advantage from the developed world of land into economic circulation inclusion positive experience and to improve the Ukraine State Land Bank functioning mechanism. The activity of this land market subject will change the state's role in the regulatory policy system, will create the civilized agricultural land market regulations economic mechanism. As the foreign experience demonstrated, the financial institutions activities significantly affects the agricultural sector development level, population in food demand satisfaction and socio-economic rural areas situation improvement.

## DISCUSSION

Author's contribution consists in practical study of the selected topics at the Ukrainian Polissya region example, agricultural land marketformation preconditions study in particular. Processing 787 land shares owners and agricultural enterprises heads questionnaires made it possible to establish land shares owners age structure, their level of education, employment and all these factors impact on available land shares efficient use. Land shares owners and agricultural enterprises executives to the agricultural land sale moratorium cancellation attitudes, the lessees land bying after moratorium cancellation willingness and dources of financial resources for the agricultural land purchase were determined. The low land shares owners land issues awareness level and the necessity of extension services activity with the purpose of rural population advisory support were established.

Conducted sociological study, legal framework analysis and the situation with the land relations development in three Ukrainian regions study allowed to make concrete conclusions and recommendations about agricultural land market circulation possibility. As at 2016, land shares owners and agricultural enterprises heads are not ready for agricultural land market implementation because of imperfect market operations legal regulation, infrastructure provision problems, limited current assets for market operations participation and lack of information and advisory of land relations development provision.

## CONCLUSION

The structure of land fund as for its intended purpose, and by type of ownership significantly changed during the Ukraine market transformations period. Land use management organizational structure now differe, new forms economic activity arose, but complete land resources market has not formed. Privatized land parcels market turnover still remains economically and infrastructure unprovided, and agricultural land turnover is still not regulated by law. Furthermore, land relations reforming accompanied by increased environmental imbalance of the land fund and natural regeneration of soil

fertility possibility reduce. This situation causes negative economic, social and environmental impacts, holding back European integration and advanced technology economic activity approbations.

Ukrainian agricultural land market development will create the national economy competitive environment and specialized infrastructure. It is necessary to introduce regulated turnover to civilize the agricultural land sale market. This assumes not only the land sales moratorium cancellation but also "On Land Market" and "On the Land Cadastre" laws revision, that are bringing into force the single electronic land cadastre without which it is almost impossible to determine the real land origin, and accordingly prove to illegal land trade schemes involvement. An important step would be the land assets to the statutory of agricultural enterprises funds inclusion that will enable to save holistic land and property agricultural production complexes and provide land shares owners to the credit resources access.

Conducted survey has demonstrated that relevant prerequisites preconditions for agricultural land market implementation have not been established in Ukrainian Polissya region. Absence of corresponding infrastructure and land shares owners protection are the most problematic issues.

Financial support for the market infrastructure necessary elements formation, namely the State Land Bank, is now the problematic issue. Another issue is the creation of the conditions for effective activity of the state specialized of land relations regulation institution. After all the State Land Bank of Ukraine could get 10 million hectares of land. This area is equal to the area of Bulgaria. It is a very difficult task to manage such land bank effectively without appropriate experience.

During the research it was found that the land market should perform two basic tasks: firstly, to ensure the implementation of the rational and efficient land use principle, obtain maximum return from each land share unit at minimal cost; secondly, to form land as for special value relationships, promote land conservation and their fertility increase. These tasks can be executed by the market with the active state role, which provides land, as the most important natural resource, protection, will create legal, economic, organizational and technological conditions for reproduction and soil fertility improvement. It should be noted, that rent relations should be the major operation of land market. In the early stages for the fully functioning land market leading role should belong to the market infrastructure which mediates the purchase and sale, leases, land exchange and mortgage, transactions. Further studies will be focused on Ukrainian land market infrastructural and informational formation providing, the Land Bank role defining and mortgage lease rights mechanism developing.

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