

ВОДНЫЕ, ЗЕМЕЛЬНЫЕ И ЛЕСНЫЕ РЕСУРСЫ

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ORGANIZATION OF LAND USE ON AGRICULTURAL LANDS IN FOREIGN COUNTRIES

Abstract

In the article the experiences of foreign countries in the organization of land use, such aspects as: forms of ownership, restrictions on the size of land, the development of rental relations in different countries of the world, the opinions of various authors are considered. The minimum and maximum sizes of land use granted to one person in the countries of the world have been analyzed. Direct payments to farmers in European Union (EU) and Eurasian Economic Union (EAEU) countries have been studied. The analysis of the current legislation on land turnover in foreign countries has been presented.

The current restrictions on the size of land plots provided for rent and private ownership to one individual and legal entity are given. The results of the work of the Land Commission of the Republic of Kazakhstan and the identified costs in the process of land reform are presented. The measures taken by the Government of the Republic of Kazakhstan to eliminate them by introducing a moratorium for 5 years on the sale of land to private ownership are outlined and the main directions for improving land relations in Kazakhstan are outlined.

Key words: land relations, rational land management, land lease, private property, land use, agricultural land, gross output, effective use, land turnover, land legislation.

Introduction

In the legislation of many foreign countries, a tendency has been established to increase state interference in land relations, primarily in land ownership relations. This is manifested in constitutions, special laws and norms of civil laws [1].

Analysis of foreign legislation allows us to identify the main ways in which land relations are regulated, which has its own specifics in comparison with civil law regulation. Land relations are regulated in special laws on the lease, sale of land, order of inheritance, land use planning, as well as agricultural and urban codes. In many countries, laws have been passed on the elimination of striped, i.e. about rational land management. One of the important methods of state regulation of land relations in foreign countries is land use planning. It has a different name in different countries. In Great Britain – «planning of urban and rural areas», in Germany – «ordering the territory», in France – «organization of the territory», in the United States – «zoning».

A private owner, along with the rights of ownership, use and disposal, is also the owner of other rights: the right to donate, the right to exchange, to alienate, to make income, the right to manage, the right for unlimited use, etc. According to research by a number of Russian scientists: A private owner, along with the rights of ownership, use and disposal, is also the owner of other rights: the right to donate, the right to exchange, to alienate, to make income, the right to manage, the right for unlimited use, etc. According to research by a number of Russian scientists: Ryzhenkov A.Ja., Nazarenko V., Shagayda N.; Kazakh scientists Esirkeпов T., Kalieva M.,

Aitkhozhaeva G., Akhmetkerimova G. [2, 3, 4, 5, 6, 7, 8] the bundle of rights of a private owner can increase to 10. Thus, with the land turnover, there is a turnover of rights to use the land plot.

In a number of world countries where private ownership of land exists, the right for secondary land use may arise. In this case, the secondary land user can cultivate the land within the lease term of the primary tenant. The right of a secondary land user is always temporary and limited to the transfer of his rights to a third land user. In the legislation of the Republic of Kazakhstan, this right is called sublease. The transfer of land to secondary land use is prohibited by the Land Code (Article 41 of the Land Code of the Republic of Kazakhstan).

Latvia has adopted laws such as the Law on Land Use and Land Management (1991); Law on Environmental Protection (1991).

In Lithuania, there are, for example, Laws: «Environmental Protection» (1992); «On the administration of the county» (1994); «On the procedure for the restoration of ownership of the preserved real estate» (1991); «On land reform (1991); «On the development of rural agriculture» (2002).

In Estonia also the Law on the Right to Use Natural Resources (1994); Pollution Compensation Act (1993); Law on Environmental Supervision (1997) are adopted.

Methods and materials

In the course of the study, various methods of economic research were used: economic and statistical - in analyzing and assessing the current state, abstract-logical, used in identifying industry and regional features. In addition, the results of analysis and studies carried out by the authors of this article were used.

An important methodological part of the study is the scientific conclusions and provisions of foreign scholars in the areas of land use formation based on the regulation of land relations. The study is based on the principles of a systematic approach and technical and economic analysis on the results of research by specialists in the field of land use in foreign countries.

Results and discussion

Having studied the experience of developed world countries in the organization of land ownership, we can make some generalizations [9].

The right for temporary paid land use (lease) of a land plot is granted to citizens, non-state legal entities, as well as international organizations.

The right can be short-term - up to 5 years, long-term - up to 49 years, or up to 99 years. In the world countries, the terms of lease of land by legal entities and individuals of domestic land users are different; in most of them they do not exceed 50 years (**Table 1**).

Table 1- Maximum and minimum lease terms in the countries of the world for domestic land users

Country	Lease term limits		Country	Lease term limits	
	min	max		min	max
EU countries					
France	9 years	25 years	Greece	4 years	not defined.
Germany	10 years	18 years	Ireland	3 years	not defined.
Spain	6 years	15 years	Portugal	7 years	10 years
Finland	year	15 years	Netherlands	6 years	12 years
Italy	6 years	15 years	Switzerland	6 years	9 years
Austria	year	15 years	Luxenburg	6 years	8 years
Poland	10 years	prolongation	Hungary	8 years	20 years
Romania	year	further extension	Bulgaria	year	further extension
Czech Republic	year	not defined.	Estonia	3 years	not defined
Lithuania	year	25 years	Latvian	year	25 years

Countries of Independent States and the EAEU					
Kazakhstan	5 years	49 years	Russia	5 years	49 лет
Kyrgyzstan	5 years	50 years	Belarus Belarus	10 years	50 years
Turkmenistan	year	10 years	Uzbekistan	30 years	50 years
Tajikistan	3 years	20 years	Armenia	year	25 years
Other countries					
USA	year	year	Ukraine	not defined	50 years
Japan	not defined	20 years	Moldova	year	30 years

As we can see, in the EU countries, with some exceptions, where private ownership of agricultural land prevails, the share of rent is less than 20-50%. Moreover, in most cases, a minimum lease period is provided, both for the farm as a whole, and for the whole household.

In the EAEU countries, almost all land is state-owned and provided for long-term lease. And in the USA, Japan, Canada, the share of land lease is less than 50% of all agricultural land in these countries.

In most EU countries, the maximum lease period is significantly shorter than in the Commonwealth of Independent States (CIS) and EAEU countries [10]. According to the data of Academician of the Russian Academy of Agricultural Sciences Nazarenko V., in 2010 in the EU countries the share of leased agricultural land ranges from 13.1% in Denmark to 66.2% in Belgium (**Table 2**).

Table 2-Share of agricultural land leases in the world countries

EU countries	Share of land leases,%	EAEU countries	Share of land leases,%	Other countries	Share of land leases,%
Germany	42,0	Kazakhstan	98,7	USA	42,8
France	56,2	Russia	98,0	Canada	56,0
United Kingdom	38,4	Belarus	100,0	Japan	13,1
Belgium	66,2	Armenia	100,0	Georgia	100,0
Latvia	27,4	Kyrgyzstan	100,0	Moldova	100,0
Lithuania	48,1	Uzbekistan	100,0	Ukraine	60,0

In countries with market economies with small land uses, the level of land use efficiency is significantly higher than in some Commonwealth of Independent States (CIS) and EAEU countries. So, in Germany, with an average size of peasant farms of 49 hectares, productivity is 14 times higher than in Kazakhstan with its more significant average size of 270 hectares on average in the republic. In the CIS countries, irrational use of land is allowed, their withdrawal from agricultural turnover for a number of reasons: lack of technical means for cultivating land, seeds, mineral fertilizers, plant protection means, limited opportunities to cultivate the land by certain categories of workers (pensioners, employees of educational and social sphere), etc.

Provision of land rent for foreign citizens, foreign legal entities, joint ventures with foreign participation. The legislation of a number of countries limits the terms of leasing land to foreigners from 10-12 years (Germany) to 15 (Russia), 25 (Kazakhstan, Armenia), 20 (Eastern European countries) and 50 years (Tajikistan, Belarus). The terms for leasing agricultural land to foreigners are much shorter, the priority always remains with local farms and integrated structures.

The study of foreign experience in the development of rental and private land use makes it possible to avoid undesirable consequences in the process of reforming agricultural formations in Kazakhstan [11].

First, land in most countries is privately owned. The exception is Israel, Holland, where all land belongs to the state, and its use is under strict state control, and in Great Britain, formally, all land belongs to the royal family, but the rights to own it are freely sold. At the same time, it is very difficult to change the intended use of the land plot here. Land owners are prohibited from selling it to foreigners.

Second, ownership of agricultural land is limited in almost all countries. For example, in European countries, the state regulates and restricts private ownership of land. The maximum size of land ownership in a family in Romania is 100 hectares, in Hungary - 300 hectares per person, in Bulgaria a family can own no more than 30 hectares. In other countries, there is a restriction on the sale of agricultural land to foreigners: in Poland, there is a 12-year moratorium on the sale of such land; in New Zealand, permission for foreigners to purchase or even lease a plot of land is in an area of more than 2 hectares; in Canada, a foreigner can own no more than 8 hectares of agricultural land.

The land policy of the developed world countries provides to prevent the concentration of too large land tracts in the same hands for measures: in Denmark, the law sets the limit for the size of own and leased land use - 150 hectares of agricultural land. In Germany, no plot should be less than 1 ha. The maximum area in use is from 400 to 500 hectares. Quite often, a prerequisite for acquiring the right to lease or the right to acquire a land plot is the requirement that the tenant or buyer must be a local resident (Denmark, Germany, Finland, Netherlands and Italy) (**Table 3**).

In Ukraine, the law establishes the maximum permitted area of agricultural land owned by one person is 100 hectares, in Poland - 300 hectares, but taking into account the inherited land up to 500 hectares, in Germany, depending on the conditions of the federal lands - 400-500 hectares, in Hungary - up to 300 hectares, in Romania - up to 200 hectares. The minimum area of land ownership is set in Germany and Poland it is 1 hectare, in Japan - 0.5 hectares, and in Ukraine it is not legally defined [11]

Table 3- Production of gross output from 1 ha of farmland taking into account direct payments to farmers from the budget for the land use in the EU -27 countries

Size of land use, ha	EU countries	Production of gross output from 1 ha of agricultural land, thousand euros	Wheat yield, t/ha
Up to 30 ha-small	Romania (13 ha)	1,52	3,5
	Italy (17 ha)	3,88	5,4
	Poland (18 ha)	1,56	5,3
	Bulgaria (26 ha)	0,92	4,0
From 160 ha and above-large	United Kingdom (160 ha)	1,44	7,6
	Czech Republic (228 ha)	1,32	5,7
	Slovakia (579 ha)	1,0	4,9

So, on small areas (only 17 hectares) in Italy, the highest level of gross production (3.88 thousand euros per hectare), in the UK, on an area of 160 hectares, the highest level of wheat yield in the EU countries was obtained - 7.6 tons / ha. Thus, in these countries, support measures to cover part of the costs of production and a higher culture of farming and the composition of farmland are more influenced by support measures.

In the countries of the Customs Union, land leases from the state prevail. For example, in the Russian Federation the share of leased land in the total volume of transactions is 62%, and in terms of area is 82.7%, in Belarus - all land is leased, in Kazakhstan 99% of land is leased from the state.

Thirdly, the main feature of the formation of land ownership in the world countries is the widespread use of land leases.

It should be noted that the lease terms in different countries are not the same: in many of them minimum and maximum allowable terms are set. For example: in Belgium, the minimum is 12 years, and the maximum is 99 years, in Spain, from 6 to 15 years, in France from 12 to 25 years. At the same time, in Greece, Ireland and Portugal, only the minimum lease periods (4, 3 and 7 years) are defined, while in Denmark, Ukraine and Japan, on the contrary, the maximum is 30, 50 and 20 years. In the United States, land leases are one year. [11].

The next aspect in the field of property relations for agricultural land is the increase in farms and land consolidation. This is especially true for the countries of the European Union, where the process of buying out small farms and selling them to larger ones is actively taking place, that is, the enlargement of farms, as well as the elimination of the striped area.

In the discussion of the received data in many Western countries, there has been an increase in the number of farmers who combine ownership of land with its lease. This trend is due to the fact that farmers tend to increase the size of their farms. Given a relatively stable land tenure system and high land prices, this is most easily achieved by renting additional space.

The most difficult problem of land reform is the agricultural land market. Studying the experience of foreign countries, we conclude that the lease of agricultural land is an effective type of market relations and an alternative to buying and selling.

The legislation of most foreign countries allows transactions with agricultural land. In order for the circulation of agricultural land to contribute to the concentration of land resources in the hands of the most efficient users, the state, through the formation of legislative norms, controls land relations, introducing significant restrictions on the acquisition of agricultural land for ownership or lease [12].

In **Table 4**, we have considered the main advantages and disadvantages of leased and privately owned land.

For example, in Germany, the turnover of agricultural land is regulated on the basis of the provisions of the German Civil Code of 1896, the Law on Measures to Improve the Agrarian Structure and Protection of Agricultural and Forestry Enterprises (Law on Land Turnover) of July 28, 1961. The German civil code provides for a ban on the fragmentation of agricultural land and their alienation with a change in the designated purpose [13].

In France, the legal regulation of the turnover of agricultural land is laid down in the French Civil Code (Napoleon's Code) of 1804. The land law of France is characterized by a differentiated approach to the legal regulation of the turnover of agricultural land for the purpose of their protection and rational use of natural resources. Thus, a special system has been established, which allows defining the subjects of land rights in the future and, in the event of violation of the law, equitably distribute responsibility. In France, the state regulates the acquisition of land plots entering the market for the purpose of their subsequent resale. In order to prevent speculation in this category of land, there are high taxes on profits from the sale of agricultural plots.

Table 4 - Advantages and disadvantages of rental and private land use in the world countries with different economies

	Private land use	Leased land from the state or from a private owner
Advantages	Pays land tax in accordance with the generally established procedure and preferential treatment. In some countries, small farms are	Pays rent in the EAEU countries at the level of land tax or 100-120%, in countries with a market economy - the rent is set on income, which includes the land tax.

	exempted from land tax. Saving money on rental payments.	With a long-term lease, there is stability. However, in the case of short-term (from 1 to 5 years) and medium-term (up to 10 years), contractual obligations for the targeted use of the land, increasing its fertility must be fulfilled. Otherwise, the owner may terminate the contract unilaterally.
	stability (no one can be deprived of the right except by the will of the owner himself or by a court decision).	
	the right to dispose of the land plot at its discretion (to give, sell, pledge, lease, etc.).	
	the right to reimbursement of the cost of a land plot in the event of its withdrawal for state, municipal needs.	the right to own and use a land plot strictly for its intended purpose, as well as to pledge, the possibility of land redemption. Functions are limited.
Disadvantages	Requires significant investments at the expense of its own funds for the introduction of new technologies that increase the efficiency of production.	the right to compensation for damage when it is withdrawn for state, municipal needs.
		High rental payments, which change annually depending on the approved ratios.
		Restrictions on the right to dispose of a land plot (excludes the possibility of alienating a plot, the possibility of transferring it to sublease, only with the consent of the owner of the land plot).

In Italy, state control over the circulation of agricultural land is reduced for the possibility of compulsory lease or sale of land to other users. In Italy, strict conditions have been introduced for the targeted use of agricultural land, for violation of which there are corresponding sanctions.

In the United States, a multilevel agricultural policy is being pursued to ensure proper regulation of the turnover of agricultural land. US legislation is aimed at preserving rural communities and preventing non-agricultural land use.

The UK has the Urban and Rural Planning Act of 1947, which has developed regional land-use plans with different zones, including agricultural land use. In the UK, changing the type of intended use requires a special permit, which is issued by the relevant legislature. Also, the possibility of withdrawal of such lands in case of their inappropriate use has been established.

In China, the main form of transaction with this category of land is still lease. At the same time, only collective ownership of agricultural land is legally established for peasants living in villages, provinces and united in agricultural cooperatives. In Japan, the country's land resources are very limited, and the population density in the country is increasing, so agricultural land is protected by the state. This country is pursuing a strict policy for the protection of agricultural land [13].

Thus, in foreign countries, there is a tendency of special attention to the issue of legal regulation of agricultural land. It is aimed primarily at concentrating agricultural land in the hands of the most efficient users. In the coming years, in many foreign countries, a significant modification of the legal regulation of the turnover of agricultural land will be carried out, and many legislative acts will also be created and transformed.

Conclusion

Land in most countries is privately owned. The exceptions are Israel, China and the United Kingdom. Land owners are prohibited from selling it to foreigners.

Agricultural land ownership is limited in almost all countries. The land policy of the developed world countries provides for measures to prevent the concentration of too large land tracts in the same hands.

The main feature of the formation of land ownership in the world countries is the widespread use of land leases. It should be noted that the lease terms in different countries are not the same: in many of them minimum and maximum allowable terms are set.

In the countries of the Customs Union, land leases from the state prevail. For example, in the Russian Federation the share of leased land in the total volume of transactions is 62%, and in terms of area it is 82.7%, in Belarus - all land is leased, in Kazakhstan 99% of land is leased from the state.

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ШЕТ ЕЛДЕРДЕГІ АУЫЛ ШАРУАШЫЛЫҒЫ ЖЕРЛЕРІНДЕ ЖЕР ПАЙДАЛАНУДЫ ҰЙЫМДАСТЫРУ

Аңдатпа

Мақалада шет елдердің жерді пайдалануды қалыптастыру тәжірибесі қарастырылады, мысалы: меншік нысандары, жер көлемінің шектеулері, әлемнің әртүрлі елдерінде жалдау қатынастарын дамыту, әртүрлі авторлардың пікірлері қарастырылады. Әлемдегі елдердегі

бір ғана тұлғаға берілетін жер Пайдаланудың минималды және максималды көлемі талданған. Еуропалық Одақ (ЕО) және Еуразиялық экономикалық одақ (ЕАЭО) елдеріндегі фермерлерге төленетін тікелей төлемдер зерттелген. Шет елдердегі жер айналымы бойынша қолданыстағы заңға талдау жасалған.

Бір жеке және заңды тұлғаға жалға және жеке меншікке берілетін жер көлеміне қолданыстағы шектеулер келтіріледі. ҚР Жер комиссиясы жұмысының нәтижелері және жер реформасын жүргізу процесінде анықталған шығындар келтірілген. ҚР Үкіметінің жерді жеке меншікке сатуға 5 жылға мораторий енгізу арқылы оларды жою бойынша қабылдаған шаралары белгіленді және Қазақстандағы жер қатынастарын жетілдірудің басты бағыттары белгіленді.

Кілт сөздер: жер қатынастары, ұтымды жерге орналастыру, жерді жалға алу, жеке меншік, жер пайдалану, ауылшаруашылығы мақсатындағы жерлер, жалпы өнім, тиімді пайдаланушы, жер айналымы, жер заңнамасы.

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ОРГАНИЗАЦИЯ ЗЕМЛЕПОЛЬЗОВАНИЯ НА СЕЛЬСКОХОЗЯЙСТВЕННЫХ ЗЕМЛЯХ В ЗАРУБЕЖНЫХ СТРАНАХ

Аннотация

В статье рассматривается опыт зарубежных стран по формированию землепользований, такие аспекты как: формы собственности, ограничения размеров земельных угодий, развитие арендных отношений в разных странах мира, рассмотрены мнения различных авторов. Проанализированы предельные минимальные и максимальные размеры землепользований предоставляемых одному лицу в странах мира. Изучены прямые выплаты фермерам в странах Европейского союза (ЕС) и Евразийского экономического союза (ЕАЭС). Дан анализ действующего законодательства по обороту земель в зарубежных странах.

Приводятся действующие ограничения размеров земельных угодий, предоставляемых в аренду и частную собственность одному физическому и юридическому лицу. Приведены результаты работы Земельной Комиссии РК и выявленные издержки в процессе проведения земельной реформы. Обозначены принятые Правительством РК меры по их устранению путем введения моратория на 5 лет на продажу земель в частную собственность и обозначены главные направления совершенствования земельных отношений в Казахстане.

Ключевые слова: земельные отношения, рациональное землеустройство, аренда земли, частная собственность, землепользование, земли сельскохозяйственного назначения, валовая продукция, эффективный пользователь, оборот земель, земельное законодательство.

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ЗЕМЛЕДЕЛИЕ, АГРОХИМИЯ, КОРМОПРОИЗВОДСТВО, АГРОЭКОЛОГИЯ

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ВЛИЯНИЕ АТМОСФЕРНЫХ ОСАДКОВ НА УРОЖАЙНОСТЬ ЯРОВОЙ ПШЕНИЦЫ И ЯЧМЕНЯ В СУХОСТЕПНОЙ ЗОНЕ СЕВЕРНОГО КАЗАХСТАНА

Аннотация

Изучение влияния осадков на урожайность яровой пшеницы и ячменя проводилось на производственных посевах в научно-экспериментальном кампусе КазАТУ им. С. Сейфуллина в 2016-2019 г.г. В условиях сухостепной зоны Северного Казахстана изучено влияние атмосферных осадков на урожайность яровой пшеницы и ячменя. В годы исследований анализировалось количество и сроки выпадения осадков и их влияние на урожайность. Анализ среднемноголетнего количества осадков показал, что в период вегетации он составляет 41%. Установлена зависимость продуктивности зерновых культур от сроков выпадения осадков и их количества. Определялось накопление снега на полях в зимний период и количество продуктивной влаги в метровом слое почвы в весенний период. Влияние запасов снега на урожайность не установлено. В условиях неравномерного выпадения осадков по сезонам года решающее влияние на урожайность в критические по требованию к влаге фазы развития зерновых культур оказывали осадки выпавшие в июне-июле месяце. Корреляция урожайности с осадками выпавшими в эти месяцы у яровой пшеницы составила 0,61, у ячменя 0,41. В период вегетации зерновых культур анализировалось количество выпавших осадков и температура воздуха по месяцам. Результаты исследований показали, что урожайность зерновых культур по годам имела существенные различия. Тогда как различия по сумме осадков по годам не имели существенных различий. В благоприятные по срокам (июнь-июль) выпадения осадков годы средняя урожайность яровой пшеницы составила 14,7 ц/га, урожайность ячменя 13,7 ц/га. В годы с небольшим количеством осадков в критические фазы развития пшеницы и ячменя урожайность снизилась в четыре раза и составила 3,3 ц/га и 5,1 ц/га соответственно.

Ключевые слова: Атмосферные осадки, зерновые культуры, урожайность, ячмень, яровая мягкая пшеница, климат, фазы роста и развития.

Введение

В сухостепной зоне Северного Казахстана основным фактором лимитирующим урожайность сельскохозяйственных культур являются атмосферные осадки. Выпадение осадков в течении года имеет неравномерный характер. Сумма осадков за год в регионе колеблется в пределах 250-350 мм, в летний период выпадает 120-170 мм, что составляет 45-50% от годовой нормы. Особенностью засушливого климата степной зоны являются большие потери влаги в результате сдувания снега с полей, интенсивное испарение жидких осадков и термическое иссушение почвы в весенне-летний период, что приводит к большим суммарным потерям дефицитной влаги.

Особенность зимних осадков в виде снега - это его перемещение и возможность накопления его на полях в зимний период. По данным В.И. Панкова на открытых участках помимо сноса наблюдается сублимация или возгонка при ветро-метельном переносе, а также