1.5. STRATEGIC MANAGEMENT PRINCIPLES OF THE USE EFFICIENCY OF LAND RESOURCES OF FARM HOUSEHOLDS OF UKRAINE

Agriculture is characterized by specific properties associated with the biological nature of production processes and the mandatory availability of the land resources to implement such processes. Efficient use of land is the basis for the formation of the agricultural production efficiency over the short and long terms and its rational use is a basis for increasing the competitiveness of agricultural products and ensuring sustainable development of agricultural producers. In the course of agrarian reform in Ukraine, whose purpose was to make a farmer a full owner and user of the land, farms have developed significantly. The efficiency of farmland use is low in comparison with the use of the agricultural enterprise land, and the land use is ecologically unbalanced. All the above-mentioned factors deteriorate the land quality and cause environmental damage, as well as reduce the competitiveness of the products in the commodity market.

According to the Agriculture Development Strategy for the period up to 2020, approved by the Cabinet of Ministers of Ukraine dated October 17, 2013, № 806-p, one of the strategic goals of agricultural development is the rational use of agricultural land. Farms are considered economic entities of great socio-economic importance for rural communities. Creation of the necessary organizational, legal and financial prerequisites for the development of farms, increase of their competitiveness, efficient, intensive and environmentally safe use of land resources is the goal of the Concept of Farms and Agricultural Cooperatives Development for 2018-2020, approved by the Cabinet of Ministers of Ukraine dated September 13, 2017, No. 664-p.

The study of the land importance in the economy of farms has shown that its place and role are widely defined. In the economic sphere, it is defined as an economic entity, the material base of production, the allocation of productive forces and a source of human needs; in the ecological sphere, it is a natural object, ecosystem, and a biological resource; in the social sphere, it is a property object, a place of residence and a basis of spiritual production. Implementation of land relations in these spheres allows us defining land as a land capital, which consists of natural, intellectual and property capital[1], and the main task of the farmer is the expanded reproduction and the increase of value of the capital.

Land as an object and means of labor has basic properties as follows: it is a unique product of nature, it has a permanent location, it is limited in space, it is territorially extended and configurable, it has fertility and the ability to self-restoration and it is an indispensable variable resource in agricultural production. The main property of the land as a means of production is the soil fertility, which is the ability to provide plants with the required amount of nutrients in plant uptake form, as well as water and air throughout the growing season[2]. Besides, soil fertility is a feature of the land, which makes it possible to call it a productive force. The transformation of the potential soil fertility into economic property occurs under the influence of objective agricultural laws. The main ones are the law of indispensability and equivalence of plant life factors, the law of the minimum, the law of optimum and maximum, the law of the combined effect of plant life factors, the law of soil fertility, the law of soil fatigue (decline fertility): the law of crop rotation, and the law of returning (balance) of nutrients in the soil.

We consider the management of farmland resources a well-structured open process-oriented system, consisting of economic, environmental, regulatory, administrative, economic, innovation and managerial, and land management and technological subsystems. The subject of this system, that is, the control subsystem, is the farms and state authorities of all levels that carry out the implementation of the state land, agrarian and tax policies, supervise compliance with the norms of rational use of land resources. The object of management is differentiated by the rate of the essence of the definition of «land», covers the land and its fertility, land resources and their capitalization,

[1] Tretyak, A.M. (2011): Zemel'nyy kapital: teoretyko-metodolohichni osnovy formuvannya ta funktsionuvannya [Land Capital: theoretical and methodological bases of formation and functioning]. SPOLOM, Lviv, p.520.

[2] Korchynska, O.A. (2015): Orhanizatsiino-ekonomichne rehuliuvannia rozshyrenoho vidtvorennia rodiuchosti [Organizational and economic regulation of the extended reproduction of soil fertility]. Kyiv: NNTs «IAE», p.388.

land and its investment attractiveness, agricultural land (by type) and efficiency of its use. The basis for the farmer managerial decision-making is the economic interests of landowners, land users, the state and the society. The subject of management is the processes of rational and effective organization of land use, which are implemented based on economic, and organizational and economic mechanisms.

Unfortunately, the monocultural agricultural production, irrational land use of most farms, where owners neglect the above-mentioned laws of agriculture, cause the land degradation, soil depletion and decline in the fertility. The restoration of land means the reproduction of its productive power – fertility, which is greatly complicated by the impossibility of replacing the latter with artificial. Depending on the nutrient balance, the type of restoration can be reduced (balance is negative): simple (zero balance) and extended (positive balance): The first type of restoration is characteristic for the anthropogenic type of economic development, predatory use of land resources. Other types of restoration refer to the sustainable development of agriculture, where the environmentalization and care for future generations is the dominant principle.

The management of the use efficiency of the land resources of farms should strategically be oriented towards the formation of sustainable agro-landscapes, which provide sufficient level of agricultural production efficiency to finance expanded reproduction and satisfaction of the farmer's interests. The land management system of farms should be based on the following main principles: consistency; purposefulness; balance of interests of the farmer, landowners, the state and the society when using land resources; payment for the land use; sustainable development of agricultural land use; rationality and economic feasibility of the use of land resources; the priority of protecting land as the main means of production; responsibility and informativity. The functions of land management of farms are planning the use of land resources; forecasting the use of land resources in the short, medium and long term; organizing the use of land resources; motivating and controlling the rational use of land resources. At the state level, in addition to those specified, the functions of coordination, accounting, analysis and regulation of farmland land use should also be distinguished.

The management of farmland resources is based on economic and organizational and economic mechanisms. These mechanisms include a set of measures aimed at implementing strategic objectives of land policy in terms of rationalizing farmland land use, ensuring landowners and land users rights, establishing fair land payments, introducing sanctions for deteriorating land quality, and economic incentives for enhanced fertility reproduction of soils. At the farm level, the instruments of the organizational and economic mechanism are the optimization of land use, territorial organization of land resources use, farmland land management, and management of farming value chains. According to the research of scientists of the Institute of Natural Resources and Sustainable Development of the National Academy of Sciences of Ukraine, the mechanism for managing the land resources capitalization consists of institutional (regulatory, informational, infrastructure of land use formation): intellectual and social (instruments of intellectual, moral and ethical influence and the scientific provision of the land management system): organizational and land management (land management, planning and institutional and structural tools): and financial and economic (economic incentives, guarantees, instruments of market circulation, credit and mortgage, fiscal and budget, and innovative tools) of sub-mechanisms[1]. In other words, it is supposed to manage and regulate the main components of land capital.

The progressive movement of the Ukrainian economy towards the market is invariably accompanied by the transformation of economic mechanism, the change of forms and methods of management. In agriculture, such transformations were marked by the reform of collective farms and state farms and the creation of various private agricultural enterprises, farms on their basis, the expansion of private farms, etc. The study showed that the essence of Ukrainian farming began to form in the early 1920s in the period of the «new economic policy»[2]. The first farms in Ukraine

[1] Khvesyk, M.A. (2014): Kapitalizatsiia pryrodnykh resursiv [Nature resources capitalisation]. DU IEPSR NAN Ukrainy, Kyiv, p 268.

[2] Kachynskyi, V. (1925): Molodaia porosl fermerstva v ukraynskoi stepy [Young growth of farming in the Ukrainian

were established in 1988, and by the time of independence, 332 farms had been registered, with only 24.7% of operative farms[1]. During 1990-1995, the number of operative farms increased 424.1 times, the area of farmland in their ownership and use in 393.2 times. However, as M. Shulsky pointed out, these farms were formed on the basis of the collective and state farm system, and their rapid development was not caused by objective factors, but by the authorities' desire to accelerate land share and reform of agriculture[2]. In 1996-1999, the process of establishing farms was suspended, and in some regions, the process of reestablishing farms started, which was due to their low efficiency and small size. The intensification of farm development in 2000-2005 contributed to the acceleration of agrarian and land reform, and land share. A certain decrease in the number of operative farms in 2008-2013 is due to a combination of factors of agrarian transformation, regulation, and consolidation of their areas, competition with large agricultural enterprises, integration and globalization processes, etc. In general, in the period from 1990 to 2017, the number of farms increased 416.3 times, the area of agricultural lands and arable land in their ownership and use 2290.1 and 8912.1 times, the average size of the farmland by area of agricultural land 5.5 times, arable land 21.4 times, respectively[3].

By 01.01.2018, 80.6% of farms had been registered as the type of economic activity «Agriculture, Forestry, and Fishery», with the largest share of farms specializing in the cultivation of grain, legumes, and oilseeds[4]; 975 farms identified their main activity in animal husbandry, 260 in fishing.

In spite of the strategic role in the development of the industry and a large number of established farms, their place in agriculture of Ukraine remains insignificant so far (Table 1):

Table 1. The position of farms in the agrarian economy

The share of farms, %	Years					
	1995	2000	2005	2010	2016	2017
In the total number of operating agricultural enterprises	66,0	60,4	73,3	73,5	70,6	74,9
In the total area of the land of agricultural enterprises and households – agricultural land	1,9	5,6	9,9	11,8	12,2	12,5
– arable land	2,2	6,3	11,3	13,5	13,8	14,3
The share of employees in the total number of the population employed in the agricultural sector	n. d.	1,6	3,3	3,2	3,4	3,4
In the production of agricultural products (to the volume of production of all categories of farms)	0,8	2,1	4,6	6,1	8,7	8,7
– crop production	1,1	3,1	6,7	8,7	11,2	11,3
– livestock products	0,3	0,4	0,7	1,6	2,0	2,0
In total production – grain	1,5	5,1	10,7	12,0	13,4	14,0
– sunflower seeds	3,0	10,0	15,6	17,8	19,4	19,3
– meat (in slaughtering weight)	0,3	0,5	0,9	2,3	2,4	2,5
– milk	0,2	0,5	0,7	1,0	1,8	1,9

Note. n.d. – no data.

Source: the authors calculated according to the State Statistics Service of Ukraine[5].

steppe]. Khozyaystvo Ukrainy-The economy of Ukraine, No.6, p. 388.

[1] Haidutskyi, P.I. (2005): Ahrarna reforma v Ukraini [Agrarian reform in Ukraine]. Kyiv: NNTs «IAE», p. 424.

[2] Shulskyi, M.H. (2004): Fermerstvo: Problemy stanovlennia i rozvyrku [Farmers: problems of formation and development.]. Lviv: Svit-Lviv: The world, p. 392.

[3] State Statistics Committee of Ukraine (2015): Statistical information, available at URL: http://www.ukrstat.gov.ua.

[4] State Statistics Committee of Ukraine (2015): Statistical information, available at URL: http://www.ukrstat.gov.ua.

[5] State Statistics Committee of Ukraine (2015): Statistical information, available at URL: http://www.ukrstat.gov.ua.

The level of intensity of farmland use is high. In particular, in 2017, 99.0% of the land was already used for economic purposes, 95.1% was cultivated. Concurrently, in 1995-2017, the level of forest areas of the territories decreased by half, and compared with 1995 by 3.3 times, indicating the ecological destabilization of agricultural landscapes (Table 2):

Table 2. Intensity and ecological efficiency of the use of farmland resources

Indicator	Years						
	1995	2000	2005	2010	2013	2016	2017
Level of economic use, %	97,4	97,6	98,6	98,8	98,8	98,9	99,0
Level of tillage of agricultural lands, %	90,9	92,3	93,3	95,1	95,2	94,9	95,1
Level of forest areas, %	1,0	0,8	0,4	0,3	0,3	0,3	0,3
Employment (per 100 hectares of agricultural land): people.	n. d.	3,3	3,6	2,3	2,2	2,2	2,1
Energy security (per 100 hectares of agricultural land): kW	53,1	72,4	118,2	120,7	139,5	152,6	157,5
Share in total crop area,% – grains and legumes	68,4	59,0	65,1	60,7	60,3	55,7	54,9
– technical crops	23,1	28,4	29,3	35,8	36,7	42,1	43,2
Coefficient of environmental sustainability	0,186	0,177	0,133	0,154	0,154	0,155	0,154
Coefficient of environmental stability	0,190	0,182	0,148	0,166	0,166	0,167	0,166
Coefficient of anthropogenic load	3,881	3,889	3,782	3,929	3,930	3,930	3,931

Note. N. d. – no data.

Source: the authors calculated according to the State Statistics Service of Ukraine[1] and the State Geo-cadaster of Ukraine.

The structure of cultivated farm areas, which generally does not meet the rational norms of scientifically grounded alternation in the crop rotation, is environmentally ineffective. In turn, unbalanced nature leads to a significant deterioration of the ecological and landscape parameters of land resources. During 1995-2017, the ecological sustainability ratio decreased by 17.2%, ecological stability – by 12.6%, the level of anthropogenic load – increased by 1.3%, which characterizes agricultural landscapes as unstable and degrading. The consequence of irrational use of land resources of farms is the fatigue of soils, erosion processes, etc., which ultimately lead to a decrease in the efficiency of management and quality of products.

Based on the comprehensive analysis carried out, it was established that the overall efficiency of the use of land resources of farms of Ukraine in 2000-2017 has significantly increased. This was mainly due to the intensification of crop production and the growth of energy security of production, the introduction of innovative agro technologies and reducing labor costs. The volumes of production of crop production per 100 hectares of agricultural land in 2017, compared with 2000, increased 3.3 times, livestock production – three times. Net income from sales of products and services per 100 hectares of farmland increased 9.2 times, profit – 20.2 times (Table 3):

Table 3. Economic efficiency of the farmland use

Indicator	Years						
	2000	2005	2010	2013	2015	2016	2017
Yield capacity, c / ha – grains and legumes	15,8	22,0	21,9	32,1	33,4	39,2	37,1
– sunflower seeds	10,2	11,1	13,4	20,9	20,8	21,2	18,8
– sugar beets (factory)	186,3	238,1	250,8	376,0	422,3	486,4	499,1
– potato	128,9	150,8	159,5	225,5	163,2	182,6	189,2
– vegetable	78,2	136,5	159,2	288,2	316,3	307,9	348,4
– fruits and berries	11,5	17,3	49,7	58,5	69,8	91,3	69,4

[1] State Statistics Committee of Ukraine (2015): Statistical information, available at URL: http://www.ukrstat.gov.ua.

Produced per 100 hectares of agricultural land							
Meat (in slaughtering weight): cwt	3,8	3,9	11,1	14,3	12,0	12,7	12,7
Milk, cwt	31,4	26,3	26,1	35,2	40,8	41,4	42,5
Wool, cwt	0,4	1,9	3,0	2,2	1,6	1,2	1,2
Honey, kg	3,8	3,2	5,0	3,9	2,8	2,8	2,4
Eggs, thousand pcs. (per 100 hectares of grains and legumes)	0,8	1,0	3,5	2,8	3,3	4,2	3,8
Agricultural products (at constant prices in 2010): ths. UAH	144,9	223,3	278,9	428,9	435,3	498,1	474,8
– crop production	134,6	210,8	252,7	397,5	404,4	466,6	444,1
– livestock products	10,3	12,5	26,2	31,4	30,9	31,5	30,7
Net income from the sale of agricultural products and services, thousand dollars USA	4,8	16,5	31,7	49,2	45,6	48,4	44,3
Profit from the sale of agricultural products and services, thousand dollars USA	0,5	2,5	7,7	8,0	15,0	15,1	10,1

Notes. Recount of the net income and mass of profit from the sale in US dollars was made based on the average annual rate of the National Bank of Ukraine for leveling the inflation.

Source: compiled and calculated by the authors according to the State Statistics Service of Ukraine[1].

The most profitable, moreover, are products of plant growing, including sunflower seeds and grain, as well as fruits, berries, and grapes. The production and sale of livestock products are, in most cases, unprofitable, except for farm milk, poultry, and rabbits, as well as chicken eggs, which are in demand on some retail rural and urban markets.

One of the deterrent factors for improving the social efficiency of farms is the low wages of their workers. In 2017, the average monthly nominal wage of farmworkers was twice lower than the average level, indicating farmers' inability to fulfill the social role of effective employers in the rural area.

The most important factor in the development of farmland use is the mechanism of land lease. During 2003-2017, the share of the leased agricultural land increased by 1.7 times, and large and medium-sized farms operate fully on the leased land. However, unlike agricultural enterprises, the rent for land shares in farms, especially in small ones, was significantly lower: in 2017, its level was only 4.9% of the normative monetary value[2]. Among the forms of rent, the natural one was prevailing, which lead to the ineffectiveness of the institution of lease land relations of farms.

According to the theoretical and methodological basis and the current state of management of the use of farmland resources, a conceptual structural model of the organizational and economic mechanism was developed (Fig. 1):

Organizational and economic mechanism of the farmland use should be grounded on the following principles[3]: historicism; consistency; purposefulness; coherence of interests of the entities of the mechanism; adaptability to changing environmental conditions; maximum implementation of the farm potential; innovation; rational use of land resources; emergence; stimulation of the development of farming and preservation of the rural areas.

Currently, one of the main reasons for the decline in the efficiency of farmland use is the non-observance of scientifically justified crop rotation and the rules for the introduction of organic (in

[1] State Statistics Committee of Ukraine (2015): Statistical information, available at URL: http://www.ukrstat.gov.ua.

[2] Hutorov, A.O., Groshev, S.V. (2018): Rozvytok zemelnykh orendnykh vidnosyn v ahrarnomu sectori ekonomiky [Development of the land lease relations in the agrarian sector of economy]. Agrosvit – Agroworld, vol. 17, pp. 3-11.

[3] Groshev, S.V. (2019): Orhanizatsiino-economichnyi mekhanizm upravlinnia efektyvvnistiu vykorystannia zemelnykh resursiv fermerskykh hospodarstv [Organization and economic mechanism for managing the efficiency of land use of farms]. Biznes inform – Business Inform, No 1, pp. 208-214.

2016, they were applied in 3.2% of farms in the area of 56.9 thousand hectares): mineral (the share of fertilized crop area in 2003-2016 did not exceed 45%) and micro fertilizers (according to expert estimates, 3-5% of farmers use them): According to the calculations, in total for 2012-2016, the farmland use in Ukraine had not received 5.95 t / ha of humus arable, 9.3 centners / ha of nitrogen, phosphorus and potassium, 10.6 c / ha of calcium and magnesium, which is equal to a loss of about 68.7 thousand UAH / ha of soil potential and 3.1 thousand UAH / ha of the cost of the short supply of agricultural products.

The solution to this problem in the system of the organizational and economic mechanism is in introducing administrative liability of land users for the irrational use of arable land. We propose determining the amount of compensation by the formula (1):

$$P_в = НГО_р \cdot Ш \cdot Ф \cdot S/100,\ Ф > Д;\ P_в = 0, Ф \le Д, \quad (1)$$

where $P_в$ is the amount of compensation, UAH; $Ш$ is the size of the fine, calculated on 1% reduction of the soil quality parameter,%; $Ф$ is the actual value of the level of soil fertility reduction for a particular parameter,%; $Д$ is the permissible level of the soil fertility reduction for a particular parameter,%; S is the area of land, ha.

Smart-specialization management is considered a strategic direction of increasing the efficiency of the farmland use[1][2]. We refer to the smart-specialization of farms as the innovation-oriented system of spatial and systematic development of socially and ecologically balanced agricultural production of competitive products, which also involves a deliberate process of separation as a result of the division of socially distributed labor between industries and types of economic activity that are characterized by a homogeneous output, technical and technological support and qualification of staff, and is accompanied by an increase in the efficiency of the land use – the resource potential in the long term. In a transition to a smart-specialization, the farm is becoming innovative-oriented, and the state must do its utmost to promote innovation and investment, transfer of innovations to agribusiness, and stimulate sales of niche agricultural products.

The instruments of smart-specialization of farms include the digitalization of agribusiness, innovative agro technologies, organic industry, government interventions of innovative products, training and retraining of staff for the innovative farming. Organizational forms of the implementation of the smart-specialization policy are clusters in the agro-food sector, formed with the participation of farms, closed farm value creation chains, network forms of farm cooperatives, product integration, the involvement of farmers in agro technologies, national technological platforms, startups, etc.

To increase the farm management efficiency in the transition to a smart-specialization model, a national information center (hub) for the development of farming in Ukraine needs to be created. Its goals are the transfer of innovative technologies, the introduction of a system of rational and ecologically safe land use and bioethical animal husbandry, the development of electronic trade in agricultural and science-intensive products, monitoring agricultural markets to identify free market niches, ensuring cooperation of farmers and financial institutions to facilitate obtaining of credits, integration of farm sector to international markets for agrarian products, etc. The following principles should be followed to ensure the effective operation of the hub: ensuring transparency, honesty and ethics for doing business; protection of perfect economic competition; freedom and democracy when adopting farmers' management decisions; continuous improvement of the mechanisms of management of the farmer chain of value creation; adaptability and flexibility according to the changing environment; loyalty to new innovative solutions of competitors; guarantee of ecological safety of management; non-damage to the rural areas; preservation of soil fertility.

[1] Foray D. Smart Specialisation: the Concept [Rozumna spetsializatsiya: kontseptsiya]. Available at URL: http://opcompetitiveness.bg/images/module6/files/26/99_Foray_Sofia.pdf. .

[2] Smart Specialisation Platform. European Commission [Rozumna platforma spetsializatsiyi]. Yevropeys′ka komisiya. Available at URL: http://s3platform.jrc.ec.europa.eu/s3-guide. .

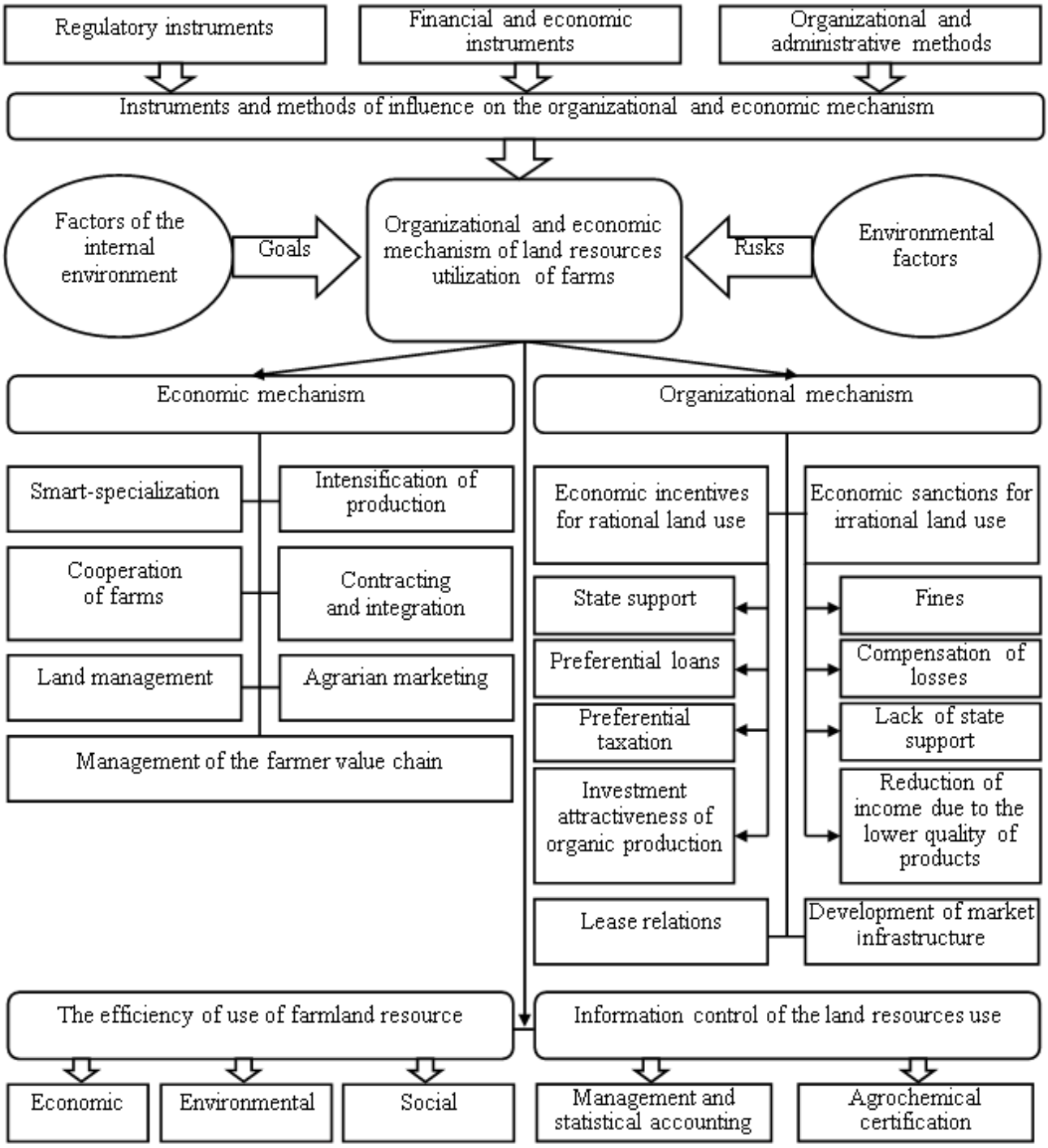

Fig. 1. The structural model of organizational and economic mechanism use of farmland resources

Source: Developed by the authors.

Besides, one of the strategic directions of increasing the efficiency of farmland use is the management of value creation chains[1]. In turn, we refer to the value creation chain of farms as a set of interconnected phases of the production and marketing process, which aims to increase the efficiency of the farm economy by maximizing the economic effect of economic activity in the target commodity market[2]. The function of the farm value chain includes the positioning of the farm

[1] Porter, M.E. (2005): Konkurentnoe preimushhestvo: Kak dostich' vysokogo rezul'tata i obespechit' ego ustojchivost'[Competitive Advantage. Creating and Sustaining Superior Performance], Alpina, Moscow, p.715.

[2] Groshev, S.V. (2018): Upravlinnia lantsiuhamy stvorennia tsinosti v konteksti pidvyshcnennia efektyvnosti vykorystannia zemelnykh resursiv fermerskykh hospodarstv [Management of value creation chains in the context of

and its products in the agrarian market, resource availability and production, the uniqueness of the created benefits and a set of managerial competencies of the farmer as the main manager. Managing the creation of the farm value chain is a systematic process of organizing, motivating and coordinating production and economic activity at all levels of the chain, constant monitoring of rational and ecologically safe use of the land resources, production of high quality products and marketing in specified timeframes to improve the competitiveness of the economy in the market and maximum satisfaction of the demand of a solvent final consumer. Moreover, the relevant management process involves four blocks of management decisions: improving the production process, improving specialization, product improvement, modernization of the value chain. The most effective forms of implementation of optimized farming chains of value creation are the cooperation of farms and the contracting of agricultural products as a network-integrated quasi-cooperation.

The main advantages of forming up farm cooperatives and network quasi-cooperatives are as follows:

- farmers' associations have advantages in concluding contracts for the purchase of material resources and the sale of their production;
- a significant advantage of cooperative associations is the possibility of exchanging experience on the effectiveness of agricultural activities, as well as the desire to work together to achieve competitive advantages in the agrarian market;
- due to the integration of farm efforts, as well as advantages in the purchase of raw materials and products, the rate of production return increases, thus, the profit is distributed equally between each participant of the cooperative;
- integrated farms are more economically protected from the risks of volatility of the market condition on non-niche products, therefore, stimulating its production and enabling the development of long-term strategic plans for the development of each farmer and the cooperative as a whole;
- a small individual farm does not have sufficient financial support for the rapid build-up of the material and technical, and resource facilities. Forming up cooperatives, farms get the opportunity to increase production volumes by obtaining a loan for the development of the enterprise, as well as using the means of production leased from other members of the cooperative;
- legally registered cooperative associations, complying with the requirements of the current legislation of Ukraine, may receive financial aid from the state budget, as well as take part in international projects for the development of agricultural co-operation.

In general, the development of traditional forms of cooperation in agriculture, especially in the field of farming, is still being hampered by the lack of effective incentives, the failure of efficient motives in the market life and the imperfect state agrarian policy[1]. Also, the formalization of cooperative relations requires legal registration, which ultimately leads to several additional problems and burden rates associated with the creation of a cooperative, reporting, taxation, distribution of results of work, and management.

Concurrently, the practice of farm management shows that without the integration of individual parts of the chain of value creation or quasi-cooperation, it is often not possible to increase the efficiency of land use and activities in general. The form of implementation of contractual relations with farm involvement is «network farms» or «network cooperatives». As a result, farms receive benefits in the form of guarantees of the stability of product sales; reduce the level of commercial risks, the access to additional resources and loans, legal protection of their rights against raiding, etc. As a result, the level of competitiveness of farms increases, the efficiency of using the land, labor and logistical resources increases, capital equipment, and labor intensity also increase, and there are wider opportunities for long-term planning of the economic activity.

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increasing the efficiency of land use of farms]. Aktyalni problem innovatsiinoi ekonomiky – Actual problems of innovative economy, No 4. pp. 76-83.

[1] Lupenko, Yu.O. (2016): Rozvytok pidpryjemnyctva i kooperaciji: instytucionaljnyj aspekt [Development of enterprise and cooperations : institutional aspect]. Kyiv: NNTs «IAE», p. 430.

The synergistic effect of network farming is the additional benefits of the scale of production, the organization of resource sharing and the sale of finished goods, the distribution of production and commercial risks between the customer and the commodity producer.

Thus, it can be claimed that the introduction of the above-mentioned mechanisms for managing the efficiency of farmland use will increase the efficiency of economic activity and the competitiveness of farms, rationalize their land use and expand the reproduction of land resources. At the state level, this contributes to the increase of employment in the rural areas, the development of small-scale farming, family-owned farms and their integration into the market.

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