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FURTHER WAYS TO IMPROVE LAND USE EFFICIENCY IN MODERN CONDITIONS OF UZBEKISTAN

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Abstract. The article discusses and explores the effectiveness of a multi-structure economy in conditions of socio-economic stability, which contributes to the rational use of agricultural resources and increased production of agricultural products, preservation and creation of new production and social infrastructure. The basis for the political and socio-economic well-being of society in Uzbekistan is the effective functioning of the agro-industrial complex. In Uzbekistan, with its geostrategic location in Asia, the diversity of natural, climatic, historical and socio-economic conditions, the problem of increasing the efficiency of agricultural production is particularly acute. The formation of market relations in our country, especially in agriculture, is assessed at a fairly high level. At the same time, the diversity of forms and subjects of economic activity, the availability of regulatory documents, and an entrepreneurial environment that provides conditions for free development, equal interaction and partnership of different forms of entrepreneurial activity become important elements of agricultural transformations. To solve these problems, agrarian reform is being deepened. In addition, the issues of increasing the efficiency of each structure and level of agricultural production while ensuring environmental safety, production in enterprises and on-farm divisions of various organizational and legal forms, taking into account promising domestic and foreign experience, have been studied.

Keywords: agro-industrial complex, agricultural products, multi-stage economy, mixed economy, environmental cooperation.

Introduction

In order to saturate the domestic market with food products, increase the income of the population by increasing the production in household farms, creation of a system of guaranteed procurement of products, produced on household lands, as well as the development of cooperative ties between owners of household lands and producers in each district, the Decree of the President of the Republic of Uzbekistan of December 16, 2021 No. PP-54 "On additional measures to increase the efficiency of the use of household lands and financial support for entrepreneurial initiatives of the population" was approved [1].

The document allocates land on the basis of reasonable calculations to limited liability companies "Rental Service" for the construction of greenhouses, refrigerated storage facilities and livestock complexes to organize a guaranteed supply of seedlings and seeds to household lands on a systematic basis. According to the Decree of the President of the Republic of Uzbekistan dated October 9, 2017 № UP-5199 "On measures to radically improve the system of protecting the rights and legitimate interests of farmers, farms and owners of household land, effective use of cultivated areas of agriculture" the necessary measures are being taken to organize multidisciplinary farms, create the necessary conditions for them, protect the rights and legitimate interests of agricultural enterprises [2].

In Uzbekistan, with its geostrategic location in Asia, a variety of natural, climatic, historical and socio-economic conditions, the problem of increasing the efficiency of agricultural production is especially acute. Deep transformations and reforms in the agricultural sector are already yielding their expected results. The formation of market relations in our country is assessed at a fairly high level.

At the same time, a variety of forms and subjects of economic activity, an entrepreneurial environment that provides conditions for free development, equal interaction and partnership of different forms of entrepreneurial activity become important elements of agrarian transformations. To solve these problems, agrarian reform is deepening.

1.Methods of solution

The basis of all relations in the process of agricultural production is the form of ownership of the means of production and produced material goods.In this sphere of production, agrarian relations have their own specifics, determined by the forms of land ownership, since land is the main means of production.When considering the economic aspects of a mixed economy, it is fundamentally important to determine the interpretation of this concept. A multi-structured economy in agriculture is associated with a certain form of ownership of the means of production and the production relations corresponding to it.It represents aset of production relations and various forms of ownership inherent in different economic structures [3,4].

At the macroeconomic level, the organizational and legal form of an enterprise in a broad sense looks like a form of business, and in this case these concepts coincide and, with a certain type of property relations, form an economic structure. At the micro level, these concepts diverge and take the form of internal economic relations. Therefore, at this level, enterprises of different legal forms can apply the same form of business, but at the same time, each legal form of the enterprise, in accordance with a certain type of ownership relationship and the corresponding production relations, forms the economic structure. Thus, a certain form of ownership of the means of production and the corresponding production relations to create their own economic structure.

In recent decades, the concepts of a mixed economy have appeared which reflect certain changes in the socio-economic life of society. Such changes manifested themselves in the interaction of the market and government regulation of the economy, private entrepreneurship and the socialization process, the combination of the private and public sectors of the economy, market and government regulation, capitalist trends and the socialization of life, economic and non-economic principles.A mixed economy is characterized not only by the presence of various structural elements in its composition, but also by the formation of specific forms of their combination in the real economy. They are represented by a relatively developed industrial basis, created in the years preceding the reforms, and combined with individual elements of post-industrialism, as well as the forms of ownership and management that have arisen in the modern economy, with the practical absence of effective methods of government regulation and the intensive development of market relations and entrepreneurship.

The innovative process of production, the social development of society, its democratization leads to an increase in the role of man in the economy. In a multi-layered economy, man and property occupy a special place and form a system of relations of economic structure, in which the nature of industrial relations orients a person to obtain the highest result of production. The cost-effective economic structure is due to

the results of the use of the means of production and live labor, the return on total investments. At the same time, efficiency is not only the ratio of costs and production results, but also the quality and usefulness of products for the consumer. It can be expressed in kind or in cash in the form of resource savings or social results [5].

In conditions of socio-economic stability (sustainability), the effectiveness of a diversified economy is manifested in a better connection with material resources, an increase in labor productivity and the quality of products produced with comparative technologies and the degree of mechanization of production, rational use of agricultural funds and an increase in the production of agricultural products, preservation and creation of new production and social infrastructure.

In addition to the overall economic efficiency of agriculture, economic efficiency should be considered in the context of each structure by level: agricultural production with environmental safety; individual industries; production in enterprises and internal divisions of different organizational and legal forms; production of individual crops and raising a certain type of animal; susceptibility to the introduction of new innovative, information technologies; investments in enterprises of one or another organizational and legal form, taking into account progressive domestic and foreign production experience.

Reliable conclusions about the economic efficiency of a particular economic structure can only be made by a system of indicators using natural and cost indicators. Production efficiency is determined by comparing the result and effect with costs and resources. In a system of performance indicators in a multi-stage economy, the result obtained can be reflected in the form of gross output, gross income, net income or profit [6].

Along with current labor and material costs, fixed assets are also used. In addition, in the system of indicators reflecting economic efficiency in a multi-layer environment, there is output, gross income, net income or profit received by one or another structure per hectare of land and cubic meter of irrigation water, labor productivity, cost of production, profitability, fund output and fund intensity of products. Each of these indicators characterizes one or another side of production, in one or another economic structure. Indicators should reflect the level of development of production of each structure and the degree of its intensity. One of them in the system of indicators may be the level (share) of agricultural production of an economic structure, which is the percentage of production by a particular economic structure in a certain territory to the total amount of production:

here D_m - share of agricultural production of economic structure, %; B_y - products produced by one structure or another; B_c - the total amount of products produced by all structures.

When determining the susceptibility of the economic structure of intensification of production, the concept of "level of intensity" is used, which is characterized by the sum of current production costs and fixed assets per hectare of available land area? The level of intensity can be used in assessing economic structures both in agriculture as a whole and in industries and individual territories and enterprises of different organizational and legal forms belonging to one or another economic structure. Evaluation of the efficiency of enterprises of different legal forms can also be carried out using financial monitoring [7,8].

Fig.1. Share of the category of farms in the production of agricultural products of the Republic of Uzbekistan in % for 2024 [19]

Certain conditions are necessary for the effective conduct of agricultural production during the formation of a multi-structure economy. One of them is the choice of optimal enterprise sizes. It is determined by a complex of factors, primarily the availability of qualified labor resources, the fund and energy supply, the use of the achievements of scientific and technological progress. With a variety of natural, economic, national and historical conditions, a variety of farms have functioned for decades. At the same time, small production under certain conditions can be as effective as large, especially if it is closely related to the infrastructure of large enterprises and cooperates with other enterprises. The concentration and size of agricultural enterprises is determined by a number of conditions. They are social, economic and natural in nature. The dynamics of concentration in agriculture and its optimum also depend on the level of development of production forces, scientific and technological progress, economic relations in society, and the system of state structure. Each level of development of productive forces and industrial relations corresponds to its specific size of agricultural enterprises [9.10,].

When assessing the efficiency of enterprises of different sizes, it should be borne in mind that low or high results are often determined not only by the difference in production sizes, but also by the economic mechanism of management. Therefore, the optimization of the size of enterprises should be closely linked with the improvement of other instruments of the market mechanism - financial and credit, tax policy, as well as with specialization, cooperation and integration of agro-industrial production, environmentally sound environmental management and economic law and order.

An important condition for the formation of a diversified economy is the deepening of territorial, regional, economic and inter-economic specialization and cooperation. Now, when agricultural producers work in market conditions, specialization, cooperation and integration are acquiring new content. In conditions of multi-level, it is necessary to clarify the concepts of specialization, cooperation and integration.

Specialization is a specific form of the social division of labor, in which a certain type of product is produced in the conditions of the multiplicity of enterprises of different organizational and legal forms. Specialization creates conditions for cooperation and

integration of enterprises. Cooperation is a form of organization of production and circulation on the basis of avoluntary association of partici pants; in amulti-stage economy, enterprises of different organizational and legal forms, on the basis of mutual interests, solve production problems in order to achieve the main goal - to obtain maximum profit [11].

Fig.2. Volume of agricultural production of the Republic of Uzbekistan for 2024 January - March [19]

In a multi-structure economy, interregional specialization occupies an important place, enterprises of different organizational and legal forms, on the terms of interregional agreements, occupy their "niches" in the production of certain types of products. This makes it possible to more fully involve the existing natural and labor and other resources in the economic turnover, to develop production and economic ties both between regions and in their territories between enterprises of different organizational and legal forms.

With all the variety of forms and types of management in the agricultural production of foreign countries, the princi ple of their equality before the law, both in rights and in obligations, the inviolability of their ownershi p of the means of production and manufactured products, should be highlighted.

A common pattern of sustainable work of agriculture in different foreign countries is that despite the difficulties of developing production at different stages, priorities, mechanisms of state regulation and support changed, only one important princi ple turned out to be independent, that any form and methods of state intervention should not restrain the economic development of agricultural enterprises and at the same time are designed to contribute to social stabilization in rural areas [12].

Hopes are justified for the growth of products in farms. Assessing the transformations in the agricultural economy that have taken place over the past ten years, we can talk about two results. The first is the granting of the right to organize any form of management, the formation of a mixed economy, the provision of independence to agricultural producers in the implementation of their production activities, the ability to dispose of the products produced and the income received at their discretion.

The second result is primarily related: with a reasonable orientation in agriculture mainly to small-scale private production, which leads to the consolidation of the

interests of enterprises and compliance equality of different organizational and legal forms of business; with thoughtful privatization of processing and agricultural service enterprises [13].

Currently, agricultural cooperation covers almost all spheres of agro-industrial production and circulation, it creates conditions for integration. Integration in a multi-structure environment is a qualitatively new form of production relations, uniting enterprises of different forms of ownership into a single production complex based on a combination of successive stages in agro-industrial production from product creation to consumption. There is a close relationship and mutual dependence between specialization, cooperation and integration. These areas of agricultural development are promising if they are based on rational relationships and modern technologies (Fig.3).

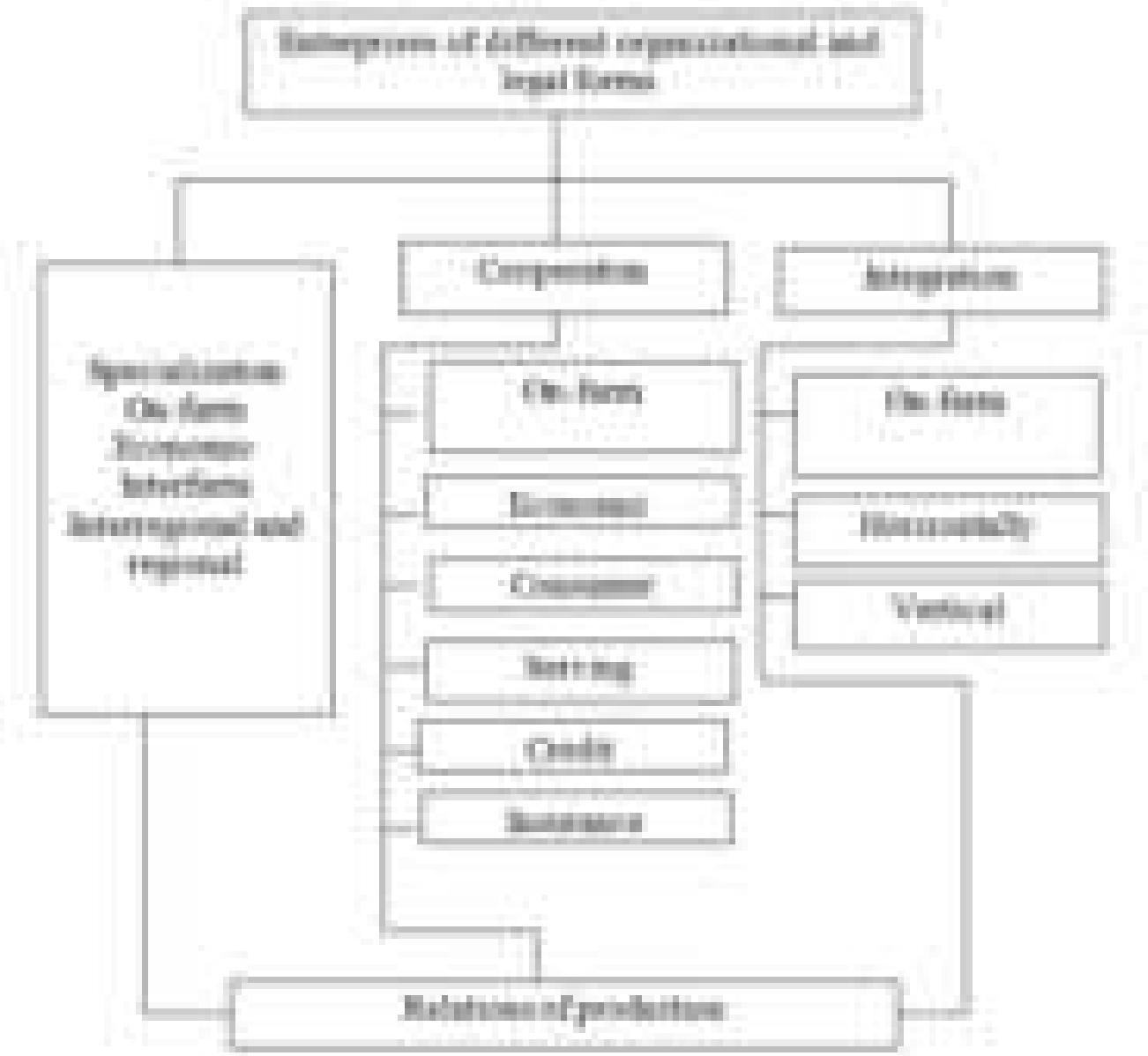

Fig.3. Diagram of the interdependence of specialization, cooperation and integration in a multi-structure economy [13]

When considering the rationalization of land management, one can take arable land and effective indicators (profit, cash proceeds, fixed assets and others) per 1 hectare of

arable land as factors when comparing them in the form of dependencies. Solving this problem empirically using the analysis of the scattering diagram of objects showed that as a result of the numerical expression of the dependence of the load of agricultural land per worker and the size of the farm on the area of land, a non-linear regression method using logarithm can be used. As a result, the regression equation was obtained [14]:

here, Y - area of agricultural land per employee, ha; x - size of farms by arable land area, ha.

This equation confirms the pattern according to which the efficiency of its use increases with a decrease in land area to the optimal size in farms. If all the studied farms had a rational combination of land area, supply fund and land load per employee, then they could produce many times more marketable products.

Economic and mathematical approaches to identifying the most rational land use sizes should be widely used to optimize the size of agricultural enterprises [15].

Recently, at certain stages of the development of agricultural science, various methods have been used to determine the optimal size of agricultural enterprises. With the development of productive forces and changes in production relations in recent years, a number of methodological approaches have required some rethinking, taking into account the current conditions for the development of agricultural production [16].

Considering that the size of the enterprise in modern conditions with various forms of ownership can change, it is difficult to calculate it on the basis of elementary mathematical calculations. Therefore, it is important to develop such a technique with which you can choose the best options according to the specified criteria. In this case, you can be guided by the following factors.

First, the current size of agricultural enterprises.

Second, the fact that the specialization of agricultural enterprises was not accidental. This is the result of a long development of production in specific natural and socio-economic conditions.

Third, the size of an agricultural enterprise is expressed by different indicators. Therefore, a multidimensional approach can be used, given that territorial stability and integrity is an important condition for effective agriculture, in which arable land plays a major role [17].

Fourth, the economic results of production are usually not linear and therefore it is extremely difficult to generalize the results of the study.

Fifth, the number of farms should be in the hundreds. To develop non-linear relationships and dependencies with a large number of farms, one can limit oneself to the results of one year, and to optimize the structure of production, an analysis period of at least five years is required.

Sixth, there are two approaches to optimizing the size of an agricultural enterprise: first, we can count with establishing the size of the enterprise as a whole, and then the size of intra-farm production; first find the size of on-farm production and divisions, and then, based on the results obtained, draw conclusions for the economy as a whole. Research has shown that the first approach is more rational.

Seventh, the size of enterprises is influenced by many different and contradictory factors. One of them is controllability. The efficiency of the enterprise largely depends on the head of the farm and its specialists, but this fact is difficult to quantify and requires

a separate study. Therefore, in the considered approaches to optimization, its influence should be taken into account in the final decision-making [19,20].

2.Results and Discussion.

Thus, the optimization approach involves several stages. At the first stage, the rational size of enterprises is established using the method of multivariate analysis using seven indicators: the total area of arable land on the farm, the area of agricultural land per worker, fixed production assets per 1 hectare of arable land, cash revenue per 1 hectare of arable land, profit per 1 hectare of arable land. In this case, it is necessary to proceed from the fact that the total area (of agricultural land) in the economy and its load per worker are important indicators of the size of the enterprise, which, in combination with production assets, provide the final result - marketable products and profit.

Information on the objects under study must be entered into computing devices and various options must be obtained at the output, from which those are selected in which, under equal other conditions, the largest mass of cash proceeds and profit from one hectare of arable land is obtained.To achieve the highest results, the necessary equi pment of the main production funds is determined.

Optimization is carried out in a multidimensional space by constructing an optimizing factor functional. To increase agricultural production, an important factor is the rational and efficient use of available land areas and the cultivation of crops on them that are most profitable. For this purpose, it is advisable to analyze the structure of sown areas, cash revenues, determine the optimal density of livestock, the need for mineral and organic fertilizers, the volume of mechanized work, the need for labor resources and structural costs, calculate the water supply of irrigated areas and make a forecast of nutritional, gas, salt, and other modes of increasing soil fertility.

Thus, in farms with an optimal size of land area, optimization of the intra-industry structure of production makes it possible to coordinate economic activities so that the enterprise in market conditions is competitive, easily managed and receives maximum output and profit.

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