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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

IMPROVEMENT OF THE FINANCIAL SUPPORT MECHANISM FOR THE AGRICULTURAL SECTOR

Specialization:	5312.01 – "Field economy"
Field of science:	Economic sciences
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GENERAL CHARACTERISTICS OF THE RESEARCH

Relevance and State of Research of the Topic: The transformation of the financial mechanism in the agricultural sector involves revising the legislative principles governing its operation, introducing and substantiating new financial methods, and establishing a regulatory and information framework to ensure that financial support is innovation- and investment-oriented. In this context, the modernization of the financial mechanism aims to adapt it to new economic conditions by transforming or improving financing forms and mechanisms in line with global trends.

Thus, an integrated system of financial mechanisms for agricultural production encompasses a wide range of important issues, including the development of forms and methods of financial support, the scientific justification of proposals in this field, the establishment of effective fiscal and credit support mechanisms, the introduction of incentive mechanisms to promote the innovative activities of agricultural entities, the identification of efficient and appropriate ways to utilize financial resources to ensure financial stability and the competitiveness of agricultural products, the establishment of an information support system for producers, the promotion of expanded reproduction, and the improvement of the economic efficiency of agricultural activities.

In recent years, the government has implemented a number of measures aimed at achieving positive results in these areas. Relevant state programs, strategies, and strategic roadmaps have been adopted, and priorities for the development of the sector have been identified.

In this regard, the President of the Republic of Azerbaijan, Ilham Aliyev, emphasizing the particular importance of agriculture in the national economy, stated:

"Agriculture is a priority sector for us. As we have already noted, through the development of agriculture, we will be able to eliminate unemployment, ensure the development of domestic production, and make the national economy more sustainable. Considering that approximately 50 percent of Azerbaijan's population lives in rural areas, this is a major social issue. Therefore, all these matters will certainly be taken into account in the investment program in the

coming years. Greater attention should be paid to the development of rural areas in the years ahead"[1].

This approach once again confirms that the development of the agricultural sector is of strategic importance from both economic and social perspectives.

The "Strategic Roadmap for the Production and Processing of Agricultural Products in the Republic of Azerbaijan" envisages the "*determination of targets for the agricultural sector's demand for financial resources*"[2], emphasizing the importance of taking into account the needs based on the level of provision of financial resources. The Decree "*On the Establishment of a New Subsidy Mechanism in the Agricultural Sector*" includes solutions to important issues such as "*the formation of a new mechanism related to support measures applied in the agricultural sector, ensuring accountability, transparency, and efficient use of budget funds in this field*"[3].

The support measures implemented within the framework of the aforementioned state programs and regulatory legal documents have resulted in positive changes in improving the financial condition of agricultural producers. Thus, during 2019–2024, the volume of gross agricultural output increased by 65.8%, while the total profit of agricultural enterprises increased 3.4 times. The profitability level of production in agricultural enterprises increased from 35.7% in 2019 to 38.7% in 2024 in crop production, and from 3.4% to 26.7% in livestock production. Nevertheless, the results achieved remain at a low level compared with the corresponding indicators of developed countries and are not satisfactory in terms of ensuring more efficient expanded reproduction.

Therefore, in order to develop the mechanism of state financial

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[1] "On Measures for the Development of Sanatorium and Resort Activities in the Karabakh Economic Region in the Field of Agriculture". Speech by the President of the Republic of Azerbaijan, Ilham Aliyev, during his visit to Aghjabadi. May 6.

[2] "Strategic Roadmap for the Production and Processing of Agricultural Products in the Republic of Azerbaijan". Decree of the President of the Republic of Azerbaijan dated December 6, 2016.

[3] Decree of the President of the Republic of Azerbaijan "On the Establishment of a New Subsidy Mechanism in the Agricultural Sector". June 27, 2019.

support for agricultural producers, it is necessary to develop scientifically substantiated concepts that will contribute to the efficient use of financial resources, taking into account the current situation, and to implement improvement measures in this area. In this regard, it can be noted that the topic of scientific research is dedicated to the study of an urgent problem that meets modern challenges.

Among the republican economists who deal with the problems of providing financial resources and improving the mechanism of financial support, the following can be noted: Z.A.Samadzadeh, E.A.Guliyev, B.Kh.Atashov, I.H.Ibrahimov, E.A.Ibrahimov, V.A.Abbasov, S.M.Mammadov, M.M.Sadigov, V.S.Bayramov, M.C.Huseynov, N.Muzaffarli, etc.

Foreign scientists K.Rau, F.Nitti, Z.Bodi, R.Merton, A.A.Nikitin, V.M.Rodionova, V.V.Kovalev, F.S.Mishkin T.N.Kasyanova, N.N.Ogarkova and others have conducted research in this direction.

It should be noted that the research of domestic and foreign scientists has mainly examined the issues of providing the economy and its sectors with financial resources and the mechanism of financial support in a general way. In the case of the agricultural sector, the issues of taking into account the characteristics of specific production sectors, the dependence between financial support and the volume of production in a specific sector, and the assessment of the needs of subjects in this sector have been studied to a limited extent.

Object and subject of the research. The object of the research of the dissertation work is the agricultural sector and economic entities operating in agriculture. The subject of the research is the development of the mechanism of financial support implemented by the state in the agricultural sector.

Goals and objectives of the research: The purpose of the research is to identify the theoretical and methodological aspects of the formation of financial resources in the agricultural sector, the main economic indicators of the agricultural sector and the level of provision with financial resources, to identify the directions for improving the provision of financial resources and improving the mechanism of financial support, and to prepare proposals and recommendations in this regard. The following tasks have been identified in this direction:

- study of scientific provisions related to the formation of financial resources in the agricultural sector;
- interpretation of the sources of formation of financial resources in the agricultural sector;
- investigation of the mechanism of financial support for the agricultural sector, its forms and types, interpretation of the features of their application;
- analysis of the dynamics of the main economic indicators of the agricultural sector;
- determination of the financial results of agricultural sectors and the factors affecting them;
- assessment of the level of financial support to the agricultural sector;
- identification of prospects for a wider provision of the agricultural sector with preferential loans;
- identification of opportunities for applying concessions in the material and technical support of the agricultural sector;
- preparation of proposals and recommendations for improving the mechanism of financial support to the agricultural sector.

Research methods: The following methods were used in the dissertation: analysis and synthesis, economic-statistical analysis, economic-mathematical methods, and comparative analysis.

Main Provisions Submitted for Defense. The main provisions submitted for defense are as follows:

- The directions for developing the financing mechanism should be determined based on the generalization of theoretical approaches to the formation of financial resources in the agricultural sector and the specific features of agricultural production;
- When implementing specific measures of state financial assistance and support for agricultural production, justifying the need to adapt the types, forms, and methods of state subsidies, as well as the use of credit and insurance mechanisms, to the level of development of production sectors is one of the current requirements;

- It is important to identify opportunities to use mechanisms that help expand the theoretical perspective of advanced international experience in providing financial support to agriculture;
- There is a need to justify mechanisms related to the development of financial and credit infrastructure for the financial support of the agricultural sector and the determination of the actual amount of financial support;
- It is necessary to identify factors affecting the development of agricultural entities based on an analysis of their financial condition and production activities;
- Under new challenges, it is important to establish links between the state financial support system, subsidies, credit resources, and the insurance system;
- From a practical point of view, it is necessary to identify priorities for using financial support mechanisms aimed at stimulating innovative development.

Scientific Novelty of the Research. The scientific novelty of the research is characterized by the following:

- Based on the fundamental principles of the research, the theoretical and methodological provisions describing the content of the financial support mechanism have been systematized;
- The scientific foundations of regulatory, informational, and methodological support for financial instruments aimed at the formation and use of financial resources in accordance with the resource potential and natural and economic conditions of the agricultural sector have been determined;
- Taking into account the role of state financial support in agricultural development, the directions for adapting this support to the requirements of the agricultural economy have been justified from a practical point of view;
- The importance of considering the geographical and economic conditions of production sectors, their level of financial resource availability, and their profitability when providing subsidies and preferential loans for agricultural products, as well as when developing insurance relations, has been justified;

- The importance of a systematic approach to determining the actual amount of financial assistance for the innovation-oriented development of the agricultural sector, as well as priorities for improving financial support, have been identified.

Theoretical and Practical Significance of the Research: The theoretical significance of the results obtained in the conducted research is reflected in their potential to play an important role in generalizing theoretical and methodological approaches related to the improvement of the financial provision of agriculture and the state support mechanism, as well as scientific views on the development of financial relations in agriculture, and in the scientific substantiation of strategies developed in this field. The main scientific provisions and results of the research may serve as a theoretical and methodological basis for studies on the development of the financing mechanism of the agricultural sector.

The practical significance of the dissertation is expressed in the possibility of developing relevant proposals and recommendations using scientific provisions and results related to financial support for the agricultural sector. The proposed recommendations may also be used in the formulation and improvement of policies aimed at improving the financial provision of entities operating in the agricultural sector.

Approbation and Implementation. The applicant has published 6 articles and 4 conference abstracts on the topic of the dissertation, including 1 article and 2 abstracts abroad, in reputable domestic and foreign journals and conference proceedings recommended by the Higher Attestation Commission. The main provisions of the research were reflected in the abstracts entitled “Priorities of the Financial Support Mechanism for the Agricultural Sector” (Eskişehir, 2022), “Assessment of the Financial Potential of the Agricultural Sector” (Mingachevir, 2022), “Strengthening Financial Mechanisms for Improving Investments in the Agricultural Sector” (Kharkov, 2024), and “Factors Affecting the Financial Potential of the Agricultural Sector” (Mingachevir, 2024), presented at international and national conferences. In addition, the applicant's articles on the research topic entitled “Subsidization as a Component of Financial Support in the Agricultural Sector” (Ganja, 2022), “Features of Lending to

Agricultural Production" (Mingachevir, 2024), "Analysis of the Level of Provision of Financial Resources in the Agricultural Sector" (Ganja, 2024), "The Mechanism of Application of Concessions in the Material and Technical Support of the Agrarian Field" (Baku, 2024), "Enhancing Financial Mechanisms to Improve Investment in the Agricultural Sector" (Ganja, 2025), and "State Support and Stimulation of Investment Activity in Agriculture in Azerbaijan" (Moscow, 2025) have been published in periodical journals.

Name of the Organization Where the Dissertation Was Conducted: Azerbaijan State Agricultural University.

Total Volume of the Dissertation in Characters, Indicating the Volume of Each Structural Section Separately. The dissertation consists of an introduction, three chapters, a conclusion, and a list of references, comprising a total of 247,034 characters. The introduction comprises 11,627 characters, Chapter I comprises 80,027 characters, Chapter II comprises 51,659 characters, Chapter III comprises 62,903 characters, the conclusion comprises 14,505 characters, and the list of references comprises 15,193 characters. The research includes 13 tables, 4 graphs, and 1 diagram, while the list of references contains 118 sources. The total number of characters in the dissertation, excluding tables, graphs, and the list of references, is 220,721.

SUMMARY OF THE RESEARCH WORK

In the introduction of the dissertation, the relevance of the topic, the state of the problem's study, the objectives and tasks of the research, its object, subject, scientific novelty, practical significance, and approval are explained.

In Chapter I of the dissertation, entitled **"The Financial Mechanism of Agricultural Sector Development and the Scientific-Theoretical Provisions Related to Its Formation**," the theoretical foundations of the formation of the financial mechanism in the agricultural sector, the forms, principles, and characteristics of the financial support mechanism for the agricultural sector, as well as international experience related to financial support for the agricultural sector, are discussed.

In modern conditions, transformational and digital changes require

the development of special development mechanisms for the economy and its sectors. From this point of view, elements, methods, and tools that make it possible to identify and forecast possible changes in the external environment are of particular importance. The economic processes taking place in this direction in the real activity of the agricultural sector make the formation, use, and application of a modern financial mechanism that is adequate to the competitive environment necessary for its development. In fact, the effective development of any field of activity largely depends on the financial mechanism.

Due to the expansion of digital transformation, financial resources as an economic category have also undergone certain changes. New digital currencies have emerged, and the interactions between financial intermediaries and their clients have improved, complemented by remote service forms and the use of artificial intelligence. It is clear that conceptually this also applies to the essential areas of finance, money, and credit.

Thus, it can be noted that determining the relationship between the economic essence of finance and its forms of manifestation is of great theoretical and practical importance. These relationships also take into account issues related to the sphere of financial relations, the methods of formation and use of financial resources, the composition of participants in financial relations, and others. Therefore, the functions performed by finance and its role in the economy are characterized by their specificity. In some cases, since the sources of funds used in financing and lending processes are identified, the boundaries between financial and credit resources become blurred.

The financial mechanism in the agricultural sector, as in other sectors of the economy, is characterized as a process that ensures the efficient functioning and sustainable development of individual areas and carries out the distribution of financial resources. The financial mechanism of the agricultural sector also includes the interaction of interrelated tools aimed at regulating the activities of economic entities and the processes in the management system at various periods, as well as methods of influencing production, distribution, exchange, and consumption through the use of financial resources. In addition to the above, the financial mechanism is considered the most effective link

in the economic mechanism aimed at increasing the flexibility and efficiency of managing the activities of agricultural sectors. From this point of view, the issue of attracting financial resources required for the implementation of various economic processes in the agricultural sector attracts special attention due to its relevance.

The financial support mechanism for the agricultural sector is of special importance not only for meeting the country's demand for agricultural products through domestic production but also for strengthening enterprises' positions in international competition. Financial support directly influences the efficiency and competitiveness of agricultural enterprises, functioning within a system of specific principles and methods. The state financial support system in the agricultural sector is formed on such principles and methods that enable long-term growth in production efficiency and contribute to transforming agriculture into a competitive sector of the economy at the level of global standards. This is because improving the overall macroeconomic situation, ensuring stability in the agricultural economy, increasing agricultural production, and enhancing production efficiency and product competitiveness require new approaches in the state's agricultural policy.

The state influences the activities of economic entities directly and indirectly, ensuring the coordination of economic activities through certain rules and regulations, eliminating imbalances in the development of various economic sectors, and creating equal opportunities for the normal functioning and balanced development of each sector. Thus, it can be stated that state support is one of the main prerequisites for the existence, efficient operation, and development of agricultural production and the food market.

The modern trends in the development of the agricultural economy require the application of new approaches, principles, methods, and management forms at all levels of the production structure of different sectors. This can primarily be linked to the need to create conditions for agricultural producers operating on the basis of market principles to ensure the sustainability of expanded reproduction. It is well known that for this purpose, the use of relevant organizational and economic mechanisms remains constantly important, and within this framework,

identifying more effective mechanisms of state financial support for the agricultural sector and assessing the possibilities of adapting them to the existing economic development potential come to the forefront. At present, international experience in agricultural development shows the increasing role of the state in regulating agricultural and food markets. Particularly in developed countries, since the agricultural sector is viewed as a system lacking self-regulation capacity, the funds allocated for agricultural support are considered a means of compensating for losses under conditions of instability.

In Chapter II of the dissertation, entitled **"The Current State of the Agricultural Sector: Analysis of Key Economic Indicators and Provision with Financial Resources",** the main economic indicators of the agricultural sector, the financial results of agricultural production areas and the factors influencing them, as well as the level of financial support to the agricultural sector are analyzed.

The most important development characteristics of the country's socio-economic system are mainly determined by the resource potential of the agricultural sector, including production resources and the possibilities of their efficient use to ensure the implementation of economic activities and adaptation to changes in economic processes. The development potential of the socio-economic system depends on the organization of production, the volume of resources used in the activities of different sectors, and the amount of products produced. Since agriculture is represented by interconnected elements such as production, processing, and sales, the development potential of a specific production area is characterized by the factors that determine it.

Agriculture is a complex socio-economic system that determines the factors of production development, the nature and efficiency of farming processes, and the quantitative and qualitative characteristics of products. Determining the criteria for sustainable agricultural development requires the evaluation of several economic indicators. In this regard, analyzing the changes in key economic indicators makes it possible to assess the level of development of the agricultural sector.

Research shows that agricultural production has increased steadily in recent years. Thus, compared to 2019, the total agricultural output in 2024 increased by 65.8% and reached 12,995.2 million manats.

During the same period, the total output of agricultural enterprises increased by 108.7% and reached 1,488.7 million manats, while the total agricultural output of individual entrepreneurs, family farms, and households increased by 61.5% and reached 11,506.5 million manats.

In agricultural enterprises, the total output of crop production increased 2.6 times, while livestock production increased by 70.8%. In individual entrepreneurial farms, family farms, and households, the total output of crop production increased by 55.8%, while livestock production increased by 66.9%.

In 2024, 55.0% of the total output of agricultural enterprises was produced by crop production, while 45.0% was produced by livestock production. In individual entrepreneurial farms, family farms, and households, 46.4% of the total agricultural output came from crop production, while 53.6% came from livestock production.

In addition, in 2024, nearly 88.5% of the total agricultural output was produced by individual entrepreneurial farms, family farms, and households (Table 1).

Table 1

Gross agricultural product, at actual prices, in million manats

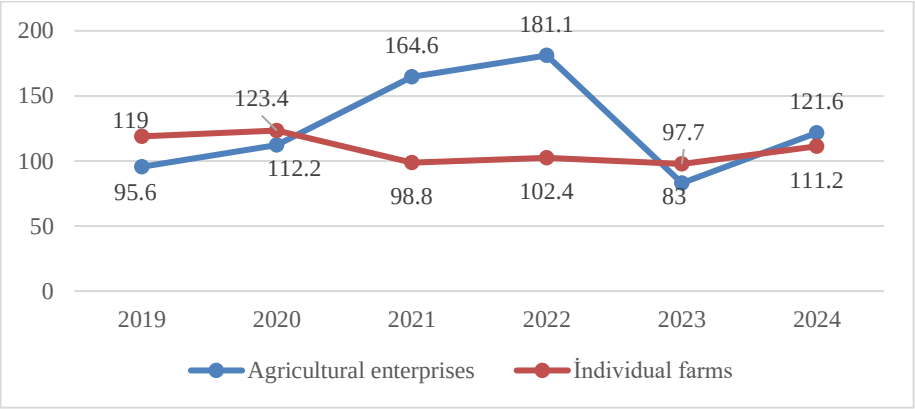
Years	Total	in crop production and livestock farming	including		Total	including	
			Crop products	livestock products		Crop products	livestock products
	Agricultural enterprises				Individual entrepreneurs, family farms, and household farms		
2019	7836,7	713,2	321,0	392,2	7123,5	3430,2	3693,3
2020	8428,9	834,5	438,3	396,2	7594,4	3590,1	4004,3
2021	9163,4	885,9	467,3	418,6	8277,5	4043,7	4233,8
2022	10984,2	1094	509,2	584,8	9890,2	5028,8	4861,4
2023	12210,6	1351,1	693,7	657,4	10859,5	5240,2	5619,3
2024	12995,2	1488,7	818,7	670,0	11506,5	5343,6	6162,9
Compared to 2019, in 2024, %	165,8	208,7	255,0	170,8	161,5	155,8	166,9

Source: *The table was prepared by the author based on data from the State Statistical Committee.* https://www.stat.gov.az/source/agriculture/az/1.9.xls

In modern conditions, increasing the efficiency of agricultural production through technical and technological modernization is considered one of the most important issues of the agricultural economy. Achieving the target indicators of financial resource provision for agricultural enterprises directly depends on investments in fixed capital and the availability of financial resources for implementing expanded reproduction. It is well known that the main objective of agricultural enterprises is to achieve higher output and profit in production with minimum costs. It should be noted that without a detailed analysis of the production potential of enterprises, as well as without determining the results of production and sales, it is not possible to reduce production costs and achieve sustainable profit.

Profit is one of the most important indicators of enterprises' activities, as it determines the level of profitability and the financial results of production and economic activities. Identifying reserves for increasing profit is an important component of financial planning in enterprises. As is known, economic reserves are characterized by the possibilities of improving the production and financial activities of agricultural enterprises through maximum utilization of existing production potential, achievements of scientific and technical progress, and advanced practices. Identifying reserves for profit growth is carried out in the following directions: applying intensification along with expanding production areas; improving the structure of production areas; preventing losses; increasing productivity, etc.

The analysis of profit dynamics in agriculture shows that, compared to 2019, this indicator increased significantly in both agricultural enterprises and individual entrepreneurial farms in 2024, by 3.4 times and 35.6%, respectively. The analysis shows that, compared to the previous year, the profit of agricultural enterprises decreased by 4.4% in 2019, increased by 12.2% in 2020, by 64.6% in 2021, and by 81.1% in 2022. In 2023, profit decreased by 17.0% compared to the previous year, while in 2024, it increased by 21.6%. Looking at the profit dynamics of individual entrepreneurial farms, it becomes clear that profit increased by 19.0% in 2019 compared to the previous year, increased by 23.4% in 2020, decreased by 1.2% in 2021, increased by 2.4% in 2022, decreased by 2.3% in 2023, and increased by 11.2% in 2024 (Graph 1).



Graph 1. Profit Dynamics in Agriculture, as a Percentage Compared to the Previous Year

Source: The graph was prepared by the author based on statistical data.
https://www.stat.gov.az/source/agriculture/az/1.52.xls
https://www.stat.gov.az/source/agriculture/

Achieving financial stability in agricultural enterprises directly depends on a more effectively structured agricultural policy based on specific goals and principles, which includes a system of directions and mechanisms of state support. In this regard, the state financial support policy for the agricultural sector is of great importance. The purpose of state financial support is related to ensuring the efficient operation and dynamic development of agricultural entities, as well as maintaining their competitiveness at a high level.

Providing subsidies to agriculture requires ensuring the economic efficiency of their results. It should be noted that considering the effects of agricultural subsidies from only one perspective is associated with certain shortcomings. Therefore, the results of agricultural subsidies are primarily focused on determining budget efficiency or the overall production indicators of this sector. In this regard, evaluating the role of subsidies in improving economic development indicators in the agricultural sector is considered an important issue. Supporting agricultural production through subsidies is mainly based on quantitative criteria related to the activities of agricultural enterprises. Supporting production through subsidies also

contributes to the innovative development of different branches of agriculture and increases their competitiveness. In this context, the existing support system based on subsidies requires the improvement of state policy aimed at stimulating agricultural production, as well as a systematic and scientifically based approach to agricultural subsidies.

Statistical data show that, in recent years, there has been a general increasing trend in the amount of subsidies and financial benefits provided to the agricultural sector. The analysis of the dynamics of state support in the form of subsidies shows that, although increases and decreases occurred in different types of subsidies during 2019–2024, the total amount of subsidies allocated increased significantly (Table 2).

Cədvəl 2.

Dynamics of Subsidies Allocated to the Agricultural Sector in the Republic of Azerbaijan

Types of subsidies	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Sowing and perennial plantations (alfalfa and motor oil)	62600.7	233235.1	258557.3	246558.4	262491.9	273998.4
Cotton production (mass planting support)	22527.7	32762.1	28549.8	54766.1	53108.4	59143.2
Tobacco production	185.5	232.76	226.7	808.9	1951.3	2888.5
Sugar beet production	873.8	751.13	697.8	2321.8	3533	4342.9
Production of first- and second-generation seeds and seedlings	7425.1	4766.1	6658.4	7433.1	6002.3	5603.96
Calves obtained through artificial insemination	8254.5	8799.8	9067.4	9690.4	10300	10300
Silkworm cocoon production	3156.5	2172.4	2405.1	1989	2050.57	1376.72
Maintenance of bee colonies	4265.3	5017.5	5313.3	5820.9	0	0
Production of food wheat	—	0	0	0	12536.5	11096.2

Source: *The table was prepared based on data obtained upon request from the Agrarian Credit and Development Agency under the Ministry of Agriculture of the Republic of Azerbaijan..*[4]

[4] Letter No. 3-22-21-2-N-2998-42-6751/2024 of the Agricultural Credit and Development Agency under the Ministry of Agriculture of the Republic of Azerbaijan.

One of the main directions of financial support for the agricultural sector is the leasing mechanism. Leasing services provide favorable conditions for the use of advanced technologies in agricultural production by supplying agricultural producers with the necessary means of production, primarily equipment.

Research shows that the leasing and sale of agricultural machinery and equipment through leasing by "Agroservis" OJSC to agricultural producers plays an important role in strengthening the material and technical base of the agricultural sector. However, the analysis of statistical data shows that there has been a very significant decrease in the leasing and sale of agricultural machinery and equipment through leasing by "Agroservis" OJSC to agricultural producers. Compared to 2019, in 2024, the number of tractors decreased by 92.7%, ploughs by 55.8%, cultivators by 95.2%, seeders by 98.9%, combine harvesters by 96.4%, fertilizer spreaders by 92.2%, hay rakes by 79.3%, mowing units attached to combines by 60%, and other agricultural machinery and equipment by 93.5%. During the same period, the number of mowing machines decreased by 70.3%, and orchard tillers by 76.9%. In 2019, the value of machinery sold and provided by "Agroservis" OJSC amounted to 130.6 million manats, while in 2024, this figure decreased by 95.7% to 5.6 million manats (Table 3).

International experience shows that financial leasing is currently one of the most effective methods of financing for enterprises operating in the agricultural sector. This is because, in most cases, agricultural enterprises lack the necessary funds to invest in equipment for production. As a result, a significant part of the material and technical base, which plays a fundamental role in the development of agricultural production, is lost. In general, leasing involves providing property to business entities for temporary use under repayment and payment conditions. Research shows that subsidies intended for product production and resource subsidies have relatively low economic efficiency. Therefore, to ensure long-term growth in agriculture and strengthen the environment for innovation, it is important to pay special attention to sectors that develop technologies that increase labor productivity.

Table 3.

Agricultural Machinery and Equipment Through Leasing by "Agroservis" OJSC, at Year-End

Machinery and equipment	2019	2020	2021	2022	2023	2024	2024 as a % of 2019
Tractors	662	266	137	86	114	48	7.3
Ploughs	197	134	67	71	191	87	44.2
Cultivators	188	54	39	3	28	9	4.8
Seeders	180	147	67	90	103	2	1.1
Mowing machines	64	10	5	20	269	19	29.7
Hay balers	21	34	1	29	37	—	—
Cotton harvesters	45	12	1	15	21	—	—
Combine harvesters	225	54	106	49	69	8	3.6
Fertilizer spreaders	64	6	2	13	62	5	7.8
Hay rakes	29	9	1	16	25	6	20.7
Orchard tillers	13	71	2	4	25	3	23.1
Tractor trailers	180	115	30	4	24	—	—
Mowing units attached to combines	20	14	12	20	16	8	40.0
Other agricultural machinery and equipment	260	479	138	129	120	17	6.5
Value of machinery sold and provided, million manats	130.6	52.3	37.6	31.8	47.7	5.6	4.3

Source: *The table was prepared by the author based on data from the State Statistical Committee.* *https://www.stat.gov.az/source/agriculture/az/1.16.xls*

Chapter III of the dissertation, entitled **"Provision of Financial Resources to the Agricultural Sector and Improvement of the Financial Support Mechanism,"** covers the expansion of access to preferential loans in the agricultural sector, the prospects for applying financial benefits in the material and technical support of the agricultural sector, and the directions for improving the financial support mechanism for the agricultural sector.

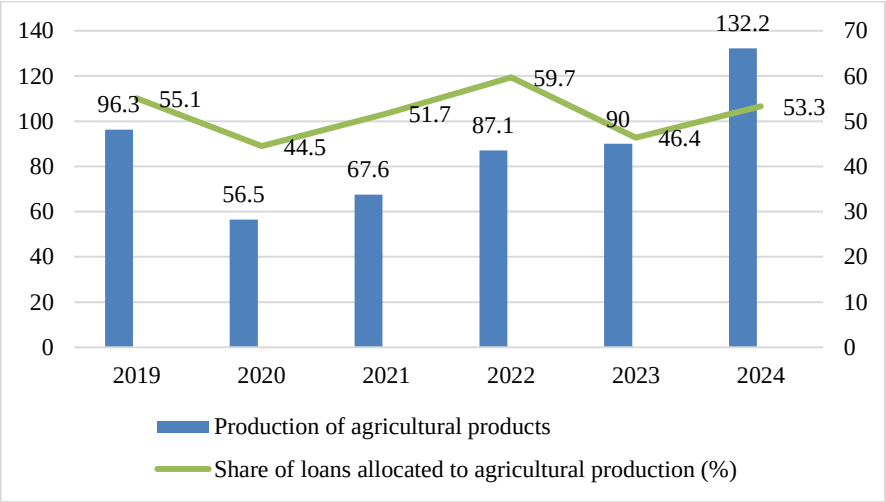
In the context of deepening integration processes in the agricultural sector, the production and promotion of agricultural products at local

and international levels, the development of scientific cooperation, activities aimed at establishing economic, scientific, and production relations, as well as financing the agricultural sector on preferential terms, are among the priorities of the state's economic policy. Currently, many countries around the world widely use the practice of creating favorable conditions for agricultural production by providing various benefits. State participation in financing the activities of agricultural enterprises is carried out in different ways, including state subsidies and interest payments on bank loans. Financial services to the agricultural sector through preferential bank loans are provided by commercial, cooperative, and specialized banks, insurance companies, and other credit institutions.

Different forms of lending are widely used in agriculture, including lending through international financial institutions. Lending to agricultural producers is carried out using the funds of banks and leasing companies, as well as within the framework of international integration. Providing preferential loans through the compensation of interest rates on loans from budget funds is of particular importance for the development of the agricultural sector. In this regard, improving the efficiency of the lending mechanism for agricultural production through the use of budget funds under conditions of international economic integration is justified by taking into account international experience.

In general, lending plays an important role in agricultural development and is aimed at generating sufficient income to expand production. Loans also serve as a main source of financing for agricultural enterprises to renew production and working capital. Looking at the dynamics of preferential loans provided for agricultural production, it becomes clear that the Entrepreneurship Development Fund provided 96.3 million manats to 1,450 projects in 2019, 56.5 million manats to 824 projects in 2020, 67.6 million manats to 1,774 projects in 2021, 87.1 million manats in 2022, 90.0 million manats in 2023, and 132.2 million manats in 2024 in preferential loans for agricultural production. Of the total preferential loans provided by the Fund, 55.1% in 2019 and 53.3% in 2024 were directed to agricultural production. Compared to 2019, the amount of preferential loans

provided by the Fund for agricultural production increased by 37.3% in 2024 (Graph 3).



Graph 3. Amount and Share of Preferential Loans Provided for Agricultural Production by the Entrepreneurship Development Fund, 2019–2024, Million Manats

Source: *The graph was prepared based on data provided by the Entrepreneurship Development Fund under the Ministry of Economy of the Republic of Azerbaijan.* https://economy.gov.az/az/post/2500/sahibkarlar-dovletin-guzestli-maliyye-mexanizmleri-ile-bizneslerini-inkisaf-etdirirler?

Currently, within the framework of state support measures for the agricultural sector, preferential loans are provided to agricultural producers using the funds of the Agrarian Credit and Development Agency. Loans to support agriculture are provided at annual interest rates of 7% or 12%. In addition, preferential loans are also provided for the purchase of agricultural equipment and machinery, as well as breeding animals.

The objectives, conditions, and maximum loan amounts of preferential lending are aimed at meeting the interests of almost all branches of agriculture and agricultural entities. Thus, the accessibility of the preferential lending mechanism creates favorable opportunities for agricultural producers to use credit resources and new machinery and technologies in the production of competitive products. The use

of preferential loans also plays an important role in financing production renewal and expansion processes.

The implementation of state support aimed at improving the material and technical support of the agricultural sector is associated with the influence of the following factors:

– *The need for a logistics system – improvement of the material and technical base of agricultural enterprises, taking into account their innovative development, application of advanced methods of using these resources, preservation of product quality through the proper organization of storage, and other related activities;*

– *Biological factors – selection and breeding, the genetic potential of plants and animals, activities related to bioengineering, and other related areas;*

– *Socio-economic factors – the potential to increase the efficiency of enterprise activities through the use of logistics and biological factors.*

Improving the material and technical supply of agriculture through state support is one of the most important tools for accelerating the processes of increasing competitiveness based on the modernization of the agricultural sector. In this regard, a comprehensive approach to solving the problems of providing the necessary conditions for the technical re-equipment of agricultural producers remains relevant.

Improving the state support mechanism for the development of the agricultural sector is of great importance in adapting the sectoral structure of agriculture to market demand and ensuring the required level of competitiveness under conditions of limited financial resources. In this regard, measures to increase the efficiency of state financial support for the development of agricultural enterprises come to the forefront. The state financial support mechanism for the agricultural sector includes a set of instruments for financing the innovation and investment activities of agricultural enterprises by the state. The effective attraction of investments for the development of agricultural enterprises makes it possible to better understand the nature and directions of state financial support for promising innovative projects.

In addition to the above, the state support mechanism requires the

creation of favorable organizational and economic conditions for the operation of its various forms. At the same time, the effective distribution of budget funds and other financial resources aimed at increasing the efficiency of agricultural production is considered one of the most important issues.

CONCLUSION

Based on the above, it can be noted that the implementation of the following measures is appropriate for improving the financial support mechanism for the agricultural sector:

1. Taking into account the specific features of agricultural production, it is necessary to systematize the following main elements in developing the financial support mechanism: ensuring that the demand for financial resources is met on time through the application of a flexible system of financial benefits during periods when agricultural enterprises and individual entrepreneurial farms need financial resources; creating the necessary conditions for agricultural entities to use a system of seasonal and large-scale lending on preferential terms; applying a system of investment and leasing benefits to agricultural entities through the financial system; creating the necessary economic environment and providing legal support for the implementation of all the mentioned components of the agricultural financial mechanism.

2. In a number of developed countries, the priority directions of state financial support policy for the agricultural sector are to create favorable conditions for increasing agricultural production and developing effective social and production infrastructure in rural areas by providing comprehensive assistance to producers. These include important directions such as direct payments from the state budget, subsidies, compensation of production costs, price support, providing subsidies for improving production infrastructure, developing regional development programs, and forming a strategy that makes the greatest possible contribution to the modernization of production and economic relations in the agricultural sector.

3. The following can be summarized as the main principles for

creating a new financial support mechanism in agriculture: the program-oriented nature of financial assistance, which involves allocating resources only for specific programs; applying the principle of repayment to financing; compensating agricultural enterprises for a certain part of their costs; strictly following the conditions established within the adopted programs, and other related measures. Taking the above into account, it is necessary to evaluate the provision of financial resources to agricultural entities, as well as the distribution and use of financial reserves. Based on the information obtained in this way, it is possible to make decisions aimed at restoring the ability of agricultural entities to meet their financial obligations and attracting investments to production.

4. Reducing budget financing and increasing the cost of loans provided on preferential terms require a more accurate assessment of the financial condition of agricultural enterprises. The development of credit cooperation is directly related to state support. Measures implemented by the state regarding the credit system create conditions for more effective activities in this area. Such an approach makes it possible to use financial resources more efficiently and increase their repayment level. State financial support for credit cooperation includes the following directions: promoting loans for the implementation of promising programs; providing agricultural machinery to agricultural producers through long-term leasing or purchasing machinery on a leasing basis, and other related measures.

Based on the research, it can be noted that production sectors in agriculture need an effective credit system. In particular, taking into account the objective difference between the working period and the production period, the credit system should make it possible to continuously provide agricultural entities with working capital throughout the entire production period until the products are sold.

5. Increasing the economic efficiency of production is one of the necessary conditions for achieving financial stability in the activities of entities operating in the agricultural sector. For this purpose, there is a need to increase the required investment activities. This may also create conditions for normalizing the situation related to the cost of loans and improving the efficiency of using working capital.

Currently, the situation shows the need to improve the relevant legislative framework to strengthen the activities of banks in the field of investment lending to agricultural producers. In order to legally define the mechanism for stimulating and implementing investments in the agricultural economy, it is important to pay attention to the following issues: determining the scope of regulation of investments; providing legal protection for investors, especially their property rights; determining measures related to state regulation of investment activities; defining the conditions for providing investment guarantees and insurance, and other related issues.

6. A comprehensive assessment of the financial and economic condition of agricultural entities is one of the most important issues in developing a system of financial support measures aimed at improving their organizational and economic activities. Among the elements of a comprehensive assessment of the financial and economic activities of agricultural entities, the following issues can be considered particularly important: collecting and analytically processing initial data for the assessment period; justifying the system of indicators used for assessment; determining and calculating the final assessment indicator; determining the ratings of enterprises based on the evaluation of their final indicators. The implementation of these measures in the activities of agricultural producers can ensure the socio-economic development of the agricultural sector as a whole, as well as the transition to an innovative activity model in the context of sustainable rural development.

7. When distributing subsidies from the state budget, it is appropriate to determine their amounts by taking into account the volume of products produced, the level of profitability, and the characteristics of natural and economic zones. Providing subsidies in this way may help take into account the financial condition of agricultural producers operating under different natural, climatic, and economic conditions, ensure price balance, and contribute to increasing both production volume and economic efficiency. When providing subsidies to agricultural entities, it is also important to pay attention to their access to technical and technological equipment. Thus, in addition to the sale of agricultural machinery and

technological equipment on preferential terms, producers are also interested in renting such equipment during the production process and using the services of enterprises that provide various agricultural services. However, the fact that rental and service prices often do not meet the interests of producers creates problems in this area and directly affects the profits of agricultural entities.

8. The directions for improving the financial support mechanism for the agricultural sector can be justified by the need to implement the following measures: introducing a system of preferential long-term and short-term lending and ensuring its accessibility for all economic entities; establishing regional financial support funds and a credit base to provide agricultural producers with long-term investment resources on preferential terms, based on international experience; introducing a system of seasonal and large-scale lending on preferential terms in agriculture; implementing a special system of benefits through state institutions for agricultural entities with lower incomes; organizing financial leasing; establishing and developing a banking system operating on cooperative principles, and other related measures.

9. The advance determination of purchase prices by the state, taking into account the interests of producers, is of particular importance for achieving effective results in preventing price-related losses. Under such conditions, agricultural producers, on the one hand, receive sufficient guarantees to sell their products at predetermined prices, and on the other hand, possible financial losses resulting from a decrease in prices are prevented. In this process, the collateral mechanism aims to protect agricultural producers by addressing the following issues: applying an effective mechanism to protect producers from unjustified increases in the cost of means of production; carrying out collateral operations by increasing the volume of products accepted as collateral in the agricultural products market; expanding the scope of the mechanism for ensuring financial stability by involving a larger share of products in collateral operations; reducing the purchase of products from agricultural producers at unjustifiably low prices; expanding the provision of budget subsidies to agricultural producers.

10. The appropriateness of providing state financial assistance to agricultural entities operating at a loss and those with low incomes can

be confirmed by the following directions. Thus, through the financial assistance provided, agricultural entities can repay their existing debts, strengthen their available resource potential, and use it more efficiently. At the same time, applying preferential taxation to these entities in order to create equal conditions for the development of different agricultural producers and bring agricultural land into economic use may produce positive results for the development of the agricultural sector. For the effective operation of such a taxation mechanism, it is important to pay attention to the following issues: forming the tax base depending on the cadastral value of agricultural land; implementing land improvement measures, addressing soil erosion problems, and restoring soil fertility; determining different amounts of land payments depending on the value of land plots; creating the necessary legal and economic conditions for optimal regulation of efficient land use, and other related measures. The regulatory role of the tax system aims to ensure mutual interests by supporting the development of agricultural production and encouraging innovation and investment activities.

11. International experience widely uses the practice of establishing an investment and financial system to support agriculture based on non-state pension insurance and credit cooperation. The purpose of establishing an investment and financial system is to support agricultural production and attract the necessary amount of financial resources for implementing investment programs and projects aimed at rural development through extra-budgetary sources. The investment and financial system operates as a part of the system of investment and financial relations and serves as a mechanism for mobilizing domestic financial resources and attracting financial resources from other available sources for the application of innovative technologies and the formation of integrated structures based on cooperation in the development of the agricultural economy as a whole. The operation of the investment and financial system for supporting agriculture is based on cooperation with various institutions, including mutual insurance societies, non-state pension funds, credit cooperatives, mutual assistance funds, banks, and others. The financial resources of insured persons are transformed into investment resources. In addition, the

application of such a mechanism may reduce the flow of funds to insurance companies in the form of insurance premiums, simplify state regulation of the activities of insurance organizations, ensure the establishment of relations with foreign investors and partners based on mutual interests, and support the creation of a unified system of commercial and non-commercial insurance.

12. The implementation of state financial assistance to the agricultural sector is directly related to the application of information and communication technologies. In this regard, it is necessary to determine the content and volume of information available to integrated agricultural entities in each economic region, the opportunities and scale of innovation implementation, and, accordingly, the directions and amount of support provided to them. Creating opportunities for free access to such information is extremely important because this information allows agricultural producers to evaluate the actual results of the practical application of innovations under similar conditions. Therefore, in order to attract investments to production sectors, it is important to create conditions for the use of information products that allow users to obtain reliable information about each agricultural entity in a shorter period of time.

The main provisions of the dissertation have been reflected in the following scientific articles:

1. Muradov R.J. Subsidization in the Agricultural Sector as a Component of Financial Support / Scientific Works of ADAU, Ganja, 2022.

2. Muradov R.J. Priorities of the Financial Support Mechanism for the Agricultural Sector // The 1st International Scientific Symposium on Intercultural Relations in a Global World, Eskisehir/Turkey, July 10, 2022.

3. Muradov R.J. Assessment of the Financial Potential of the Agricultural Sector // Mingachevir State University // "Education and Research Activities in the New Era: Realities and Challenges". Mingachevir, December 16–17, 2022.

4. Muradov R.J. Analysis of the Level of Provision of Financial Resources in the Agricultural Sector / Azerbaijan Technological

University, Innovative Economics and Management, No. 2, Ganja, 2024.

5. Muradov R.J. Features of Lending to Agricultural Production / Mingachevir State University, Sustainable Development Scientific Journal, Mingachevir, 2024.

6. Muradov R.J. Strengthening Financial Mechanisms for Improving Investments in the Agricultural Sector. XVIII International Scientific and Practical Conference “Problems and Prospects of Enterprise Development”, Kharkiv, 2024.

7. Muradov R.J. Factors Affecting the Financial Potential of the Agricultural Sector // Mingachevir State University // “Education and Research Activities in the New Era: Realities and Challenges”, 2nd International Scientific Conference, Mingachevir State University, Mingachevir, December 13–14, 2024.

8. Muradov R.J. The Mechanism of Application of Concessions in the Material and Technical Support of the Agrarian Field. Eneco, Proceedings of Energy Economic Research Center, 2024.

9. Muradov R.J. Enhancing Financial Mechanisms to Improve Investment in the Agricultural Sector/ Azerbaijan Technological University, Innovative Economics and Management, No. 1, 2025.

10. Muradov R.J. State Support and Stimulation of Investment Activity in Agriculture in Azerbaijan. Competitiveness in a Global World: Economics, Science, Technology, 2025.



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