

REPUBLIC OF AZERBAIJAN

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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

PROBLEMS OF ACCESS TO FINANCE OF AGRICULTURAL PRODUCERS

Speciality: 5312.01 “Field economy”

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Applicant: **Mammadova Ulkar Shahin**

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Dissertation work was performed at Azerbaijan Cooperation University.

Scientific supervisor: doctor of economic sciences, professor
Salahov Sadig Vali

Official opponents: doctor of economic sciences, professor
Abbasov Anar Fazil

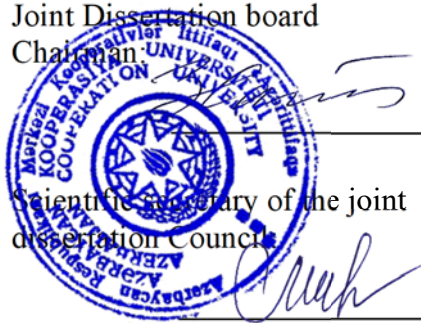
doctor of philosophy in economics,
associate professor
Panahov Azer Maarif

doctor of philosophy in economics,
associate professor
Hajiyev Galib Bahram

Dissertation council ED 2.46 Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Azerbaijan Cooperation University and the Baku Business University.

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full member of ANAS, doctor of
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dissertation Council

doctor of philosophy in
economics, associate professor
Mammadova Samira Yashar

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seminar:

doctor of economics, professor,
Honored Worker of Agriculture
Ibrahimov Islam Haji

OVERALL QUALITY OF WORK

The relevance of the topic and the degree of its elaboration.

Sustainability of material production is possible only if the necessary resources are available, along with other important conditions. Financial resources together with material, labor and informational resources are decisive factors in ensuring purposeful activity. The financial situation of agricultural producers is important in the sustainability and efficiency of their activities, as well as in ensuring their competitiveness. The need to facilitate access to finance for agricultural producers and generally resolve the problems encountered in this regard is primarily due to the strategic importance of the sector in terms of ensuring national food security.

The unique aspects of agriculture do not remain unaffected by the process of access to finance for those who work here. The level of profitability and the rate of turnover of funds in the agricultural sector are low compared to many areas of material production. The high risk of the field is also one of the factors that make access to finance difficult. For this and a number of other reasons, agricultural producers are at a disadvantage in terms of access to financial resources compared to entities operating in other sectors. The strategic importance of the sector makes its state support an objective necessity. The level of development of the national economy is reflected in the nature, continuity and scope of agricultural production stimulation measures in most countries. Improving access to financial resources of production subjects in agriculture and raising their financial security is one of the important directions determining the effectiveness of those measures. Therefore, the problems of facilitating access to finance for these production entities are almost always on the agenda.

The relevance of the problems of access to finance for agricultural producers is also due to its role in strengthening the practical implementation of the "Strategic Roadmap for the Production and Processing of Agricultural Products in the Republic of Azerbaijan". Thus, the 3rd strategic goal in that Strategic Road Map is called "Easing access to finance". The mentioned strategic goal covered three priority directions. The first priority is the improvement

of agricultural financing mechanisms, the second priority is to develop the insurance system in the agricultural sector in Azerbaijan, and the third priority is to stimulate the attraction of local and foreign investment resources to the sector.

Although the problems of agricultural producers' access to finance have been investigated in one or another aspect in Azerbaijan, comprehensive studies in the relevant direction have not been conducted. What has been said, gives reason to say that the research topic is relevant.

Problems of agricultural producers' access to finance have been studied in one aspect or another by Azerbaijani and foreign scientists. In this regard, the works of Z.A. Samadzade, E.A. Guliyev, I.H. Aliyev, B.Kh. Atashov, I.H. Ibrahimov, M.J. Huseynov, R.Z. Huseynov, H.A. Khalilov, R.A. Balayev, N.A. Javadov, A.A. Alekperov, S.V. Salahov and a number of other Azerbaijani economists should be noted. The studies conducted by S. Harvey, D. L. Hitman, V. H. Smith, J. W. Glauber, P. B. Hazell, D. D. Zilberman, L. A. Vado, A. V. Biryukov, E. S. Burikh, M. N. Dudin, N. P. Lyubushin, E. T. Prokopchuk, I. N. Rykova, T. N. Sedash, A. N. Semin, A. T. Stadnik, D. M. Matveev, E. A. Shkarupa, S. V. Shkodinsky, A. A. Yuryeva and others on the problems of access to finance for agricultural producers in foreign countries deserve special attention. However, the problems discussed were not comprehensively studied, and the named scientists did not set themselves the solution of the problem of facilitating the access of agricultural producers to finance as a goal.

The object and subject of the research. The object of the study is the current state of access to financial resources of agricultural producers, production and service enterprises that determine their financial security. The subject of the study is the factors, trends and regularities that determine the current state of access to financial resources of agricultural producers.

Research goals and objectives. The main goal of the study is to determine the scientific basis for ways to facilitate access to financial resources for agricultural producers in modern conditions, analyze the current situation, improve credit provision, increase the role of the

agricultural insurance system in solving problems of access to finance, and prepare proposals and recommendations to increase investment attractiveness. The following tasks to achieve the stated goal defined as:

- justification of the conceptual provisions of facilitating the access of agricultural producers to finance;
- improvement of the methodology for assessing access to finance;
- evaluation of the foreign experience of facilitating agricultural producers' access to finance, including effective crediting of producers, determining the role of the insurance factor in facilitating their access to finance, evaluating the possibilities of applying foreign experience in our country on increasing the investment attractiveness of agriculture;
- analysis of the financial condition of Azerbaijan's agriculture and determination of the level of credit accessibility;
- characterization of agrarian insurance as a factor in the financial sustainability of production;
- determining the level of investment attractiveness of agriculture and characterizing the system of promoting investments in the field;
- substantiating directions for improving the financial security of agricultural producers, increasing their loan repayment ability and the level of credit provision;
- establishing the agrarian insurance system at the level of modern requirements, increasing the investment attractiveness of the area, as well as preparing proposals and recommendations for expanding the possibilities of using financial services for the rural population.

Research methods. The theoretical and methodological basis of the research is the relevant laws adopted by the Milli Majlis, decrees and orders of the president of the Republic of Azerbaijan aimed at solving the problems of financial output of agricultural producers, improving their financial security, research of agrarian economists on the topic.

The information base of the study consists of legislative and regulatory acts regulating economic activity in rural areas, including

financial relations in agricultural production, data from the Ministries of Economy, Agriculture and Finance of the Republic of Azerbaijan, the State Statistical Committee, materials from scientific conferences, data from observations conducted by the applicant, and internet resources.

Scientific abstraction, monograph, comparison, economic-statistical analysis, modeling, generalization and other statistical-economic methods were used in the research process.

The main provisions defended:

- determining the factors determining the state of access to finance of agricultural producers and the scientific basis for assessing that state;
- conceptual provisions for facilitating access to finance for agricultural producers and offering opportunities to use foreign experience;
- proposing the appropriateness of using the transaction cost indicator in assessing the access to finance of agricultural production entities;
- identifying opportunities to facilitate access to finance for agriculture in the country and increase investment attractiveness;
- taking necessary measures to increase the credit repayment capacity of agricultural producers and increase their level of credit coverage;
- specifying the possibilities of using the advantages of the digital environment in implementing innovations in agricultural insurance;
- preparation of proposals and recommendations to increase the investment attractiveness of agriculture.

The scientific novelty of the research consists of the following:

- the scientific basis of the factors determining the state of access to finance of agricultural producers has been characterized, the theoretical basis for assessing that state has been investigated, and methods for analyzing that state have been selected;
- a hypothesis has been put forward on the possibility of using

quantitative expression of transactional costs in assessing the state of access of agricultural producers to finance;

- factors that create an enabling environment have been identified in best practices to facilitate access to finance for agricultural producers, including improving credit provision and increasing investment attractiveness
- the reasons for the failure of the development potential of agricultural businesses to be realized at the desired level and the factors determining the financial situation of agricultural producers, including their access to loans, have been identified;
- the reasons for the low interest of agricultural producers in insurance have been identified, and directions for improving the system for increasing agricultural insurance literacy have been specified;
- opportunities for increasing the investment attractiveness of agriculture in the country have been identified, and directions for realizing these opportunities in the liberated territories, including improving the investment promotion system, have been identified;
- a set of measures necessary to increase the credit repayment capacity of agricultural production entities and increase their level of credit coverage has been developed;
- the prospects of customer relationship management systems in agricultural insurance and the possibilities of using the advantages of the digital environment in their implementation have been identified;
- proposals and recommendations for increasing the investment attractiveness of the agrarian sector are substantiated.

Theoretical and practical significance of research. The theoretical importance of the research is the approach to the evaluation of the state of access to finance of production subjects in agriculture, the preparation of proposals for the improvement of the financial guarantee system of producers in the field. The results obtained on the assessment of the possibilities of providing credit to producers in the agricultural field, improving the insurance business and increasing investment attractiveness have practical significance in terms of

strengthening national food security and improving the supply of raw materials of agricultural origin to the industry.

Substantiated provisions, proposals and recommendations can be used in the preparation and implementation of agricultural development programs in the Republic of Azerbaijan, as well as in the preparation and implementation of relevant measures to solve the problems of access to financial resources of agricultural producers, as well as in the process of implementing "Azerbaijan 2030: National Priorities for Socio-Economic Development".

Approbation and application. The main scientific-theoretical provisions, results and proposals of the dissertation are reflected in 5 articles (including 1 abroad) and 7 theses (including 1 abroad) published in prestigious journals and conference materials recommended by the Supreme Attestation Commission under the President of the Republic of Azerbaijan. Among the conference materials are “Western and Northern European experience in efficient lending to agricultural producers” (Baku, 2021), "Investment factors in facilitating access to finance for agricultural producers: foreign experience" (Ganja, 2022), “Insurance in facilitating access to finance for agricultural producers" factors: foreign experience” (Baku, 2022), “Increasing the credit repayment ability of agricultural producers” (Baku, 2022) “Heydar Aliyev and the development directions of the agricultural sector” (Mingachevir, 2023), "Increasing the investment attractiveness of agriculture” (Baku, 2023), “Концептуальные вопросы облегчения доступа сельскохозяйственных производителей к финансам” (China, 2023) theses can be shown .

During the research, the author also wrote “Methodological issues of assessing the state of access of agricultural producers to finance” (Baku, 2020), “Foreign experience of facilitating access to credit for agricultural producers” (Baku, 2021), “Improving the credit repayment capacity and credit security of agricultural producers” (Baku, 2021), “Облегчение доступа к финансированию инновационного сельского хозяйства” (Москва, 2022), “Directions for improving the agricultural insurance system” (Baku, 2023) articles entitled have been published.

The name of the organization where the dissertation work was performed: Azerbaijan Cooperation University.

The total volume of the dissertation with a sign indicating the volume of the structural sections of the dissertation separately.

The dissertation consists of an introduction, three chapters, a conclusion and a list of used literature. The introduction is 12199 characters, Chapter I is 81419 characters, Chapter II is 51863 characters, Chapter III is 69061 characters, the conclusion is 11056 characters and the list of used literature is 23898 characters, the total volume is 261058 characters. The number of characters of the dissertation is 225598 characters excluding tables, figures and the list of used literature.

SUMMARY OF THE RESEARCH WORK

The introductory part of the dissertation work justifies the relevance of the topic, characterizes the goals and objectives of the research, and describes the main provisions put forward for defense, and reflects the scientific innovations, theoretical and practical significance, and approval of the work.

In the first chapter of the dissertation titled "**Theoretical and methodological problems of facilitating access to finance for agricultural producers**", the conceptual issues of facilitating access to finance for agricultural producers were first examined. The methodical aspects of the assessment of access to finance were investigated, the foreign experience of facilitating the access to finance of agricultural producers was comparatively analyzed, and the possibilities of using it were evaluated.

The agricultural sector is in a disadvantageous position compared to other sectors in terms of access to financial resources. The reasons for this situation include the following: relatively low level of profitability in agriculture; low cash turnover rate; strong dependence of the results of activity on natural and climatic factors; low ability of production entities to repay loans, etc.

Financial control is necessary in every country based on

commodity-money relations. Financial control is of great importance for financial management at any stage. It helps to ensure the financial security of the state by ensuring the reliable functioning of the entire financial system and the implementation of the financial policy pursued by the state¹.

In the Strategic Roadmap for the production and processing of agricultural products in the Republic of Azerbaijan, approved by the decree of the president of the Republic of Azerbaijan dated December 2016, 6, "Facilitating access to finance" the first priority should be the improvement of the financing mechanism in order to facilitate access to finance by entities engaged in the production and processing of agricultural products, as indicated in the 3rd strategic goal. The second priority is the development of agrarian insurance, and the third is the stimulation of attracting investments in agriculture.²

The role of insurance as a guarantee system in ensuring the harmony and sustainability of agricultural activity is increasing. However, it should be noted that most small and medium-sized commodity producers still do not have reliable insurance protection. The following factors should be noted as factors that determine this situation: low trust in insurers in rural areas, insurance services are not offered in the necessary range, the financial condition of insurance companies in the regions is weak, insurers are weak and few in number, etc. Insurers consider insurance of agricultural products to be more risky than in other areas.

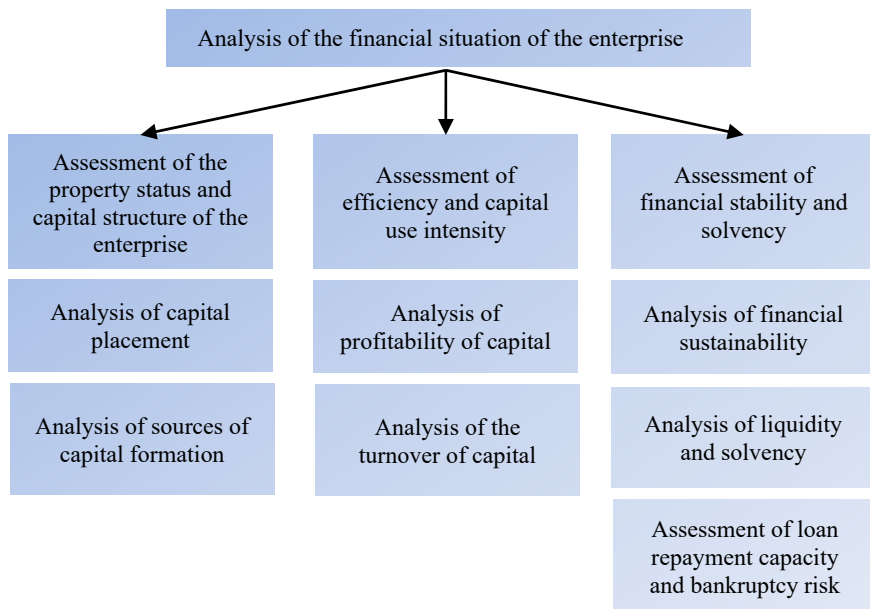
The following can be attributed to the main stages (blocks) that must be realized in order to assess the state of access of the agricultural producer to finance (scheme 1).

-The ability of agricultural producers to self-apply existing methods of assessing credit solvency and bankruptcy risk is significantly limited. Thus, for the realization of risk-management, the steps taken

¹ Ataşov B., Novruzov N., İbrahimov E. Maliyyə nəzəriyyəsi. Bakı, "Kooperasiya" nəşriyyatı, 2014, 648 s.

² Azərbaycan Respublikasında kənd təsərrüfatı məhsullarının istehsalına və emalına dair Strateji Yol Xəritəsi. Azərbaycan Respublikası Prezidentinin 2016-cı il 6 dekabr tarixli 1138 nömrəli 1138 nömrəli Fərmanı ilə təsdiq edilmişdir. Bakı, 2016, 177 s.

in the direction of determining its limits, forming reserves, insuring against various risks and diversifying activities should be of a complex nature. An investor (bank or non-bank credit organization) who makes a decision to invest (or give a loan) to the agricultural sector can use the group of coefficients presented in relevant sources. In this regard³ we think it is reasonable to pay attention to the following groups of ratios :



Scheme 1. Simplified scheme for analyzing the financial condition of an enterprise

Source: <http://www.grandars.ru/college/ekonomika-firmy/finansovyy-analiz-predpriyatiya.html>

financial stability, business activity, growth rate, efficiency and solvency (table 1).

³ Соловьев Ю.П., Типенко Н.Г. Об оценке привлекательности отраслей промышленности для банковского кредитования / Ю.П. Соловьев, Н.Г. Типенко // Банковское дело. 2000. № 4, с. 15-20

Table 1

Coefficients, the calculation of which is recommended by the creditor and investor to determine the feasibility of investing funds in agricultural production

Coefficient groups	Coefficient included in the group	Calculation method
Financial stability	A1	The ratio of total loan debts to special funds
	A2	Ratio of sales receipts to overdue receivables and advances
	A3	Ratio of sales proceeds to past due accounts payable
Business activity	A4	Ratio of sales receipts to inventories
	A5	Ratio of sales revenue to balance sheet profit
Growth rate	A6	It means the increase (decrease) in the volume of the product at current prices.
Efficiency	A7	Ratio of balance profit to balance amount
	A8	The ratio of balance sheet profit to sales revenue (net of taxes).
	A9	Ratio of balance sheet profit to special funds
Solvency	A10	Ratio of cash, short-term investments, receivables, reserves and expenses to current liabilities

Source: Соловьев Ю.П., Тупенко Н.Г. Об оценке привлекательности отраслей промышленности для банковского кредитования / Ю.П. Соловьев, Н.Г. Тупенко // Банковское дело. 2000. № 4, с. 15-20 on the basis of which it was compiled by the author.

A1 expresses the degree of dependence on attracted funds and the degree of provision at the expense of own capital. The case of $A1 \geq 1$ is considered a crisis situation. A decrease in A2, which belongs to the financial stability group, indicates a deterioration in the financial condition of the manufacturer. An analogous opinion can be made about A3.

The manufacturer's business activity significantly affects its access to finance. In the group of coefficients from this section, A4 characterizes the rate of conversion of reserves into receivables (the degree of business activity).

Reflecting the efficiency of using all resources, regardless of their source, the A5 coefficient shows how many times the profitable cycle has occurred during the considered period. A6 reflects the dynamics of development, and this dynamics is expressed in the rate of increase (decrease) of the produced (sold) product. The A7 coefficient, included in the group of coefficients characterizing the efficiency of the agricultural producer's economic activity, shows the profitability of the total capital. A8 reflects the profitability of product sales, A9 reflects the profitability of private capital. The solvency ratio A10, which shows how ready the manufacturer is to pay short-term debts at the expense of its own funds, should not be less than unity for normal activity.

The partnership of the state and the private sector in the agricultural insurance system should satisfy the interest of both agricultural producers and private insurance companies, and there should be a flexible attitude to tariffs. Work for the application of digital technologies in the agrarian insurance system should be intensified, and the characteristics of the insurance business should be in focus during the creation of special databases.

In the second chapter, “Analysis of the state of access to finance of agricultural producers in Azerbaijan”, the financial situation of the agricultural sector in the country was assessed, and the level of access to credit was determined for the production subjects working here. Agrarian insurance has been studied in detail as a factor of financial stability of production, and the place and role of the guarantee system in facilitating access to finance for production subjects has been clarified. The investment attractiveness level of agriculture was evaluated, and the system of promoting investments in the field was characterized.

In the process of the development of individual entrepreneurship, the existing potential could not be realized at the desired level. Although the state has implemented necessary measures in this direction, ensured their continuity and systematicity. The agribusiness experience, necessary agrarian education, acceptable initial capital, etc., are the factors that determine such a situation. first of all, it can be noted that there is no In agricultural enterprises, the trend of growth

in the dynamics of costs for the production of plant products prevailed, and there was a serious and continuous increase in the cost of the product. Let's say that during 2005-2023, the cost of one centner of cereals in agricultural enterprises increased by 2.4 times, amounting to 19.29 manat in 2023.

The cost of one quintal of agricultural products of individual entrepreneurs in agriculture increased with fluctuations during 2005-2023. The cost of livestock products in the agricultural enterprises of the country continued to increase during 2005-2023, this increase was 2.9 times for milk and 2.5 times for eggs. the cost of milk increased 3.8 times and the cost of eggs increased 5.7 times.

The financial situation of agricultural producers depends on their economic and legal relationships with processing enterprises, logistics system elements, and consumers (buyers). In this regard, the warehouses built in Azerbaijan since 2007 have increased the maneuverability of agricultural producers depending on the market situation.

One of the most important factors affecting the financial situation of agricultural producers in Azerbaijan is state support to the sector. This support is provided in the form of tax and customs concessions and in the form of direct state support. State support measures for agriculture have been actively implemented in the country for at least two decades .

The factors affecting the availability of loans (it should be taken into account that their effects are not less than the intersection points) can be classified as follows: the competitiveness of the enterprise; degree of riskiness of the activity; the degree of uncertainty of the economic results of activity in the field; inflation risks; the level of operational costs of banks; export potential of the field; capital turnover rate; state support to the field; characteristics of the debt burden of the subject who wants to get a loan, etc.

Loan investments in the country's agriculture, forestry, and fisheries sectors decreased by 13.4% between 2017 and 2023 (table 2).

Table 2.

Loans to private enterprises operating in agriculture, forestry and fishing sector, in million manats

	2017	2020	2021	2022	2022 compared to 2017, in %
Loans to private enterprises (manats), mln. manats	407.3	416.9	431.5	454.9	111.7
Short-term loans (in manat), mln. manat	25.6	36.6	34.9	118.8	4.6 times
Long-term loans, mln. manatla	381.7	380.3	396.6	336.1	88.1
Specific gravity, in percent					-
- short-term loans	6.3	8.8	8.1	26.1	-
- long-term loans	93.7	91.2	91.9	73.9	-

Source: Statistical Bulletin of the Central Bank of the Republic of Azerbaijan. 09.2021. p.26; Statistical Bulletin of the Central Bank of the Republic of Azerbaijan. 01.2023. p. 28; Statistical Bulletin of the Central Bank of the Republic of Azerbaijan.09.2024. p. 28. Prepared by the author

During the analyzed period, the number of insurance contracts increased significantly, in other words by 69.1%. Although this growth rate is significant in itself, it is difficult to say that the number of insurance contracts is adequate to the dynamic development of the national economy due to the unsatisfactory situation at the beginning of the analyzed period. As for the comparison of compulsory and voluntary insurance, it should be noted that the change in this ratio in favor of voluntary insurance is the result of the strengthening of incentive measures carried out in the country (chart 1).

The country's agricultural producers were not interested in insuring their property, even with the provided favorable terms. The following can be attributed to the main reasons for such a situation: low confidence of both the insurer and the insured in agricultural insurance; lack of adequate level of awareness of insurance by agricultural producers; presence of ambiguous approaches in the assessment of losses and application of standards in the insurance market, etc.

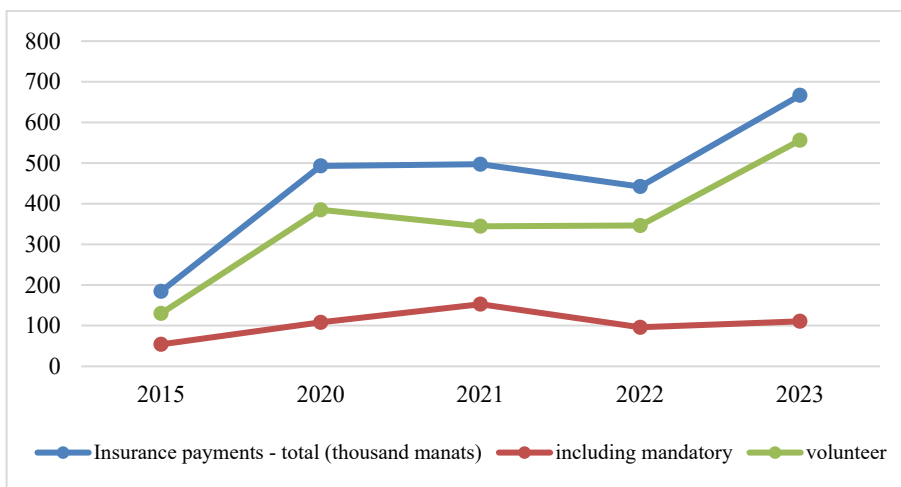


Chart 1. Dynamics of insurance payments.

Source: Statistical indicators of Azerbaijan. Baku, 2024, p.378. Compiled by the author.

The above reasons, which slow down the development of the agricultural insurance system in Azerbaijan, together with the fact that the income of the agricultural producer, even with concessions, are not always adequate to the insurance rates, formed an unsatisfactory insurance environment until recent years. On the other hand, serious fluctuations in productivity and prices, increased frequency of resource losses and high probability of several other risks reduced the interest of insurers in the agricultural sector. The investment potential of the industry and the level of investment risks are manifested in the form of investment activity, conditioning investment attractiveness. The share of industry in the structure of the use of fixed capital investments during the period 2005-2023 has significantly decreased, from 72.3% to 57.6%. During that period, the share of agriculture increased. (table 3).

During 2005-2023, total domestic investments directed to fixed capital increased 8.3 times, including 23.6 times in agriculture and forestry. This speed has repeatedly exceeded the growth (4.3 times) of domestic investments directed to fixed capital in the production of food products, including beverages and tobacco. All basic funds

Table 3

The structure of the use of fixed capital investments by types of production activities (in percentage)

	2005	2019	2020	2021	2022
Industry	72.3	49.9	49.8	58.1	39.4
Agriculture	0.7	4.2	3.0	9.2	4.6
Investments in fixed capital in agriculture, million manats	40.7	769.5	520.6	341.9	408.0

Source: Statistical indicators of Azerbaijan, Baku, 2018, pp. 558-559; Baku, 2023, p. 511; Agriculture of Azerbaijan, Baku, 2023, p. 57; Statistical indicators of Azerbaijan, Baku, 2024, p. 498. Prepared by the author.

increased by 7.8 times, while the balance value of basic funds in the fields of agriculture, forestry and fishing increased by 3.4 times at the end of the year. In other words, the value of fixed assets in agriculture, forestry and fisheries has consistently lagged behind the value dynamics of all fixed assets during the analysis period (diagram 1).

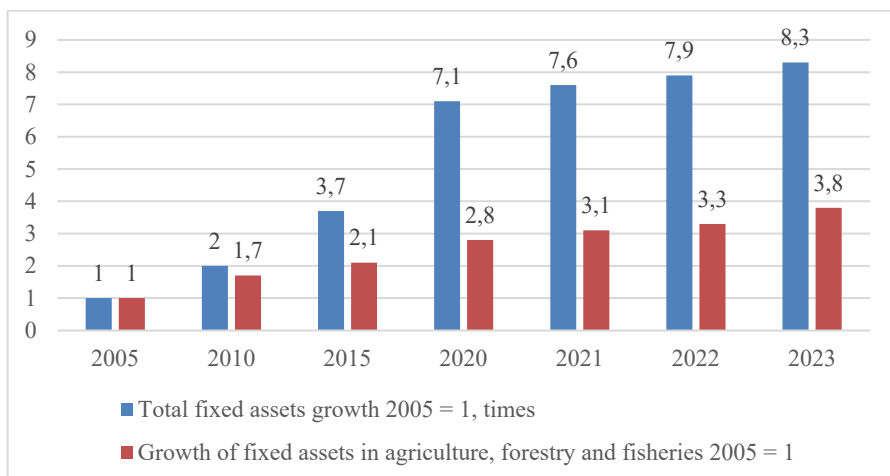


Diagram 1. Comparison of the dynamics of fixed assets and all fixed assets in agriculture, forestry and fisheries.

Source: Statistical indicators of Azerbaijan, Baku, 2020, p. 387; Baku, 2023, p. 19; Agriculture of Azerbaijan, Baku, 2021, p.57; Baku, 2024, p.58

The level of investment attractiveness of Agriculture in the country is not yet at the desired level. Such a situation requires a special approach to the agricultural sector, in the circumstances in which the national economy is of interest to foreign investors. It is related to the unique innovative approach, as well as the need to revive agriculture in the territory freed from the occupation of Armenia. The joint development of agricultural production, agrarian tourism and self-employment in those areas can open additional opportunities for increasing the investment attractiveness of the area. In our opinion, it is entirely appropriate to take advantage of public-private sector cooperation in the system of promoting investments in the sector.

In the third chapter of the dissertation entitled "Directions for improving the financial security of agricultural producers", the possibilities of increasing the credit repayment ability and the level of credit provision of the producers in the field were revealed, and the ways of realizing those possibilities were shown. The directions for improving the agrarian insurance system were substantiated, proposals and recommendations were put forward to increase the investment attractiveness of agriculture.

For both approaches to assessing the creditworthiness of agricultural producers, except for the real estate indicator of the potential borrower, preliminary data are currently absent. Thus, for the purpose of evaluating the ability to pay back loans, the credit history of production subjects, including the largest amount of loans received so far, information on investments, real estate, and financial reports are used. In the case of preferential lending of the agricultural sector, parameters such as the socio-economic importance of the activity and the compatibility of the sector with development priorities are taken into account. It is not difficult to see that the necessary database for quantitative assessment of the listed parameters is not sufficient.

The cases of giving preference to large production entities during lending, as shown by preliminary studies, have decreased somewhat in recent years, but still remain a serious and undesirable fact. These cases, as is well known, also contradict the principles of sustainable development and national food security. Therefore, the activity of small and medium-sized agricultural production entities in the credit

market should be encouraged, in this case, export-oriented and innovative agricultural activity should be supported.

In order to increase the level of credit provision of agricultural producers, it is proposed to implement measures in the following direction: increasing the role of the state in regulating the credit market to increase the interest of banks in the agricultural sector, promoting agricultural cooperation, etc.; improvement of the concessional lending system, especially on the basis of reliable guarantee of food and food safety, as well as sustainable innovative development criteria; creation and support of targeted lending funds; creation of credit unions and promotion of their coordinated activity, etc.

In the process of deepening economic reforms, the initial mechanism of crediting agricultural producers was formed in Azerbaijan. This may include subsidizing interest on loans, concessional loans, crediting cooperatives, institutional guarantee components to significantly facilitate access to loans, and a number of other elements. At the same time, let's also note that a set of continuous measures should be implemented in order to bring the discussed mechanism to full operation in order to increase the credit repayment ability of agricultural producers and the level of credit provision. This should include a wide range of measures, from the development of special rules and regulations to the creation of a mechanism for promoting the organization of producers.

Improving the efficiency of the agricultural insurance system also requires improvements in the damage adjustment mechanism. For this purpose, first of all, standards on agrotechnologies should be approved. One of the directions for improving the agricultural insurance system is to prevent the tendency of insurance tariffs to increase as the size of the farming entities decreases. In the agricultural field, the development of insurance instruments supported by the state for small forms of farming can be attributed as well as mutual insurance and the preparation and implementation of special insurance programs. However, the problems arising in the operation of mutual insurance companies significantly limit the realization of that approach in the field of agricultural insurance. In this regard, first of all, it should be noted that the funds of these societies are low,

especially during natural disasters, serious problems arise due to the lack of funds. On the other hand, the administrative expenses of the insured working in agricultural production, which constitute a significant amount in the mutual insurance society, are paid at the expense of the producers.

It draws attention to the following opportunities for improving the agrarian insurance system: to increase the interest of agrarian producers in insuring their property under favorable conditions, first of all, to increase trust in the insurer, to ensure the unambiguity of the approaches to damage assessment, to accelerate the formation of the normative-legal base; increasing the interest of both agricultural producers and private insurance companies in insurance due to state and private sector partnership in agricultural insurance. Achieving an effective compromise between the producer and the private insurance company on the issue of the amount of funds allocated by the state between insurance payments and insurance rates in agricultural insurance due to the flexible tariff policy; optimization of the process of changing the special weights of voluntary and mandatory types of agricultural insurance in terms of the realization of national food security priorities; more active use of the insurance factor to stimulate investments in agriculture, including ensuring complexity in the insurance of production-technological and organizational-logistic stages; that the insurers are fully aware of the possibilities of relying on the state's assistance in the agricultural field, and the producers are fully aware of the possibilities of concluding contracts with preferential terms.

Investment attractiveness has an important role as a manifestation and indicator of the cumulative effect of a wide range of factors, from investor interest to the quality and efficiency of capital structure formation. When assessing the possibilities of increasing investment attractiveness, factors that are more important from a practical point of view, that is, the investor, the direction of activity and the purpose of investing funds, should be taken into account. The investment attractiveness of agriculture is related to its competitiveness in the current conditions, and competitiveness is related to the possibilities of realizing the innovative development potential in the field. The

level of technical and technological support of production and commercial activity has a decisive role in the realization of that potential. Therefore, the investment demand arising in the direction of the realization of the innovative development potential, as a result, can have a significant impact on the investment attractiveness of agriculture.

In order to improve the financial security of agricultural producers, it is appropriate to implement the following measures in order to increase the investment attractiveness of the field: increasing attention to the issue of state support to agricultural producers who use investments more effectively; forming a class of agrarian entrepreneurs open to innovation and ready for high-tech activity; personnel training that can adequately respond to the changing demands of the market, open to innovation, including digital innovation, and create investment demand for competitive activity; diversification of the activities of enterprises whose products do not have a necessary demand in the relevant segment of the market and search for new directions; increasing the interest of investors in rural areas thanks to the development of agrarian services, production and social infrastructure; stimulation of the development of the services market in rural areas.

CONCLUSION

The need to facilitate access to finance for those working in agriculture stems from the strategic importance of the sector in ensuring national food security. Another factor that determines this need is the disadvantage of agricultural producers in terms of access to financial resources. Such a situation is associated with the problems that the specificity of the sector should be taken into account in the financial mechanism as a whole. The state of access to finance of agricultural producers depends on factors such as: their size, how they manage costs and risks, including their reliance on insurance as a guarantee system, their ability to work in conditions of incomplete information, the investment attractiveness of the activity, and the provision of infrastructure. Quantitative expression of transaction

costs can be useful in assessing the state of access to finance of agricultural producers.

The concept of financial stability of agricultural producers has been clarified, and the place and role of the financial stability factor in assessing their access to finance has been determined. The stages of assessing the access to finance of agricultural producers include: assessment of the property status and capital structure of the enterprise, analysis of capital allocation, analysis of sources of capital formation, assessment of efficiency and intensity of capital use, analysis of capital profitability, assessment of financial stability and solvency, analysis of liquidity and solvency, assessment of credit repayment capacity and bankruptcy risk, etc.

To analyze the state of access to finance of an agricultural producer, as well as to assess its financial condition, including its solvency, horizontal, vertical, trend, financial ratios, comparative analysis and factor analysis methods can be used. To determine the feasibility of investing in agricultural production, preference was given to the groups of ratios of financial stability, business activity, growth rate, efficiency and solvency. When applying economic-mathematical models for the purpose of analyzing the state of access to finance of agricultural producers, it was considered appropriate to use the criterion of minimizing losses due to untimely and incomplete financing.

The analysis of the volume, structure and dynamics of transaction costs is of great importance in assessing the state of access to finance of agricultural producers. Since the upper limit of transaction costs determines the feasibility of agricultural economic activity, the reduction of these costs can be considered as a sign of easier access to finance for the production entity.

When studying the experience of facilitating access to finance for agricultural producers, the main characteristics of three main factors that create the environment should be examined: effective lending, insurance, and the experience of increasing the investment attractiveness of the sector. In order to facilitate access to finance for agricultural producers and improve their credit coverage, producers should have the opportunity to make decisions together with banks

when determining interest rates, the experience of cooperative banks should be actively used, and the system for using grants should be sufficiently transparent.

The partnership of the state and the private sector in the agricultural insurance system should satisfy the interests of both agricultural producers and private insurance companies, and there should be a flexible attitude to tariffs. The experience in which the active participation of the state in agricultural insurance is not envisaged, as well as the absence of competition between private insurance companies, is currently less promising. The experience of Turkey can be considered promising in terms of realizing the possibilities of public-private partnership in the national agricultural insurance system.

The investment attractiveness of the agricultural sector, as well as the agri-food sector, can be increased by improving the institutional structure and active use of digital platforms. In foreign practice, there is ample evidence that investments in cluster initiatives, which include taking into account the spatial and temporal aspects of agricultural activities, improving production resources in terms of key parameters, joint logistics activities, etc., improve the environment for producers' access to finance.

Although the legal framework and economic foundation created for property pluralism in the country have led to the development of various forms of entrepreneurship, including farming in the agricultural sector, the development potential of individual entrepreneurship has not been realized at the desired level. Despite the continuous implementation of necessary measures by the state, the factors that determine this situation, which are observed, are primarily the lack of agribusiness experience, necessary agricultural education, and acceptable initial capital of those starting entrepreneurship in the agricultural sector. Currently, the financial situation of agricultural producers is still highly dependent on their processing enterprises, logistics system elements, economic and legal relations with consumers (buyers), and state support, including the progress of measures to form a new mechanism for providing unsecured microloans to producers.

Factors affecting the availability of loans can be classified as follows: the competitiveness of the enterprise; the degree of riskiness of the activity; the degree of uncertainty of the economic results of the activity in the field; inflation risks; the level of banks' operating costs; the export potential of the field; the speed of capital turnover; state support for the field; the characteristics of the debt burden of the entity seeking to obtain a loan, etc.

The lack of interest of agricultural producers in insuring their property, even on the envisaged preferential terms, is due to the following reasons: low trust of the insurer and the insured in agricultural insurance; lack of information about insurance; the existence of ambiguous approaches to assessing losses and applying standards in the insurance market; the failure of large-scale loss compensation instruments to function due to the lack of a risk redistribution system, etc.

The role of agricultural insurance in the financial sustainability of production depends on increasing insurance literacy. Analysis of measures to increase agricultural insurance literacy suggests that the following changes are appropriate: insurance of pilot farms in various rural regions and wide dissemination of their results; monitoring the experimental results of measures to increase insurance literacy in the agricultural sector and making appropriate adjustments to the education process; ensuring the active participation of insurance companies in this work.

Promoting investments in agriculture in the country serves to support progressive structural changes. Analyses show that in order to increase the investment attractiveness of agriculture in the country, the technological level of production in the field should be improved, state support measures should not worsen the competitive environment, and a favorable environment should be formed for the application of digital technologies. In order to increase the investment attractiveness of the territories liberated from the occupation of Armenia, it is advisable to jointly develop agricultural production, agrarian tourism and self-employment, and to use public-private sector cooperation in the system of promoting investments in the field.

In order to increase the credit repayment capacity of production

entities in agriculture, it may be considered appropriate to take the following measures: improving the monitoring of lending in the field, minimizing transaction costs related to such monitoring; strengthening the relationship between employee wages and the results of the production and financial activities of the production entity; improving marketing activities; improving the quality of labor and products; increasing working capital purchased at the expense of own funds; efficient management of receivables and payables; establishing contractual relations with buyers that ensure timely and full receipt of funds; establishing contractual relations with consignors that take into account the timing of receipt of funds from buyers; ensuring reputation and economic stability as a borrower.

To increase the level of credit provision for agricultural producers, it is proposed to implement measures in the following areas: increasing the role of the state in regulating the credit market to increase banks' interest in the agricultural sector, promoting agricultural cooperation; improving the preferential lending system, especially on the basis of reliable provision of food and nutrition security, as well as sustainable innovative development criteria; establishing and supporting targeted lending funds; creation of credit unions and promotion of their coordinated activities; development and implementation of programs for the financial recovery of agricultural production entities; expansion of access to financial resources for agricultural producers under public-private partnership; creation of special innovation funds to promote agricultural innovations; promotion of competition in the agricultural leasing market; providing state resource support to banks with a stable and positive experience of working with agricultural enterprises; introducing land-mortgage lending, taking into account the creation of the necessary institutional and infrastructure support in the country (including the Mortgage and Credit Guarantee Fund, the relevant insurance fund); developing agricultural credit cooperation.

The development and use of customer relationship management (CRM) systems can be promising as a direction for improving agricultural insurance. When the necessary level of hardware and software of the system, the completeness and flexibility of the unified database of customers are achieved, the prospects for increasing the

number of customers and expanding insurance activities are broad. In this case, by analyzing the reasons for refusals from a specific insurance company (service culture, tariff, location and a number of others), it is possible to reduce them and increase the number of real customers.

The application of digital technologies has real opportunities in terms of increasing the efficiency of insurance work. This is, first of all, the benefit arising from the establishment of digital document circulation. The digitalization of insurance, as shown by initial experience, increases the competitiveness of the insurance company. However, in the digital environment, cyber threats to the personal data of insurance company clients are increasing, and psychological and infrastructural barriers arise for some socially vulnerable people to contact insurance companies.

In the near future, state regulation of the agricultural insurance market should act as a guarantor of the interests of insurers and the financial stability of insurance companies. When introducing digital technologies aimed at replacing intermediaries in insurance activities, a reasonable compromise should be found between the criteria of speeding up this replacement, improving the quality of insurance services, and facilitating the access of insured persons to these services.

The following measures are considered appropriate to increase the investment attractiveness of agriculture: increasing attention to the issue of state support for agricultural producers who use investments more efficiently; forming a class of agricultural entrepreneurs open to innovations and ready for high-tech activities; training personnel who can adequately respond to changing market demands, are open to innovations, including digital innovations, and create investment demand for competitive activities; increasing investor interest in rural areas through the development of agrarian services, production, and social infrastructure; stimulating the development of the services market in rural areas.

The main provisions of the dissertation work, the results obtained and the proposals made are reflected in the following published scientific works:

1. Methodological issues of assessing the state of access to finance of agricultural producers. // – Baku: “Cooperation” scientific and practical journal, 2020, 3 (58). – pp. 112-119.

2. Foreign experience of facilitating access to credit for agricultural producers // – Baku: “Labor and Social Relations” scientific and practical journal, 2021, 2 (16). – pp. 103-110.

3. Improving the ability of agricultural producers to repay loans and the level of credit security // – Baku: “Agricultural Economics” scientific and practical journal, 2021. 4 (38). – pp. 94-102.

4. Western and Northern European experience in effective lending to agricultural producers // – Baku: International scientific and practical conference “Problems of the impact of the pandemic on the social and economic development of countries of the world” dedicated to the 98th anniversary of the birth of the great leader Heydar Aliyev, May 31, 2021. – pp. 102-104.

5. Investment factors in facilitating access to finance for agricultural producers: foreign experience // – Ganja: Republican scientific and practical conference “Heydar Aliyev and Azerbaijani agriculture”, May 05, 2022. – pp. 124-127.

6. Insurance factors in facilitating access to finance for agricultural producers: foreign experience // – Baku: International scientific and practical conference “Priority directions of modernization: socio-cultural and economic-ecological aspects” dedicated to the 99th anniversary of the birth of the great leader Heydar Aliyev, May 06, 2022. – pp. 127-130.

7. Improving the ability of agricultural producers to repay loans // – Baku: International Social Science Conference on “Strategic Priorities of Socio-Economic and Historical-Cultural Relations”, September 28-29, 2022. – pp. 120-125.

8. Facilitating access to financing for innovative agriculture // – Moscow: Vestnik Altayskoy Akademii Ekonomikii Prava Scientific Journal, 2022. 9 (1). – pp. 106-112.

9. Directions for improving the agricultural insurance system // –

Baku: “Audit” scientific and practical journal, 2023, 2 (40). – pp. 92-102.

10. Increasing the investment attractiveness of agriculture // – Baku: International Scientific and Practical Conference on “Heydar Aliyev and the Modern Turkic World”, May 2, 2023. – pp. 474-479.

11. Heydar Aliyev and the development directions of the agricultural sector // – Mingachevir: “Heydar Aliyev – 100: the founder of independent Azerbaijan and the author of a comprehensive development strategy” republican scientific conference, May 4-5, 2023. – pp. 367-373.

12. Conceptual issues of facilitating access of agricultural producers to finance // – China: IV International Scientific Conference Beijing. October 24-25, 2023. – pp. 4-9.

A handwritten signature in blue ink, appearing to be 'M. Aliyev', with a horizontal line extending to the right.

The defense of the dissertation will be held on 27 February 2025, at 14⁰⁰ at the meeting of the Dissertation Council ED 2.46 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at Azerbaijan Cooperation University and Baku Business University.

Address: AZ1106, Baku city, Narimanov district, Najaf Narimanov street 93.

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