

## DEVELOPMENT OF INNOVATIVE AGRARIAN ENTREPRENEURSHIP BASED ON PUBLIC-PRIVATE PARTNERSHIP IN AZERBAIJAN

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*The current conditions of Azerbaijan are inevitable for public-private sector cooperation. This cooperation envisages the application of mechanisms for involving the private sector by the state in social projects. In a modern sense, public and private sector cooperation is understood as an institutional and organizational alliance between the state and entrepreneurship to implement international, national, and local projects. Analysis of the experience of countries at different stages of socio-economic development shows that this type of cooperation is more successfully applied in their sectors. The development of entrepreneurship in the agricultural sector creates favorable conditions for the implementation of the production of competitive agricultural and food products. Regarding the development of entrepreneurship in this field, the specific characteristics of agricultural production and the agrarian economy as a whole should be taken into account. As a result of the existence of an excellent legislative framework related to the development of entrepreneurship in the agricultural sector in our republic, large-scale steps have been taken in the direction of the development of entrepreneurship and the formation of a multi-system economy, and this process, more precisely, the organization of cooperation between the state and the private sector in the agricultural sector, and state support for the development of innovative entrepreneurship is still ongoing.*

*The article mentions the role of innovations in the direction of entrepreneurship in the agricultural sector. In this direction, the regulatory activity of the state in the field of public-private partnership is shown. At the same time, public-private sector cooperation in the modern sense is investigated as an institutional and organizational alliance created between the state and entrepreneurs to implement international, national, and local projects with public content. In addition, the mechanisms for ensuring the development of micro, small and medium-sized enterprises in the country, the mechanisms that coordinate and regulate the activities of state bodies providing services to enterprises, and the activities of several institutions that provide state support for their financing are analyzed.*

*As a result, we can note that the public-private sector partnership should play a special role in the creation of economic conditions for increased investment attractiveness and the accelerated innovative development of rural entrepreneurship in the needs of the deterioration of the economic situation and the deficit of budget funds. Practical experience in implementing public-private partnership projects at the international and national level shows that with a properly formed structure and optimal form selection, its application can solve important infrastructure problems and satisfy all the interests of the involved parties.*

**Key words:** *agrarian sphere, entrepreneurship, public-private partnership, development, innovation, investment, financing*

*Нынешние условия Азербайджана способствуют сотрудничеству государственного и частного секторов. Это сотрудничество предусматривает применение государством механизмов вовлечения частного сектора в социальные проекты. В современном понимании под сотрудничеством государственным и частного секторов понимается институциональный и организационный союз государства и предпринимательства для реализации международных, национальных и местных проектов. Анализ опыта стран, находящихся на разных этапах социально-экономического развития, показывает, что этот вид сотрудничества более успешно применяется в этих отраслях. Развитие предпринимательства в агропромышленном комплексе создает благоприятные условия для осуществления производства конкурентоспособной сельскохозяйственной и пищевой продукции. Что касается развития предпринимательства в этой сфере, то следует учитывать специфику сельскохозяйственного производства и аграрной экономики в целом. В результате наличия в нашей республике прекрасной законодательной базы, связанной с развитием предпринимательства в агропромышленном комплексе, были предприняты масштабные шаги в направлении развития предпринимательства и формирования многосистемной экономики, и этот процесс, точнее, организация сотрудничества государства и частного сектора в аграрной сфере, государственная поддержка развития инновационного предпринимательства продолжается до сих пор.*

*В статье упоминается роль инноваций в направлении предпринимательства в аграрной сфере. В этом направлении показана регулирующая деятельность государства в сфере государственно-частного партнерства. При этом государственно-частное сотрудничество в современном понимании исследуется как институционально-организационный альянс, создаваемый между государством и предпринимателями для реализации международных, национальных и местных проектов общественного содержания. Кроме того, разработаны механизмы обеспечения развития микро-, малого и среднего предпринимательства в стране, анализируются механизмы, координирующие и регулирующие деятельность государственных органов, оказывающих услуги предприятиям, а также деятельность ряда учреждений, оказывающих государственную поддержку для их финансирования.*

*В итоге можно отметить, что особую роль государственно-частное партнерство должно играть в создании экономических условий для повышения инвестиционной привлекательности и ускоренного инновационного развития сельского предпринимательства в условиях ухудшения экономической ситуации и дефицита бюджетных средств. Практический опыт реализации проектов государственно-частного партнерства на международном и национальном уровне показывает, что при правильно сформированной структуре и выборе оптимальной формы его применение позволяет решить важные инфраструктурные задачи и удовлетворить все интересы вовлеченных сторон.*

**Ключевые слова:** *аграрная сфера, предпринимательство, государственно-частное партнерство, развитие, инновации, инвестиции, финансирование.*

**Introduction.** As a result of the successful, purposeful policy conducted in Azerbaijan, which has chosen the path of active integration into the world economic system, the formation of the economy has created favorable conditions for the further increase of business activity in the country, as well as for the rapid development of the non-oil sector as well as the oil sector.

The agricultural sector, which forms the basis of the economy, plays a decisive role in the development of other sections of the economy. Entrepreneurship and economic development, the locomotive of economic development, are interrelated processes. Thus, the unity of entrepreneurship and socio-economic development gives the necessary benefit. Development in agriculture depends directly on the attitude toward entrepreneurship, and coverage of entrepreneurial activity helps to reduce the balanced development of the regions, unemployment, and poverty. Of course, the role of the state in this process is great.

Taking into account the interests of both the enterprise and the state in the innovative development of the enterprise and increasing the gross domestic product, the establishment of an effective organizational mechanism for the regulation of innovation activity should be based on the balancing of the interests of the participants of the innovation process:

- the enterprise that implements innovation projects;
- the enterprise generating innovation projects;
- investors;
- economic subjects and the state.

In modern economic conditions, the interaction of the private and public sectors of the economy is the most important condition for the efficient distribution of resources without excluding the sphere of innovation. In terms of entrepreneurship, state authorities are called to create the most favorable conditions for the development of the business sector. From the position of the state, during its activity, the latter ensures the implementation of goals, tasks, and interests related to improving the welfare of the population, employment, economic, environmental security, etc.

As a rule, public-private partnership considers that it is not the state that participates in business projects, but on the contrary, the state invites entrepreneurs to participate in the implementation of socially important projects. In practice, the concept of public-private partnership is considered as an institutional and organizational union of the state and the entrepreneurial sector, created for a certain period for the implementation of specific joint projects, and ceases to operate after their implementation is completed. In other words, it is a kind of mechanism capable of increasing the level of trust between partners and acting as an indicator of the efficiency of relations between the state and the business sector.

In modern world experience, forms of cooperation between the state and business within the framework of public-private partnership are divided into three parts:

- traditional – joint use of financial and other resources based on partnership;
- investment – a joint investment of the state and private enterprises in infrastructure development projects;
- scientific and educational - cooperation within the framework of international innovation projects in the context of internationalization of capital.

A complex of methodological approaches to the analysis of the formation and activity of public-private partnership relations in the direction of the development of entrepreneurship in the agricultural field has been formed in the scientific literature. However, there is still no unified concept of the conditions for its development. The characteristics of the modern development of public-private partnership in Azerbaijan and the theoretical justification of its importance for the formation of innovative entrepreneurship in the agricultural field are relevant.

The **purpose** of the study is to prepare scientifically based proposals and recommendations regarding the place and role of public-private partnerships and mutual relations in the direction of increasing the efficient management of innovative entrepreneurship in the agricultural field.

**Source analysis's.** Current economic problems of the agricultural sector in Azerbaijan, its role in ensuring food security and the formation of entrepreneurship, system transformations and modernization in the agricultural economy, state regulation of material and technical support of products in the field, and creation of modern forms (network) of innovation infrastructure, public-private partnership in this field and such problems from Azerbaijani scientists Z. A. Samadzade, E. R. Ibrahimov, E. A. Guliyev, B. Kh. Atashov, I. H. Aliyev, I. H. Ibrahimov, T. N. Aliyev, R. A. Balayev, A. E. Guliyeva, A. C. Verdiyev, S. V. Salahov, M. C. Huseynov, A. F. Abbasov, A. H. Valiyev, H. A. Khalilov, F. H. Gasimov, Z. M. Najafov, and foreign researchers O. M. Kunitsaya, V. L. Tsbovski, V. G. Varnavski, M. A. Deryabina, A. V. Klimenko,

S. D. Danasorova, L. M. Igolkina, and M. B. Losutova were studied in the works of other scientists and important recommendations were given.

**Main part.** In the evaluation of the effectiveness of the use of new technical means and the application of advanced agrotechnologies in the agricultural field, the technical and technological innovation should be characterized, by the new techniques and technologies, the environment of their application, in other words, the conditions of innovation should be characterized, the technical tools that have been used for a long time and are accepted as a basis for comparison the main indicators should be determined, the perspectives of changes in technical and economic parameters should be compared in the example of new and basic technical tools [3, p.32]. As you know, the effectiveness of the innovation process is determined by the cooperation and coordination of actions among its participants. To increase the efficiency of innovation processes, partnership relations simultaneously, but in different degrees, involve all its stakeholders – the state, investors, innovators, universities, research organizations, etc. occurs between As a result, the concentration of all types of resources, as well as their sources, is observed within the framework of a certain form of interaction between the public and private sectors in priority areas for the implementation of joint innovation projects [7, p. 607–614]. Resources and their sources are selected based on maximizing the possible synergy effect achieved at all stages of the implementation of such projects.

In terms of comprehensively assessing the social and even economic expediency of technological development, the rapid pace, which creates time constraints, faces serious limitations caused by the uniqueness factor of the agrarian field, especially the factor of conservatism. In other words, there is a significant difference between the speed of development of the digital environment and the pace of agricultural production. [2, p. 94]

In terms of the motivation, in other words, the internal driving force of digitalization in agriculture, we can first mention the following: access to the Internet, the price of mobile phones, computer literacy, the number of people in rural areas with the ability to think innovatively and make bold experiments, the existence of interest groups that motivate them, etc. At the same time, the role of the system approach factor as a driving force of digitization in modern agriculture continues to grow. In this regard, we consider the following position appropriate. “Full-scale realization of the digitalization potential of agriculture is impossible without the cooperation of all participants of the production-sale chain of the agri-food sector. There is a need to prepare an overview of the state of use of the opportunities of digital agriculture by players in the digital products industry and agri-food sector, representing the private sector and the state”. [6, pp. 15–17]

State support for the development of agrarian entrepreneurship is one of the main tasks of ensuring the development of the agricultural sector in Azerbaijan and ensuring the necessary institutional changes and modernization of production by the modern model of national agriculture to expand entrepreneurial activity in this field. This coincides with the modern model of national agriculture, which is mainly related to the assessment of the role of agribusiness as a specific form of coordination of the development of the agro-industrial complex. Within the framework of that model, the measures implemented in the direction of the development of the agricultural sector in Azerbaijan should pave the way for strengthening the position of the agro-industrial complex in the world markets. The efficiency of entrepreneurship in the agricultural field is evaluated in terms of reaching the main goal of activity in this field (increasing profit). On the other hand, this efficiency depends on the nature and level of activity in the field and the relevant segment of the market [4, p. 11]. The availability of resources alone is not enough for the production of any product. Thus, it is of particular importance to pay attention to the entrepreneur who organizes the unity of resources (labor, capital, land), manages it, and ensures efficient activity. Thus, the entrepreneur organizes the interaction of resource factors with each other, strengthens their influence, activates them, and, as a result, realizes the production of goods that can satisfy the needs of the population. That is why, unlike other areas of the economy, the regulation of entrepreneurial activity in the agrarian sphere requires consideration of the characteristic features of agriculture. To develop entrepreneurship in Azerbaijan, the Laws “On Entrepreneurship” on December 15, 1992, and “On State Aid to Small Entrepreneurship” on June 4, 1999, were adopted.

The creation of innovative infrastructure (clusters, incubators, technology parks, technology transfer offices, etc.) as one of the forms of public-private partnership in agriculture, as in other areas of the economy, provides important support for the development of entrepreneurship in this area. As a result of the steps taken in the direction of the development of entrepreneurship, the improvement of the business environment, reforms, and state support measures in Azerbaijan, the private sector has become the leading force in the economy. It is believed that in the coming decade, 7 out of 10 jobs in the world will be created by small and medium entrepreneurs. [5]

It should be noted that the fact that 99 percent of entrepreneurs in the agricultural sector in our republic are small and medium-sized businesses (SMEs) shows that small and medium-sized enterprises have great potential in this field. The role of the Small and Medium Business Development Agency (SMBDA) is important in ensuring the development of micro, small and medium business entities in Azerbaijan. KOBIA (SMBDA) was established by the Decree of the President of the Republic of Azerbaijan dated December 28, 2017, and is a public legal entity that supports the development of small and medium entrepreneurship in Azerbaijan and coordinates and regulates the activities of state bodies providing services to SMEs.

In real conditions, KOBIA (SMBDA) provides services to entrepreneurs through 4 types of action mechanisms:

- territory (“KOB Dostu” network and KOB (SMEs) Development centers);
- sectoral (sectoral associations and focus groups, “SME cluster” companies);
- one location principle (“SME houses”);
- electronic means (“e-KOB evi” portal) are platforms.

Today, the “KOB Dostu” network is one of the Agency's effective support mechanisms for entrepreneurs, and KOBIA’s (SMBDA) activities in the regions are implemented through this mechanism. They provide on-the-spot support and services to business entities related to entrepreneurial activity. From this point of view, the “KOB Dostu” network is considered to be the representative of the Agency for administrative-territorial units.

Another important activity of the “KOB Dostu” network is the protection of the rights of SMEs, surveys, and monitoring. SME friends, who are in close contact with entrepreneurs, learn about their development needs through surveys.

In 2021 alone, 15 surveys with the participation of more than 2,000 SMEs (agriculture and horticulture, connection to the electricity grid, risks faced by SMEs in their activities and their management) covering Baku city and the regions of the country to study the needs, challenges and proposals of SMEs. The use of digital technologies by SMEs, foreign trade operations, the study of training and qualified personnel needs, examination of clustering opportunities, evaluation of corporate management, directions of measuring the level of satisfaction of entrepreneurs in the business environment, etc.) were held.

In 2021, 7 “KOB Dostu” started operating in Shirvan, Goychay, Sabirabad, Salyan, Ismayilli, Tartar, and Astara regions. Currently, in the cities of Baku, Sumgait, Ganja, Mingachevir, Yevlakh, Sheki, Lankaran, Absheron, Gabala, Shamakhi, Guba, Gusar, Khachmaz, Siyazan, Masalli, Fuzuli, Imishli, Shamkir, Jalilabad, Kurdamir, Shirvan, Goychay, Sabirabad, Salyan, There are 7 coordinators and 34 “KOB Dostu” in Ismayilli and Tartar regions.

For this purpose, in the structure of the Small and Medium Business Development Agency (SMBDA), SME development centers deal with the issues of building and developing business, increasing the knowledge and skills of micro, small and medium entrepreneurs, expanding access to innovations, organizing training by modern challenges and providing practical consulting services (SME) operates. The centers also support innovative entrepreneurship, start-ups, and family businesses, promote entrepreneurship among women, people with disabilities, and young people, and carry out other activities aimed at informing SMEs. It should be noted that the number of SMEs has reached 21 across the country (17 SMEs started operating in 2021).

The nature of the dependence of the efficiency of resource use in agriculture on the application of advanced technologies on the flexibility of the attitude to the requirements of the competitive environment is conditioned by the market situation. In this regard, factors such as the division of powers and the dynamics of the field structure also play no small role.

When developing the strategic principles of agricultural development, the requirements of the objective reality, and which approach will be preferred, are determined based on the results of the analysis of the modern situation. The question of which of the market or resource-oriented approaches is preferred is based on the analysis of cluster characteristics, taking into account the comparative pros and cons.

The strategic analysis of the current situation of agrarian entrepreneurship farms, first of all, involves the examination of the cluster structure in which it operates. The internal structure of the entrepreneurial organization whose situation is analyzed is examined in different aspects, depending on whether the units that make it up: operate as technologically unified structural units or relatively independent organizational units. [3, p. 65]

The creation of SME clusters will also have a positive impact on the development of entrepreneurship. Small and medium business clusters are formed by the location of related and complementary activities in the same or similar sector, in a certain geographical region, by sharing common infrastructure, technology, a



single market, workforce, and services. Establishment of mutual economic relations, cooperation model of SME cluster company and its participants with joint activity opportunities. The Tax Code of the Republic of Azerbaijan defines several tax benefits for “SME cluster company” and “Participant of SME cluster”. Thus, the SME cluster company is exempt from profit, land and property tax, and VAT for the import of machinery, technological equipment, and facilities for 7 years. The participant of the SME cluster is exempted from income tax on the part of the profit obtained for capital expenditures for 7 years.

A “Startup” certificate is also presented to entrepreneurs for the production of a product (service) produced by KOBIA (SMBDA) to obtain income or profit, based on an innovative initiative, competitive, as well as different from other startup products (services). According to the Tax Code of the Republic of Azerbaijan, micro and small business entities that have received the “Startup” certificate are exempted from profit and income tax on their income from innovation activities for 3 years from the date of receipt of the certificate.

Starting in December 2020, KOBIA (SMBDA) started accepting applications from local and foreign business entities interested in establishing a business in the liberated territories, and the process is still ongoing. So far, KOBIA has received nearly 1,000 applications from entrepreneurs who want to set up businesses in the territories freed from occupation. Of these, 446 applications are related to investment projects, and 499 are related to the implementation of other works and services (mainly contract-based). 27 % of applications are in construction, 27 % in trade and services, 21 % in industry, 18 % in agriculture, and another 7 % in tourism, health, education, culture, transport, and logistics. [5]

On October 26, 2021, the foundation of the “Dost Agropark” project was laid in Zangilan. The “Dost Agropark” project, which will be implemented by Turkish and Azerbaijani investors, will be implemented in three stages. In the first phase of the project, administrative buildings, closed and semi-open breeding complexes, social facilities, a cafe, a cinema, a recreation area, and buildings for the service staff will be built. Breeding of 4,000 head of cattle, production of agricultural products, and other activities will be carried out in the pasture areas of the complex. All of this will contribute to the food security of Azerbaijan and Turkey and will make it possible to export agricultural and livestock products of the region to international markets.

Another important step towards the development of the agrarian sphere in our Republic is the creation and implementation of the agrarian insurance system. In connection with the implementation of the Law of the Republic of Azerbaijan "On Agrarian Insurance" and the Decree "On the Application of the Law of the Republic of Azerbaijan No. 1617-VQ dated June 27, 2019 "On Agrarian Insurance" and the Establishment of the Agrarian Insurance Fund, agricultural insurance models applied in different countries of the world were investigated and the experience of the United States, Canada, Spain, Israel, and Turkiye, which have an advanced agricultural insurance system, was studied in this field. The strengths and weaknesses of the insurance system of these countries have been examined and a model based on public-private sector partnership is being prepared for our country. Based on this model, the Agrarian Insurance Fund was established and the implementation of the agrarian insurance mechanism was ensured. [8]

Based on this insurance mechanism, a joint insurance system was formed for the first time in Azerbaijan. The joint insurance system envisages that the insurers insure farms with their joint funds. The state allocates subsidies to the insured in the amount of a specified percentage of insurance funds. As a result of the reinsurance policy and correct assessment of insurance risks, stable and effective activity is ensured in this area.

As in international practice, several institutions are operating in Azerbaijan that provides state support for the development, including financing, of entrepreneurial entities:

- Entrepreneurship Development Fund;
- Agrarian Credit and Development Agency;
- Innovations Agency;
- Youth Fund;
- Azerbaijan Investment Company. [1]

Credit resources provided by these institutions are provided at the expense of funds allocated from the state budget. And it's affordable. The activities of the groups mentioned above have specific characteristics:

- The funds of the Entrepreneurship Development Fund (EDF) are directed to the financing of investment projects in the development of the non-oil sector, the application of innovative technologies, and export operations. Although the fund was established in 1992, it started its active activity in 2002 as the National Fund for Entrepreneurship Support. To improve the support mechanism for the development of entrepreneurship and expand the access to financial resources of economic entities operating in the private sector, the National Fund for Entrepreneurship Support was abolished in July 2018, and the Entrepreneurship Development Fund was established as a public legal entity under the Ministry of Economy.

The annual interest rate of the Fund's loans is 1 %, and the annual interest rate applied by authorized credit organizations is 5 %, provided that the annual interest rate does not exceed 4 %. The concession period for the use of loans is determined depending on the nature of the business entity's activity and may cover the first 1/2 period of the loan's use period. During the grace period, entrepreneurs pay only interest debts. The maximum limit of the concessional loan (including for one investment project) received by each business entity at the expense of the Fund cannot exceed 10,000,000 manats.

- The funds of the Agrarian Credit and Development Agency (ACIA) are directed to the financing of development projects of the agrarian unit and concessions given to agricultural production facilities. In 2004, the State Agency for Agricultural Credits was established under the Ministry of Agriculture. However, in December 2018, the Agrarian Credit and Development Agency was formed under the structure of the State Service for the Management of Agricultural Projects and Credits under the Ministry of Agriculture.

The agency transfers the funds it has attracted to authorized credit institutions in an established manner by applying 2 % per annum. The maximum annual interest rate applied by authorized credit institutions to the Agency's loan funds cannot exceed 7 %. ACIA funds are used in the following directions:

- financing of projects related to the improvement of the processes of production, processing, storage, and sale of agricultural products;
- financing of innovative projects related to agrarian development of regions;
- financing of projects related to the improvement of the supply of agricultural means of production, as well as their preferential sale and leasing;
- financing of projects in the field of development of animal husbandry by applying public-private partnership;
- financing pilot projects of the Ministry of Agriculture of the Republic of Azerbaijan.

- According to the Decree of the President of the Republic of Azerbaijan dated November 6, 2018, and Innovations Agency was established under the ministry based on the State Fund for the Development of Information Technologies under the Ministry of Transport, Communications, and High Technologies, and the "High Technologies Park" Limited Liability Company. The Innovations Agency is an agency that assists local entrepreneurs in acquiring modern technology and technological equipment, organizes their transfer, supports innovation-based scientific research, stimulates innovative projects, including startups, and finances them through grants, concessional loans, and ventures. The main goal of the agency is the sustainable development of the ICT sector and increasing its competitiveness, the expansion of innovation and high-tech areas based on modern scientific and technological achievements, conducting scientific research, and creating modern complexes for the development of new technologies.

- By the Decree of the President of the Republic of Azerbaijan on December 19, 2011, the Youth Fund was established under the Ministry of Youth and Sports. The main purpose of the fund is to finance projects and programs in the form of grants aimed at science, education, culture, and other social fields related to youth policy, and to provide financial assistance to young people. is to support the projects that envisage The initial charter fund of the fund is 115 million manats.

- "Azerbaijan Investment Company" OJSC was established by the decree of the President of the country dated March 30, 2006 "On Additional Measures for the Promotion of Investment Activity", and currently the charter capital is 224 million manats. The main goal of AISH is to develop the non-oil sector of the economy in Azerbaijan by attracting local and foreign investors to existing and new commercial enterprises and through long-term investments at the expense of its funds. AISH revives the activities of these enterprises by directing state investments to purchase shares in the authorized capital of enterprises.

As in other areas of the economy, the role of the mentioned institutions in ensuring the innovative development of entrepreneurship, especially financing, is great in the agrarian area, and it is important to further improve these relations.

**Conclusions.** At the current stage of the comprehensive economic, social, and institutional reforms implemented in the Republic of Azerbaijan, the functional features of public-private partnership in the direction of the development of innovative entrepreneurship in the agrarian sphere are relevant. Our country's unequivocally prioritizing innovative sustainable development criteria and implementing continuous and systematic measures to create a favorable economic-institutional environment for the support of advanced technologies gives a full reason for optimism that real benefits will be obtained from public-private partnership and cooperation.

Thus, the formation of interaction between agrarian entrepreneurship and the state, and the implementation of public-private partnership is related to the importance of current socio-economic problems, which can be solved by combining public and private resources. To intensify cooperation between agrarian entrepre-

neurship structures of administrative bodies, it is necessary to develop the institutional system of interaction between agrarian entrepreneurship and the state, to provide favorable conditions for the efficient operation of agrarian entrepreneurship structures, to improve the directions and mechanisms of interaction between agrarian entrepreneurship structures. Agrarian entrepreneurship and the state promote the development of social partnerships and increase the social responsibility of entrepreneurs.

#### REFERENCES

1. Azərbaycanca dövlətin maliyyə dəstəyi mexanizmləri. [State financial support mechanisms in Azerbaijan]. Kriptoinvest.az 03.12.2019 (Internet resources) [in Azerbaijani].
2. Balayev, R. Ə. Aqrar sahədə rəqəmsal mühitin formalaşmasının əsas amilləri və təcrübi aspektləri. [Balayev R. A. The main factors and practical aspects of the formation of the digital environment in the agricultural field]. Kənd təsərrüfatının iqtisadiyyatı jurnalı. Bakı, 2020, № 1 (31) [in Azerbaijani].
3. Mirzəyev, N. S. Azərbaycanca taxılçılıq sahəsində sahibkarlıq subyektlərinin fəaliyyət istiqamətləri. [Mirzəyev N. S. Activity directions of entrepreneurial subjects in the field of grain growing in Azerbaijan]. Monoqrafiya, Bakı, 2017 [in Azerbaijani].
4. Mirzəyev N.S. Kənd təsərrüfatında sahibkarlığın iqtisadi səmərəliliyinin meyarları və göstəriciləri. [Mirzəyev N. S. Criteria and indicators of economic efficiency of entrepreneurship in agriculture]. Kənd təsərrüfatının iqtisadiyyatı jurnalı. Bakı – 2021, № 2 (36) [in Azerbaijani].
5. Səmədzadə Z. Kiçik və orta sahibkarlığın inkişafı üçün əlverişli şərait yaradılır. [Samadzade Z. Favorable conditions are created for the development of small and medium enterprises]. İqtisadiyyat qəzeti, 24.02.2022 (Internet resurları) [in Azerbaijani].
6. Афонина, В. Е. Влияние цифровизации на развитие аграрного сектора экономики [Afonina V. E. The influence of digitalization on the development of the agricultural sector of the economy] // Международный сельскохозяйственный журнал. – № 3 (363). – 2018, С. 15–17 [in Russian].
7. Левушкина, С. В. Государственно-частное партнерство как основа развития долгосрочной устойчивой системы инновационного предпринимательства в России [Levushkina S. V. State-private partnership as the basis of development of a long-term sustainable system of innovative enterprise in Russia] // Фундаментальные исследования. – 2016. – № 9–3. – С. 607–614 [in Russian].
8. <https://avciya.az/noyabrin-1-i-k%C9%99nd-t%C9%99s%C9%99rufati-iscil%C9%99rinin-pes%C9%99-bayrami-gunudur/> [in Azerbaijani].
9. <https://stat.gov.az/>