

ISSN: 2733-2713; E-ISSN: 2733-2721

DOI: 10.36962/SWD

© THE BALTIC SCIENTIFIC JOURNALS

# SOCIOWORLD

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

REFEREED & REVIEWED JOURNAL

VOLUME 07 ISSUE 01 2022

<https://bsj.fisdd.org/index.php/swd>



ISSN: 2733-2713; E-ISSN: 2733-2721

DOI: 10.36962/SWD



© THE BALTIC SCIENTIFIC JOURNALS

# SOCIOWORLD

REFEREED & REVIEWED JOURNAL

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

VOLUME 07 ISSUE 01 2022

<https://bsj.fisdd.org/index.php/swd>

ESTONIA, TALLINN 2021



ISSN: 2733-2713; E-ISSN: 2733-2721

**SOCIOWORLD**

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

ISSN: 2733-2713, E-ISSN: 2733-2721

VOLUME 07 ISSUE 01 2022

©**Publisher:** LEPL, Sokhumi State University. R/C 405282260.

**Rector:** Zurab Khonelidze, Professor, Doctor of Political Sciences.

**Technical and reviewer team manager:** Larisa Takalandze, Professor, PhD in Economics.

Registered address: 61, Politkovskaya street. 0186 Tbilisi, Georgia.

©**Publisher:** Chernihiv Polytechnic National University. R/C 054607925261

**Rector:** Oleg Novomlynets, Professor, Doctor in Technical Sciences.

**Technical and reviewer team manager:** Olha Rudenko, Professor, Doctor in Public Administration Science.

Registered address: 95, Shevchenko street, 14035, Chernihiv, Ukraine.

©**Publisher:** All Ukrainian Institute of Eurasian Research And Eastern Science. R\C 39783993

**Registered address:** 3B, Petra Hryhorenka Avenue, office 111, Kyiv, 02068, Ukraine

**Director and Founder:** Olha Rudenko, Professor, Doctor in Public Administration Science.

©**Publisher:** NGO International Center for Research, Education & Training.

MTÜ Rahvusvaheline Teadus-, Haridus- ja Koolituskeskus.

**Management Board Member:** Seyfulla Isayev.

©**Editorial office:** Narva mnt 5, 10117 Tallinn, Estonia.

©**Typography:** NGO International Center for Research, Education & Training. R/C 80550594

**Registered address:** Harju county, Tallinn, Lasnamäe district, Väike-Paala tn 2, 11415, Estonia.

**Telephones:** +994 552 41 70 12; +994 518 64 88 94, +994 703 75 70 12

**E-mail:** sc.mediagroup2017@gmail.com, socioworldbsj@gmail.com

**Websites:** <https://bsj.fisdd.org/index.php/swd>; <https://bsj.fisdd.org/>

**ISSN: 2733-2713; E-ISSN: 2733-2721; DOI: 10.36962/SWD**

**SOCIOWORLD-SOCIAL RESEARCH & BEHAVIORAL SCIENCES**

## OFFICIAL REPRESENTATIVES-COORDINATORS

**Isazade Namig (EU, Azerbaijan)**

+ 994 552 41 70 12

**Rudenko Olha (EU, Ukraine)**

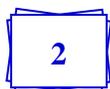
+ 380 674 08 20 28

**Takalandze Larisa (EU, Georgia)**

+995 577 17 07 89

**Accepted for publication in this edition 20.03.2022**

©**LLC CPNU, NGO AUIERES, NGO SSU, MTÜ ICRET.** The Baltic Scientific Journals. All rights reserved. Reproduction, store in a retrieval system, or transmitted in any form, electronic or any publishing of the journal permitted only with the agreement of the publishers. The editorial board does not bear any responsibility for the contents of advertisements and papers. The editorial board's views can differ from the author's opinion. The journal published and issued by The Southern Caucasus Media Group.



**SOCIOWORLD**

SOCIAL RESEARCH & BEHAVIORAL SCIENCES



## TABLE OF CONTENTS

<b>Karim Karimov, Turkan Sheydai Ali, Turkan Hatamova</b> INTEGRATED EVALUATION OF DETERMINATION OF INNOVATIVE POTENTIAL LEVEL OF INDUSTRIAL SECTORS .....	03
<b>Elvin Azhdarli</b> ECONOMIC ANALYSIS OF EMPLOYMENT IN THE CONSTRUCTION SECTOR OF AZERBAIJAN DURING THE PANDEMIC .....	12
<b>Amin Rustamli</b> SOCIO-ECONOMIC ASPECTS OF THE DEVELOPMENT OF THE HIGHER EDUCATION SYSTEM IN AZERBAIJAN .....	22
<b>Ayaz Tagiyev</b> AGRARIAN REFORMS AND DEVELOPMENT OF AGRIBUSINESS FORMS IN AZERBAIJAN .....	30
<b>Elshan Hajizadeh</b> STRATEGY FOR THE RESTORATION AND RECONSTRUCTION OF THE ENERGY SYSTEM IN THE ECONOMIC REGIONS OF KARABAKH AND EAST ZANGAZUR .....	40
<b>Abdullah Adili</b> USED ANALYTICAL PROCEDURES IN INTERNAL AUDIT AND THEIR EVALUATION .....	45
<b>Nodar Sulashvili, Nana Gorgaslidze, Luiza Gabunia, Ketevan Ghambashidze, Irine Zarnadze, Shalva (Davit) Zarnadze</b> MODERN SCIENTIFIC RESEARCH DEVELOPMENT ISSUES OF HIGHER PHARMACY EDUCATION, SCIENCE, INNOVATION AND PERSPECTIVES TOWARDS ON UNIVERSAL PHARMACIST' PROFESSION GLOBALLY .....	51
<b>Tamar Sultanishvili, Ramaz Khetsuriani, Iona Sakvarelidze, Manana Arabuli, Nino Abaishvili, Shalva Petriashvili</b> RELATIONSHIP BETWEEN SOCIO-ECONOMIC FACTORS AND STUDENT MORBIDITY .....	67



## INTEGRATED EVALUATION OF DETERMINATION OF INNOVATIVE POTENTIAL LEVEL OF INDUSTRIAL SECTORS

<sup>1</sup>Karim Karimov, <sup>2</sup>Turkan Sheydai Ali, <sup>3</sup>Turkan Hatamova

<sup>1</sup>Associate Professor, Internationally qualified economist, <sup>2</sup>Master,, <sup>3</sup>Master, <sup>1,2,3</sup>Azerbaijan State University of Oil and Industry.

Email: <sup>1</sup>karimov.zizik2013@yandex.com, <sup>2</sup>turkan.sheydai.90@list.ru,

<sup>3</sup>turkan.axmedova.87@mail.ru

### ABSTRACT

The article theoretically substantiates the essence and content of the structural components of innovation potential, which explains the characteristics of the complex system of interaction and interaction of personnel, scientific, financial-investment and organizational-technical potentials. The methodological approach to the integrated assessment of the level of innovative potential of industries, based on the functional dependence of the identified structural components of innovative potential, was considered. Practical recommendations for the establishment and operation of an information system for monitoring the innovative potential of the economic system in enterprises and a methodological approach to the development of information maps to assess the effectiveness of measures for its development and the search for resources were commented.

**Keywords:** industry, innovation, potential, system, component, evaluation, efficiency, development.

**Introduction:** In modern conditions, the development of new scientific approaches to solving the problems of development of economic systems based on the methods of integrated assessment and management of the potential level of innovative development of the economy of Azerbaijan is becoming increasingly relevant. To address these issues, first of all, it is necessary to theoretically substantiate the essence and content of the structural components of innovative potential in industry, the methodological basis for the integrated assessment of their internal and external environmental factors.

The realities of the world economy are such that active innovation has become one of the key factors for success in ensuring the required level of competitiveness in this area. Expanding the range of sales markets, goods and services, improving their quality and other key aspects of the business is not possible without innovative activity.

Innovative activity should be considered as a process of active use of innovations in the form of the latest "smart technologies" and techniques, radically new methods of production organization and new forms of marketing.

It should be noted that the basis of the economic power of any country is industry. That is why industry is one of the most important areas of development in countries that claim the status of world economic powers.

Statistics on the development of the country's industry show that despite the measures taken by the state in recent years to improve it, the situation is not acceptable. In order to stop the regression in the industrial sector, it is necessary to take systematic and cumulative measures,



taking into account the current situation and the direction of increasing competitiveness in the context of globalization of the world economy.

Thus, the following problems hinder the intensification of innovation in industrialized countries:

- lack of highly qualified personnel, lack of professional training system for the innovation sector;
- high levels of social inequality and regional disparities;
- insufficient protection of property rights, non-transparency of the land relations system;
- low level of competition in some markets, which does not create incentives for enterprises to increase productivity;
- issues such as insufficient level of development of the national innovation system, coordination of education, science and business have been resolved in a short time.

In our opinion, the reasons for the low level of innovative activity of industrial enterprises in the country and the insufficient use of the innovative potential of enterprises include the following:

1. Adequate motivation and low incentives for innovation, which manifests itself in poor support for small and medium-sized businesses.
2. The issue of classification criteria for the level of innovative activity of enterprises remains controversial.
3. High payback period of scientific results and research work, this is primarily due to the inconsistency of research with the needs of the industry.
4. The environmental factor, as a deterrent to the application of innovations, manifests itself in the need to control the balance of the environment under the influence of the results of innovative projects.
5. Unsatisfactory condition of the material and technical base of the industry, in particular, low technical equipment of enterprises, high rate of depreciation of fixed assets, high percentage of obsolete equipment.
6. Lack of a well-established system of preferential lending and subsidies for innovation-active enterprises.
7. Undeveloped mechanisms of vertical and horizontal integration, production cooperation.
8. Insufficient attention to the creation and development of cluster structures in all sectors of the economy.
9. Incomplete legal regulation of the public-private partnership mechanism between business and government.

**Advantages and disadvantages of modern scientific approaches to the assessment of innovative potential in the economic literature:** Increasing the innovative potential of economic entities should be considered a necessary factor for their sustainable development. However, the lack of a well-developed theoretical, methodological and practical basis for assessing the innovative potential and the effectiveness of innovative activities in general makes it difficult to develop this area. Therefore, the development of tools for assessing innovative potential in modern economics is especially relevant. Assessing innovative potential is a multifaceted task that requires a comprehensive approach. In the arsenal of foreign economic science, there are a wide range of methods for conducting procedures to assess the potential of innovation.

In our opinion, all acceptable methods for assessing innovative potential can be divided into quantitative and qualitative.



The main purpose of quantitative methods is to obtain final numerical indicators. The basis of quantitative methods is the mathematical apparatus. These types of methods include statistical, analytical, graphical methods.

Analytical methods are based on mathematical concepts. The main advantage of the methods of this group can be considered the objectivity of the results obtained, the independence of the experts conducting the assessment from the subjective beliefs. Often graphical models should be used as a tool to present results.

Statistical methods are based on the conceptual apparatus of statistical science in their nominations. The essence of statistical methods is to judge the properties of a certain part of the general population (ie, for sampling) as a whole [1].

Graphic methods include all types of graphical representation of information, ie visual description of the processes under study. The advantage of the graphical method is that it allows you to take into account a number of factors that are very roughly considered or often not taken into account in the analytical solution without complicating the constructions.

The main research tool for qualitative methods is not mathematical and statistical data, but the understanding and interpretation of empirical data. Therefore, the results obtained by such methods are not subject to quantitative analysis. The quality methods used to assess innovative potential include scenario methods and structuring methods.

The scenario method is based on the development of scenarios that cover all possible options of external conditions that have the right to arise at each step of the investment project. However, since the number of options is virtually infinite, certain generalizations and simplifications are used when developing scenarios [2,3,4].

Structuring methods occupy one of the central places in the group of quality methods. The main idea of structuring methods is to select the visible parts (subsystems, components) in complex systems for a more detailed study. Structuring methods form the basis of system analysis. Among the methods of structuring, the "goal tree" method should be noted. This term is understood as a set of goals of a structured, hierarchical principle (distributed, ranked by level) system, program, plan. Here there is a general goal ("on top of the tree"), sub-goals that are subordinate to the first. The second and subsequent levels ("tree branches") are emphasized. "). The name "goal tree" is due to the fact that the set of goals, distributed schematically, represented by levels, looks like an inverted tree [5,6,7].

In the first approach, the overall indicator of the level of innovative potential is calculated taking into account the weights and is evaluated on a scale from 0 to 100 [8].

Proponents of the second approach to assessing the level of innovation potential K.V. Pavlov, S.V. Kochetkov and O.V. Kochetkova offers a methodology based on measuring its value to assess innovative potential. Their methodology is based on the concept of innovation reserve, which refers to the difference between the potential and capabilities of the enterprise. Researchers formulate its definition according to formula (1), based on the idea that the components of human resources, production and investment should be distinguished in the structure of innovative potential [9]:

$$\dot{I}_s = \dot{I}_k + \dot{I}_i + \dot{I}_p, \quad (1)$$

where  $\dot{I}_k, \dot{I}_i, \dot{I}_p$ - personnel, production, investment potential, respectively.



A.A. Trofilova suggests assessing the innovative potential of the enterprise, taking into account the level of financial stability. The technique is based on an analysis of the enterprise's ability to support the production process. In other words, this approach allows you to assess the innovative capabilities of the enterprise to provide the required technology with the necessary tools. This theory uses a three-component indicator to determine the level of innovative potential:

$$S = \Delta S_1(x_1); \Delta S_2(x_2); \Delta S_3(x_3), \quad (2)$$

where  $\Delta S_1(x_1); \Delta S_2(x_2); \Delta S_3(x_3)$ - excess of own working capital, respectively; own working capital for the formation of reserves and expenses; the total cost of the main sources for the formation of costs.

The author identifies 4 types of innovative potential of the enterprise:

- highly innovative opportunities that do not require the involvement of external financial sources, innovative development can be implemented only at their own expense;
- medium innovation opportunities that require effective development to attract long-term loans;
- low innovative opportunities, characterized by the need to attract large amounts of foreign debt;
- zero innovative opportunities in the absence of sources of financing costs.

Summarizing the above, it can be concluded that currently there is no consensus in local and foreign economics on the assessment and forecasting of the level of innovative potential of enterprises and the effectiveness of innovative activities. The low level of theoretical, methodological and methodological approaches in this direction hinders the development of innovative activities of the organization. These issues are especially relevant in the context of globalization of world economic systems. This is because ensuring the high competitiveness of industrial enterprises requires the creation of the right methodology for assessing innovative potential, taking into account innovative opportunities. The result of the correct methodology are integrated indicators of innovative development, which allow to predict the development trends of the business entity in the context of instability of the enterprise [10,11].

**Calculation of an integrated indicator for assessing the level of innovative potential of industrial enterprises:** The need to develop a methodology for assessing innovative potential should be determined in advance not only by the complexity of the concept under study, but also by the variety of management situations requiring such assessment. The methodology for assessing innovative potential involves a particularly general assessment, ie. In order to obtain an integrated indicator, it is necessary to first calculate the indicators that characterize each structural element (scientific, organizational, technical, personnel, etc.) of innovation potential. These include the following and we suggest using the following indicators to assess their scientific potential:

1. Employee rank level:

$$\dot{I}_d = \frac{\dot{I}_{edis}}{\dot{I}_{etis}}, \quad (3)$$

where  $\dot{I}_{edis}$  - the number of employees with a scientific degree, people;  $\dot{I}_{etis}$  - the number of employees working in scientific research, people.

2. The share of employees involved in the development of science:

$$E_i = \frac{E_{ei}}{S}, \quad (4)$$

where  $E_{ei}$  - is the number of workers involved in the development of science, people;  $S$  - total number of employees of the enterprise, people.

3. Expenditures on scientific research and design (ETLK) work in the enterprise:

$$X_{etik} = \frac{ETLK_{md}}{i_h}, \quad (5)$$

where  $ETLK_{md}$  - is financial value, man;  $i_h$  - is the amount of total investment in production at the enterprise, man.

4. ETLK - efficiency factor:

$$S_{em} = \frac{ETLK_{tg}}{X}, \quad (6)$$

where  $ETLK_{tg}$  - income from the application of scientific projects, man;  $X$  - expenses for scientific work, man.

Based on the analysis of the above formulas, the characteristic features of the innovative potential assessment methodology can be classified as follows:

- use of a special system of economic indicators to characterize each structural component;
- innovative potential of the enterprise;
- identification in the process of assessing the relationship between indicators.

The process of information processing is a key stage of analytical work to assess innovative potential, so information processing methods are important elements of evaluation. In our opinion, the methods used in research can be divided into quantitative and economic-mathematical methods.

The main quantitative method in the analysis of the results of the assessment of innovative potential is comparison. Comparison of indicators is possible in several ways. In particular, a comparison of the indicators of the reporting period of a number of previous years is made, which allows to assess the development trends of the business entity [12,13].

Particular attention should be paid to factor analysis, which allows to study the relationship between indicators between economic and mathematical methods, as well as to determine the impact of various factors on the resulting indicator.

In the study, we proved that innovation potential is a very parametric feature, and therefore it is logical to assess it with a single integrated indicator that should fully reflect the state of all subsystems of innovation potential and the state of innovation potential.

It is proposed to use the following formula to calculate the integrated indicators to assess the scientific, organizational and technical component of innovative potential:

$$i_g = \sqrt[n]{N_{i=1}^n T_i}, \quad (7)$$

where  $N$  -  $n$  - the number of indicators analyzed;  $T_i$  - is the  $i$ -th coefficient of the evaluation system.

The calculation of the index of each structural element of the studied potential is determined by the following formula:

$$P_{sei} = \frac{T_{ip}}{E_{ip}}, \quad (8)$$



where  $P_{sei}$  - is the  $j$ -th indicator of the studied potentials;  $T_{ip}$  - is the integral indicator of the evaluation of the  $j$ -th part of the studied potentials;  $E_{ip}$  - is the maximum value set for the integrated indicator of the  $i$ -th structural element of the innovation potential determined by the expert.

To assess the level of innovative potential, the final integral indicator is calculated by the following formula:

$$IPS_{yig} = \sqrt[\alpha]{i_{pms} + i_m + i_k + i_e + i_{mak} + i_{ttki}}, \quad (9)$$

where  $i_{pms}, i_m, i_k, i_e, i_{mak}, i_{ttki}$  - are indices of financial investment, environment, personnel, scientific, marketing and organizational-technical components of innovation potential, respectively;  $\alpha$  - are the weights of the relevant components of the innovation potential. The specific values of  $\alpha$  are determined by the expert.

It should be noted that in the foreign literature, the interpretation of the obtained value of the integrated indicator for assessing the level of innovative potential in industrial enterprises is carried out according to the scale developed using the Harrington desirable function with the indicators presented in Table 1 [14,15,16,17]:

**Table 1.** Interpretation of an integrated indicator for assessing the level of innovative potential of an industrial enterprise.

No№	Meaningful description of the calculation of the final integral exponent	Digital value
1	The low level of innovative potential is characteristic of such economic entities that do not pay attention to innovative activities that contribute to the expansion of business value, but are aimed at achieving short-term goals and objectives. .	0,0 - 0,2
2	The stagnation of innovation potential, ie the problems in the production activities of the elements of the innovation potential system (personnel, financial crisis, etc.) is a situation that can not create conditions for the successful flow of the innovation process. This type of innovative potential, on the one hand, does not currently provide a competitive advantage for the enterprise. Practical implementation of the anti-crisis strategy that will strengthen the competitive position of the organization in the market.	0,2 - 0,37
3	Stable innovative potential is a quality condition of the system where the synergistic effect of the interaction of structural elements of innovative potential allows to ensure the sustainability of the level of innovative development, increase its level and ensure the innovation of products (works, services).	0,37 - 0,64
4	Innovative potential is the innovative potential of active growth, which is likely to rapidly increase the competitive advantage associated with quality changes in each structural element of the system. The innovative potential of this species is characterized by positive dynamics of indicators to assess its level of development and the implementation of the strategy of "following the leader".	0,64 - 0,8
5	High innovative potential. This type of innovation potential is typical of companies that are leading players in the market, implementing a "competitive leadership" strategy, which helps to increase the effectiveness of innovation, especially to shorten the period from development to implementation.	0,8 - 1,0



It is clear from Table 1 that the system of indicators proposed by Harrington most objectively reflects the situation of each structural component of innovation potential, allows to determine future strategic measures in their development.

**The result:** 1. The globalization of world economic systems, the struggle for leadership in the world community in the context of growing imbalances between countries, innovative development is one of the main resources in ensuring competitiveness. In general, the innovative development of industrial enterprises of the republic and especially the assessment of the level of its innovative potential are modern market tools for strategic management, which allow to increase competitive advantage and increase investment attractiveness.

2. In connection with the multifaceted and always ambiguous approach to the understanding of the term "innovation potential" presented in the local and foreign economic literature and theoretical research, we have proposed a definition of this term. Buddha allows a certain economic entity to develop and successfully implement innovations in all areas of activity, to choose strategic development alternatives based on its sustainability.

3. The state of the enterprise's innovative potential depends on the degree of interaction between the internal potentials of the enterprise. The solution to this problem involves the development of appropriate tools for managing innovation potential based on a continuous monitoring system, which allows for the rapid development and implementation of measures to address vulnerabilities.

4. A system of author indicators is proposed to assess the innovative potential, which allows to judge the current level of innovative opportunities and innovative activities.

5. The method of calculating the integrated indicator of the innovative potential of the industrial entity is proposed, as well as the scale interpretation of the values of the integrated indicator based on the Harrington desirable function, which allows the development of strategies.

## REFERENCES

1. Antonenko I.V. Typology and classification of the innovative potential of the economic system. Problems of modern economy. M.:- 2010. - No.
2. Bulysheva T.S. Simulation of production investment activity of the firm: a study guide. M.: UNITY-DANA, 2012. - 320 p.
3. Baklanova Yu.O. Innovative potential of the region and its openness in relation to the external environment. Management of economic systems. M.:- 2010. – N 1.
4. Baturina N.A. Theoretical foundations of innovative analysis of an economic entity . Reference book of an economist. - 2008. - N.9.
5. Gruzdova M. V. To the question of monitoring and evaluation of the innovative potential of the region. Young scientist. - 2014. - N13. - p. 133-139.
6. Indicators of innovation activity: 2014: statistical compendium. - M.: "Higher School of Economics", 2014. – p.472
7. Indicators of science: Statistical collection. – Moscow.: National Research University "Higher School of Economics", 2014. – p.400
8. Milner B.Z., Makarov V.L., Maevsky V.I., Silvestrov S.N. Innovative development: Economics, intellectual resources, knowledge management: Monograph. - M .: Infra-M, 2013. – p.624.



9. Lugovaya E.S. Innovations as the basis for the modernization of modern society. Bulletin of the Volgograd State University, 2012. – N 2. - Ser. 7.
10. Mironov R.A. Diagnosis and assessment of the level of innovative development of organizations based on the analysis of their innovative potential and competitive status. Abstract of diss. ... cand. economy Sciences. - Nizhny Novgorod, 2010.
11. Moseiko V.O., Knyazev S.A. Determining the innovative potential of an enterprise based on a factorial approach. Herald.Volgograd State University. - 2008. - N 2 (13). - p. 22 - 29.
12. Nizamova I.R. Innovations as a factor in increasing the country's competitiveness.Proceedings of the international scientific-practical conference "Strategies for the development of the investment-building complex in the context of self-regulation." - Kazan: KGASU. – 2012. – p.152-155.
13. Sukharev O.S., Sukharev S.O. Innovations in Economics and Industry: Textbook. - M .: Higher. school, 2010. – p.316.
14. Tronina I.A. Methodology for managing the innovative development of integrated systems in the high-tech sphere of the modern economy. Abstract of diss. ... doctors of economic sciences. – Eagle, 2014.
15. Khansevyarov R.I. Methodological approaches to evaluating the effectiveness of innovative projects. Economic sciences. - 2015. – N 2 (123). - p. 52-55.
16. Khansevyarov R.I. Modern approaches to the formation and development of innovative systems. Economic sciences. - 2015. - N 3 (124). - p. 48-52.
17. Shapovalova T.A. Evaluation of the innovative potential of the organization and ways to improve the efficiency of its use. Abstract of diss. ... cand. economy Sciences. – Belgorod, 2010.



## ECONOMIC ANALYSIS OF EMPLOYMENT IN THE CONSTRUCTION SECTOR OF AZERBAIJAN DURING THE PANDEMIC

**Elvin Azhdarli**

Doctoral student, Azerbaijan Technical University, ORCID ID: 0000-0001-8659-1662.

E-mail: az.elvinazhdarli@gmail.com

### ABSTRACT

In both pandemic and post-pandemic times, the construction sector will remain one of the priority areas in terms of both employment and economic value generation. The construction sector is a multidisciplinary activity. The revival of the construction sector means the revival of many industries, such as the furniture industry, accessories market, construction materials sales, jewelry sales, the banking sector and the labor market. In summary, as can be seen from the figures presented in the material, against the background of economic problems caused by the global pandemic, the construction sector is not only not damaged, but is developing. Of course, given the importance of the construction sector, we must also note the relevant decision of the Operational Headquarters under the Cabinet of Ministers, which does not restrict the activities of this area during the pandemic.

**Keywords:** construction, employment, pandemic, economy

### XÜLASƏ

Pandemiya dövründə Azərbaycanda tikinti sektorunda məşğulluğun iqtisadi təhlili: İstər pandemiya, istərsə də post-pandemiya dövründə tikinti sektoru həm məşğulluğun təmin edilməsi, həm də iqtisadi dəyərin formalaşdırılması baxımından prioritet sahələrdən biri olaraq qalacaq. Tikinti sektoru çoxşaxəli alt sahələrdən ibarət fəaliyyət növüdür. Tikinti sektorunun canlanması mebel sənəyesi, aksesuar bazarı, inşaat materiallarının satışı, bəzək əşyalarının satışı, bank sektoru və eyni zamanda əmək bazarı kimi bir çox sahələrin də dirçəlməsi deməkdir. Xülasə, materialda təqdim etdiyimiz rəqəmlərdən də görüldüyü kimi qlobal pandemiya ilə əlaqədar yaranmış iqtisadi problemlər fonunda tikinti sektoru, nəinki ziyan görməyib, əksinə, inkişaf etməkdədir. Təbii ki, tikinti sektorunun vacibliyini nəzərə alaraq, Nazirlər Kabineti yanında Operativ Qərargahın pandemiya dövründə bu sahənin fəaliyyətini məhdudlaşdırmayan müvafiq qərarını da məxsusi qeyd etməliyik.

**Açar sözlər:** tikinti, məşğulluq, pandemiya, iqtisadiyyat.

**Introduction:** All over the world, the construction sector has a special share in economic development and, in particular, in strengthening the resilience of the economy. More than 7 manats out of every 100 manats of new value created in the Azerbaijani economy is formed by the construction sector. In 2019, 7.3 percent of the country's GDP fell to the construction sector. More than 87 percent of construction work in Azerbaijan is carried out by private enterprises. Against the background of economic problems caused by the global crisis, the construction sector has become a relatively stable sector.[10]

Today, construction work continues rapidly throughout Azerbaijan, especially in our liberated lands. This puts serious responsibilities on construction companies. The construction of new



infrastructure also opens up great opportunities for construction companies. But to what extent will they be able to respond to the emerging student? What challenges do they face in carrying out this responsibility?

Year	Value added, at current prices, million manat	Cost of construction work, million manat
2000	308.0	324.5
2001	310.7	320.2
2002	528.0	527.9
2003	802.0	899.5
2004	1062.1	1388.0
2005	1171.6	1558.0
2006	1445.4	2119.7
2007	1892.0	2702.4
2008	2800.3	3785.5
2009	2554.3	3484.9
2010	3439.7	4531.4
2011	4141.0	6115.0
2012	5,507.90	7,716.00
2013	6,753.70	8,721.20
2014	7,454.40	8,591.90
2015	6,499.50	7,319.60
2016	6,338.90	7,660.40
2017	6,750.60	7,762.10
2018	6,183.40	8,448.30
2019	6,098.8	9,439.2
2020	5577.7 *)	9,778.8

**Table 1.** Macroeconomic indicators for construction enterprises

Source: <https://www.stat.gov.az/source/construction/en/4.1.xls>

The President's instructions and recommendations to carry out construction and improvement work with pleasure and at the level of today's requirements place a great responsibility on economic entities. In general, over the past 10 years, the construction of industrial and social infrastructure, as well as residential buildings in the country has continued rapidly. The real volume of the construction sector has grown by an average of 5.1% annually, and the construction of residential and non-residential buildings accounted for up to 35% of the total volume of work carried out in the field.[10]

At present, the institutional structure of construction management, the housing construction management system have been improved, and accessibility for all groups of the population has been increased. A unified information support system for urban planning and construction activities, a system of information registers on existing facilities have been established and put into operation.

A system of electronic application procedures has been established on the basis of the "one-stop shop" principle for obtaining permits for construction and operation of construction facilities in Baku that do not require expertise, and the number of required procedures, time and costs have been reduced.



As a result of all these measures taken in the construction sector, high results have been achieved in the existing field. Thus, 1 billion 029.5 million manat (6.4%) of investments in Azerbaijan in 2021 was spent on housing construction. 11 billion 015.7 million manat or 68.3% of the funds directed to fixed assets were spent directly on construction and installation work. "[12]

In connection with the new type of coronavirus (COVID-19) pandemic, the Ministry of Labor and Social Protection of Population of the Republic of Azerbaijan In 2020, individuals were provided with materials, equipment and other property in kind to organize the chosen direction of self-employment on the basis of business plans developed with the help of local authorities, without being involved in trainings organized for this purpose.

The Action Plan prepared by the decree of President Ilham Aliyev dated March 19, 2020 includes the implementation of 12 measures in 4 directions to support employment and social welfare. Thus, important steps have been taken towards the social protection of the population during the quarantine period within the socio-economic package prepared on the instructions of the President. The program has reached 5 million people in need of employment and social welfare. As a result, the salaries of 900,000 people working in the public sector and 760,000 people working in the private sector were retained. At the same time, unemployed citizens were paid a lump sum of 190 manat per month. In total, the state paid 333 million manat for this purpose. At the same time, 85,000 families received targeted social assistance in the amount of 225 manat per month.[7]

All this was done at a time when many countries around the world had a policy of "squeezing" in connection with the coronavirus pandemic, as a result of which many countries, first of all, postponed the implementation of social projects. However, President Ilham Aliyev said that during the pandemic. The implementation of any social project will not be suspended. The President's participation in the opening and groundbreaking ceremonies of many social projects this year has once again proved that the promise is being fulfilled.[3]

Starting from the second quarter of 2020, on the instructions of President Ilham Aliyev, certain urgent projects have been developed and implemented for the construction sector, as well as other sectors of state importance, and for this reason only 100 million manat for the second half of 2020 through the Mortgage and Credit Guarantee Fund It was decided to issue new mortgage loans in the amount of With this decision, a new revival began in the construction sector, and one of the areas with the lowest losses during the pandemic was the construction sector.[11]

Commenting on the reasons for the rise in prices for construction materials in Azerbaijan, the Azerbaijan Construction Materials Production Association said that there is an increase in prices for many construction materials on the world market:

The main reason for the rise in prices for construction materials is only the increase in the price of raw materials for certain types of products (cement, etc.). Another reason for the price increase is the introduction of customs duties on imports of paper bags used for packaging gypsum board and other construction materials. "

The association believes that the auction of minerals used as the main raw material in the production of building materials from the subsoil in recent years is one of the factors that led to the rise in prices. At present, the specific price increase in the construction materials market varies in different interest rates. This increase is not regular or regular.

**Currently, the situation in the real estate market of Azerbaijan:** A pandemic is a force majeure situation. Neither real estate market participants, valuation companies nor economic



experts expected such a situation. Despite all this, the fact happened. The pandemic has now affected all areas of our lives, including our country's economy and the world economy. It is expected that the scope of the pandemic will not end with these areas, and all sectors of the economy will be more exposed to these effects. In this situation, the real estate market has changed. The effects of the pandemic are being observed in individual segments of the real estate market and at the same time in the market as a whole. First of all, I would like to note that After the pandemic, people who are the main participants in the market find it more expedient to take a wait-and-see attitude. Some people believe that real estate prices will change significantly. Prices will fall sharply as a result of the economic crisis. Therefore, they consider the waiting position more correct. This, of course, has led to a slowdown in the real estate market for some time.

**The main reason for the stagnation in the real estate market the Covid 19 pandemic:** I would like to emphasize that the main reason for the current stagnation in the real estate market is not only the pandemic. In addition to the pandemic, changes in oil prices also affect this area. Currently, the economically active part of the population, which actively monitors the processes in the country, is waiting for the possible devaluation. The appreciation of the dollar against the manat is also a major factor influencing prices in the real estate market, as well as movements.

**The main factors influencing the formation of prices in the real estate market in Azerbaijan:** The real estate sector is also an integral part of the Azerbaijani economy. As the economy of Azerbaijan is an integral part of the world economy, the economic processes taking place in the world have a direct or indirect impact on the country's economy. Falling oil prices have a direct impact on the real estate market. Thus, the requirements of the real estate market have changed against the background of cheap oil prices and the idea that oil will not be as expensive as in the past. Citizens are waiting for possible changes in the dollar exchange rate and the possibility of falling prices. All these processes have reduced the fact of buying and selling in the real estate market. Of course, the real estate market is currently in a state of uncertainty due to the decline and stagnation. There are people who want to sell their property. The global crisis caused by the pandemic has had a negative impact on the economic situation of the people. Therefore, even some people I know have sold their property in order to protect their business in the current situation or to ensure the sustainability of their companies, without compromising the stability of their financial situation. For this, the market supply is growing. However, the real facts of trade are now almost non-existent. If we do not see additional revival in the real estate market after a while, the initial stages of mortgage lending and social housing are expected to be postponed until the end of June. will fall. We will witness serious price differences.[3]

**Current analysis of prices in the real estate market:** Currently, there is uncertainty in the real estate market. As I mentioned, the lack of facts of buying and selling in the market shows that it is impossible to say unequivocally about the real estate market. We are watching separate ads. After the expiration of the exposition period, ie if the citizen made the announcement in April and the property was not purchased, he will reduce the price in May. This shows that there is a tendency in the real estate market to reduce prices. For example, if I put my car on the market and sell it, but it is not bought, I automatically decide that the price I offer does not meet the demand in the market. Inevitably, I lower the price in order to attract some attention and sell my property. From this point of view, there are points when prices tend to fall.



**The level of influence of investors on price formation in the real estate market:** Of course, investors who are currently interested in investing in the real estate market also have a big role. One of the features of activity in the real estate market is that investors buy and rent individual apartments with cosmetic repairs. This, of course, is considered one of the most profitable businesses. Let the investor invest his free money in a certain building and get a steady income. Of course, there is a stagnation in this area as well. As a result of the pandemic, many apartments, both rented by foreign nationals and rented by workers from the regions, were vacated. We have not witnessed the previous demand in this area. As a result, individual tenants today offer more than the price they rented before the pandemic. I have even come across cases where The tenant was forced to rent the apartment at half price. Currently, it is very difficult to find rent in the market. The slight depreciation trends observed in the rental market can be assessed as a forced reduction in the face of the fact that there is no reduction in prices. According to the pandemic, a number of bans imposed in the country lead to the restriction of economic processes and financial transactions. In such a situation, the income of the population falls, which also has a direct impact on the real estate market. At present, it is impossible to expect mass buying and selling in the real estate market. I would like to note a nuance here. Thus, investors with a ready supply of money may find that many areas of business have lost their relevance. to invest in real estate, taking into account the delays and increasing risks. This can be done in order to generate long-term income.[5]

**The pandemic affect the activities of construction companies:** Construction companies also have very serious problems. Thus, at present, banks are very cautious when lending, and the crisis situation makes it important to be cautious in almost all areas. Tenders have already been announced. The allocation of funds for state-funded construction also helps some construction companies. The construction of medical facilities has also become relevant as a requirement of the time. Construction orders are also expected in this area. Construction is an area that is needed in any situation. It is true that there is no activity during the construction boom, but the construction sector will continue to develop. The activities of construction companies will be provided to some extent on their own, including with state subsidies and budget assistance.

During the pandemic, this sector was referred to areas that do not restrict its activities. In the post-pandemic period, the construction sector in Azerbaijan will contribute to the restoration of economic activity as soon as possible, while maintaining its relevance. Especially given the large-scale construction and improvement work to be carried out in Karabakh, it is possible to imagine how fast the construction sector will develop. How much will the reconstruction of Karabakh cost us?

The Azerbaijan State Agency for Motor Roads, Azerishig, the Azerbaijan Water and Amelioration Economy and a number of other government agencies and companies have already started operating in the liberated areas. In 1996, the Agency for Restoration and Reconstruction of the Territories of the Republic of Azerbaijan was established. At that time, the organization calculated the amount of damage for 2000 within the framework of the State Commission for the Restoration and Reconstruction of the Liberated Territories of the Republic of Azerbaijan.[12]

According to the state commission, the damage in the liberated territories amounted to \$ 12.72 billion. In the current equivalent, this is equivalent to \$ 19.2 billion or 32.7 billion manat. For comparison, the state budget revenues of Azerbaijan for 2020 are projected at 24.2 billion manat, and the state budget revenues in 2021 are projected at 24 billion 327 million manat. [10]



At present, experts estimate that the restoration work will take 5-7 years. A lot of resources are needed to carry out all the work at the same time. At present, this cleaning work should cover at least all areas of Jabrayil, Fizuli and Aghdam regions. The commission estimated in 2000 that the demining operation would cost \$ 182 million and cost \$ 345 million. kilometers were predicted to be mined. This means a very large area. For example, without taking into account the surrounding settlements and villages of Baku, 150 sq. M. Given the number of kilometers, it is possible to imagine the size of the mined area. According to economists, the restoration of the liberated lands could cost the state 25-40 billion manat.[9]

It was agreed to involve Turkish, Italian, Israeli and Pakistani companies in the construction work. In the future, other countries may join the construction boom. Carrying out large-scale construction work in Karabakh means that the people who have so far turned to Baku for work will now flock to Karabakh. There will be great potential. Of course, if this potential is used properly, we will have solved many problems at once, such as economic development of the regions, employment, the settlement of the Azerbaijani population in Karabakh.

Against the background of the current coronavirus pandemic, which requires maximum isolation, adherence to social distance rules and many sanitary measures, the construction sector remains one of the most important sectors of the economy. It is gratifying that the coronavirus has not adversely affected the construction industry in the country. On the contrary, according to statistics, sustainable development and growth is observed both through the opening of new industrial and service facilities, as well as the renewal of the housing stock. In addition, thanks to government support, the industry has quite optimistic prospects. Thus, the preconditions for strong and sustainable growth of the construction sector and the real estate market, as well as other sectors of the economy, have been created. [4]

The construction sector in Azerbaijan is second only to the oil sector in terms of attracting more investment. At the same time, the expansion of the housing stock (construction of residential buildings) is one of the main indicators of socio-economic development of the country. All this shows that the economic policy pursued in our country attaches great importance to the construction sector, and as a result, the sector is developing and strengthening. The construction sector, which successfully fulfills the role of the locomotive of Azerbaijan's non-oil economy, is a diversified production and economic complex, forms the basis of urban planning and is of great social importance. For example, in the process of construction, not only industrial zones and residential areas are created, but also the material base is formed in the form of roads, public buildings, The development of enterprises producing construction materials and many economic entities, architectural-design and research organizations, the transport sector is stimulated, new jobs are created. According to statistics, at the beginning of March 2020, the number of employees amounted to 1.641 million, of which 7.3% (about 120,000 people) worked in construction.[10]

The development of the urban planning, architecture and construction sector during the pandemic is directly related to the measures and indicators taken over the past period, which we present in this material based on accurate facts and figures.

However, before moving on to the analysis of statistics, it should be noted the successful implementation of the Decree of the President of Azerbaijan Ilham Aliyev dated February 19, 2019 No. 529 "On simplification of permits for the operation of some apartment buildings."

As it is known, this Decree covered apartment buildings that were built and inhabited before January 1, 2019, but were not allowed to be commissioned in time due to violations of urban



planning legislation by construction contractors or shortcomings in the registration of construction projects. Guided by the interests of the residents of such buildings, as well as the principles of humanism based on social policy, the President instructed the relevant structures of the Ministry of Emergency Situations (MES) to issue permits for the operation of these buildings in a simplified manner.

Based on the results of these inspections conducted by the Ministry of Emergency Situations, the State Committee for Urban Planning and Architecture (for apartment buildings built in Baku), as well as relevant local executive authorities (for apartment buildings built in other cities) have built a total area of 8,466,990 square meters. meters of 408 apartment buildings were allowed to operate. [10]

It should be noted that despite the fact that all these residential buildings were built and settled before the beginning of 2019 (10 years and in some cases even longer), residents have the right to own apartments only in 2019 and early 2020, mentioned by President Ilham Aliyev. As a result of the work done on the basis of the decree, he was able to formalize. In total, residents of 84,579 apartments were able to register their property rights.[13]

Now let's look at the visual indicators of the investment climate in the construction sector, which is an important element of economic policy for the effective development of each city and the country as a whole. The phased nature of the investment process in housing construction reflects the inflow of resources from the public and private sectors, local and foreign companies.

In 2019, 18,539,476.5 thousand manat of the main amount of capital fell to 9,738,696 thousand manat, in other words, more than half of investments fell to non-governmental organizations, which is an important factor in the development of the business environment in the country. At the same time, the volume of public investments amounted to 8,800,780.0 thousand manat. It should also be noted that the dependence on foreign investment has decreased. Compared to 5,672,408.6 thousand manat of foreign investment in construction last year, 12,867,067.9 thousand manat was invested at the expense of domestic resources. As a result, these figures show the real situation with increasing business activity of local entrepreneurs, an increase in private investment and a decrease in foreign investment. [11]

Let's also look at other interesting facts. As you know, construction is half the work, and commissioning is the other half. Thus, over the past 10 years, there has been not only stability but also growth in this area. Numbers always speak better than words! According to statistics, the total area of residential buildings commissioned in 2009 was 1,501,000 square meters. meters, in 2011 this figure rose to 2,033,000 square meters. meters, in 2014, 2,197,000 square meters. meters, and in 2018, 2,250,000 square meters. meters. As for the statistics of apartments commissioned in 2019 and the first half of 2020, the figures significantly exceed those of previous years. The reason for this was built years ago,

Thus, in 2019, 9,469,000 sq.m. meters of housing has been commissioned. Of this, 7,238,216 sq. Km. meters of apartments built in previous years and commissioned under the Decree of the President of the Republic of Azerbaijan on the simplification of permits for the operation of apartment buildings. As a result, the area of new apartments commissioned in 2019 is 2,230,784 square meters. meters. In addition, in the first 6 months of 2020, this figure was 2,586,000 square meters. meters, of which 1,228,778 square meters. meters falls to the share of apartments commissioned in accordance with Decree No. 529. Thus, the volume of new residential buildings commissioned in the first half of 2020 is 1,357,222 square meters. meters. These facts, It clearly shows that the process of commissioning of residential areas has not stopped and is growing



steadily, even during the difficult pandemic. In particular, despite the pandemic and its impact on the world economy, the area of apartments commissioned in Azerbaijan in the first half of this year alone is 60 percent of the total for 12 months of 2019. [10]

**Result:** Thus, by stimulating the construction sector, the state actually brings it to the forefront of the non-oil sector and has a positive impact on the economy, not only developing other areas, but also improving the lives of hundreds of thousands of our compatriots.

Interestingly, there are also buildings created by the pandemic. These are modular hospitals. If we look at what is happening from an urban perspective in the long run, once the fight against the coronavirus is over, we will have dozens of new hospitals that will be able to optimize, change their profiles or apply them to everyday life in terms of urban planning.

Finally, the urgency of the construction sector and urban planning in Azerbaijan in the post-pandemic period is of particular importance. The steps taken today to support and stimulate the development of the construction sector will serve the development of the economy and the prosperity of the country.

## REFERENCES

1. Abbasov G.A. Directions for improving the formation of prices for construction products in Azerbaijan [Text]: iqt. on the verb. d-ru e. sweat al. for dis .: 5312.01. Q.A. Abbasov; ANAS, Economics In-tu.-B., 2014.- 16COVID-19 Priorities for the economy, Joseph Stiglitz, 06.07.2020, <https://www.socialeurope.eu/prioritiesfor-the-covid-19-economy>
2. Aliyev E.A. Directions of formation of financial resources in mortgage housing construction [Text]: iqt. on the verb. d-ru ae der. al. for ed. dis.: 5312.01. E.A. Aliyev; Azer. Rep. Ministry of Education, Azerbaijan. State University of Economics, 144 p.
3. Aliyev R.M. The role of the financial and tax system in the development of the construction sector in the Republic of Azerbaijan and directions for improvement [Text]: iqt. on the verb. d-ru e. sweat al. for ed. dis.: 08.00.18. / R.M.Aliyev; Azerb. Rep.
4. Hasanov H. Prospects for the development of entrepreneurship in the field of construction materials production in the Republic of Azerbaijan [Text]: economy e. n. al. sweat a. for ol. dis .: 08.00.05. / Q.R.Qeybullayev; Azerbaijan University of Architecture and Construction.-Baku: 2001.
5. Hasanov I.J. Some issues of capital construction development in the conditions of transition to market economy in the Republic of Azerbaijan [Text]: economy ena der. al. for ed. dis .: 08.00.05. / İ. C. Hasanov; AİMU.-Baku: 2019.- 137 p.
6. Nagiyev Zafar Naghi oglu. The role of foreign and joint ventures in the development of the construction sector in Azerbaijan [Text]: iqt.e.n.al.dər.a. for ed. dis .: 08.00.05. / ZN Nagiyev; Azer. Rep. Ministry of Education; Azerb. University of Architecture and Construction.- Baku: 2018.- 156 p.
7. Ramazanov V.Z. Improving the efficiency of investment in the development of the construction materials industry [Text]: iqt. on the verb. d-ru e. sweat al. for ol. dis .: 5312.01.V.Z. Ramazanov; Azer. Rep. National Academy of Sciences, Institute of Economics.-Baku, 2017.- 155 p.



8. Valiyev Z.M. Improving the organization of construction and other public procurement in the context of increasing public funds of the Republic of Azerbaijan e. on the verb. d-ru al. sweat a. for ol. dis . 08.00.21. / Z.M. Valiyev; Azərb. Res., 138 p.
9. WHO. (2020). Coronavirus disease (COVID-19) weekly update. NA: WHO., <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20201012-weekly-epi-update-9.pdf>
10. WHO. (2020). The Economic and Social Impact of COVID-19 in the Eastern Mediterranean Region. NA: WHO.
11. <https://www.stat.gov.az/source/construction/>
12. <https://nk.gov.az/media/files/ff0145806a54cfbe10603cda6d837b7a.pdf>
13. [https://uluchay.org/wp-content/uploads/2021/01/Economic\\_Impact\\_COVID-1.pdf](https://uluchay.org/wp-content/uploads/2021/01/Economic_Impact_COVID-1.pdf)
14. <http://unec.edu.az/application/uploads/2015/02/UE-2020.pdf>



## **SOCIO-ECONOMIC ASPECTS OF THE DEVELOPMENT OF THE HIGHER EDUCATION SYSTEM IN AZERBAIJAN**

**Amin Rustamli**

Doctoral student, Azerbaijan State Agricultural University, ORCID ID: 0000-0001-6945-9870.

E-mail: Amin.rustemli@mail.ru

### **ABSTRACT**

Forecasting of socio-economic indicators in the field of education, preparation of the draft state budget on the education system, financing of educational institutions, departments and organizations, centralized measures are the priority directions of the education economy. In particular, the implementation of financial support of various state programs, forecasting student and student enrollment in higher and secondary schools, vocational high schools and vocational schools, general secondary education institutions directly under the Ministry of Education, preparation of analytical and statistical indicators related to the education network, new educational institutions One of the priorities of the education economy is to make proposals to the relevant government agencies on the establishment and change of type.

**Keywords:** education, economics, service, university

**Introduction:** In our country, the concept of "educational services" has changed in content since the 90s. The Law on Education, adopted in 1992, provided for the activities of these institutions that would bring additional income to these services. At that time, education was a social blessing that people received for free. Today, we are accustomed to the fact that education is a service provided within the framework of educational standards.

The 1992 Law on Education included educational services as "additional program training, social courses and a series of subjects, tutoring, in-depth study of subjects, and other services." At the same time, it was stated that "all this will not be able to replace the main activity, financed from the budget." Later, the training and retraining of skilled workers and specialists with the appropriate level of education was added to the list of paid educational services. The range of entities providing these services has also changed.

In the 1990s, as a rule, these were state and municipal education departments. Paid services and their provision were to be specified in the charter of the educational institution on a contractual basis. Decisions of 2001 and 2003 gave state and municipal education departments (preschool, general and vocational education), scientific institutions, non-governmental education institutions, as well as citizens who provide such services individually, the right to provide educational services.

According to ISO 9004-2, service is, first of all, the result of the interaction between the executor and the consumer of the service.[7]

It is known that the successful future of any country is determined by the level of education in that country. We know from world experience that the abundance of natural resources is not a key indicator of the development of the state, but to ensure the transformation of these resources into human capital, which is the driving force of society. This is the main task of the education system at this stage. History also shows that advanced countries such as the United States, Japan, and South Korea have benefited more from the human capital produced by the education system than



from the material resources they have. Among these factors, the share of education in development in these countries is quite high, at about 70 percent.

All these trends observed in the world make it necessary to determine the direction of reforms in the field of higher education in the country, reflecting the national interests, in accordance with these trends.

It should be noted that in accordance with the "Long-term strategy for oil and gas revenue management" approved by Presidential Decree No. 128 of September 27, 2004, to stimulate the improvement of the intellectual and technological base of the economy and the development of "human capital" Personnel training and professional development have been identified as one of the main directions in the use of oil revenues. Some measures have been taken in this direction. The State Program on Education of Azerbaijani Youth Abroad for 2007-2018 was approved by the Presidential Decree dated April 16, 2007.[6]

In 2008-2010, the State Oil Fund provided 19.8 million manat to finance this program, 733 students were sent abroad for study, 51 of them graduated. It should be noted that today 10,000 young Azerbaijanis successfully continue their education in universities around the world. 789 of them were sent to study at world-renowned universities in accordance with intergovernmental agreements, and 773 in accordance with the "State Program for the study of Azerbaijani youth abroad in 2007-2018." 150 of them have already graduated. In the context of the State Program, in 2018, 1,800 young people were sent to most universities around the world to study in various specialties. As a result, Most of the graduates studied humanities. During this period, the share of students studying technical and natural sciences in the number of students studying abroad was small. In addition, the "State Program on Reforms in the Higher Education System of the Republic of Azerbaijan for 2009-2013" was approved by the Presidential Decree dated May 22, 2009. However, there is a backlog in the country compared to the CIS countries, which have improved in the field of higher education.[6]

In modern times, the state pays great attention and care to education, which is considered a priority, and the expenditures allocated to this area are significantly increased from year to year. All this is a clear example of the confirmation of the President's motto "We must turn our material values and economic potential into human capital."

	2013	2014	2015	2016	2017
Expenditures on science from the state budget, million manat	117.0	124.2	113.2	110.2	109.8
as a percentage of gross domestic product	0.2	0.2	0.2	0.2	0.2
as a percentage of state budget expenditures	0.6	0.7	0.6	0.6	0.6

**Table 1.** Expenditures on science from the state budget

**Source:** <https://www.stat.gov.az/source/education/>

As can be seen from the table, there are fluctuations in education spending. Thus, while 117 million manat was spent in 2013, in 2015 this figure decreased to 113.2 million manat. This decrease continued in 2016 and 2017, reaching 110.2 million manat in 2016 and 109.8 million manat in 2017. The table also shows the ratios of these expenditures to GDP and the State Budget as a percentage. There was no change in GDP ratio and it was 0.2 percent in all years. However, compared to the state budget in 2013, it was 0.6 percent, while in 2014 it was 0.7 percent, and in



subsequent years it was 0.6 percent. When we look at the number of students studying abroad, we can see the results in the table below.[7]

Name of countries	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Total	2270	3035	2911	2998	2197	1800
including:						
In the CIS countries	428	488	404	320	267	241
In Belarus	48	60	60	36	32	22
In Russia	314	377	303	247	213	215
In Ukraine	66	51	41	37	22	4
In other countries	1842	2547	2507	2678	1930	1559
In the United States	36	58	63	57	50	34
In Germany	278	351	325	316	240	188
In Australia	20	53	61	72	63	43
In Austria	10	19	24	29	25	18
In the UK	267	499	570	621	411	289
In the Czech Republic	7	14	15	19	15	9
In the People's Republic of China	27	37	39	39	37	46
In France	43	44	53	54	53	25
In Switzerland	41	68	86	82	58	42
In Spain	5	10	17	19	16	9
In Italy	7	24	33	37	29	19
Canada	129	179	189	195	151	137
In the Republic of Korea	31	26	21	14	8	4
Lithuania	8	17	16	14	10	8
In the Netherlands	27	67	72	139	110	98
In Turkey	877	1024	866	907	603	569

**Table 2.** State education in foreign universities Number of Azerbaijani citizens (at the beginning of the academic year, people)

**Source:** <https://www.stat.gov.az/source/education/>

According to these results, there is an increase and decrease in the total number of students studying abroad. While the total number of students was 2,270 in 2012-2013, it was 3,035 in 2013-2014, 2,197 in 2016-2017 and 1,800 in 2017-2018.[8]



In countries with developed market economies, modern technologies play an important role in ensuring economic growth and improving people's living standards. In developing countries, where the highest levels of economic growth are recorded, it is possible to ensure rapid progress through the application of modern technologies. It is impossible to imagine this without science. Although most countries have access to these technologies, not all countries have access to them. The spread of these technologies requires a high level of scientific progress in the country. Secondly, it is clear that in the current situation, students studying on a paid basis have a special role in the formation of financial resources of educational institutions of our country. Their role in shaping the budget of universities is growing every year, and this is likely to be the case in the future. It is this factor that necessitates the introduction of marketing in universities, and they expand their public relations and organize and implement their activities. In the current situation, the university has a high chance of attracting applicants, so that the university is highly protected by the public and the university has a high reputation among the public. Achieving this goal requires the development and implementation of marketing programs by educational institutions. In general, the successful operation of educational institutions depends on improving the management of their activities based on a marketing approach.

The following table shows the number of students studying in higher education institutions of our country (Table 3).

	2012 2013	2013 2014	2014 2015	2015 2016	2016 2017	2017 2018
Number of higher education institutions	52	52	53	54	51	51
Number of state higher education institutions	37	37	39	41	38	39
Number of non-state higher education institutions	15	15	14	13	13	12
the number of students in them - sami, people	145584	151274	158212	161234	163779	167677
including by forms of education:						
Visual	120619	128851	137909	144539	150656	154927
correspondence 1)	24965	22423	20303	16695	13123	12750
Number of students per 10,000 population	158	160	167	168	169	171
Number of students admitted to higher education institutions:						
bachelor's degree - total, people	33327	35370	35801	33645	36126	38546
including by forms of education:						
Visual	31134	33443	33746	32181	34334	36356
correspondence 1)	2193	1927	2055	1464	1792	2190
to master's degree - total, people	4746	5514	4913	4953	5098	6515
including by forms of education:						
Visual	3073	4209	4913	4953	5098	6515
in absentia	1673	1305	-	-	-	-

**Table 3.** Higher education institutions of Azerbaijan.**Source:** <https://www.stat.gov.az/source/education/>

It is clear from the data in the table that the number of higher education institutions operating in our country has changed in the analyzed years. Thus, while there were 52 enterprises in 2012-2013, there were 53 in 2014-2015 and 54 in 2015-2016. However, this figure was 51 in 2016-2017 and 2017-2018. As a result, there are changes in the number of state and non-state higher education institutions. There were 37 state-owned enterprises in 2012-2013, 39 in 2014-2015 and 41 in 2015-2016. There were reductions in 2016-2017 and 2017-2018, and the result was 39. The table also shows the number of students studying. When we look at the total number of students, it is seen that there is a steady increase. The total number of students in 2012-2013 was 145,584, in 2014-2015, 158,212.[7]

It is also clear from the figure below that the increase in the number of students was mainly due to the share of public educational institutions, and this was due to the choice of these educational institutions by the population. This was possible due to the marketing structure implemented by the relevant structure of state higher education institutions - the Department of Marketing and Communications. As a result, as a result of targeted measures taken by the relevant departments of universities recently, the opportunities for future applicants and their parents to get acquainted with university life have increased, and they have all the opportunities from this point of view. For example, the State University of Economics provides opportunities for future entrants to listen to lectures by teachers directly at the university. Applicants who attend lectures with their high school teachers several times a year create a full picture of the university, which has a direct impact on their future career choices. Prospective entrants who have had the opportunity to participate in the lectures will also witness a change in the technology of imparting these lectures to students. Thus, they witness the lectures of teachers in an interactive mode, using the latest achievements of information and communication technologies, and as a result, they get a full picture of the quality of these lectures. this has a direct impact on their future career choices. Prospective entrants who have had the opportunity to participate in the lectures will also witness a change in the technology of imparting these lectures to students. Thus, they witness the lectures of teachers in an interactive mode, using the latest achievements of information and communication technologies, and as a result, they get a full picture of the quality of these lectures. this has a direct impact on their future career choices. Prospective entrants who have had the opportunity to participate in the lectures will also witness a change in the technology of imparting these lectures to students. Thus, they witness the lectures of teachers in an interactive mode, using the latest achievements of information and communication technologies, and as a result, they get a full picture of the quality of these lectures.[3,101]

One of the notable innovations in the marketing activities of state educational institutions is the launch of a quality control unit in some of these institutions. The activity of these departments in universities has been ensured for a long time. As a result of its activities, the quality of teachers' teaching-related activities is monitored at several levels (department, dean's office and teaching quality control department).[2, 98]

Deficiencies in teachers' teaching materials are promptly communicated to them and those deficiencies are addressed. All this allows us to improve the quality of education and adapt it to the needs of consumers - university students. At the same time, it should be noted that the Department of Teaching Quality Control monitors the quality of teachers' lectures and sends



quality ambassadors to participate in their lectures. This strengthens the sense of responsibility of teachers and allows to improve the quality of education. Innovations in university marketing activities do not end there. As a result, this is a major innovation in the life of universities and is an integral part of their marketing activities. In fact, the development of marketing activities is possible on the basis of feedback from consumers and the study of their opinions, which is currently observed in public educational institutions. This is possible by filling out a student satisfaction form with the teacher.

It is clear that marketing in the field of education refers to service marketing, and the sale of this product takes place directly through the sales channel, which is an indication of the lack of intermediaries in the delivery of these lectures to students. At the same time, it should be noted that the provision of this service begins shortly before the lectures and begins with the placement of the teacher's own lectures in the "teacher's office". This in itself can be assessed as a positive trend in the marketing activities of universities in recent years. By getting acquainted with them before the lectures are given, the students actually benefit from the service and have the opportunity to further strengthen the knowledge they have acquired during the lectures. The measures taken in terms of the application of marketing in the activities of enterprises operating in the field of education and its further development have a positive effect - the quality of education is increasing and the image of universities is improving. It is clear from the research that the number of students admitted to and graduated from higher education institutions of the country has recently increased.[5,104]

	2011 / 2012	2012 / 2013	2013 / 2014	2014 / 2015	2015 / 2016	2016 / 2017
Number of students admitted	31213	33326	35370	35802	33644	36125
Including						
to state institutions	26993	28715	30317	31080	30278	32933
on the forms of admission from them						
Visual	23428	26756	28618	29034	28825	31187
correspondence, evening	3564	1958	1698	2046	1456	1744
To non-governmental	4220	4612	5053	4722	3365	3193
From them						
Visual	4074	4376	4825	4714	3356	3146
correspondence, evening	146	235	227	8	9	48
Number of graduates, people	30712	35228	33858	32836	33715	37951
Number of specialists graduating from higher education institutions per 10,000 population	35	37	35	34	36	37

**Table 4.** Admission to higher education institutions of Azerbaijan and graduation of specialists with higher education.

**Source:** <https://www.stat.gov.az/source/education/>



It is clear from the data in Table 4 that compared to the 2011/2017 academic year, the number of students admitted to higher education institutions in 2016/2017 increased from 31,212 to 36,126 or 15.7%. During this period, the number of students admitted to public educational institutions increased from 26,992 to 32,932 or 22.0%. A more complete picture of the dynamics of the number of students entering and graduating from a university can be found in the figure below.[7] The analysis shows that the Azerbaijan State University of Economics has more experience in implementing marketing activities in Azerbaijani universities. Among the higher education institutions of our country, this university has begun to take shape almost as a brand. Known as the UNEC brand, this higher education institution maintains its popularity by further improving its image. The opportunities of our country's higher education institutions to attract students from abroad directly depend on the marketing activities of these institutions. Recently, the tendency to change the number of students studying abroad in higher education institutions of our country is characterized by the information in the table below.

Name of countries	2012 2013	2013 2014	2014 2015	2015 2016	2016 2017	2017 2018
Total	3926	3971	3698	3425	3370	3784
including:						
From CIS countries	511	489	581	606	748	943
From Kazakhstan	19	43	50	48	50	40
From Russia	218	190	241	274	418	549
From Turkmenistan	187	169	229	204	191	211
From other countries	3415	3482	3117	2819	2622	2841
From the People's Republic of China	107	157	102	111	75	77
From Georgia	201	218	221	251	270	286
From Jordan	28	26	25	25	20	12
From Iraq	104	153	139	117	126	248
From Iran	559	521	329	251	271	316
From Pakistan	26	32	25	24	24	31
From Syria	22	27	27	28	27	22
From Turkey	2232	2212	2087	1817	1604	1531

**Table 5.** Number of foreign students studying in higher education institutions of Azerbaijan (people at the beginning of the academic year).

**Source:** <https://www.stat.gov.az/source/education/>

It is known from the information in the table that compared to the 2012-2013 academic year, in the 2017-2018 academic year, Azerbaijan decreased by 142 people or 3.6%. A significant number of students studying in our country are from neighboring countries. Among these countries, the number of students coming to our country from Turkey to study is a significant advantage. With the exception of Turkey, the number of students studying in Azerbaijan from neighboring countries has been increasing. However, the number of students from Turkey is constantly



declining. Thus, the number of students from Turkey in 2012-2013 was 2232 people, while in 2017-2018 it was 701 people or 31.4 percent decreased to 1531 people.[8]

In recent years, in the market of professional services, special opportunities have been opened for enterprises operating in the field of inculcating this education in young people. In modern times, there is a greater need for the application of marketing in vocational education institutions. It should be noted that the neglect of vocational education for many years has reduced the interest of young people in this field. Over time, the number of people who pay attention to vocational education has decreased, and as a result, the activity of vocational schools has not been at a high level. However, some work has recently begun in this area, and as a result, this is due to the demand for various professions. It should be noted that some time ago a decision was made to regionalize vocational education.[6]

Thus, President Ilham Aliyev signed a decree on the establishment and operation of the State Agency for Vocational Education under the Ministry of Education. According to the decree, the State Agency for Vocational Education under the Ministry of Education was established to increase the effectiveness of vocational training in the field of initial vocational education and ensure the training of competitive qualified personnel. As a result of the activities of this agency, it is expected that the interest of young people in the profession will increase, which is possible in any sense by taking marketing measures in this area. To this end, the benefits that young people can have from different occupations should be explained and they should be encouraged to pursue vocational training. Practitioners note that the establishment of the State Agency for Vocational Education stems from the fact that vocational education is a priority for the country. According to them, the agency can play an important role in making significant changes in this area. Vocational training is an important step in the education system of all developed countries. Specifically, based on our country, about 30 percent of the more than 100,000 graduates can be admitted to universities. Almost all of the remaining high school graduates do not want to study in vocational schools. This was closely related to the state of vocational education. As a result, previously no special attention was paid to the development of vocational education in our country. This agency can do special work for the development of vocational education. In our opinion, The establishment of such an agency under the ministry is a timely step and stems from the requirements of the professional services market. At present, the goals of vocational education have changed, and this is seriously related to the fact that we live in an information society. The fact that the majority of Azerbaijani youth outside of higher education will go to vocational education will depend on the activities of the agency.

**Result:** It is impossible to think of the education system without a profession. Now there is a need for skilled workers all over the country. Unfortunately, we do not have the education of many professionals. They spontaneously acquired professions without being taught by a master. This also has a negative effect. In fact, the schools in which people with different professions study have a special role in providing them with jobs, and it also depends on the image of vocational schools in society. Special work should be done in Azerbaijan to increase the interest of young people in vocational education. To this end, the main work should be in the field of education, and in this way the demand for vocational education should be formed. Advertisements to be implemented by vocational schools can play a significant role in the implementation of awareness-raising activities in this area. It is worth noting that countries such as Germany and



Japan have the opportunity to become the most advanced countries in the world in terms of professionalism. In our country, young people pay more attention to higher education.

## REFERENCES

1. Taşkın, E. and Büyük, K. (2020). "Quality in Education Services from the Perspective of Service Marketing (A Related Field Study with Private School Students in Kütahya)", Dumlupınar University Journal, 7: 1-21.
2. Армстронг, Г. Basics of marketing. - 4th European edition / Armstrong G., Wong V., Kotler F., Saunders J. - Пер. с англ. - М.: ID "Williams", 2019. - 1200 p.
3. Kovtun TV Theory and methods of marketing activities in the pedagogical college / TV Kovtun. - Stavropol: SSU Publishing House, 2017. - 180 p.
4. Valiyev D. States that do not build a knowledge-based economy and do not develop human capital will take one of the last places // Palitra.-2011.- October 15.- p. 6
5. <http://unec.edu.az/>
6. [http://www.au.edu.az/upload-files/menu/ipekyolu/4\\_-2015.pdf](http://www.au.edu.az/upload-files/menu/ipekyolu/4_-2015.pdf)
7. [https://knowledge.allbest.ru/marketing/3c0a65625a3bd68a5c43b88521306d37\\_0.html](https://knowledge.allbest.ru/marketing/3c0a65625a3bd68a5c43b88521306d37_0.html)
8. <https://www.stat.gov.az/source/education/>



## AGRARIAN REFORMS AND DEVELOPMENT OF AGRIBUSINESS FORMS IN AZERBAIJAN

**Ayaz Tagiyev**

Doctoral student, Azerbaijan State University of Economics – UNEC, ORCID ID: 0000-0003-0426-6765

E-mail: mba\_az@mail.ru

### ABSTRACT

Legal support for the implementation of agrarian reform in our country is the Constitution of the Republic of Azerbaijan, laws adopted on the implementation of agrarian reforms, decrees to ensure their implementation, decisions adopted by the state on the development of the agrarian sector. Theoretical and practical instructions and decisions arising from these laws, decrees and decisions determine the methodological basis for the establishment of private farms, the formation and development of entrepreneurship. The main purpose of the implementation of agrarian reforms in our country is to achieve the organization of special forms of economy in accordance with the law of market economy and to develop entrepreneurship in all areas of the agrarian sector by all means. It should be noted that the State Agrarian Reform Commission, local and regional agrarian reform commissions have been established to carry out agrarian reforms in the country.

**Keywords:** agrarian, reform, industry, economy.

### XÜLASƏ

**Azərbaycanda aparılan aqrar islahatlar və aqrobiznes formalarının inkişafı:** Ölkəmizdə aqrar islahatın həyata keçirilməsinin hüquqi təminatı Azərbaycan Respublikası Konstitusiyası, aqrar sahədə islahatların həyata keçirilməsinə dair qəbul edilmiş qanunlar, onların icrasının təmin edilməsinə dair fərmanlar, dövlətin aqrar bölmənin inkişafına dair qəbul etdiyi qərarlar təşkil edir. Bu qanun, fərman və qərarlardan irəli gələn nəzəri və təcrübi əhəmiyyətli göstəriş və qərarlar xüsusi təsərrüfatların yaradılması, sahibkarlığın formalaşması və inkişafının metodoloji əsaslarını müəyyənləşdirir. Ölkəmizdə aqrar islahatların həyata keçirilməsinin başlıca məqsədi bazar iqtisadiyyatı qanununa uyğun gələn xüsusi təsərrüfat formalarının təşkilinə nail olmaqdan və aqrar bölmənin bütün sahələrində sahibkarlığı hər vasitə ilə inkişaf etdirməkdən ibarətdir. Qeyd etmək lazımdır ki, respublikamızda aqrar islahatları aparmaq məqsədilə Dövlət Aqrar İslahat komissiyası, yerli və rayon aqrar islahat komissiyaları yaradılmış, onların hüquqları, funksiyaları, vəzifələri və iş qaydaları müvafiq olaraq əsasnamələrdə təsdiq edilmiş, islahatların aparılmasına dair yaradılmış komissiyalar qarşısında çox mühüm vəzifələr qoyur.

**Açar sözlər:** aqrar, islahat, sənaye, iqtisadiyyat

**Introduction:** The formation of the agrarian economy necessitates the implementation of many important principles. These principles can be divided into five areas (economic, social, environmental, political and legal). Economic principles, first of all, consider the creation of effective economic and investment conditions, raising macroeconomic and macroeconomic criteria through the economical use of natural and other resources, and form the basis of the concept of sustainable development. We think that it is more convenient to consider each of the



five basic principles of the agrarian economy in a complex way, rather than individually. Because one of these principles complements the other and acts in interaction.

The agrarian sector is important in improving the supply of food to the population, ensuring the efficient operation of light, food, textile and other industries and strengthening the economy of our country.[4, 142]

Therefore, in recent years, the agricultural sector of the country has undergone significant changes in the implementation of comprehensive measures and the deepening of agrarian reforms, which have led to an increase in socio-economic indicators in this area. The deepening of agrarian reforms, the development of property relations, the improvement of the economic mechanism have ensured the creation of real production and economic conditions for the effective operation of private farms and entrepreneurs in the agrarian sector. As a result, reforms in the agricultural sector of the republic have been successfully completed, public property-based farms have been abolished, land and property have been privatized, and private property-based farms have been established. [3]

In a market economy, peasant farms are the strongest source of food in the country to meet the needs of the population in the near future. The creation of an abundance of crops depends on the proper consideration of a number of conditions and factors in the development of peasant farms. The most important of these is to determine the main directions of development of peasant farms. Peasant farms are a special form of farming, a form of entrepreneurship based on the principle of independent individual or collective labor and economic benefit. Its activity refers to the work of an individual, a family, a group of able-bodied persons established by mutual consent in accordance with the Law of the Republic of Azerbaijan "On Peasant Farms". Peasant farms are established on the basis of existing collective and state farms and other agricultural enterprises in the country. [2]

Each stage of agrarian reform had its own characteristics. Thus, the preparatory processes are primarily characterized by the creation of the necessary legal guarantees for the formation of new production relations in agriculture.

In order to eliminate the problems that could not be solved in the first stage of agrarian reforms, serious steps have been taken and relevant policy measures have been identified within the second stage of these reforms.

Agrarian reforms in Azerbaijan (I) have reached the first stage, which resulted in serious institutional, socio-economic changes in the agricultural sector and the formation of market relations, and (II) the market-based sector is more economically viable than in market economies. can be divided into the second stage, which begins the process of formation of the system of regulation by means. Effective meeting the sustainable growth of the country's population depends on increasing the level of productivity in agriculture, efficient use of production capacity, creating an abundance of products, as well as stabilizing prices, as well as increasing the income of the population.[7]

In order to ensure the comprehensive and systematic implementation of agrarian reforms, the State Agrarian Reform Commission was established by the Presidential Decree dated March 2, 1995, and the "Regulations of the Republican, District and Local Agrarian Reform Commissions" were approved. As a result of the reforms, land and property in the agricultural sector were privatized, and the production of agricultural products was subordinated to the requirements of the free market environment.



The scientific and theoretical basis for the development of the state's agrarian policy is the laws of the Republic of Azerbaijan "On the Fundamentals of Agrarian Reform", adopted on February 18, 1995, "On Reform of State and Collective Farms" and July 16, 1996 "On Land Reform". The main goal of modern agrarian policy is the formation of market socio-economic agrarian structures operating on the basis of various forms of ownership and economy. Accordingly, agrarian policy, includes directions for radical change in investment and tax policy. [4,101]

Along with the adoption of the above three laws, which are the main pillars of the agrarian sector, "On State Land Cadastre, Land Monitoring and Land Management", "On Stimulation of Insurance in Agriculture", "On Amelioration and Irrigation", "On cancellation of tax debts of state farms, collective farms and other legal entities and individuals (except for processing enterprises) engaged in agricultural production", "On the land market", "Land on rent", "On fisheries", "On plant quarantine" (April 23, 34, 1996), "On plant protection" (December 3, 1996), "On breeding" (May 26, 1996), "On Provision of Term Tax Incentives to Agricultural Producers" (November 27, 2001), "On Selection Achievements" (November 15, 1996), "On Grain" (June 16, 2000), "On Tobacco and Tobacco Products" (June 8, 2001), "On Seed Production" (March 11, 1997), "On Viticulture and Enology" (October 19, 2001), "On Soil Fertility" (December 30, 1999), "On Specially Protected Natural Areas and Objects" (March 24, 2000), Normative-legal acts such as "Water Code" (December 26, 1997), "On preferential sale of oil products to agricultural producers" (Resolution of the Cabinet of Ministers No. 49 of March 26, 1999) were also adopted. (1) "On Seed Production" (March 11, 1997), "On Viticulture and Enology" (October 19, 2001), "On Soil Fertility" (December 30, 1999), "On Specially Protected Natural Areas and Objects" (March 24, 2000), "Water Code" (December 26, 1997), "On preferential sale of oil products to agricultural producers" (Resolution of the Cabinet of Ministers No. 49 of March 26, 1999) were also adopted. (1) "On Seed Production" (March 11, 1997), "On Viticulture and Enology" (October 19, 2001), "On Soil Fertility" (December 30, 1999), "On Specially Protected Natural Areas and Objects" (March 24, 2000), "Water Code" (December 26, 1997), "On preferential sale of oil products to agricultural producers" (Resolution of the Cabinet of Ministers No. 49 of March 26, 1999) were also adopted. (1) Normative-legal acts such as "On preferential sale of oil products to agricultural producers" (Resolution of the Cabinet of Ministers No. 49 of March 26, 1999) were also adopted. (1) Normative-legal acts such as "On preferential sale of oil products to agricultural producers" (Resolution of the Cabinet of Ministers No. 49 of March 26, 1999) were also adopted.

[1]

The "Strategic Roadmap for 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 6, 2016 provides 360-degree diagnostics and SWOT (GZIT) analysis in the field of agricultural production and processing in the country. The strengths and weaknesses of these forces, the weaknesses and the dangers of these weaknesses have been identified. At the same time, the strategic roadmap identifies strategic goals, target indicators, priority areas and a set of measures to achieve these priorities, sources of sector funding and the competent authorities to implement them. ("Strategic Roadmaps Covering the National Economy and Key Sectors of the Economy" .[5]

Strategic vision for 2020 based on the strategic roadmap. The strategic vision for the processing and production of agricultural products in our country until 2020 is based on the principles of sustainable development, to further accelerate food security, contribute to economic diversification and increase the social status of the population in 47 villages to create a



competitive agricultural production and processing sector envisages the formation of a fertile environment. (“Strategic Road Map for the production and processing of agricultural products in the Republic of Azerbaijan”. [8]

The implementation of the Strategic Road Map will create a favorable business and business environment by further modernizing the legal regulatory system, as well as increasing the impact of government support and further strengthening the competitive environment in the market.

Long-term review for the period up to 2025. The long-term vision for the processing and production of agricultural products in our country until 2025 envisages the creation of a competitive agricultural business by accelerating the transition from a socialist economic system to a value-added economic system based on market relations.[9]

Thanks to the formation of a fertile business environment as a result of the implementation of the Strategic Road Map, on the one hand, the integration of accelerating the market orientation of small family farms, leading the family business, mainly producing and processing products for personal consumption, and on the other hand forming and processing large agricultural complexes Production capacity will be increased in accordance with relevant quality requirements through the intensification of successful relations between industry and agricultural production, as well as accelerating the development of market infrastructure. Thus, the acceleration of the practice of applying modern technologies in the production of agricultural products State support measures in the field of agriculture.

State support measures in the general field	State support measures in the field of crop production	State support measures in the field of animal husbandry
<ul style="list-style-type: none"> <li>•Agriculture is tax-free;</li> <li>•producers are given soft loans from the budget;</li> <li>•customs preferences are applied to many imported production mechanisms in the processing of agricultural products;</li> <li>•40% of the price of agricultural machinery, machinery and equipment sold by “Agroleasing” OJSC is provided from the budget and they are sold through leasing;</li> <li>•50% of the insurance premium calculated for the insurance of agricultural property and certain insured events is paid by the state.</li> </ul>	<p>A subsidy of 50 manat per hectare of arable land is provided to ensure that the state pays 50 percent of the cost of fuel and motor oils required for the production of agricultural products;</p> <ul style="list-style-type: none"> <li>•0.1 manat per kilogram of cotton, 0.1 manat per kilogram of dry tobacco and 0.05 manat per 10 kilograms of wet tobacco sold to processing companies;</li> <li>•the price of each 1000 m3 of irrigation water was set at 0.5 manat for those engaged in agricultural production;</li> <li>•40% of the cost of modern irrigation equipment sold by “Agroleasing” OJSC is paid from the budget;</li> <li>•70% of the cost of fertilizers, pesticides and biohumus produced by industrial methods is paid from the</li> </ul>	<p>50% of the price of imported goods imported by “Agroleasing” OJSC is provided from the budget and sold through leasing;</p> <ul style="list-style-type: none"> <li>•100 manat subsidy is given for each calf obtained by artificial insemination;</li> <li>•the infrastructure for artificial insemination services is provided by the state;</li> <li>•treatment, prevention and diagnostic measures against special dangerous infectious diseases of animals among all types of farm animals and birds are carried out by the state.</li> </ul>



	state budget;  <ul style="list-style-type: none"> <li>•subsidies are provided for the production and sale of seeds and seedlings;</li> <li>•Measures to control quarantined and especially dangerous pests of agricultural crops are financed from the state budget</li> </ul>	
--	--	--

**Picture:** Strategic Roadmap for agricultural production in the Republic of Azerbaijan, approved by the Decree dated December 6, 2016, p.37

**Source:**

[https://mida.gov.az/documents/strateji\\_yol\\_xeritesi\\_kend\\_teserrufati\\_mehsullarinin\\_istehsalina\\_ve\\_emalina\\_dair.pdf](https://mida.gov.az/documents/strateji_yol_xeritesi_kend_teserrufati_mehsullarinin_istehsalina_ve_emalina_dair.pdf)

Target review for the period after 2025. The target vision for the production and processing of agricultural products in our country for the period after 2025 is based on the creation of agriculture based on high technology, industrially oriented, meeting the requirements of environmental standards and successfully integrated into the global value chain. After 2025, there will be a basis for increasing productivity in the production and processing of agricultural products in the country, and production enterprises will play an important role in processing agricultural products into high-value products. Domestic and foreign market participants will stimulate the successful development of processing industries with efficiency, high productivity and environmental sustainability.[9]

Years	Total	Including		Total	including		Total	including	
		plant products	livestock products		plant products	livestock products		plant products	livestock products
All farm categories				Agricultural enterprises			Individual entrepreneurs, family peasants and households		
1990	0.102	0.065	0.037	0.062	0.046	0.016	0.040	0.019	0.021
1991	0.198	0.125	0.073	0.111	0.084	0.027	0.087	0.041	0.046
1992	1,560	1,056	0.504	0.780	0.673	0.107	0.780	0.383	0.397
1993	10,726	5,615	5.111	4,205	3.115	1,090	6,521	2,500	4,021
1994	143.7	93.1	50.6	48.3	40.7	7.6	95.4	52.4	43.0
1995	726.8	418.1	308.7	233.6	194.7	38.9	493.2	223.4	269.8



1996	925.3	529.7	395.6	295.9	246.6	49.3	629.4	283.1	346.3
1997	853.5	486.5	367.0	213.7	178.1	35.6	639.8	308.4	331.4
1998	921.6	538.6	383.0	59.6	54.7	4.9	862.0	483.9	378.1
1999	989.1	541.7	447.4	37.6	33.4	4.2	951.5	508.3	443.2
2000	1112.4	617.7	494.7	23.9	17.8	6.1	1088.5	599.9	488.6
2001	1242.2	718.6	523.6	22.9	14.9	8.0	1219.3	703.7	515.6
2002	1342.9	774.1	568.8	22.8	11.0	11.8	1320.1	763.1	557.0
2003	1450.5	807.0	643.5	41.6	10.3	31.3	1408.9	796.7	612.2
2004	1572.7	874.8	697.9	63.2	13.0	50.2	1509.5	861.8	647.7
2005	1844.8	988.2	856.6	68.8	13.9	54.9	1776.0	974.3	801.7
2006	2115.5	1124.4	991.1	63.7	16.0	47.7	2051.8	1108.4	943.4
2007	2918.6	1726.4	1192.2	119.6	23.2	96.4	2799.0	1703.2	1095.8
2008	3505.9	2084.9	1421.0	186.0	41.0	145.0	3319.9	2043.9	1276.0
2009	3805.5	2106.0	1699.5	227.9	70.0	157.9	3577.6	2036.0	1541.6
2010	3877.7	1999.2	1878.5	192.6	60.0	132.6	3685.1	1939.2	1745.9
2011	4525.2	2339.8	2185.4	236.0	82.2	153.8	4289.2	2257.6	2031.6
2012	4844.6	2458.2	2386.4	319.4	97.3	222.1	4525.2	2360.9	2164.3
2013	5244.6	2629.6	2615.0	363.9	120.5	243.4	4880.7	2509.1	2371.6
2014	5225.8	2449.4	2776.4	404.5	111.8	292.7	4821.3	2337.6	2483.7
2015	5635.3	2761.1	2874.2	410.1	132.5	277.6	5225.2	2628.6	2596.6
2016	5632.4	2577.2	3055.2	449.2	145.8	303.4	5183.2	2431.4	2751.8
2017	6580.0	3019.0	3561.0	645.4	238.5	406.9	5934.6	2780.5	3154.1
2018	7010.0	3186.0	3824.0	660.9	262.1	398.8	6349.1	2923.9	3425.2
2019	7836.7	3751.2	4085.5	713.2	321.0	392.2	7123.5	3430.2	3693.3
2020	8428.9	4028.4	4400.5	834.5	438.3	396.2	7594.4	3590.1	4004.3

**Table:** Gross agricultural output, mln. AZN

**Source:** <https://www.stat.gov.az/source/agriculture/en/1.22.xls>



According to the table, if on the eve of agrarian reforms in our country produced a gross agricultural output of 713.4 million manat, in 2020 this figure increased to 3 billion 3428.9 million manat or 5.4 times (Table). It is noteworthy that the vast majority of this increase falls on the private sector.[9]

As a result of agrarian reforms in the country, entrepreneurship has developed in the countryside, the socio-economic activity of people working in the agricultural sector and other related areas has significantly increased, and significant changes have taken place in the structure of processing and export of agricultural products. As a result of purposeful and consistent socio-economic policy, production and productivity are increasing every year. In particular, the population's demand for food products is fuller, dependence on the foreign market is reduced to a minimum, and the export capacity of the product is constantly increasing.

Development of seed and seedling production, preservation of arable lands, increase of fertility, application of advanced agro-technical measures, including sowing, cultivation and irrigation technologies meeting modern requirements, use of agrochemicals, which are the basis for meeting the population's demand for food products through domestic production. The organization of intensive livestock development is one of our priority tasks.

As a result of the hard and purposeful work of President Ilham Aliyev in a very short historical period, great achievements have been made in all areas of the country's economy, especially in priority areas of socio-economic life, creating new jobs, reducing poverty, improving welfare and implementing global and regional projects. . Implementation of numerous decrees and orders signed by the President during 2014-2020 ensures the dynamic development of agriculture and processing industry.[9]

Producers who received land and property shares as a result of privatization in the agricultural sector began to operate by creating various forms of farming. The vast majority of families who received land shares, ie 97.3% (845.9 thousand families) preferred individual family farms with the status of individuals. Each of these farms has an average of 1.58 hectares of land. In addition, there were 2,570 individual enterprises and other agricultural entities with different ownership registered as legal entities in the country.[7]

In a market economy, taking into account natural and climatic conditions, the degree of specialization and other features, one of the large, medium and small forms of entrepreneurship should complement the other, and each should take its own place in a healthy competitive environment. In general, as a result of experience and analysis, it is clear that in the transition to market relations of the republic, positive trends in agriculture have begun to emerge. These are mainly:

1. In accordance with the principles of market economy, new structural changes are taking place in agriculture due to supply and demand.
2. The psychology of property ownership has begun to take shape in the population, and the tendency to free activity, creativity and entrepreneurship has intensified.
3. At the initial stage of the reform, the tendency to world experience increased, and property began to be formed in accordance with the natural and economic conditions of the republic, the specific features of agriculture, customs and traditions.
4. Tendencies are growing in the country to create a competitive environment, produce products that meet world standards and protect the domestic market.
5. Centralized, planned management of agricultural production is beginning to be replaced by self-government, and management functions are being improved.[6]



The development of agriculture in the conditions of market relations depends on the implementation of agrarian reform, the correct definition of its main directions, the scientific substantiation of the theoretical issues of the goals and principles of the reform. The Law of the Republic of Azerbaijan "On the Fundamentals of Agrarian Rehabilitation" states that the purpose of the reform is to bring the agrarian sector out of the crisis, to stabilize the economy, to improve the socio-economic situation of the population. It is about setting theoretical and methodological issues to bring the agrarian sector of the republic out of the economic crisis and correctly defining its scientifically substantiated directions. From this point of view, it is very important to theoretically substantiate the purpose of the agrarian reform implemented in our country.

There is also a discrepancy between the Law of the Republic of Azerbaijan "On Reform of State Farms and Collective Farms" and the Law "On Fundamentals of Agrarian Reform" stating the purpose of the reform. Thus, the section of the Law of the Republic of Azerbaijan "On Reform of State Farms and Collective Farms" states that the purpose of the reform is to create various forms of economy in accordance with the market economy and to develop entrepreneurship in the agricultural sector.

In the context of the transition of the agrarian sector and the economy as a whole to market relations, it is necessary to implement comprehensive measures to improve the socio-economic situation of the population in the following areas:

1. To form new property relations in the agrarian sector.
2. To ensure the comprehensiveness of land, land reclamation and water management reforms.
3. Create different types of new forms of farming.

When reorganizing state farms and collective farms or reforming them, the specifics of the reform must be taken into account.

1. When carrying out reforms in state and collective farms, along with the laws, normative-legal documents, recommendations and instructions adopted by the Republic of Azerbaijan on agrarian reform, the decision of the general meeting of reformed farms shall be taken into account and considered at general meetings;
2. The principle of voluntariness in the implementation of reforms applies to state farms and collective farms declared bankrupt;
3. In the process of reform, if it is economically expedient, several different types of farms may be established on the basis of each state farm and collective farm;
4. In the process of reform, the management and material-responsible persons of the economy are responsible for the maintenance and protection of its material and technical property until the end of the reform within the framework of the legislation;
5. Social and engineering infrastructure facilities may be transferred to municipal ownership with the consent of the staff. Provided that everyone can use these facilities with equal rights and in accordance with the purpose;
6. In the process of reform, to fulfill pre-concluded contractual obligations, to comply with instructions on basic and agricultural products, etc. Control groups with specialized legal authority may be established for this purpose.

By improving the existing sales infrastructure of agricultural products, conditions should be created for producers to sell their products directly to end consumers. Existing sales markets need to be transformed and transformed into multi-functional wholesale markets, as in developed market economies. In this case, there may be opportunities for producers to stay on the market and not sell their products, and as a result to make more profit.[6]



**Result:** The scientific approaches, suggestions and recommendations obtained as a result of the research can be summarized as follows:

1. Fiscal policy measures are one of the tools of economic regulation used to create favorable conditions for the activities of the agricultural sector. In general, the state, through its budget, mainly regulates economic processes in two directions. In another direction, it increases the focus on social functions by using the state budget revenues. The budget plays an important role in socio-economic processes by organizing the redistribution of national income through its distribution and control functions, participating in the financing of production, trying to serve the interests of producers and consumers. Besides, allocates loans from the state budget to large banks at a certain interest rate and creates a mechanism of centralized control over credit operations, promotes the formation of credit and other financial markets. Thus, the state determines a favorable monetary policy in order to achieve its economic goals by interacting with budget policy.
2. In recent years, investment in the development of the agricultural sector is not allocated at the level of demand, not only soft, generally long-term loans are not provided, and high repayment rates are applied to medium and short-term loans. All this does not adequately meet the long-term interests of entrepreneurs in developing production and increasing the economic efficiency of production.
3. Compared to other sectors of the economy, the pace of creation of private producers in the agro-industrial complex, including those within the scope of the agrarian market, is higher. As a result, the role and share of local production in meeting the needs of the country's population in agriculture, food and food products is constantly growing. This does not mean an increase in the volume of goods in the market only in terms of quantity. As the producer operates in a free competitive environment unlike the previous economic system, it pays special attention to the quality factor in order not to lose its consumers, but to attract additional buyers to its products and services.
4. In general, it is expedient to improve financial relations in the agricultural market, as well as in its individual segments, in two directions:
  - macro-improvement of existing financial relations in the agrarian market and its separate segments;
  - Macro-improvement of financial relations between agrarian market entities. The macro-improvement of the existing financial relations in the agrarian market and its separate segments envisages the implementation of necessary measures by the state and the continuation of the course of reforms in this area. We believe that the improvement of financial relations in the agricultural market begins with the formation of a favorable business environment in the country, the state regulation of prices and tariffs of monopolies.

## REFERENCES

1. Abbasov A.F., Abbasov F.H. Some issues of formation of the food market of Azerbaijan in modern conditions. Ecological and technological problems in emergencies. II International Symposium. Baku, 2020, pp. 435-440.
2. Javadov N.O. Structural changes in the agricultural sector, Monograph. Baku, "Science", 2019, 440 p.
3. Hajiyev A.H. Economics of agro-industrial complex. Baku, "Education", 2016, 334p.



4. Hamidov A.V. Materials of the scientific-practical conference "Theoretical basis of the innovative organization of development of agrarian entrepreneurship". Ganja, ADAU, April 25-26, 2018, pp. 208-210.
5. Huseynov M.C. Problems of sustainable development of agrarian sector, Baku, Nurlar, 2016, 304 p
6. Ibrahimov E.R., C.Q.Nuriyev, A.T.Asgarov. Heydar Aliyev and agrarian course of the Republic of Azerbaijan. Baku, 2014, 360 p.
7. Verdiyev A.Ch., Garayev I.Sh. Economic problems of agrarian base formation. Baku 2014,256 p.
8. [https://mida.gov.az/documents/strateji\\_yol\\_xeritesi\\_kend\\_teserrufati\\_mehsullarinin\\_istehs\\_alina\\_ve\\_emalina\\_dair.pdf](https://mida.gov.az/documents/strateji_yol_xeritesi_kend_teserrufati_mehsullarinin_istehs_alina_ve_emalina_dair.pdf).
9. <https://www.stat.gov.az/source/agriculture/en/1.22.xls>.



## STRATEGY FOR THE RESTORATION AND RECONSTRUCTION OF THE ENERGY SYSTEM IN THE ECONOMIC REGIONS OF KARABAKH AND EAST ZANGAZUR

**Elshan Hajizadeh**

Azerbaijan State University of Economics, Center for Energy Economics, Professor, DOS..

ORCID ID: 0000-0001-5447-9676, E-mail: elshan@hajizada.com

### ABSTRACT

The liberation of Azerbaijani territories from occupation by the Second Karabakh War led to large-scale rehabilitation and reconstruction works here. Priorities have been set in this direction, and as a result of the new classification, which will ensure integrative development in the region, new economic regions called Karabakh and Eastern Zangezur have been created. The first measures in the liberated territories were carried out in the field of restoration and reconstruction of infrastructure, as well as in the field of electric power, petroleum products and gas supply. The region's possession of a large green energy potential served as the basis for the creation of a separate "Green Energy Zone" here. The implementation of all these works in the strategic plan, along with government measures, also gave relevance to the conduct of relevant scientific research. Based on this relevance, the article examines the system of indicators of the liberated territories, provides a statistical analysis of the work done in the field of energy reconstruction of the region. The analysis and assessments carried out showed that large-scale measures for the restoration and reconstruction of the energy system were carried out in these economic areas characterized by efficiency. Now the work in this direction has moved to a new stage. The energy concept of the region can practically be said to revolve around the parameters of the "Green" economy. Ensuring greater progress and long-term prospects for these works has led to their implementation within the framework of the relevant state program.

**Keywords:** Karabakh economic region, East Zangazur economic region, energy system, oil products, gas supply.

### XÜLASƏ

İkinci Qarabağ müharibəsi ilə Azərbaycan ərazilərinin işğaldan azad olunması burada miqyaslı bərpa və yenidənqurma işlərinin aparılmasını şərtlə etmişdir. Bu istiqamətdə prioritetlər müəyyən olunmuş, integrativ inkişafı təmin edəcək yeni təsnifatlandırma nəticəsində ərazidə Qarabağ və Şərqi Zəngəzur adlı yeni iqtisadi rayonlar yaradılmışdır. İşğaldan azad olunmuş ərazilərdə ilk fəaliyyətlər infrastruktur yenidənqurması və həmçinin onun mühüm tərkib hissəsi olan elektroenergetika, neft məhsulları və qaz təchizatı sahələri üzrə aparılmışdır. Regionun böyük yaşıl enerji potensialına malik olması isə burada əlahiddə "Yaşıl Enerji Zonası"nın yaradılmasına zəmin olmuşdur. Bütün bu işlərin strateji planda həyata keçirilməsi dövlət tədbirləri ilə yanaşı, həm də müvafiq elmi araşdırmaların aparılmasına da aktualıq gətirmişdir. Bu aktualıqdan irəli gələrək, məqalədə işğaldan azad olunmuş ərazilərin göstəricilər sistemi araşdırılmış, regionda enerji yenidənqurması sahəsində görülmüş işlərin statistik analizi verilmişdir. Aparılan təhlil və qiymətləndirmələr göstərmişdir ki, bu iqtisadi rayonların enerji sektorunda səmərəliliyi ilə fərqlənən böyük həcmli bərpa və yenidənqurma tədbirləri həyata keçirilmişdir. İndi bu



istiqamətdə görülən işlər yeni mərhələyə keçid etmişdir. Regionun enerji konsepsiyası demək olar ki, yaşıl iqtisadiyyatın parametrləri çərçivəsində addımlayır. Bu işlərin daha böyük irəliləyişlərinin və uzunmüddətli perspektivlərinin təmin edilməsi isə onların müvafiq dövlət proqramı çərçivəsində aparılmasını şərtləndirmişdir.

**Açar sözlər:** Qarabağ iqtisadi rayonu, Şərqi Zəngəzur iqtisadi rayonu, enerji sistemi, neft məhsulları, qaz təchizatı

**Introduction:** In order to repel the military aggression of Armenia, which occupied one of the most important regions of Azerbaijan, Karabakh, Azerbaijan began counter-attack operations in accordance with Article 51 of the UN Charter on the right to self-defense and, having won over the enemy within 44 days, forced him to sign the act of capitulation. Thus, the conflict ended and Azerbaijan secured the implementation of 4 UN Security Council resolutions on the Armenian occupation. The results of the occupation showed that during the last 30 years Armenia committed acts of unique vandalism and barbarism, committed real uricide, culturid and ecocid crimes in the territories of Azerbaijan, 9 cities and hundreds of villages were wiped off the face of the earth [1-3].

The end of the war conditioned the large-scale restoration and reconstruction of the liberated territories. As the first step in this direction, the conceptual base document “Azerbaijan 2030: national priorities on socio-economic development”, approved by the Order of the president of the Republic at the beginning of 2021, was made. It was established that Azerbaijan entered the strategic phase covering 2021-2030. The next step was the approval by the Presidential Decree of the new division of economic regions of the Republic. According to this division up to now 10 economic regions based on 14 Economic districts, including 2 Karabakh and Eastern Zangezur economic regions were established in the liberated territories [5].

On the basis of all this, mine clearance works started and new infrastructure construction started. An important part of the implementation of these works is accompanied by public financial support. At the same time, “Karabakh Revival Fund” was established in order to ensure sustainable settlement and decent social and economic life in the liberated territories. Restoration and creative work is also being carried out within the framework of state-business cooperation. In this area, foreign partners carry out practical measures in the process of restoration of territories. It should be emphasized that the leadership among them belongs to the Republic of Turkey. Also, the strategy of creating a High Technology Park in the region with GOSB technopark operating in Turkey and supporting 130 technology companies, Turkish, Chinese, Italian and Israeli companies in the “Smart Village” project in Agali village of Zangilan region, Kamaz OJSC of the Russian Federation in Jabrayil region, the intention of Uzbekistan to build a secondary school in these areas, the supply of equipment to 4 substations to be built in Agdam, Fizuli, Kalbajar and Gubadli regions by the Italian company Ansaldo Energia, etc. also joins this series [3, 9].

A large area of activity in the liberated territories is associated with restoration and creative work in the energy sector. Energy supply is the most important component of the infrastructure building strategy. The region's huge green energy potential also sets specific contours for this strategy. Studies in this direction differ not only with the state strategy, but also with its conceptual purpose, and scientific research is relevant. Proceeding from all this, in the article the strategy of the reconstruction of infrastructure in the energy sector of liberated territories and the Karabakh and East zangazur economic regions as a whole becomes a research object.



**Indicator system of liberated territories:** One of the two newly established economic districts, forming an important part of the liberated territories, “Karabakh” economic region has a greater potential. The area of the economic district is 8,99 thousand km<sup>2</sup> and the population is 904,5 thousand. It includes Khankendi city, Agjabadi, Aghdam, Barda, Fuzuli, Khojali, Khojavand, Shusha and tartar regions. This means that this economic region inhabits the liberated regions and part of them, as well as other geographically close regions. The economic region “Eastern Zangezur” fully occupies the territory of the occupation zone. It includes Jabrayil, Kalbajar, Gubadli, Lachin and Zangilan districts, which cover an area of 7,47 km<sup>2</sup> and 343,5 thousand people. Both economic regions are distinguished by their rich natural resources [1, 12].

Natural resources of Karabakh economic region - Polymetal ore deposits, building materials, mineral water, main fields of economy are agriculture, industry, tourism fields and natural resources of “East Zangezur” economic region - gold, Mercury, marble, facing building stones, copal, perlite, main fields of economy are agriculture, industry, tourism. The green energy capacity, which is an important part of the large energy potential of these districts, is 10 thousand MW [4, 7, 12].

It should be noted that during the war, a total of 29363 shells fell on 11 cities and regions of Azerbaijan outside the occupation zone, causing great destruction. As a result, 93 civilians, including 12 children and 27 women, were killed and 454 civilians were injured. Most of the shells hit the territory of the Karabakh economic region with 28 thousand. The projectile area was about 4 thousand km<sup>2</sup> and covered 5% of the country's territory. This shows that sufficient restoration and construction work must be carried out on the applications of the economic zone located outside the occupation zone. The current real volume of compensation work is estimated at \$ 100 million.

**Statistic analysis of the work done in the field of energy reconstruction:** Important work to restore the liberated areas covers electricity. In the past, there were many Small Hydroelectric Power Stations (SHPP) with a total capacity of more than 240 MW. As a result of Armenian vandalism, most of them were rendered useless. At present, 4 SHPP with a capacity of 20,2 MW have been completely reconstructed within the framework of the “Karabakh Energy Project”. These are “Gulabrid” SHPP with a capacity of 8,0 MW, “Sugovushan - 1” SHPP with a capacity of 4,8 MW, “Sugovushan - 2” SHPP with a capacity of 3,0 MW and “Kalbajar - 1” SHPP with a capacity of 4,4 MW. Work is underway at the “Kalbajar-2” SHPP with a capacity of 3,0 MW. In addition, the 200 MW “Khudaferin” (Azerbaijan and Iran - 100 MW each) and the 80 MW “Kiz Kalasi” (Azerbaijan and Iran - 40 MW each) Hydroelectric Power Stations (HPS) located in the liberated Jabrayil region and their the construction of hydro junctions is underway. So far, 110 kV 9 substations (“Kalbajar”, “Shusha”, “Fuzuli”, “Shukurbayli”, “Jabrayil”, “Zangilan”, “Gubadli”, “Aghdam - 1”, “Aghdam - 2” substations) and 365 km long 110 kV power transmission lines and fiber optic cable lines were laid, Karabakh Regional Electric Control Center was established in Aghdam region. In addition, over the past year, about 500 km of new low-voltage transmission lines were built and restored in these areas, 35/10 kV 9 substations (Shusha - “Dashalti - 1” and “Dashalti - 2” Tartar region - “Sugovushan”, Khojavend region - “Hadrut”, Jabrayil region - “Harakul”, Zangilan region - “Alibeyli”, Dashkesan region - “Dashkesan” and Hadrut settlement substations) construction, restoration and reconstruction Works were carried out, about 100 transformer points were installed and the existing points were repaired and electricity was provided to the facilities [4-7, 9-11].



It was noted that the economic regions of Karabakh and East Zangazur have great green energy potential. The solar energy potential is estimated at 7 thousand MW and the wind energy at 2 thousand MW. In order to effectively use the green energy potential of the region, a Concept for the creation of a “Green Energy Zone” was developed with the involvement of the Japanese company TEPCO [4]. Currently, a “Master Plan” is being developed for implementation. Within the framework of this concept, various energy demand and supply scenarios on the development and settlement options of the territories were considered, and the hydro, solar, wind, biomass, geothermal and other renewable energy potentials of the region were studied. It should be noted that about 25 percent of Azerbaijan's internal water resources, ie 2 billion 560 million cubic meters per year, are formed in these areas [6]. Solar energy potential is observed in Fizuli, Jabrayil, Zangilan and Gubadli, and wind energy potential is observed in the mountainous areas of Lachin and Kalbajar. The main rivers and other small rivers of the region, such as Tartarchay, Bazarchay, Hakarichay, have great hydropower potential. According to preliminary analysis, 3093 m<sup>3</sup> of thermal water per day is expected in Kalbajar and 412 m<sup>3</sup> per day in Shusha.

The rich energy potential and high ambition for "green energy" is a great opportunity for investors who are always looking for new opportunities, especially for energy companies that prioritize renewable energy in their operations. One of the main priorities in the economic regions of Karabakh and East Zangazur is the implementation of a number of major projects at the expense of foreign investment. In this regard, the agreement reached with “British Petroleum” - BP on the implementation of the 240 MW Solar Power Plant project in the Zangilan/Jabrayil region is an important message for other companies. At present, the technical and economic aspects of the construction of this station and issues arising from its integration into the country's network are being discussed. Relevant work is being done to determine the land area, topographic surveys, study the possibility of connecting to the network, hydrometeorological analysis and environmental impact assessment [4, 7].

Another project that will contribute to the establishment of the “Green Energy Zone” is the construction of a wind farm with a capacity of up to 100 MW in Lachin or Kalbajar. The “Information Inquiry” document, prepared on the basis of data from the identified areas for this project, has already been submitted to potential investors. Currently, work is underway on the “Information Inquiry”

In general, the creation of the “Green Energy Zone” is not only the acquisition of energy from renewable energy sources, but also the use of the most efficient and "smart" systems in its transmission, distribution and consumption, emphasis on small-scale renewable energy solutions, energy efficiency, hydrogen It covers a wide range of issues, including production, promotion of environmentally friendly vehicles, employment and increasing the use of local resources. In this regard, it can be shown that the "Smart Village" project has already become a reality in the village of Agali, Zangilan region. This pilot project covers the 1st, 2nd and 3rd Agali villages of the region. The work was carried out mainly on 5 components: housing, manufacturing, social services, “Smart agriculture” and alternative energy. The area was first fully insulated and 200 individual houses were built using innovative construction materials. In these houses, the internal engineering communication, heating systems are built on the basis of smart technologies. At present, the implementation of the next such smart projects in other settlements of the region has begun.

Along with all this, work is underway in the field of oil products and gas supply in the region. “SOCAR Petroleum” of Azerbaijan has put into operation in these areas 1 stationary petrol station



in Gubadli, 1 mobile petrol station in Shusha and 1 mobile petrol station in Agdam. At present, mobile filling stations are planned to be used in the city of Hadrut. Also, research is being carried out on the inventory of the existing gas supply network in the territories of economic regions for the restoration of the gas transport system.

**Result:** Research once again shows that all these successes are the conceptual result of the purposeful policy pursued by the victorious Supreme Commander-in-Chief, President of the Republic of Azerbaijan Ilham Aliyev, and the strategic line he authored. The results achieved in the energy sector in the economic regions of Karabakh and East Zangazur are only a part of its strategic work. Currently, the work in the energy sector in these regions is entering a new phase. The energy concept of the region almost revolves around the parameters of the green economy. In order to ensure greater progress and long-term prospects of this work, it is important to conduct them within the relevant state program. This work should be based on the integration of all territories, integration into value chains within the overall development strategy of the republic, as well as innovative concepts.

## REFERENCES

1. Ibrahimov İ.H. Development directions of the regions and liberated territories. Monograph. Baku: "Cooperation" publishing house, 2022. 240 p.
2. Mammadov MA, Aliyev R.Y., Hajizade N.E. Organizational and management mechanism for the restoration and development of liberated territories in the post-conflict period. "Integration of the territories liberated after the war into the Azerbaijani economy: a conceptual view". Materials of the Republican scientific-practical conference (online in video format). Baku: February 10, 2021. p. 35-42.
3. Official website of the president of the Republic of Azerbaijan - [www.president.az](http://www.president.az).
4. Ministry of Energy of the Republic of Azerbaijan - [www.minenergy.gov.az](http://www.minenergy.gov.az).
5. Ministry Of Justice Of The Republic Of Azerbaijan. Unified electronic database of legal acts - [www.e-qanun.az](http://www.e-qanun.az).
6. The State Statistical Committee of the Republic of Azerbaijan - [www.azstat.org](http://www.azstat.org).
7. Ministry of Economy of the Republic of Azerbaijan - [www.economy.gov.az](http://www.economy.gov.az).
8. State Oil Company of Azerbaijan Republic - [www.socar.com](http://www.socar.com).
9. "Azerenergy" JSC - [www.azerenerji.gov.az](http://www.azerenerji.gov.az).
10. "Azerishiq" OJSC - [www.azerishiq.az](http://www.azerishiq.az).
11. Website of Professor Elshan Hajizade - [www.hajizada.com](http://www.hajizada.com).
12. Musayev A.F. The liberated territories will become one of the most prosperous parts of the country - <https://science.gov.az/en/news/open/16136>.



## USED ANALYTICAL PROCEDURES IN INTERNAL AUDIT AND THEIR EVALUATION

**Abdullah Adilli**

Ph.D., Azerbaijan State Economical University (UNEC) "Accounting and audit" chair  
ORCID ID: 0000-0002-2962-1981, E-mail: muhasibat2020@gmail.com

### ABSTRACT

**Purpose of the study** - This article presents the analytical procedures used in internal audit and their evaluation.

**Research methodology** - A systematic and comprehensive approach to the problem under study, as well as methods for analytical processes and evaluation used in modern times.

**Importance of applied research** - Provides recommendations for the development of the enterprise with a systematic approach to analytical procedures in the internal audit of enterprises.

**Research Findings** - Provides advice on how to identify and prevent analytical procedures, errors, frauds, unusual or recurring operations or events.

**Originality and scientific novelty of research** - The pace of economic growth, social welfare of people and sustainable development of the economy are increasingly dependent on the creation of new knowledge and its practical application. The organization's activities depend on a variety of sources, among which analytical procedures are becoming an increasingly important incentive for the organization to operate. Effective application of analytical procedures improves the quality of internal audit and reduces the cost of its implementation. The true value of internal audit is important to maintain a competitive advantage and increase the value of shares in the market, because it also determines the market value of organizations. This is why this article is sometimes written out of necessity.

**Keywords** - analytical procedures, international auditing standards, financial analysis, internal audit, reliability.

**Introduction:** From the point of view of auditors, one of the main directions of economic analysis is the analysis directly related to the audit. Currently, the improvement and development of the audit methodology is associated with the full satisfaction of the requirement of accurate information about the financial and economic condition of the organization and its focus on financial (accounting and tax) audits. At the same time, the development of economic audit helps to fully comply with the interests of audit users - shareholders, owners, investors, creditors. In addition to confirming the accuracy of the report from the point of view of accounting, the main purpose of the audit is to assess its economic value, the possibility of continuity of the organization, as well as the effectiveness of the organization's management.

It should be noted that a fundamentally new approach is required to the methods of conducting audits that assess the continuity of the audited entity. In this case, the auditor should not only express an opinion on the accuracy of the financial statements, but also determine whether the organization has sufficient funds to meet its obligations and how to generate resources for its future development. To do this, the auditor must gather information about the organization's production capacity and level of use, to form an opinion on the objective need for investment and alternative sources of their involvement. These tasks can be performed using a wide range of



analytical procedures. All of this forms new perspectives on auditing and implies a transition from retro auditing, financial (accounting) and tax auditing to economic auditing, which covers the organization's past activities. It is aimed at assessing the possible consequences of future events in the organization and fully meets the requirements of the concept of development of accounting.

The use of analytical procedures in the final stage of the audit can be effective in detecting financial errors and drawing the auditor's attention to possible significant deviations, and thus in forming a reasoned opinion about the audited entity. The need for analytical procedures stems from the importance of determining the overall effectiveness of the audit, including the analysis methods used in planning the audits [1].

**The need for analytical procedures used in internal audit:** The internal auditor should apply analytical procedures as risk assessment procedures to gain an understanding of the business, the enterprise and the environment and to identify potential risk areas [12]. The application of analytical procedures may indicate areas of activity that the internal auditor is unaware of and may help to determine the nature, timing and extent of other internal audit procedures. In planning an internal audit, analytical procedures use both financial and non-financial information, such as the relationship between retail sales and sales per square meter or volume of goods sold. The auditor should apply analytical procedures, such as risk assessment procedures, to study the entity and its environment and to conduct a general analysis at the end of the audit. Analytical procedures can also be applied as subprocedures.

"Analytical procedures" is the assessment of financial information by studying the logical relationship between financial and non-financial information. Analytical procedures also include the study of relationships and identified changes that conflict with other important information or that differ significantly from the probable outcome [3][6].

Analytical procedures are evaluated as both material and basic procedures. Deciding what procedures will be used to achieve a particular internal audit objective will serve to reduce the risk of errors in the internal auditor's specific financial statements related to the process, systems and controls and to increase the expected efficiency and effectiveness [10]. The internal auditor usually informs management of the availability and reliability of the information required to apply the analytical procedures and the results of such procedures performed by the entity. The use of analytical information prepared by the entity may be effective, as the internal auditor is the person who certifies that such information has been properly prepared. When an analyst intends to perform analytical procedures as substantive procedures, the internal auditor should consider a number of factors as follows:

- The degree to which the objectives and results of analytical procedures are trusted;
- The nature of the work, the enterprise and the degree of division of information;
- Availability of non-financial information, such as budget and forecast, as well as the number of units produced or sold;
- Reliability of available information;
- Relevance of available information;
- Source of available information;
- Comparability of available data;
- Knowledge gained during previous internal audits;
- Control over the preparation, review and storage of data.

Analytical procedures include comparisons with an entity's financial and non-financial



information. We can show them the following:

- Comparable information for previous periods;
- Expected results of the entity, such as budgets or internal auditor forecasts or expectations;
- Forecasts prepared by the internal auditor, such as an estimate of annual depreciation costs;
- Information such as comparing the ratio of an enterprise's sales to trade creditors with industry averages or comparing the same figure in a competing industry.

In addition, analytical procedures include reviewing relationships:

- A regularity projected as gross margin percentages based on the entity's experience is among the expected financial information.
- Wage costs by number of employees or total production costs by volume of production are included in the non-financial information along with financial information [11].

Different methods can be used to perform the above procedures. These can range from simple comparisons to complex analyzes using statistical methods. Analytical procedures may be applied to consolidated financial statements, component financial statements (such as branches, divisions or segments) and individual elements of financial information and relevant non-financial information. The choice of procedures, methods and level of application by the internal auditor is a matter of professional judgment [9]. Ratio to specific analytical procedures, trend and regression analysis, justification tests, inter-period comparisons, comparisons with budgets, forecasts and foreign economic data, etc. includes. The internal auditor should consider the following factors when determining the extent to which analytical procedures will be used:

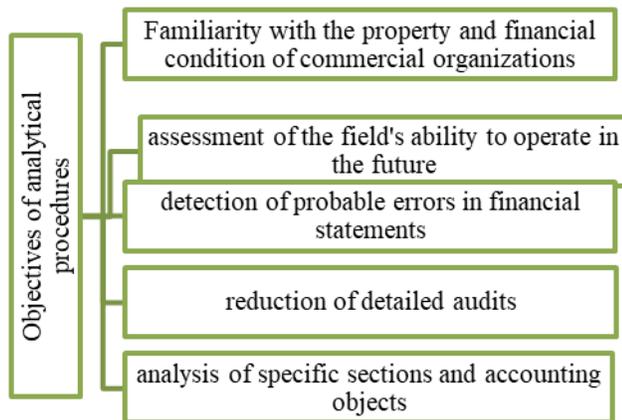
- Significance of the area being examined;
- Adequacy of the internal control system;
- Availability and reliability of financial and non-financial information;
- The accuracy with which the results of analytical procedures can be predicted;
- Availability and comparison of information related to the field in which the organization operates;
- The extent to which other audit procedures support audit results.

After assessing the above factors, the internal auditor should consider and use additional audit procedures to achieve the audit objective. Analytical procedures are used for the following purposes:

- Assist the internal auditor in gaining an initial understanding of the entity and the environment as risk assessment procedures and then planning the nature, timing and extent of other internal audit procedures;
- reduce the risk that errors identified in specific financial statements may occur;
- as an overview of the systems and processes in the final review phase of the internal audit;
- Evaluate the effectiveness of different work / management systems.

Analytical procedures include errors, fraud, accidental operations or events, and so on. prevents problems that may arise due to factors such as research and experiments show that analytical procedures help to detect 27.8 percent of errors, programming and disputes - 18.7 percent, and a total of 45.9 percent [7]. As can be seen, the analytical procedures used in the audit process are very important [8]. At present, according to the model of organization of analytical procedures, the purpose of these procedures can be defined as follows:

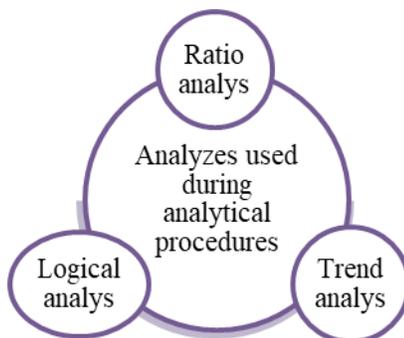
### Table 1



There are the following types of analyzes used in analytical procedures (Table 2) [5]:

- Proportion Analysis is a percentage expression of the ratio between two mathematical quantities.
- Trend Analysis - The same ratio is compared with the ratios of the past
- Logic test - an analysis of accounts or changes between reporting periods, which involves the development of a model to form an expectation based on financial data, non-financial data, or both.

**Table 2**



**Results and reliability of analytical procedures in Internal Audit:** When the internal auditor draws a general conclusion from the analytical procedures, it is important that the systems, processes, and controls as a whole are sound, efficient, and consistent with the internal auditor's business knowledge. The final conclusions drawn from such procedures are intended to help confirm and draw conclusions about the results of the internal audit of individual components or elements of the financial statements, such as purchases [13]. However, in some cases, as a result of the application of analytical procedures, the internal auditor may identify the areas required for the application of internal procedures before drawing general conclusions about systems, processes and related controls.

The application of analytical procedures is continued in the absence of feedback between the data. The existence of these relationships provides internal auditor evidence of the completeness, efficiency, and effectiveness of the systems, processes, and controls. However, reliance on the results of analytical procedures will depend on the internal auditor's assessment of the risk that



analytical procedures can identify. The degree of confidence of the internal auditor in the results of analytical procedures depends on the following factors:

- Significance of the substances involved;
- other internal audit procedures aimed at the same internal audit objectives;
- the accuracy with which the expected results of analytical procedures can be predicted;
- Assessment of internal and control risks.

The internal auditor should oversee the preparation of the information used in the application of the analytical procedures. When such control is effective, the internal auditor will have greater confidence in the reliability of the information and therefore in the results of the analytical procedures. Control over non-financial information can often be tested in conjunction with accounting-related control tests. For example, an entity that oversees the processing of sales invoices may include the verification of compliance with the Internal Audit Standard (SIA) over the registration of single sales [2]. Under these conditions, the internal auditor may test controls over the registration of single sales, together with control tests on the development of sales invoices [4].

When the internal auditor identifies significant discrepancies in the application of analytical procedures that are inconsistent with other relevant information or deviate from projected amounts, it should conduct an investigation and obtain adequate explanations and relevant supporting evidence. The examination and evaluation should include management inquiries and the application of other audit procedures until the internal auditor is satisfied that the results or relationships are adequately explained. Undisclosed results or relationships can be an indication of a significant situation, such as a potential error, breach of rule, or illegal action [16]. Insufficiently explained outcomes or attitudes should be communicated to the appropriate management levels [14]. Depending on the circumstances, the internal auditor may recommend appropriate course of action.

When researching unusual information and connections, management usually begins with a questionnaire. Management's responses are then verified by the internal auditor by comparing work knowledge and other evidence obtained during the internal audit and considering the need to apply other internal audit procedures based on the results of such inquiries if management is unable to provide an explanation or the explanation is not considered adequate. The Internal Audit Standard applies to all internal audits that begin after the date of use within the company.

**Result:** In a free market economy, the auditor's task is to identify individual errors and intentional misstatements in accounting and national reporting, as well as to identify cases where the absence of irregularities in accounting is not economically justified.

The most important purposes of using elements of financial analysis in audit planning in modern conditions are:

1. Familiarity with the nature of the audited entity;
2. Detection of possible documents of intended and accidental errors;
3. Reduction of detailed inspections;
4. Indication of solutions for the development of the enterprise;
5. Other purposes.

In the context of the Strategic Roadmap, the reliability of a national report is defined as the degree of accuracy (accuracy of the report) of the national accounting information, which allows the professional client to draw the right conclusions and make an implemented management



decision [15]. Such explanations are, in essence, aimed at giving preference to analytical functions rather than to the performance of existing controls, ie audit and control functions. In the current context, information confirming the results of the audit should be used during inspections. The following factors should be considered for this:

- importance of the inspected area;
- Satisfaction of internal control systems;
- completeness and accuracy of available information;
- independence of comparable information;
- compliance of audit results with other procedures.

When elements of financial analysis are used in an audit in a market economy, the auditor is competent in gathering evidence to support the veracity of the information obtained, while also determining the need to use analytical procedures when conducting audits at various stages.

## REFERENCES

1. “Daxili audit fəaliyyətinin təməl prinsipləri” (2006), Bakı: Mütərcim, s. 44.
2. “Daxili audit standartları” (2001), Bakı: Azərbaycan Milli Ensiklopediyası nəşriyyatı, s. 32.
3. Novruzov V., Qənizadə R., Nəsibova L., Əliyev M. “Daxili audit. Tədris-praktika vəsaiti” (2002), Bakı: Nağıl evi, 112 s.
4. “Daxili audit. Qanunvericilik və normativ sənədlər” (2007), Bakı: İqtisadiyyat və audit jurnalının nəşri, s. 96.
5. Джек К. Робертсон “Аудит” (1993), М.: Инвест фонд, с. 468.
6. “Daxili audit” İqtisad elmləri doktoru, professor V.Novruzovun redaktorluğu ilə (2008), Bakı: Nağıl evi, s. 332.
7. Ahrens, T. (1997). Talking accounting: An ethnography of management knowledge in British and German brewers. *Accounting, Organizations and Society*, vol. 7, no. 22, pp. 617 - 637.
8. AICPA (1974). Study group on the objectives of financial statements. Financial Accounting Standards Board. American Institute of Certified Public Accountants. Arthur Young & Company.
9. Akintoye, I. R (2008). Optimising Investment Decisions Through Informative Accounting Reporting. *European Journal of Social Sciences*, vol. 7, no. 3, p. 180.
10. Alexander, D. & Nobes, C. (1994). A European introduction to financial accounting. London: Prentice Hall International (UK) limited.



## MODERN SCIENTIFIC RESEARCH DEVELOPMENT ISSUES OF HIGHER PHARMACY EDUCATION, SCIENCE, INNOVATION AND PERSPECTIVES TOWARDS ON UNIVERSAL PHARMACIST' PROFESSION GLOBALLY

**Nodar Sulashvili<sup>1</sup>, Nana Gorgaslidze<sup>2</sup>, Luiza Gabunia<sup>3</sup>, Ketevan Ghambashidze<sup>4</sup>, Irine Zarnadze<sup>5</sup>, Shalva (Davit) Zarnadze<sup>6</sup>**

<sup>1</sup>MD, PhD, Doctor of Theoretical Medicine in Pharmaceutical and Pharmacological Sciences, Professor of Millennium University, Head of The International English Pharmacy Program, Head of The Division of Pharmacology, Georgia.

<sup>2</sup>MD, PhD, Doctor of Pharmaceutical Sciences, Professor of Tbilisi State Medical University, Department of Social and Clinical Pharmacy, Georgia.

<sup>3</sup>MD, PhD, Doctor of Medical Sciences, Professor, Director of the Scientific Research-Skills Center at Tbilisi State Medical University, Professor of the Department of Medical Pharmacology at Tbilisi State Medical University, Georgia.

<sup>4</sup>MD, Ph.D, Doctor of Medical Sciences, Professor of Department of Pathophysiology and Professor/Lecturer of the Scientific Research-Skills Center at Tbilisi State Medical University, Georgia;

<sup>5</sup>MD, PhD, Doctor of Medical Sciences, Professor of Tbilisi State Medical University, Department of Public Health, Health Care Management, Policy and Economy, Georgia.

<sup>6</sup>MD, PhD, Doctor of Medical Sciences, Professor of Tbilisi State Medical University, Head of the Department of Nutrition and Ageing Medicine, Georgia.

**Email:** n.sulashvili@ug.edu.ge

### ABSTRACT

The main objective of the study was to analyze the modern scientific research development issues of higher pharmacy education, science, innovation and perspectives towards on universal pharmacist' profession Globally. The study was a quantitative investigation and analysis of the characteristics of pharmaceutical vocational inquires and challenges in the direction on pharmacists' profession, role, problems, perspectives and innovations in pharmaceuticals and medicine in Georgia by using questionnaires. Were conducted a survey study. The in-depth interview method of the respondents was used in the study. The 7 types of approved questionnaires were used (Respondents were randomly selected): Questionnaire for chief pharmacists: 410 chief pharmacists participated in the study. Questionnaire for patients: 1506 patients (customers of drug-stores) participated in the study. Questionnaire for the employed pharmacy faculty-student: 222 employed pharmacy faculty students participated in the study. Questionnaire for health-care specialists: 307 public health specialists participated in the study. Questionnaire for pharmacist specialist, 810 pharmacist specialists participated in the study. Were used methods of systematic, sociological (surveying, questioning), comparative, mathematical-statistical, graphical analysis. The data were processed and analyzed with the SPSS program. We conducted descriptive statistics and regression analyses to detect an association between variables. Statistical analysis was done in SPSS version 11.0. A Chi-square test was applied to estimate the statistical significance and differences. We defined  $p < 0.05$  as significant for all analyses. According to the study results, the level of basic training of pharmacists should be in compliance with the contemporary requirements. The pharmacist should have deep knowledge in pharmacology, in pharmacotherapy, in toxicology, in pharmaceutical care, in clinical pharmacy, in pharmacokinetics, in pharmacodynamics, in basic of medicine and in other



pre-clinical and clinical directions. Such knowledge can be obtained only in the higher pharmaceutical education institutions. Therefore, pharmacist working in pharmacy must have only higher pharmaceutical education. It is necessary to provide a deep cooperation between pharmacists and physicians on the issues of pharmacotherapy and healthcare to ensure the patients' health state effective improvement, and also to provide the best feedback regulation and revision in the healthcare specialists' team work. Pharmacists also should be responsible for registration of the drugs' side effect, as well as be attentive in case of improperness and professional defects of drugs they provide. To achieve that it is necessary to raise awareness of specialists on the essence of pharmacists' profession and functions among the medical personnel and general public.

**Keywords:** scientific, pharmacist, pharmacy, profession, medicine, pharmaceuticals, education.

**Introduction:** In the pharmacy field, an increase of negative trends, such as poor mechanisms of interaction between professional education and the pharmaceutical market, a slow adaptation of graduates to the market reality is being observed [1-5]. A difference between the increasing demands of the patients' and the level of specialists' knowledge, as well as adaptation to market reality can affect the process of professional development of pharmacists and the quality of pharmaceutical care in general [6-11]. The mentioned trends, as well as the pharmacists' professionals' increasing role and responsibility in the health care system, make the necessity to analyze the current practical experience and evaluate the theoretical background of the specialists' development, as well as identify new contributing factors for their development as professional pharmacist practitioners [12-19]. An integral part of the state system of measures to implement the rights of citizens for protecting their health, via using the quality pharmaceutical care services [20-26]. The provision of pharmaceutical care maintenance is significantly dependent on the pharmacist personnel qualifications. In this concern, the professional qualification of drug experts is under the state control and is one of the state regulations objects in regard to the drug-medicine relationship aiming to maintain the competence of expert specialists throughout their careers with the varying requirements for professional quality [27-32]. In developed countries and in many developing countries in the pharmacy field there are also state regulations like as in family medicine [33-38]. A pharmacist, as a family doctor, should have the higher, post-graduate and consistent education in pharmacy, and also needs to hold the pharmacist license and periodic accreditation by the board of pharmacy [39-43]. In the western countries, pharmacists are the specialists with the higher pharmaceutical education who have graduated from the state-recognized and accredited colleges and universities, and only such qualification specialists are allowed to work in the pharmacy [44-46]. A pharmacy opening permission is issued only the pharmacists who holding higher pharmaceutical education with the pharmacist diploma [47-51]. The literature analysis showed that a study of individual aspects of the pharmacists' professional development is directed to elaborating of the necessary requirements to ensure effective pharmaceutical care, postgraduate education, finding strategies for the better management of pharmacist personnel, pharmacists' job satisfaction and issues of their psycho-social adaptation to the emerging market conditions [52-58]. However, weighable studies aimed at understanding the perspectives of the pharmacist in the career aspect and the ways to provide high-quality pharmaceutical care have not been carried out yet [56-68].



**Objective:** main objective of the study was to analyze the modern scientific research development issues of higher pharmacy education, science, innovation and perspectives towards on universal pharmacist' profession in medicine and pharmaceuticals in Georgia.

**Material and methods:** Research objectives are materials of sociological research: the study was quantitative investigation by using survey (Questionnaire). Research objectives are materials of sociological research: the study was quantitative investigation by using survey (Questionnaire). The in-depth interview method of the respondents was used in the study. The 7 types of approved questionnaires were used (Respondents were randomly selected): Questionnaire for chief pharmacists: 410 chief pharmacists participated in the study. Questionnaire for patients: 1506 patients (customers of drug-stores) participated in the study. Questionnaire for the employed pharmacy faculty-student: 222 employed pharmacy faculty students participated in the study. Questionnaire for health-care specialists: 307 public health specialists participated in the study. Questionnaire for pharmacist specialist, 810 pharmacist specialists participated in the study.; Totally 3888 respondents were interviewed in Georgia. We used methods of systematic, sociological (surveying, questioning), comparative, segmentation, mathematical-statistical, graphical analysis. The data was processed and analyzed with the SPSS program. Results and discussion: The survey was conducted through the questionnaires. 1506 patients were interviewed in Georgia. Questions and answers are given in the tables. On each question are attached diagrams or table. Questionnaire and diagrams are numbered. The data was processed and analyzed with the SPSS program. We conducted descriptive statistics and regression analyses to detect an association between variables. Statistical analysis was done in SPSS version 11.0. A Chi-square test was applied to estimate the statistical significance and differences. Study of The data was processed and analyzed with the SPSS program. We conducted descriptive statistics and regression analyses to detect an association between variables. Statistical analysis was done in SPSS version 11.0. A Chi-square test was applied to estimate the statistical significance and differences. We defined  $p < 0.05$  as significant for all analyses. The study's ethical items. In order to provide the study's ethical character each participant of it was informed about the study's goal and suggested of willingness of the work to be done. So, the respondents' written or oral compliance was got on that issue. All the studies were carried out by the selected organizations administrations' previous compliance. Were used Informed consent form for each respondent to participate in an anonymous survey. During the whole period of research, the participants incognita was also provided. For the international rules' and criteria' conformity this human subject comprising given study was discussed and confirmed on the Bioethics Committee sessions of the YSMU. In order to meet the objectives, set in the research we also used the results obtained through analysis of available official information, studies and opinions about pharmacists, as well as the methods of quantitative studies. The research implementation required the following sub studies: The modern scientific research development issues of higher pharmacy education, science, innovation and perspectives towards on universal pharmacist' profession in medicine and pharmaceuticals in Georgia.

**Results and discussion: On the basis of performed study results the following have been found:** Mostly essential pharmaceutical activity issues for the respondents' pharmacists' majority were: new drugs, generic drugs, chemical and brand names of them; psychology of communication (relationships) with customers; issues of pharmacotherapy of certain diseases, pharmacology, pharmacodynamics, pharmacokinetics and pharmaceutical care (See tabl.1). It is apparent, that in the

higher pharmaceutical education universities programs should be emphasized on the following subjects: pharmacotherapy, pharmacology, pharmaceutical care, clinical pharmacy and drugs toxicity.

**Table 1.** Mostly essential pharmaceutical activity issues for the respondents' pharmacists.

The most essential (relevant) for respondents issues of pharmaceutical activity	Count	Percent (%)
1. New drugs, generic drugs, chemical and brand names of drugs	518	64.0
2. Psychology of communication (relationships) with customers	478	59.0
3. Issues of pharmacotherapy of certain diseases	541	66.8
4. The safety, effectiveness and quality of the drugs	558	68.9
5. Pharmacology, pharmacodynamics and pharmacokinetics issues	572	70.6
6. The normative legal regulation of pharmaceutical activity	364	44.9
7. Drug technology issues	241	29.8
8. Pharmacognosy	110	13.6
9. Pharmaceutical organization and economics and pharmaceutical business	154	19.0
10. Pharmaceutical management and marketing	281	34.7
11. Pharmachemistry	90	11.1
12. Toxicology	96	11.9
13. Clinical pharmacy	267	33.0
14. Pharmaceutical care	487	60.1
15. Pharmaceutical analysis	77	9.5
16. Toxicological chemistry	50	6.2
17. Pharmaceutical technologies	86	10.6
18. Nutrition	95	11.7
19. Pharmaceutical cosmetics and perfume	178	22.0
20. Social pharmacy and Public Health	146	18.0
21. Computer technology and pharmaceutical information	140	17.3
22. Phytotherapy	132	16.3
23. Routes of drug administration	183	22.6
24. Drug forms and drug design	158	19.5
25. Drugs' toxic effects	196	24.2
26. Rules of drug administration	237	29.3
27. Cost-effectiveness and cost-benefits of drugs	124	15.3
28. Terms and conditions of storage of drug (conditions and shelf-life)	259	32.0

The most impacting factors influencing on the young pharmacists' work satisfaction were found and evaluated during the research. These factors included the correspondence of qualification to work, correspondence of the work nature to capabilities of personality, existence of perspective for professional promotion, possibility to qualifications enhancement, existence of high degree of responsibility for the result of work, information about affairs of the company and of the staff activity, working conditions, existence of the labor contract of working regimen and salary,



existence of benefits' scheme for employees, support and assistance of the chief, direct relations with manager(s), relations with colleagues, possibility for the career enhancement (See tabl.2).

**Table 2.** The report of impacting factors - influenced on respondents' work satisfaction.

Report on the question about estimation of the impacting factors, which have an influence on the work satisfaction (estimate each factor under the 5- point scale system).	Mean	Median	Std. Deviation
1 Correspondence of the got qualification to work	4.65	5.00	0.603
2 Correspondence of the work nature to capabilities of personality	4.42	5.00	0.721
3 Existence of perspective for professional promotion	4.21	4.00	0.907
4 Possibility to qualifications enhancement	4.13	4.00	0.895
5 Existence of high degree of responsibility for the result of work	3.87	4.00	1.141
6 Information about affairs of the company and the colleagues' activity	4.09	4.00	0.946
7 Working conditions	3.67	4.00	1.127
8 Existence of the labor contract	3.66	4.00	1.102
9 Working regimen (schedule)	3.25	3.00	1.140
10 Salary	2.65	3.00	1.053
11 Existence of benefits' scetch for employees	2.25	2.00	1.145
12 Support and assistance of the chief (manager)	3.41	4.00	1.223
13 Direct relations with the chief	3.44	4.00	1.185
14 Relations with colleagues	4.04	4.00	0.937
15 Possibility to career enhancement	3.89	4.00	0.962

Coupling the data of respondents' answers' analysis of the questions "Indicate your sex" (Q1) and „Are you satisfied with the time duration of your job? “ (Q26) it became apparent that variables are gender dependent ( $P=0.048$ ), there is a statistically significant differences between two groups, that means that the male pharmacists were less satisfied with the time duration of work, rather than the female pharmacists (See tabl.3).

**Table 3.** Respondent pharmacists' satisfaction with the time duration of job

Coupling the data of respondent's answers' analysis of the questions "Indicate your sex" (Q1) and

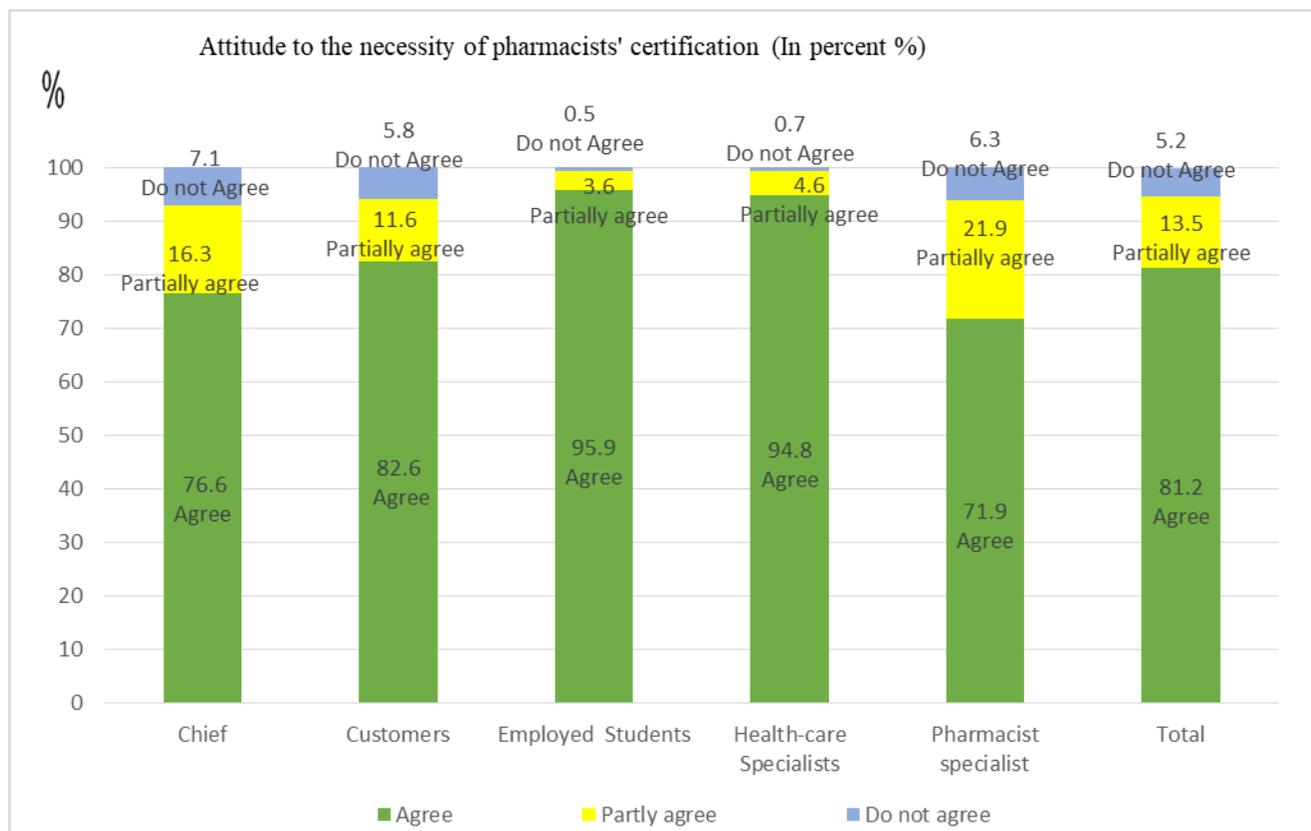
Satisfaction with time duration of work of the respondent pharmacists according gender			
Respondent pharmacists' satisfaction with the time duration of job			
Are you satisfied with the time duration of your job?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	22.38%	14.70%	22.10%
2. Partially	34.10%	36.70%	34.20%
3. No	43.51%	48.60%	43.70%
Total	100.0%	100.0%	100.0%

„Are you satisfied with your income? “ (Q27) it became apparent that variables are gender dependent ( $P=0.019$ ), there is a statistically significant differences between two groups, what means that the male pharmacists were less satisfied with income, rather than the female pharmacists (See tabl.4).

**Table 4.** Satisfaction of the respondent pharmacists with income according gender

Crosstab			
Satisfaction of the respondent pharmacists with income according gender			
Are you satisfied with your income?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	10.59%	0.00%	10.20%
2 .Partially	25.48%	23.30%	25.40%
3. No	63.82%	76.70%	64.30%
Total	100.0%	100.0%	100.0%

Analysis the data of respondents answers on the question „Do you think that the Government should make the certification of pharmacists? “(Q) revealed the following in different categories: the majority of chief pharmacists, of consumers of medications, of the employed students, of the healthcare specialists and pharmacists considered, that Government should make certification of pharmacists ( $P < 0.000$ ) There are statistically significant points between variables. (See Fig 1).



**Fig. 1.** Attitude to the necessity of pharmacists certification

For the majority of respondents' patients' mostly asked the pharmacists about the rules of drugs intake and prices of drugs. For the less than half part of the respondents mostly asked about the drugs' adverse effects and quality. For about the one third of them mostly asked about help in



selection of analogue of drugs, indication/contraindication of drugs, the terms and conditions of their storage (conditions and shelf-life), the drugs dosage, rules of drug administration and selection of OTC drugs (See tabl.5).

**Table 5.** The respondents' mostly asked questions to pharmacists.

The questions mostly asked to pharmacists (several answers were possible)	Count	Percent (%)
1. About rules of intake of medications	950	63.1
2. About adverse effects of medications	625	41.5
3. About prices of medications	925	61.4
4. About help in selection of analogue of medication	449	29.8
5. About quality of medications	640	42.5
6. About availability of medications in a pharmacy	399	26.5
7. About indication/contraindication of medications	471	31.3
8. About terms and conditions of storage of drugs (conditions and shelf-life)	464	30.8
9. About medications dosage	505	33.5
10. About routes of drug administration	292	19.4
11. About drug forms	289	19.2
12. About drug design	130	8.6
13. About drugs toxic effects (toxicity)	297	19.7
14. About principles of pharmacotherapy	55	3.7
15. About rules of drug administration	386	25.6
16. About drugs generic, chemical and brand names	156	10.4
17. About selection of OTC drugs	409	27.2
18. Some specific information about drugs	380	25.2
19. Effectiveness of drug	312	20.7
20. About drugs action and their interactions	284	18.9
21. About drugs safety	321	21.3
22. About cost-effectiveness of drugs	51	3.4

The study of the professional adaptation of pharmacists indicated that inadequate professional knowledge, improper performance of the acquired professional skills were the main reasons for imperfect pharmaceutical care supply. The majority of the pharmaceutical organizations' heads and also the young specialists considered the coexistence of a mentor (experienced professional pharmacist) as the main factor of professional improvement for pharmacists' professional adaptation. The pharmacists' personnel must show stirring involvement in sharing their cognition, understanding, science, skill and contributing partnership and cooperation within the colleagues and other health care professionals in pharmacy direction.

It is quite significant, that pharmaceutical companies regularly perform study of pharmacists' work satisfaction. The pharmaceutical companies should determine combination of factors that effect on the pharmacists' work satisfaction. Pharmaceutical companies should create favorable working conditions for pharmacists to enable the maximal realization of the pharmacists'



professional capabilities, skills and habits. A balance between the workload and pharmacists' personal life should be more harmonized, convenient, resourceful and more poised. This will increase the quality of pharmaceutical care in pharmacies.

It should be noted, that pharmacist's satisfaction with income is a very sensitive factor that has a significant impact on the quality of pharmaceutical services performed in pharmacy, so the pharmacists' salary should be revised and increased.

It should be noted that in developed countries and in many developing countries pharmaceutical specialty is regulated profession alike the family medicine. In western countries pharmacist as a family doctor need higher pharmaceutical education, diploma and continuous pharmaceutical education, pharmaceutical license and periodic accreditation. Only pharmacists with higher pharmaceutical education have the right to work as pharmacists' position in the pharmacies. On the pharmacists' certification programs should be only involved pharmacists who have graduated pharmaceutical faculties from state recognized and accredited universities.

The majority of higher pharmaceutical education pharmacists' specialists were female; among them the largest majorities were working on the pharmacist position at pharmacies. The Government and pharmaceutical companies should create promotional conditions for males to make pharmacist profession attractive for men. It is very important for career advancement and satisfaction to provide a balance between the workload and man personal life for the satisfaction by income, for pharmacists' professional satisfaction, for pharmacist job satisfaction, and also for the career promotion perspectives.

The Government should take care of the profession of pharmacist authority. The pharmacist's profession in the health care system should increase the authority and social importance by the state support. Pharmacist's profession should become of more power and authority; a pharmacist should have a much higher status in the healthcare system. Therefore, the role of a pharmacist is significantly increased in the healthcare system and is directly related to his professional education level. Therefore, pharmacist should have appropriate higher pharmaceutical education. All the mentioned is achieved then, when the pharmacist profession will move into the health-regulated professions list.

The level of basic training of pharmacists should be in compliance with the contemporary requirements. The pharmacist should have deep knowledge in pharmacology, in pharmacotherapy, in toxicology, in pharmaceutical care, in clinical pharmacy, in pharmacokinetics, in pharmacodynamics, in basic of medicine and in other pre-clinical and clinical directions. Such knowledge can be obtained only in the higher pharmaceutical education institutions. Therefore, pharmacist working in pharmacy must have only higher pharmaceutical education.

To increase the pharmacist's professional qualification, professionalism, professional knowledge and competency the higher pharmaceutical education universities programs should more emphasize the mentioned subjects. It is too important, that a pharmacist should realize and understand that qualification upgrading study courses, professional trainings and professional workshops are of great necessity for further professional advancement. Thus, the Government should develop continuous pharmaceutical education programs accessible to all pharmacists. The qualification upgrading study courses, professional education or training courses should be available for all pharmacists. Pharmacist's education process should not be stopped. Developing a continuous pharmaceutical education system will enhance the professionalism of the



pharmaceutical personnel. Experiential education should encourage perfection of critical opinion and the problem resolving processes along with the medicine discovery.

Opinion that certification of pharmacists should be mandatory was more common among health care specialists than among chiefs (Chi-square = 45.2,  $p < 0.001$ ) and among pharmacists (Chi-square = 68.9,  $p < 0.001$ ), but there was no statistically significant difference between chiefs and pharmacists. It was more common also among customers /patients than in pharmacists (Chi-square = 44.2,  $p < 0.001$ ). The necessity of pharmacists' certification was stated more often by employed students than by pharmacists (Chi-square = 57.3,  $p < 0.001$ ).

Pharmacy faculty students should take part in the patient care practice in hospitals, society proceeding settings and in other practical experiences. Students should have the possibility to apply the clinical and pharmaceutical information taught in classes when studying in medical facilities by working under the supervision of volunteer mentors (the healthcare specialists or professionals). The research activity of the pharmaceutical faculty students in all fields of pharmaceutical practice should be encouraged.

Quality reliance refers to the necessity to improve higher pharmaceutical education to guarantee a useful, sustainable and steady activity and appropriate skills and competencies of the tomorrow's labor resources. The pharmacy degree programs should be proposed at the higher pharmaceutical institution level and entire experimental constituent element in the clinical facilities.

It is necessary to provide a deep cooperation between pharmacists and physicians on the issues of pharmacotherapy and healthcare to ensure the patients' health state effective improvement, and also to provide the best feedback regulation and revision in the healthcare specialists' team work. Pharmacists also should be responsible for registration of the drugs' side effect, as well as be attentive in case of imperfection and professional defects of drugs they provide. To achieve that it is necessary to raise awareness of specialists on the essence of pharmacists' profession and functions among the medical personnel and general public.

On the basis of the theoretical and logical analysis the structure and composition of the factors have been developed, considering the objective (external), subjective (internal) and universal factors, which influence on the professional formation of the pharmacist. These factors comprised the content of work, position, correspondence of qualification and nature of work to capabilities, aspirations and inclinations of the pharmacist, the existence of perspective for professional promotion. The existence of perspectives for career promotion, the possibility to enhance qualifications, a high degree of responsibility for the work results, regimen, labor salary and the system of benefits scheme for employees, support and assistance of a manager, direct relations with manager and colleagues serve the essential base for the pharmacists' successful work. The unity of criteria for pharmacist professional formation, for the common professional formation (characteristic to all stages) and the specific professional formation (characteristic to the separate stage) had been developed.

**Conclusion:** The level of basic training of pharmacists should be in compliance with the contemporary requirements. The pharmacist should have deep knowledge in pharmacology, in pharmacotherapy, in toxicology, in pharmaceutical care, in clinical pharmacy, in pharmacokinetics, in pharmacodynamics, in basic of medicine and in other pre-clinical and clinical directions. Such knowledge can be obtained only in the higher pharmaceutical education institutions. Therefore, pharmacist working in pharmacy must have only higher pharmaceutical education. It is necessary to provide a deep cooperation between pharmacists and physicians on

the issues of pharmacotherapy and healthcare to ensure the patients' health state effective improvement, and also to provide the best feedback regulation and revision in the healthcare specialists' team work. Pharmacists also should be responsible for registration of the drugs' side effect, as well as be attentive in case of imperpness and professional defects of drugs they provide. To achieve that it is necessary to raise awareness of specialists on the essence of pharmacists' profession and functions among the medical personnel and general public.

## REFERENCES

1. Thomas R. Brown, By Thomas R. Brown - Handbook of Institutional Pharmacy Practice // 4th (fourth) Edition; American Society of Health-System Pharmacists (December 1, 2006); pp. 65-74.
2. Krass I. Ways to boost pharmacy practice research. The Pharmaceutical Journal 2015;(2).
3. ParthasarathiG. A Textbook of Clinical Pharmacy Practice: Essential Concepts and Skills // Universities Press India Private Limited; 2 edition (January 18, 2017); pp. 26-37.
4. Franklin B. D.& van Mil J. W., Defining clinical pharmacy and pharmaceutical care // Pharm World Science 2005;27(3): p. 137-144.
5. N. Sulashvili; Peculiarities of professional and career improvement strategy for pharmacists' republic of Armenia ministry of education and science; Yerevan state medical university; Dissertation; Dissertation for the Scientific Degree of PhD in Pharmaceutical Sciences; On specialty 15.00.01 – Pharmacy; YEREVAN – 2019; Pp 1-175;
6. Shane P. Desselle, David P. Zgarrick, Greg Alston; Pharmacy Management: Essentials for All Practice Settings // Fourth Edition; 2016,pp. 329-347.
7. Michael Ira Smith, Albert I. Wertheimer, Jack E. Fincham; Pharmacy and the US Health Care System; Pharmaceutical Press // 4th Revised edition edition (April 15, 2013);pp. 402-426.
8. N. Sulashvili, M. Beglaryan, I. Zarnadze, Sh. Zarnadze, N. Chichoyan, T. Tsintsadze, N. Kvizhinadze; THE FEATURES OF PHARMACISTS' PROFESSIONAL CHALLENGES AND REGULATION TRAIT ISSUES THOUGHT- OUT BY THE PATIENTS; ISBN 978-9941-448-61-4 Collection of scientific papers; THE II INTERNATIONAL SCIENTIFIC-PRACTICAL INTERNET CONFERENCE “MODERN PHARMACY – SCIENCE AND PRACTICE” PROCEEDINGS; AKAKI TSERETELI STATE UNIVERSITY, FACULTY OF MEDICINE; KUTAISI-GEORGIA 01.12.2020-21.12.2020, Pp 147-154.
9. N. Kvizhinadze, D. Tophuria, N. Sulashvili; Study of Factors Affecting on Population's Health Improvement; Caucasus Journal of Health Sciences and Public Health; E ISSN 2449-2450; ISSN 2449-2647; The University of Georgia Publishing House. www.caucasushealth.ge Official Journal of the University of Georgia and Iv. Javakhishvili Tbilisi State University with Support of the Arctic University of Tromsø/Norway. Volume 4, Supplement 8, July 20-24, 2020; Pp 42-45.
10. N. Sulashvili, M. Beglaryan, S. Kocharyan, N. Gorgaslidze, I. Zarnadze, N. Chichoyan, Sh. Zarnadze; Scientifically study of prospects of modern scientific achievements and research challenges of pharmacists vocational features in pharmaceutics and medicine; MATERIALS OF IX INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE-“MANAGEMENT AND MARKETING IN THE MODERN ECONOMY, SCIENCE,



EDUCATION AND PRACTICE”. MINISTRY OF HEALTH OF UKRAINE; MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE; UKRAINIAN MARKETING ASSOCIATION, NATIONAL PHARMACEUTICAL UNIVERSITY OF UKRAINE, DEPARTMENT OF PHARMACEUTICAL MANAGEMENT AND MARKETING. MARCH 18, 2021, KHARKIV. p:26-41.

11. International Pharmaceutical Federation (FIP). Continuing Professional Development/Continuing Education in Pharmacy // Global Report 2014. The Hague: International Pharmaceutical Federation; 2014.
12. Nodar Sulashvili. Peculiarities Of Professional And Career Improvement Strategy For Pharmacists Republic of Armenia Ministry Of Education And Science; Yerevan State Medical University After M. Heratsi; Abstract of The Dissertation For The Scientific of PhD In Pharmaceutical Sciences; On Specialty 15.00.01 – Pharmacy; The Specialized Council 026 “Theoretical Medicine” of The Supreme Certifying Committee Of The Republic Of Armenia At The Yerevan State Medical University. YEREVAN – 2019; Pp 1-26.
13. Van Mil J. F., Schulz M., Tromp TFD. Pharmaceutical care, European developments in concepts, implementation, teaching, and research: a review // Pharm World Sci. 2014;26(6); pp. 303–321.
14. N. Sulashvili, N. Chichoyan, O. Gerzmava, T. Tsintsadze, L. Gabunia, N. Kvizhinadze, T. Okropiridze, M. Beglaryan; ORGANIZATIONAL AND REGULATORY FRAMEWORK, AND IDENTIFY THE MAIN EDUCATIONAL ISSUES AND POTENTIALS OF YOUNG PHARMACISTS IN GEORGIA; УДК: 615.014.2:615.2 НФаУ, 2020; Scientific Publication; The collection of MATERIALS of the V International Scientific and Practical conference- “TECHNOLOGICAL AND BIOPHARMACEUTICAL ASPECTS OF DRUGS DEVELOPING WITH DIFFERENT ORIENTATION OF ACTION”; MINISTRY OF HEALTH OF UKRAINE, National University of Pharmacy, Department of drug technology. 26 of November, Kharkiv, Ukraine-2020. Pp 51-69.
15. Global Respiratory Infection Partnership. Antibiotic resistance: prioritising the patient. Report from the Global Respiratory Infection Partnership; 2015. <http://www.grip-initiative.org/media/114428/recstr-grip-cta-meeting-report.pdf>. Accessed June 16, 2016.
16. N. Sulashvili, N. Kvizhinadze, M. Beglaryan; JUNIOR PHARMACIST WORK GRATIFICATION AND VOCATIONAL TRAITS; THEORETICAL RESEARCH; MINISTRY OF HEALTH OF UKRAINE, DONETSK NATIONAL MEDICAL UNIVERSITY. MATERIALS of the 82nd All-Ukrainian Scientific Medical Congress of Students and Young Scientists “Medicine of the XXI Century” (with international participation). Devoted to the 90th anniversary of Donetsk National Medical University and the 90th anniversary of Student Scientific Society named after professor M. D. Dovgyallo; September 24-25, 2020, Lyman, Donetsk, Ukraine. Pp 272.
17. Fielding S, Porteous T, Ferguson J, Maskrey V, Blyth A, Paudyal V, et al. Estimating the burden of minor ailment consultations in general practices and emergency departments through retrospective review of routine data in North East Scotland. Fam Pract. 2015;32(2):165–72.
18. N. Sulashvili, M. Beglaryan, I. Zarnadze, Sh. Zarnadze, N. Alavidze, N. Abuladze, J. Cheishvili, N. Kvizhinadze; VOCATIONAL PERSPECTIVES AND THE MAIN PROFESSIONAL OPPORTUNITIES AND CHALLENGES OF PHARMACY FACULTY



- STUDENTS IN GEORGIA; УДК: 615.014.2:615.2 НФаУ, 2020. Scientific Publication. The collection of MATERIALS of the V International Scientific and Practical conference-“TECHNOLOGICAL AND BIOPHARMACEUTICAL ASPECTS OF DRUGS DEVELOPING WITH DIFFERENT ORIENTATION OF ACTION”; MINISTRY OF HEALTH OF UKRAINE, National University of Pharmacy, Department of drug technology. 26 of November, Kharkiv, Ukraine-2020.Pp 35-51.
19. PGEU Annual Report 2014. Promoting efficiency, improving lives. PGEU; 2015. <http://www.pgeu.eu/en/component/content/article/34-homepage-topics/16-pgeu-annual-report.html>. Accessed June 16, 2016.
  20. N. Sulashvili, M. Beglaryan; Pharmacist Vocational Features, Regulations Framework and Profession Enhancement Challenges of Pharmaceutics.Caucasus Journal of Health Sciences and Public Health; E ISSN 2449-2450; ISSN 2449-2647; The University of Georgia Publishing House.[www.caucasushealth.ge](http://www.caucasushealth.ge); Official Journal of the University of Georgia and Iv. Javakhishvili Tbilisi State University with Support of the Arctic University of Tromsø/Norway. Volume 4, Supplement 8, July 20-24, 2020; Pp 31-36.
  21. N. Kvizhinadze, D. Tophuria, N. Intskirveli, N. Sulashvili; Study of Factors Affecting on Population’s Health Improvement.Caucasus Journal of Health Sciences and Public Health; E ISSN 2449-2450; ISSN 2449-2647; The University of Georgia Publishing House. [www.caucasushealth.ge](http://www.caucasushealth.ge); Official Journal of the University of Georgia and Iv. Javakhishvili Tbilisi State University with Support of the Arctic University of Tromsø/Norway. Volume 4, Supplement 8, July 20-24, 2020; Pp 42-45.
  22. Thomas R. Brown; By Thomas R. Brown - Handbook of Institutional Pharmacy Practice // 4th (fourth) Edition; American Society of Health-System Pharmacists (December 1, 2006); pp. 65-71.
  23. Sulashvili, N., Beglaryan M., Matoshvili M. Vocational features of pharmaceutical workers, viewed by the chief pharmacists // Caucasus Journal of Health Sciences and Public Health. Volume 2, Issue 2, June 2018.Tbilisi-Georgia. pp. 56-61.
  24. Mary E. Mohr RPhMS; Standards of Practice for the Pharmacy Technician (Lww Pharmacy Technician Education) // LWW; Student edition (January 20, 2009);pp. 312-336.
  25. N. Sulashvili, N. Chichoyan, O. Gerzmava, T. Tsintsadze, L. Gabunia, N. Kvizhinadze, M. Beglaryan; SINGULARITIES OF PHARMACEUTICAL ORGANIZATIONAL AND REGULATION ISSUE ASPECTS VISION BY PUBLIC HEALTH SPECIALISTS.ISBN 978-9941-448-61-4 Collection of scientific papers; THE II INTERNATIONAL SCIENTIFIC-PRACTICAL INTERNET CONFERENCE “MODERN PHARMACY – SCIENCE AND PRACTICE” PROCEEDINGS; AKAKI TSERETELI STATE UNIVERSITY, FACULTY OF MEDICINE; KUTAISI-GEORGIA 01.12.2020-21.12.2020, Pp 131-140.
  26. Linacre JM, Wright B. Interpreting output tables. A User's Guide to BIG STEPS WINSTEPS Rasch Model Computer Program. Chicago: MESA Press; 2011.
  27. N. Sulashvili, N. Kvizhinadze, N. Abuladze, M. Beglaryan, N. Alavidze, M. Sulashvili; THE ROLE OF THE PHARMACIST AND MODERN PECULIARITIES OF THE PHARMACIST PROFESSION, VIEWED BY THE PATIENTS AND PUBLIC HEALTH SPECIALISTS THROUGH PHARMACEUTICAL CARE DIVISION IN PHARMACIES IN GEORGIA; УДК: 579:578:61(06) © НФаУ, 2021; Materials of the Scientific and Practical International Distance Conference-“MICROBIOLOGICAL AND



- IMMUNOLOGICAL RESEARCH IN MODERN MEDICINE”; MINISTRY OF HEALTH OF UKRAINE; NATIONAL UNIVERSITY OF PHARMACY; DEPARTMENT OF MICROBIOLOGY, VIROLOGY AND IMMUNOLOGY; 26 March, 2021; KHARKIV - 2021; Pp:147-149.
28. Frost MH, Reeve BB, Liepa AM, Stauffer JW, Hays RD. What Is Sufficient Evidence for the Reliability and Validity of Patient-Reported Outcome Measures? *Value Health*.2007.
  29. N. Sulashvili, M. Beglaryan, L. Gabunia, I. Zarnadze, Sh. Zarnadze, T. Tsintsadze, M. Sulashvili; THE SCIENTIFIC DISCUSSIONS OF THE CONTEMPORARY FEATURES AND CHALLENGES OF THE PHARMACISTS VOCATIONAL DEVELOPMENT STRATEGIES, BY THE OPINION OF HEALTH-CARE SPECIALISTS AND PATIENTS, DIRECTED THROUGH THE PHARMACEUTICAL CARE DIVISION; УДК 615:616-08; © НФаУ, 2021 Materials of the V International Scientific and Practical Conference; «Medical drugs for humans. Modern issues of pharmacotherapy and prescription of medicine»; MINISTRY OF HEALTH OF UKRAINE; DEPARTMENT OF HEALTHCARE; NATIONAL UNIVERSITY OF PHARMACY, EDUCATIONAL AND SCIENTIFIC INSTITUTE OF APPLIED PHARMACY; 11-12 of March 2021 , UKRAINE, Kharkiv-2021; Pp:140-144.
  30. Sosabowski MH, Ingram MJ. 21st century issues in pharmacy education in the United Kingdom. *Am J Pharm Educ*. 2003;67(4):Article 122.
  31. N. Sulashvili, N. Kvizhinadze, Kh. Jojua, O. Gerzmava, M. Beglaryan; Pharmaceutical specific vocational activities and professional scope features of Georgian pharmacists; UDC 001.1 ISBN 978-91-87224-07-2 SSPG Publish. Stockholm, Sweden. 2020. Collection of scientific articles of the scientific and practical publications. Abstracts of VI International Scientific and Practical Conference “MODERN SCIENCE: PROBLEMS AND INNOVATIONS” Stockholm, Sweden 23-25 August, 2020; Pp105-118.
  32. British Pharmaceutical Students’ Association. The imbalance between pre-registration training and undergraduate pharmacy student numbers: A BPSA discussion paper. Accessed April 9, 2014.
  33. N.Sulashvili. PECULIARITIES OF PROFESSIONAL AND CAREER IMPROVEMENT STRATEGY FOR PHARMACISTS; REPUBLIC OF ARMENIA MINISTRY OF EDUCATION AND SCIENCE; YEREVAN STATE MEDICAL UNIVERSITY AFTER M. HERATSI; ABSTRACT of the dissertation for the scientific degree of PhD in Pharmaceutical Sciences; On specialty 15.00.01 – Pharmacy; The Specialized Council 026 “Theoretical Medicine” of the Supreme Certifying Committee of the Republic of Armenia at the Yerevan State Medical University. YEREVAN – 2019; Pp 1-26.
  34. Sulashvili, N., Beglaryan M., Sulashvili M. Personal features, capabilities and skills of job adaptation for pharmacist specialists //Tbilisi David Agmashenebeli University Periodical scientific Journal №13, 2018. Tbilisi, Georgia. pp. 231-236.
  35. Isett's BJ, Schondelmeyer SW, Artz MB, et al. Clinical and economic outcomes of medication therapy management services: the Minnesota experience. *J Am Pharm Assoc* (2003). 2018.
  36. N. Sulashvili, M. Beglaryan, N. Gorgaslidze, N. Alavidze, N. Abuladze, N. Chichoyan, T. Okropiridze. The higher educational challenges, recent pharmaceutical professional issues and vocational specification of pharmacists in Georgia. УДК 615.1:339.188 ISSN 2415-8593 MATERIALS OF IX INTERNATIONAL SCIENTIFIC-

- PRACTICAL CONFERENCE- “MANAGEMENT AND MARKETING IN THE MODERN ECONOMY, SCIENCE, EDUCATION, AND PRACTICE”. MINISTRY OF HEALTH OF UKRAINE; MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE; UKRAINIAN MARKETING ASSOCIATION, NATIONAL PHARMACEUTICAL UNIVERSITY OF UKRAINE, DEPARTMENT OF PHARMACEUTICAL MANAGEMENT AND MARKETING. MARCH 18, 2021, KHARKIV-2021. Pp 53-68.
37. Delate T, Chester EA, Stubbings TW, Barnes CA. Clinical outcomes of a home-based medication reconciliation program after discharge from a skilled nursing facility. *Pharmacotherapy*. 2008.
  38. N. Sulashvili, M. Beglaryan, O. Gerzmava, I. Zarnadze, Sh. Zarnadze, N. Kvizhinadze, M. Sulashvili; MODERN FEATURES AND CHALLENGES OF THE PHARMACIST PROFESSION, VIEWED BY THE PATIENTS AND PUBLIC HEALTH SPECIALISTS VIA PHARMACEUTICAL CARE DIRECTION IN PUBLIC HEALTH SETTINGS; REPUBLIC OF ARMENIA ISSN 1829-040X, ORCID: 0000-0001-9263-6791, BULLETIN OF THE MEDICAL INSTITUTE AFTER MEHRABYAN, VOL. 9 TOM, YEREVAN 2020, Pp 105-120.
  39. Schnipper JL, Kirwin JL, Cotugno MC, et al. Role of pharmacist counseling in preventing adverse drug events after hospitalization. *Arch Intern Med*. 2016.
  40. N. Kvizhinadze, N. Dughashvili, N. Nikuradze, N. Sulashvili; PHARMACEUTICAL ACTIVITIES PECULIARITIES IN GEORGIA.UDC 001.1 ISBN 978-1-4879-3793-5 Abstracts of VI International Scientific and Practical Conference- “World Science: Problems, Prospects And Innovations”; Toronto, Canada; February 23-25, 2021; Pp: 59-60.
  41. M. Sulashvili, M. Beglaryan, N. Kvizhinadze, N. Sulashvili; Pharmacists’ working professional challenges in vocational practice; Scientific edition. IV International Scientific and Practical Conference. «Medical Drugs for Human. Modern Issues of Pharmacotherapy and Prescription of Medicine». 12-13 of March-2020; the National University of Pharmacy in Xarkov in Ukraine; Ministry of health of Ukraine. Pp 71-73.
  42. *Clinical Skills for Pharmacists: A Patient-Focused Approach* //3 edition (Tietze, Clinical Skills for Pharmacists) by Karen J. TietzePharmD (Mar 31, 2011).
  43. Red-Hot Careers; *Clinical pharmacist RED-HOT Career Guide*; 2592 REAL Interview Questions // Create Space Independent Publishing Platform 2017;pp. 216-242.
  44. Karen J. TietzePharmD; *Clinical Skills for Pharmacists: A Patient-Focused Approach*, 3e (Tietze, Clinical Skills for Pharmacists) // Mosby; 3 edition (March 31, 2011); pp. 64-96.
  45. N. Sulashvili, N. Kvizhinadze, M. Gogashvili, M. Beglaryan; Common characteristics and scope of young pharmacist professionals in Georgia; Materials of 12th Scientific and Practical Internet Conferences, The National University of Pharmacy, Scientific and Practical Internet-Conference: «Pharmacoeconomics in Ukraine, Condition and Development Prospects», (Kharkiv, Ukraine, May 22, 2020 Year). Pp 153-156.
  46. Royal Pharmaceutical Society (RPS). *Foundation Pharmacy Framework, a Framework for Professional Development in Foundation Practice across Pharmacy* // London: Royal Pharmaceutical Society; 2014.
  47. N. Sulashvili; PECULIARITIES OF PROFESSIONAL AND CAREER IMPROVEMENT STRATEGY FOR PHARMACISTS; REPUBLIC OF ARMENIA MINISTRY OF EDUCATION AND SCIENCE; YEREVAN STATE MEDICAL UNIVERSITY AFTER



- M. HERATSI; DISSERTATION; Dissertation for the Scientific Degree of PhD in Pharmaceutical Sciences; On specialty 15.00.01 – Pharmacy; YEREVAN – 2019; Pp 1-175;
48. Bryant L.J. M., Coster G., Gamble G. D., McCormick R. N. General practitioners' and pharmacists' perceptions of the role of community pharmacists in delivering clinical services. // *Res. Soc. Adm. Pharm.* 2009; 5; pp.347–362.
  49. Cruthirds D. L. Hughes P. J. Weaver S. Value of pharmacy services to the healthcare system: an interdisciplinary assessment // *Int J Pharm Pract.* 2013;21(1):38–45.
  50. Wongwiwatthananut S, Popowich N. G. Applying the ARCS model of motivational design to pharmaceutical education // *Am J Pharm Educ.* 2010; 64: pp. 168–196.
  51. Casserlie, L. M., & Mager, N. A. D. (2016). Pharmacists' perceptions of advancing public health priorities through medication therapy management // *Pharmacy Practice*, 14(3), pp.792-798.
  52. World Health Organization (WHO) Framework for action on inter professional education and collaborative practice // Geneva: WHO; 2010.
  53. Atkinson J., Rombaut B., The 2011 PHARMINE report on pharmacy and pharmacy education in the European Union // *Pharm. Pract.* 2011;9: pp. 169–187.
  54. Moore T.J., Furberg C.D., Mattison D.R., Cohen M. R. Completeness of serious adverse drug event reports received by the US Food and Drug Administration in 2014. // *Pharmacoepidemiology, Drug Safety.* 2016; 25(6): pp. 713–718.
  55. Jeri J. Sias and Susana V. James; Spanish for the pharmacy professional (English and French Edition) // American Pharmacists Association; 1st edition (January 30, 2009); pp. 35-79.
  56. Robert P. Navarro; *Managed Care Pharmacy Practice* 2nd Edition // Jones & Bartlett Learning; 2 edition (December 25, 2008); pp. 336-389.
  57. World Health Organization; *Quality Assurance of Pharmaceuticals 2017: WHO Guidelines, Good Practices, Related Regulatory Guidance and GxPs Training Materials* // World Health Organization; 2017 edition (January 11, 2018); pp. 51-59.
  58. Mari J. Wirfs PhD MN APRN ANP-BC FNP-BC CNE; *The APRN's Complete Guide to Prescribing Drug Therapy* Springer Publishing Company; 1 edition (April 25, 2017); pp. 548-613.
  59. Consumer Health care Products Association's Clinical/Medical Committee // White paper on the benefits of OTC medicines in the United States. *Pharmacy Today* 2010; (Oct); pp. 68-79.
  60. Patrick M. Malone , Karen L. Kier , John Stanovich Jr. , Meghan J. Malone; *Drug Information A Guide for Pharmacists 5/E* (Malone, Drug Information); McGraw-Hill Education / Medical; 5 edition (August 11, 2014); pp. 1116-1169.
  61. Judith E. Thompson, Lawrence W. Davidow; *A Practical Guide to Contemporary Pharmacy Practice* 3rd Edition; Lippincott Williams and Wilkins; 3rd edition (January 24, 2009); pp. 456-488.
  62. National Matching Services. Summary results of the match for positions beginning in 2014. <https://www.natmatch.com/ashprmp/stats/2014applstats.html>. Accessed March 24, 2014
  63. N. Sulashvili, M. Beglaryan, M. Sulashvili, N. Kvizhinadze, N. Kiknavelidze; *JOB SATISFACTION PROPOSALS AND CHALLENGES OF GEORGIAN PHARMACISTS; UDC 001.1 ISBN 978-92-9472-197-6* Collection of scientific articles of the scientific and practical publication. Abstracts of II International Scientific and Practical Conference” THE

- WORLD OF SCIENCE AND INNOVATION”; London, United Kingdom, 16-18 September -2020. Pp 175-190.
64. Pharmacist’s professional features and work gratification/ N. Sulashvili; M.Beglaryan // Black sea scientific journal of academic research multidiscipline journal. (Medicine, Pharmacy sciences) Volume 29. March-April 2016. Tbilisi, Georgia, p.62-68.
  65. Pharmacists’ professional features, viewed by the customer's (customer’s) eyes in Georgia/
  66. N. Sulashvili, M. Beglaryan // Scientific-Practical Journal. Experimental and Clinical Medicine, №4, 2017. Tbilisi, Georgia, p. 22-25.
  67. Characteristics of pharmacist activity, viewed by the customer’s / N.Sulashvili. M. Beglaryan // International Science and Innovation Festival 2017. Conferences “Healthy Lifestyle-Scientific Evidence and Controversial issues” and “Innovation in Medicine” Tbilisi State Medical University. September 2017. Tbilisi, Georgia, p. 30-31.
  68. Professional features for employed pharmacy faculty students’ in Georgia / N.Sulashvili, M.Beglaryan // The New Armenian Medical Journal Supplement. YSMU Science Week 2017 Conference. November 27-December 1, Vol.11, №3 2017, Yerevan, Republic of Armenia, p. 40.
  69. Wittayanukorn S, Westrick SC, Hansen RA, et al. Evaluation of medication therapy management services for patients with cardiovascular disease in a self-insured employer health plan. J Manag Care Pharm. 2013.



## RELATIONSHIP BETWEEN SOCIO-ECONOMIC FACTORS AND STUDENT MORBIDITY

<sup>1</sup>Tamar Sultanishvili, <sup>2</sup>Ramaz Khetsuriani, <sup>3</sup>Ilona Sakvarelidze, <sup>2</sup>Manana Arabuli, <sup>3</sup>Nino Abaishvili, <sup>4</sup>Shalva Petriashvili

<sup>1</sup>MD, PhD student, <sup>2</sup>MD, PhD, professor, <sup>3</sup>MD, PhD, professor, <sup>2</sup>Associate professor, <sup>3</sup>MD, PhD, Associate professor

<sup>4</sup>MD, PhD, Professor,

<sup>1</sup>David Aghmashenebeli University of Georgia, <sup>2</sup>Tbilisi State Medical University, <sup>3</sup>Tbilisi Humanitarian Teaching University, <sup>4</sup>East-West Teaching University.

Email: tsultanishvili@yahoo.com

### ABSTRACT

Students' social-demographic characteristics, stressors experience, psychological symptoms, and mental and general health ratings are related to their academic achievement.

**The aim** of the study is to establish a link between socio-economic status and morbidity.

**Methods:** 766 Georgian students, aged 15 to 35(20.7±2.4) have been interviewed from universities of Georgia, among them 347 men and 419 women. The cross-sectional study was performed, using the questionnaire form, created by us.

**Results:** Among the respondents Female are unreliably predominant, 56% of students are employed, the majority of them - for paid work. Almost half of the students live with their families and parents, most of them - 48% are from Tbilisi, the frequency in other regions varies from 2% to 4%. Diseases identified during student life correlate with the following socio-economic characteristics of the family. Shows a positive correlation with pathologies of the gastrointestinal tract: socially vulnerable -  $r=0.050$ ,  $p=0.164$ ; Single mother -  $r=0.075$ ,  $p=0.038$ ; Divorced parents -  $r=0.154$ ,  $p<0.001$ ; Negative - higher education of parents:  $r=-0.107$ ,  $p=0.003$ ; Shows a positive positive correlation with cardiovascular diseases: socially vulnerable family -  $r=0.103$ ,  $p=0.004$ ; Single mother -  $r=0.100$ ,  $p=0.006$ ; Negative - higher education of parents -  $r=0.113$ ,  $p=0.002$ ;

Abrupt weight loss correlates with socially vulnerable status -  $r=0.078$ ;  $p=0.031$ . Nervous system disorders are negatively correlated with parents's higher education  $r=-0.080$ ;  $p=0.028$ . Shows a positive positive correlation with sexually transmitted diseases: high-income family -  $r=0.076$ ;  $p=0.035$ , single mother -  $r=0.098$ ;  $p=0.006$ , divorced parents -  $r=0.100$ ;  $p=0.006$ ; Negative - parents with higher education -  $r=-0.179$ ,  $p<0.001$ .

**Conclusion:** Student illness is related to the social-economic characteristics of the family and the education of the parents.

**Keywords:** students' morbidity, social-economic factors

**Introduction:** Socio-economic characteristics are important determinants of population health [1]. High levels of parental education are associated with better mental well-being, regardless of race, age, or gender. In France, depressive disorder was associated with an unstable economic situation, anxiety disorder with unstable work or unemployment of the father [3].

University students are the future socio-economic, intellectual, creative potential of the country. Their frequent illness leads to a decrease in the effectiveness of learning and subsequent

interference with professional activities. The problem of student health is particularly acute in the current difficult social and economic conditions.

Students' socio-demographic characteristics, stressors experience, psychological symptoms, and mental and general health ratings are related to their academic achievement. Thus it is important to establish morbidity predictions among students, of which the socio-economic status and education of the family play an important role.

**Methods:** 766 Georgian students aged 15 to 35 (20.7 + 2.4) aged from Georgian universities were interviewed, including 347 men and 419 women. A cross-sectional study was conducted using a questionnaire compiled by us, the validity of which was determined in previous studies - using Krombach alpha. The following groups of factors were studied: academic achievement, extra work, sports activity, diet type and regimen, sleep hygiene, skills, doctor referral. Socio-demographic status of parents. Universities and students were selected through randomization. Inclusion criteria: Georgian university student, citizen of Georgia. Consent to participate in the study.

**Exclusion Criteria:** Pregnant women, refusal to participate in the study

Students were provided with complete information about the aims and objectives of the research. Data were collected for research purposes only. The data is coded by numbering and stored with the researcher and is available for research purposes only.

We used structured interviews and self-assessment questionnaires as the main methodological tools of the research.

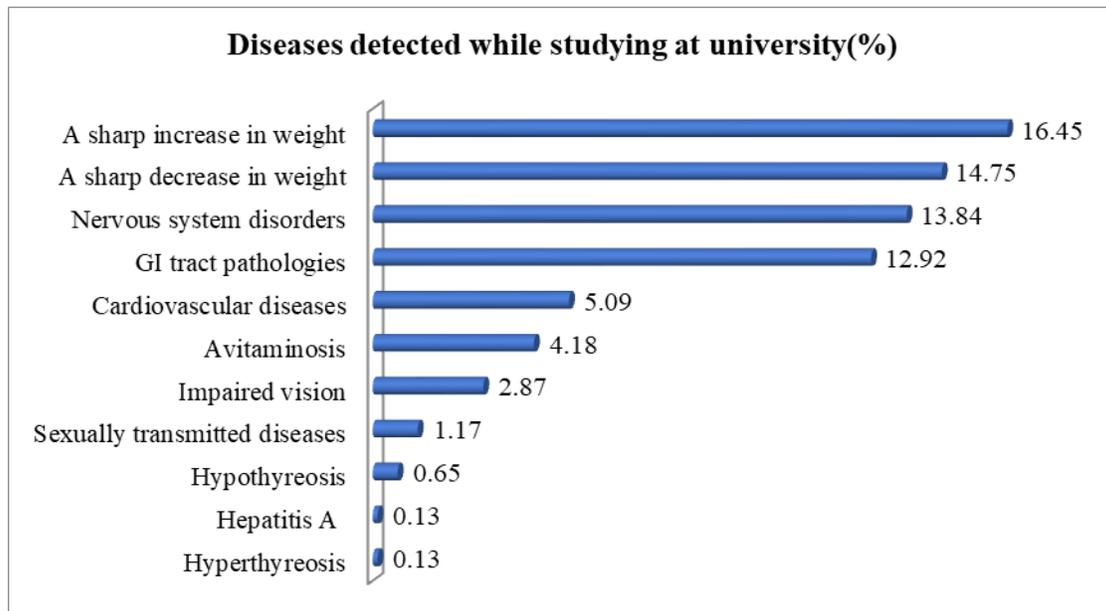
Statistical analysis

Qualitative data are presented in terms of quantity and%, groups were correlated by Spearman rank correlation analysis.

Statistical analysis was performed using SPSS 23 software package.

**Results:** The frequency of diseases detected during student life in Georgian students is given in 1 diagram.

The highest frequency is characterized by abrupt changes in weight and neurological disorders, the lowest are thyroid pathologies.



The association of diseases detected during student life with socio-economic factors is given in Table 1.

**Table 1.** Relationship of diseases detected during student life with socio-economic factors

Factor		A sharp increase in weight	A sharp decrease in weight	GI tract pathologies	Cardiovascular diseases	Nervous system disorders	Avitaminosis	Hypothyreosis	Hyperthyreosis	Hepatitis A	Sexually transmitted diseases	Impaired vision
University education	r	0.040	-0.004	0.107*	-0.113**	-0.080*	-0.005	0.013	0.022	-0.059	-0.179*	-0.019
	p	0.268	0.915	0.003	0.002	0.028	0.886	0.723	0.543	0.100	0.000	0.608
Socially vulnerable	r	-0.036	0.078*	0.051	0.103**	0.012	-0.004	-0.022	-0.010	-0.010	-0.029	-0.046
	p	0.323	0.031	0.161	0.004	0.738	0.902	0.546	0.787	0.787	0.416	0.200
High-income	r	-0.063	0.038	0.027	0.016	0.046	0.014	0.065	0.062	0.062	0.076*	0.008
	p	0.082	0.288	0.449	0.657	0.203	0.697	0.072	0.085	0.085	0.035	0.820
Single mother	r	0.013	-0.032	0.075*	0.100**	-0.046	0.022	-0.017	-0.008	-0.008	0.098*	0.355**



	p	0.72 0	0.38 2	0.038	0.006	0.205	0.550	0.640	0.835	0.835	0.006	0.000
Divorced parents	r	- 0.04 3	0.03 6	0.154*	0.017	0.031	0.032	-0.024	-0.011	- 0.011	0.100*	- 0.023
	p	0.23 3	0.31 6	0.000	0.636	0.385	0.369	0.502	0.765	0.765	0.006	0.525
Has no parent	r	- 0.04 0	0.05 6	0.042	0.064	0.055	0.026	0.021	-0.013	- 0.013	-0.002	0.230 **
	p	0.26 9	0.12 2	0.240	0.075	0.126	0.471	0.558	0.717	0.717	0.962	0.000

Diseases identified during student life correlate with the following socio-economic characteristics of the family: A sharp decrease in weight during student life correlates with a vulnerable family Shows a positive correlation with pathologies of the gastrointestinal tract: socially vulnerable - Single mother; Divorced parents; Negative correlation - higher education of parents; Shows a positive correlation with cardiovascular diseases: socially vulnerable family; Single mother; Negative - higher education of parents; Abrupt weight loss correlates with socially vulnerable status; Nervous system disorders are negatively correlated with parent's higher education. Shows a positive correlation with sexually transmitted diseases: high-income family, single mother, divorced parents; Negative - parents with higher education.

**Discussion:** Traditional socio-demographic characteristics such as education level or education aspirations and family factors such as parental education or lack of communication about contraception have been identified as risk factors in young people. The higher the level of education of the parents, the better the attitude of the students towards their health. The connection between material condition and illness has been identified [4].

The main stressors were related to academic and stress-contributing factors, which correlated with university, coping strategies, types of stressors, and parental income status [5]. Low levels of parental education are significantly associated with depression in college students. In addition, the low economic status of the family, the unemployment of the father or mother, the long period of separation from the family, family conflicts, conflict with friends and heavy academic workload, determine depression in students [6]. According to our research, diseases of the nervous system developed during studentship were negatively correlated with parents's higher education. Cardiovascular diseases are also negatively correlated with parental higher education, which is positively related to parental social status and single motherhood. Cardiovascular diseases in young people are associated with genetic factors and dyslipidemia [7,8]. There is less knowledge among students about sexually transmitted diseases [9], according to our research the incidence of these diseases is related to high-income families, divorced parents and is negatively correlated with higher education of parents, which shows the role of the family in raising awareness about this disease.

A study of students' eyesight showed that having at least 1 parent with nearsightedness was a risk factor for myopia, while a 30-minute continuous reading break and at least 2 hours of outdoor activity per day was protective against myopia [10].



The risk of developing myopia is affected by parental myopia and poor reading and writing habits. In addition, parental myopia exacerbates the damage caused by poor reading and writing habits, thus increasing the risk of myopia. Pupils of parents with myopia should be involved in myopia prevention efforts [11]. Our research revealed a link between a single mother and the loss of one parent.

Diseases of the gastrointestinal tract are associated with the presence of eating disorders [12]. Pathologies of the gastrointestinal tract in the subjects we examined: positively correlated with socially vulnerable, Single mother; Divorced parents; Negative correlation - higher education of parents;

**Conclusion:** Diseases detected during the study period among students are related to the socio-economic status and social status of student families.

## REFERENCE

1. Ahnquist J, Wamala SP, Lindstrom M. Social determinants of health—a question of social or economic capital? Interaction effects of socioeconomic factors on health outcomes. *Social science & medicine*. 2012 Mar 1;74(6):930-9.
2. Assari S. Parental educational attainment and mental well-being of college students: diminished returns of Blacks. *Brain Sciences*. 2018 Nov;8(11):193.
3. Verger P, Guagliardo V, Gilbert F, Rouillon F, Kovess-Masfety V. Psychiatric disorders in students in six French universities: 12-month prevalence, comorbidity, impairment and help-seeking. *Social psychiatry and psychiatric epidemiology*. 2010 Feb;45(2):189-99.
4. Гафиатулина, Н. Х. Специфика отношения учащейся молодежи России к здоровью в социоструктурном контексте. 2007.
5. Sreeramareddy CT, Shankar PR, Binu VS, Mukhopadhyay C, Ray B, Menezes RG. Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical education*. 2007 Dec;7(1):1-8.
6. Zhai H, Chen L, Yang Y, Sun H, Pan H, He J, Zhu X, Sui H, Wang W, Qiu X, Qiao Z. Family and college environmental exposures mediate the relationship between parental education and depression among college students. *PloS one*. 2016 Mar 18;11(3):e0151759.
7. Gogishvili G, Petriashvili Sh, Nanobashvili N, Megrelishvili N, Taboridze I. Association of blood group AB0 with coronary artery disease in young adults in Georgian population. The First International Scientific–Practical Virtual Conference " Science and Technology in Modern Society: Problems, Prognoses and Solutions." Izmir, Turkey, September 26-27, 2020
8. Gogishvili G, Petriashvili Sh, Nanobashvili N, Megrelishvili N, Taboridze I. Evaluation of Diagnostic Value of Non-HDL Lipoproteins in Georgian Population Under 45 Years of Age withnCoronary Heart Disease. *Scientific journal s p e c t r i*. 2021; 5:15-19.
9. Visalli G, Cosenza B, Mazzù F, Bertuccio MP, Spataro P, Pellicanò GF, Di Pietro A, Picerno I, Facciola A. Knowledge of sexually transmitted infections and risky behaviours: a survey among high school and university students. *Journal of preventive medicine and hygiene*. 2019 Jun;60(2):E84.
10. <sup>1</sup>Huang L, Kawasaki H, Liu Y, Wang Z. The prevalence of myopia and the factors associated with it among university students in Nanjing: A cross-sectional study. *Medicine*. 2019 Mar;98(10).



11. Shi H, Fu J, Liu X, Wang Y, Yong X, Jiang L, Ma S, Yin Z, Yao J, Yao X, Chen X, Wang T. Influence of the interaction between parental myopia and poor eye habits when reading and writing and poor reading posture on prevalence of myopia in school students in Urumqi, China. *BMC Ophthalmol.* 2021 Aug 14;21(1):299.
12. Santonicola A, Gagliardi M, Guarino MP, Siniscalchi M, Ciacci C, Iovino P. Eating disorders and gastrointestinal diseases. *Nutrients.* 2019 Dec;11(12):3038.



## EDITORIAL TEAM

### EDITORS-IN-CHIEF:

Associate Professor, Doctor in Economic Sciences *Jakubek Peter*, DTI University Dubnica and Vahom (Slovakia)

Professor, Doctor in Political Sciences *Khonelidze Zurab*, Sokhumi State University (Georgia)

Professor, Doctor in Public Administration Sciences *Bulba Volodymyr*, Kharkiv Regional Institute of Public Administration of the National Academy of Public Administration attached to the Office of the President of Ukraine (Ukraine)

### DEPUTY OF EDITOR-IN CHIEF:

Associate Professor, Doctor in Public Administration Sciences *Kuczabski Aleksander*, Institute of Geography of Uniwersytet Gdański (Poland)

Professor, PhD in Economics *Jalagonia Davit*, Sokhumi State University (Georgia)

Professor Doctor in Philosophy Sciences *Mandragelia Volodymyr*, State University of Telecommunications (Ukraine)

### EDITORIAL BOARD

Professor, PhD in Business Administration *Baratashvili Irma*, Caucasus International University (Georgia)

PhD in Economics *Chechelashvili Valeri* Ambassador Extraordinary and Plenipotentiary (Georgia)

PhD in Medical Biology *Hasanova Aytakin*, Azerbaijan Medical University (Azerbaijan)

Professor, PhD, *Hristov Petar*, Varna Free University “Chernorizets Hrabar” (Bulgaria)

Associate Professor, Paed Dr. Ing., PhD., MBA, ING-PAED IGIP *Hrmo Roman*, DTI University Dubnica nad Váhom (Slovakia)

Associate Professor, PhD in Biology Science *Ismayilov Abbas*, Azerbaijan State Agricultural University (Azerbaijan)

Professor, Doctor in Economic Sciences *Kasych Alla*, Kyiv National University of Technologies and Design (Ukraine)

Dr.h.c. Professor, Ing., DrSc. MBA, LL.M., Brigadier General ret. *Kelemen Myroslav*, Technical University of Košice (Slovakia)

Doctor in Economic Sciences *Kesy Marcin*, University of Economy in Bydgoszcz (Poland)

Associate Professor, PhD in Economics *Khubua Marine*, Sokhumi State University (Georgia)

Associate Professor, PhD in Economics *Kikutadze Vasil*, Tbilisi State University. East European University (Georgia)

Associate Professor, PhD *Kovacheva Stanislava*, University of Forestry (Bulgary)

Professor, Doctor in Economic Sciences *Melnyk Victor*, Kyiv National Economic University named after V.Hetman (Ukraine)

Professor, Doctor in Political Sciences *Nelipa Dmytro*, Taras Shevchenko National University of Kyiv (Ukraine).

Doctor of Philosophy *Pawliszczy Dariusz*, Gromadka Commune Office (Poland)

Associate Professor, PhD in Mathematics *Tophuridze Nino*, Sokhumi State University (Georgia)

PhD in Public Administration Science *Sergiienko Larysa*, Zhytomyr Polytechnic State University (Ukraine)



Doctor in Public Administration Sciences ***Shestakovska Tetiana***, Chernihiv Polytechnic National University (Ukraine)

Professor, Doctor Habilitatus ***Simanavičienė Žaneta***, Micolas Romeris University (Lithuania)

Associate Professor, PhD in Economy ***Suleymanov Elchin***, Baku Engineering University (Azerbaijan)

Associate Professor, Doctor in Public Administration Sciences, PhD in Political Science

***Zahurska-Antoniuk Victoria***, Zhytomyr Polytechnic State University (Ukraine)

Associate Professor, Doctor in Pedagogy Sciences ***Zhukova Oksana***, V.N.Karazin Kharkiv National University (Ukraine)

Associate Professor, Doctor in Economic Sciences ***Zhytar Maksym***, University of the State Fiscal Service of Ukraine (Ukraine)



## AIMS AND SCOPE

**ICRET MTÜ The Baltic Scientific Journals** publishes peer-reviewed, original research and review articles in an open access format. Accepted articles span the full extent of the social and behavioral sciences and the humanities.

ICRET MTÜ The Baltic Scientific Journals seeks to be the world's premier open access outlet for academic research. As such, unlike traditional journals, ICRET MTÜ The Baltic Scientific Journals does not limit content due to page budgets or thematic significance. Rather, ICRET MTÜ The Baltic Scientific Journals evaluates the scientific and research methods of each article for validity and accepts articles solely on the basis of the research. Likewise, by not restricting papers to a narrow discipline, ICRET MTÜ The Baltic Scientific Journals facilitates the discovery of the connections between papers, whether within or between disciplines.

ICRET MTÜ The Baltic Scientific Journals offers authors quick review and decision times; a continuous-publication format; and global distribution for their research via ICRET MTÜ The Baltic Scientific Journals Online. All articles are professionally copyedited and typeset to ensure quality.

Those who should submit to ICRET MTÜ The Baltic Scientific Journals include:

- Authors who want their articles to receive quality reviews and efficient production, ensuring the quickest publication time.
- Authors who want their articles to receive free, broad, and global distribution on a powerful, highly discoverable publishing platform.
- Authors who want their articles branded and marketed by a world-leading social science publisher.
- Authors who want or need their articles to be open access because of university or government mandates.



## TOPICS OF JOURNAL

International Economics  
Financial Economics  
Business studies  
Public Economics  
Labor and Demographic Economics  
Law and Economics  
Industrial Organization  
Business Administration and Business Economics, Marketing, Accounting.  
Economic History  
Economic Development, Innovation, Technological Change, and Growth  
Economic Systems  
Agricultural and Natural Resource Economics, Environmental and Ecological Economics.  
Urban, Rural, Regional, Real Estate, and Transportation Economics  
Tourism Economics  
Anthropology  
Area studies  
Civics  
Criminology  
Demography  
Development studies  
Education  
Environmental studies  
Gender studies  
Geography  
History  
Industrial relations  
Information science  
International relations  
Law  
Library science  
Linguistics  
Political science  
Psychology  
Public administration  
Sociology  
Social work  
Sustainable development  
Health, Education, and Welfare



**NGO International Center for Research, Education & Training (Estonia, Tallinn)** is publishing scientific papers of scientists on Website and in Referred Journals with subjects which are mentioned below:

**© The Baltic Scientific Journals**

ISSN: 2613-5817; E-ISSN: 2613-5825; UDC: 0 (0.034);

DOI PREFIX: 10.36962/PIRETC

Proceeding of The International Research Education & Training Center. PIRETC

<https://bsj.fisdd.org/index.php/piretc>

ISSN: 2674-4562, E-ISSN: 2674-4597, UDC: 620.9 (051) (0.034);

DOI PREFIX: 10.36962/ENECO

Proceedings of Energy Economic Research Center. ENECO

<https://bsj.fisdd.org/index.php/eneco-peerc>

ISSN: 1609-1620, E-ISSN: 2674-5224; UDC: 62 (051) (0.034);

DOI PREFIX: 10.36962/PAHTEI

Proceedings of Azerbaijan High Technical Educational Institutions. PAHTEI

<https://bsj.fisdd.org/index.php/pahtei>

ISSN: 2663-8770, E-ISSN: 2733-2055; UDC: 672, 673, 67.01-67.02

DOI PREFIX: 10.36962/ETM

Equipment, Technologies, Materials. ETM

<https://bsj.fisdd.org/index.php/etm>

ISSN: 2733-2713; E-ISSN: 2733-2721; UDC: 33

DOI PREFIX: 10.36962/SWD

SOCIO WORLD-SOCIAL RESEARCH & BEHAVIORAL SCIENCES. SWSRBS

<https://bsj.fisdd.org/index.php/swd>

E-ISSN: 2587-4713; UDC: 620.9 (051) (0.034)

DOI PREFIX: 10.36962 / ECS

Economics

<https://scia.website/index.php/ecs>



**Representation of the International Diaspora Center of Azerbaijan in Georgia. NGO (Georgia Tbilisi)** is publishing scientific papers of scientists on Website and in Referred Journals with subjects which are mentioned below:

© **Southern Caucasus Scientific Journals**

ISSN: 2346-8068; E-ISSN: 2346-8181; UDC: 611-618

DOI PREFIX: 10.36962/ALISJMSC

Ambiance in Life-International Scientific Journal in Medicine of Southern Caucasus.

<https://scia.website/index.php/AILISJMSC>

ISSN: 2298-0946, E-ISSN: 1987-6114; UDC: 3/k-144

DOI PREFIX: 10.36962/CESAJSC

The Caucasus-Economic and Social Analysis Journal of Southern Caucasus

<https://scia.website/index.php/CESAJSC>



### [Review Article Template]

[This Review Article Template has the standard set of headings that make up different sections of the manuscript.]

[Below the headings the dummy text is given in red color.]

[Delete the dummy text in red color and replace it with your own text.]

[You can directly type your text here or copy your text from your file and paste it at the appropriate place.]

[Delete any section or heading you do not need.]

[If you need more than one set of headings, you can copy and past the headings.]

[Keep the right margin of the text ragged. Do not use “Justify text” command.]

[Please make sure that the reference format conforms to the journal reference style.]

[DO NOT FORGET TO FREQUENTLY SAVE THIS FILE WHILE WORKING ON THIS MANUSCRIPT TO PREVENT LOSS OF DATA.]

[DOUBLE SPACE THE MANUSCRIPT THROUGHOUT (Title Page need not be double spaced)]

**[DELETE ALL TEXT IN RED COLOR BEFORE SUBMITTING YOUR MANUSCRIPT.]**

**TITLE: PAPER TITLE** (Title, Times New Roman, bold, 14)

[Enter here the title of manuscript in sentence case (14 Bold)-capital letter.]

**AUTHORS:** [List here all author names; identify authors with author affiliations with superscript Arabic numerals]

**[First Name Middle Name Family Name<sup>1</sup>, [First Name Middle Name Family Name<sup>2</sup>**

**[First Name Middle Name Family Name<sup>3</sup>], [First Name Middle Name Family Name<sup>4</sup>**

(Author(s), Times New Roman, bold, 12)

**AFFILIATIONS:** [List here all author affiliations including position in the department, department, institute, city, state, country, email; identify authors with author affiliations with superscript Arabic numerals]

<sup>1</sup> [Author affiliations – position, department, institute, city, state, country, email ID, ORCID ID]

<sup>2</sup> [Author affiliations – position, department, institute, city, state, country, email ID, ORCID ID]

<sup>3</sup> [Author affiliations – position, department, institute, city, state, country, email ID, ORCID ID]

(Affiliation1,2,3 Times New Roman, 10)

### **CORRESPONDING AUTHOR DETAILS**

[Give here name, contact address, contact phone number, email and fax number of the corresponding author, Corresponding author must be one of the authors of the manuscript.]

[First Name Middle Name Family Name]

[Complete Mailing Address]

[City]

[State]

[Country]

[Postal Code]

[Contact Phone Number - Country prefix followed by full phone number]

[Contact Email]

[Fax number - Country prefix followed by full fax number]

(Affiliation for CA Times New Roman, 10)

**Short Running Title:** [Give here a short title of the paper, less than 40 characters] (Times New Roman, 10)

Guarantor of Submission: The corresponding author is the guarantor of submission.

[If an author other than the corresponding author is the Guarantor of Submission, delete the previous line, write the name of the individual and give the details below.]

(Times New Roman, 10)

### **Guarantor of Submission (if not the corresponding author)**

[Give here name, contact address, contact phone number, email and fax number of the guarantor of Submission, if other than the corresponding author]



[First Name Middle Name Family Name]

[Complete Mailing Address]

[City]

[State]

[Country]

[Postal Code]

[Contact Phone Number - Country prefix followed by full phone number]

[Contact Email]

[Fax number - Country prefix followed by full fax number]

(Times New Roman, 10)

### **SUMMARY (OPTIONAL)** (Times New Roman, 12 Bold)

[This section of the manuscript is optional. It is up to the author(s) to decide whether to include this section in the manuscript.]

["Summary" of your work is a short description of the work being presented in your article. It is longer than the "Abstract" which is limited to 250 words for all types of articles. After reading the "Summary" a reader should be able to understand the background information, why the work is being reported, what the significant results are, and what may be the explanation for the results.]

[Although writing an additional section in the form of "Summary" of your work may seem like an extra burden on your time and resources, it will be an important part of your manuscript especially for articles which are highly technical. Many times readers who are students, or who are not expert on the subject of the article or readers who are experts but in related subjects may skip reading an article if on first look the article appears to be very technical with lot of data, facts and statistics. Some other articles may not be easy to understand, on first reading, even by experts in the subject of the article. The "Summary" section will help the readers in understanding the results of your study.]

- The recommended word limit for "Summary" for Review Article is – 800 words (2 pages)
- When writing the "Summary" use as simple and as non-technical language as possible. Write the "Summary" as if you are explaining your study to a first year graduate student.
- Do not repeat or copy text verbatim from the main text of your manuscript. "Summary" will probably be the most important and most widely read part of your manuscript. Write it fresh as a separate section.
- In the "Summary" give: 1) relevant background information, 2) why the work was done, 3) what were the significant results, 4) possible explanation of the results.
- Only give the significant results of your study and give their possible explanation.
- Do not compare your results with other studies.
- Do not give references in the "Summary" section. First reference should start in main text of your manuscript from the "Introduction" section.

**TITLE:** [Enter Here the Title of Manuscript in Sentence Case.]

**ABSTRACT** (Times New Roman, 12)

**OBJECTIVE:** (Times New Roman, 12)

**METHODS:** (Times New Roman, 12)

**RESULTS:** (Times New Roman, 12)

**CONCLUSION:** (Times New Roman, 12)

[Structured or unstructured abstract as required by the manuscript]

[Less than 250 words for all manuscripts]

**Keywords:** [Four to six keywords for indexing purpose] (Times New Roman, 12)

**TITLE:** [Enter here the title of manuscript in sentence case.] (Times New Roman, 12)

[Type or copy/paste the manuscript text under the headings below. References are in square brackets, e.g. [1, 2, 3] and figures/tables are in parenthesis, e.g. (Figure 1) or (Table 1)]



**INTRODUCTION** (Times New Roman, 12 Bold)

[Type or copy/paste your text here]

(Times New Roman, 12)

[After “INTRODUCTION” rest of the headings or subheadings can be as required by the manuscript]

[Heading (level 1 heading is in CAPITALS followed by text)] (Times New Roman, 12 Bold)

DDDD DDDD DDDDDDD DDDDDDDDD DDDDDDD DDDDDDD DDDDD DDDDD DDDDD]

(Times New Roman, 12)

[Subheading (level 2 heading is in sentence case, followed by text) (Times New Roman, 12 Bold)

DDDD DDDD DDDDDDD DDDDDDDDD DDDDDDD DDDDDDD DDDDDDD DDDDDDDDD]

(Times New Roman, 12)

[Subheading (level 3 heading is in sentence case, in line with text) (Times New Roman, 12 Bold) DDDD DDDD

DDDDDD DDDDDDDDD DDDDDDD DDDDDDD DDDDDDD DDDD DDD D D DDDD DDDDDDD D D DD DD]

(Times New Roman, 12)

**CONCLUSION** (Times New Roman, 12 Bold)

[Type or copy/paste your text here]

(Times New Roman, 12)

**CONFLICT OF INTEREST** (Times New Roman, 10 Bold)

[Declare here if any financial interest or any conflict of interest exists. ]

(Times New Roman, 10)

**AUTHOR’S CONTRIBUTIONS** (Times New Roman, 10 Bold)

[Enter name of authors followed by author’s contribution.]

[At least one task from each group is required from an individual to be listed as author of the article, delete anything which is not applicable.]

(Times New Roman, 10)

[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)

[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)

[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)

[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)



[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)

[First Name Middle Name Family Name]

Group1 - Conception and design, Acquisition of data, Analysis and interpretation of data

Group 2 - Drafting the article, Critical revision of the article

Group 3 - Final approval of the version to be published

(Times New Roman, 10)

**ACKNOWLEDGEMENTS** (Times New Roman, 12 Bold)

[List here any individuals who contributed in the work but do not qualify for authorship base on the above criteria.]

**REFERENCES** (Times New Roman, 12 Bold)

[List here all the references in the order of citation in the text. List all authors if less than six. If more than six authors, list the first six followed by “et.al.”]

[General style of reference is:]

[Surname First Name Middle Name, Surname First Name Middle Name. Title of article. Journal Name

Year;Volume(Number):Full inclusive page numbers.]

**[NO SPACES BETWEEN - Year;Volume(Number):Full inclusive page numbers. ]**

1. [Surname First Name Middle Name, Surname First Name Middle Name. Title of article. Journal Name Year;Volume(Number):Full inclusive page numbers.]

2. [Surname First Name Middle Name, Surname First Name Middle Name. Title of article. Journal Name Year;Volume(Number):Full inclusive page numbers.]

3. [Reference 3]

4. [Reference 3]

5. [Reference 3]

6. [Reference 3]

(Times New Roman, 12 Bold)

**SUGGESTED READING** (Times New Roman, 12 Bold)

[In this section include references to articles, abstracts, books, manuals, web pages, videos, presentations or any other material you have referred to in planning and writing your study which are either not directly relevant to your study or not important enough to be cited in the text and given in the "References" section.]

[Include any number of items in this section, but we suggest you to limit the number to 15 or less for review articles and original articles and 10 or less for case series and case reports.]

**[Please DO NOT cite the items in the "Suggested Reading" section in the text of your manuscript.]**

**TABLES** (Times New Roman, 12 Bold)

[All tables should be double spaced. Each table on a separate page]

Table 1: [Type or copy/paste here a brief descriptive title of the table DO NOT use full-stop after table sentence]

(Times New Roman, 12)




**Abbreviations:** [Give here full form of all abbreviations used in the table. Give the full form even if it has been explained in the text.]

[All tables should be double spaced. Each table on a separate page]

**Table 2:** [Type or copy/paste here a brief descriptive title of the table DO NOT use full-stop after table heading] (Times New Roman, 12)


**Abbreviations:** [Give here full form of all abbreviations used in the table. Give the full form even if it has been explained in the text.]

**FIGURE LEGENDS** (Times New Roman, 12 Bold)

**Figure 1:** [Give here a description of figures/image, include information like contrast media, stain, chemical, power used, protect patient privacy at all times. End the legend with full stop.]

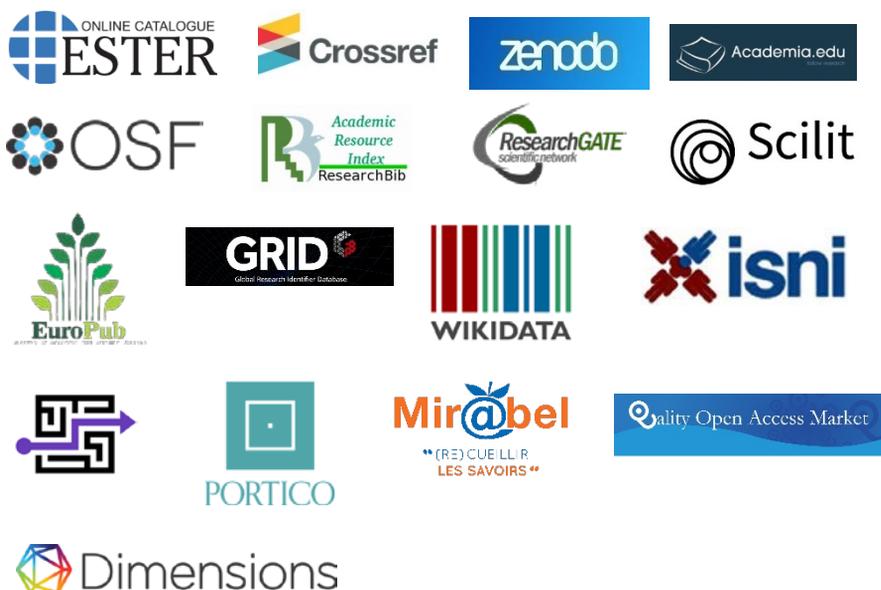
(Times New Roman, 12)

**Figure 2: (A)** – [If a figure has many parts give here a description of part of figures/image, include information like contrast media, stain, chemical, power used, protect patient privacy at all times;] **(B)** – [Give here a description of part of figures/image, include information like contrast media, stain, chemical, power used, protect patient privacy at all times. End legend with full stop.]

(Times New Roman, 12)



## JOURNAL INDEXING



Accepted for publication in this edition 20.03.2022

© THE BALTIC SCIENTIFIC JOURNALS

ISSN: 2733-2713; E-ISSN: 2733-2721; DOI: 10.36962/SWD

©**Publisher:** Sokhumi State University. R/C 405282260.

**Registered address:** 26, Politkovskaya street, 0186, Tbilisi, Georgia.

©**Publisher:** Chernihiv Polytechnic National University. R\C 054607925261

**Registered address:** 95, Shevchenko street, 14035, Chernihiv, Ukraine.

©**Publisher:** All Ukrainian Institute of Eurasian Research And Eastern Science. R/C 39783993

**Registered address:** 3B, Petra Hryhorenka Avenue, office 111, Kyiv, 02068, Ukraine.

©**Publisher:** NGO International Center for Research, Education & Training. R/C 80550594

**Registered address:** MTÜ Rahvusvaheline Teadus-, Haridus- ja Koolituskeskus.

**Registered address:** Narva mnt 5, 10117 Tallinn, Estonia.

ISSN: 2733-2713; E-ISSN: 2733-2721

DOI: 10.36962/SWD

© THE BALTIC SCIENTIFIC JOURNALS

# SOCIOWORLD

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

REFEREED & REVIEWED JOURNAL

VOLUME 07 ISSUE 01 2022

<https://bsj.fisdd.org/index.php/swd>

