

**REPUBLIC OF AZERBAIJAN**

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**PROBLEMS OF IMPROVEMENT OF ORGANIZATIONAL  
AND ECONOMIC MANAGEMENT MECHANISMS OF  
BEEKEEPING IN AZERBAIJAN**

Specialty: **5312.01 - Economics**

Field of science: **Economic sciences**

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**ABSTRACT**

Of the dissertation for the degree of Doctor of Science

**Ganja – 2022**

The dissertation work was carried out at the Azerbaijan Scientific-Research Livestock Institute of the Agrarian Science and Innovation Center of the Ministry of Agriculture of the Republic of Azerbaijan.

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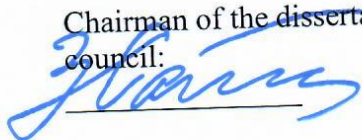
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## GENERAL CHARACTERISTICS OF RESEARCH

**The actuality.** At present, the main objectives of the economy are balancing its various fields, the constant improvement of product supply, providing agriculture with raw materials for industrial applications. Having increased the export potential of the economy, the level of the well-developed countries can be reached. Now Ilham Aliyev continues fulfilling the economic policy of his predecessor, the National Leader of the country Heydar Aliyev.

One of the branches of agriculture is beekeeping. The organization and improvement of mechanisms for managing the economy of beekeeping are becoming urgent and for the effective management of this economy, solid foundations are needed. On April 10, 2015, the President of the Republic, Ilham Aliyev, at a meeting of the Cabinet of Ministers dedicated to the results of socio-economic development in the first quarter of 2017 and the challenges ahead said: who did not ensure their safety will face a big problem. To resolve the problem, the most reasonable way is to use innovative methods.

In continuation of reforms in the field of agriculture in the decree of December 6, 2016 "strategic roadmap for the production and processing of agricultural products in Azerbaijan was enforced. This map depicts the production and processing of agricultural products, food safety coordination, assessment program, preparation and implementation of new projects, identification of emergency resilience, and performance issues.

Today, beekeeping farms have a specific role in meeting the needs of the population in food products, despite the favorable soil and climatic conditions for the development of this sector in our country, the population cannot fully meet the demand for food and other beekeeping products, the organization of beekeeping production in the country and the study of aspects of improving economic governance has become an objective necessity.

According to international experts, our country is still one of the countries with the weakest supply of beekeeping products to its population. However, according to the statistics of 2020, per capita production of beekeeping products in accordance with medical

norms has already been ensured in our country. However, exports are very weak, and the management of the sector's infrastructure has not been fully resolved. These cases have not been adapted to a single market-based governance mechanism.

Since the scientifically substantiated high, effective methods of economic management of beekeeping, which are an integral part of the agrarian sector, have not yet been created, the strategic goal of this sector has not been achieved. In this regard, it is inevitable to conduct a new methodological approach to the study of the problem, the management of beekeeping as a result of reforms, the study of its content and essence.

It is no coincidence that the problems of organization, management, especially economic management, have always been the subject of research by world economists, including economists of our country. This topic is still relevant today.

The economists of the republic in the monographs and scientific works on these issues published since the early 1990s, Z.A.Samadzade, E.R.Ibrahimov, I.H.Aliyev, B.H.Atashov, E.A.Guliyev, I.H.Ibrahimov, M.J.Huseynov, N.A.Javadov, A.B.Abbasov, A.F.Abbasov, A.H.Nuriyev, V.M.Niftullayev paid special attention to the study of the problem.

The economic study of beekeeping, which is one of the components of the agrarian sector and one of the most ancient and traditional fields in the world, is theoretically relevant today.

The field of beekeeping has been studied by economists of many foreign countries, including, O.Dmitriyevich, O.Grobov, V.Savchenko, A.Shukov, E.Popov, V.Ovchinnikov, N.Krivsov and others object of scientific research.

Although research has been conducted in the field of biology of beekeeping, bee diseases, organization of breeding work, various issues have been touched upon in the research work, but economic management and economic mechanisms in this field have not been studied. The study of the issues arising from the need to solve the economic problems of each sector in the context of market relations requires the study of economic mechanisms in beekeeping, one of the leading sectors of agriculture. From this point of view, the doctoral

dissertation on "Problems of organization of beekeeping and improvement of economic management mechanisms in Azerbaijan" was implemented as a complex research work.

**Aim and objectives of the thesis.** The primary goal of the work is to study theoretical and methodological foundations of improving the organizing and management of apiculture in Azerbaijan. To accomplish this goal, the author put forward and solved the following objectives:

- Studying of the theoretical and methodological foundations of the organizing of the beekeeping and improvement of the mechanisms of control of the economy in modern times;
- Analysis and prognosis of the current situation of the development of beekeeping in the agricultural sector and factors which have an impact on it;
- Introducing and explaining the importance of following the law about the forming and developing of beekeeping;
- Analysis of the location of the beekeeping organizations by the climate and environmental conditions and flora of the regions and making the right decisions;
- Reforms concerning organizing and management of the apiary and the scientific justification of their influence on the development of the beekeeping;
- Preparation of the properly reasoned suggestions and the role of the state financial support for the promotion of entrepreneurship in the field of beekeeping;
- Consideration of the directions of the delivery of the products of the beekeeping to consumers and progressing of the marketing;
- Consideration of the directions of investing, research, and enhancement of the sources of funding for providing improvement for the mechanisms of the economic management of the beekeeping;
- Determining of the directions for providing state apiary with the financial support and loan proceeds;

**Research methods.** The problem was solved by applying theoretical and economic analysis methods. The theoretical and methodological foundation of the study is based on the works of the prominent economists of the world and our country. These are the

Constitution of Azerbaijan, "Act about beekeeping in Azerbaijan", public statements by the National Assembly of Azerbaijan, laws, and regulations. The study is based on existing regulations on economic reforms. In the dissertation work, such methods as economic analysis, comparison, dynamics, statistical grouping, observation, etc. were used.

**The main provisions of the defense:**

- economic report developed to substantiate the improvement of the organization and mechanisms of economic management of beekeeping, depending on the elements of the economic management system and the factors affecting it;
  - to study the characteristics of ensuring sustainable development in the agricultural sector and to substantiate its role in food security;
  - methodology of organization and management of beekeeping farms and application of corporate governance in this field;
  - substantiation of the factors determining the location of beekeeping farms in the regions under the current situation and natural-climatic conditions;
  - research of the role of entrepreneurship in the organization of beekeeping, state support, and methods of improving regulation;
  - model of creation of modern beekeeping farms, organization based on industry and its application scheme;
  - scientific substantiation of the organization and improvement of marketing of beekeeping products;
  - scientific substantiation of improvement of investment and financial mechanisms of beekeeping;
  - model and application scheme for improving the price mechanism in improving the financial condition of beekeeping producers.

**The scientific novelty of the research is:**

- For the first time in our republic, the organization of beekeeping and management mechanisms of the economy has been fully disclosed;
- The essence and substantive elements of ensuring sustainable development of the agricultural sector have been clarified;
- The international experience has been analyzed and summarized in

the field of a form of organizing of beekeeping and the directions of their use in Azerbaijan have been determined.

- The current state of development of apiary in the agricultural sector and the factors influencing it are analyzed, promising directions of development are indicated;
- The location of the beekeeping organizations is scrutinized by the climate conditions and vegetation of the regions and reasonable suggestions are given;
- The scientifically grounded proposals revealing the importance of the state-funded support for the development of entrepreneurship in the field of beekeeping;
- The directions have been worked out to improve the delivery and sale of the beekeeping products to consumers;
- The sources of investments and financing have been considered and directions for improvement have been worked out, ensuring the nationalization of the mechanisms of economic management of beekeeping farms;
- Directions have been identified which explain the necessity of boosting state-funded support and loan services for beekeeping;
- Comprehensive proposals have been made to improve the mechanism for managing the economy and increase the efficiency of the industry as a whole, for the effective use of the potential of the regions (*economic, logistics, natural*);

**The theoretical and practical significance of the study** is based on existing economic theories, works of world and national economists, the Law of the Republic of Azerbaijan "On Beekeeping", public and private organizations engaged in beekeeping, the Azerbaijan Beekeepers Union, regional beekeepers' associations, beekeepers. legal documents, decrees of the President of the country, decisions, and orders of the Cabinet of Ministers. Theoretical knowledge obtained during the research can be used in the teaching process and research work of scientific and pedagogical staff on beekeeping.

The practical significance of the results of the research was discussed and approved by the Union of Beekeepers of Azerbaijan, the Scientific and Technical Council of the "Beekeeping" Center of

the Azerbaijan Livestock Research Institute, and the application was considered expedient. (Protocol №5, 22 June 2016). In addition, the dissertation was approved by the North Caucasus Federal University of the Stavropol, Russia.

**Approbation and application.** The results of the study were discussed in Contemporary features of formation and development of the beekeeping farms in Azerbaijan // - Materialy X miedzynarodowej aukowi-praktyczney konferenci 07-15 marca 2014 roku; Beynəlxalq Elmi-Praktik Konfrans (ADAU-un 85 illiyinə həsr olunmuş 2014-cü il Gəncə) “Azərbaycanda regionlar üzrə arıçılıq təsərrüfatlarının yerləşdirilməsi üçün ilkin şərtlər”; Modern research and development Philodelfia, USA № 09(29) - 2015 “Improving the delivery and marketing of beekeeping products to consumers”; Monoqrafiya (AzETİİ, Gəncə, 2015) “Arıçılıq təsərrüfatlarının təşkili və idarəetmə mexanizminin təkmilləşdirilməsi”; Materials of the International Scientific Practical Conferense (2015 Marseille, Fransa) “About regulation of beekeeping farm prices by the state”; “Azərbaycanda arıçılıq Arıçılığın inkişafına dair Azərbaycan - Türkiyə Elmi-Tədqiqat əməkdaşlığı” toplantısı - II (9 iyun 2015, Gəncə) “Azərbaycanda arıçılıq təsərrüfatlarının müasir vəziyyəti və onun inkişaf istiqamətləri”; Beynəlxalq Elmi-Praktik Konfrans (2015, Gəncə ATU) “Arıçılıq təsərrüfatlarının yerləşdirilməsi və sənaye əsasında təşkili”; Components Scientific and Teehnological Progress (№3(25) 2015) “Curent State and Development of Beekeeping in Azerbaijan”; Экономика и предпринимательство (№12 Москва, 2015) «Основные направления организации пчеловодства на современном этапе»; Beynəlxalq Elmi-Praktik Konfrans” (ATU, Gəncə, 2016) “Arıçılıq təsərrüfatlarının iqtisadi səmərəliliyinə ekoloji amillərin təsiri”; Наука и бизнес. Пути развития. (Москва, 2016) «Современные состояние и развитие пчеловодство в Азербайджане»; Вестник Омского Регионального Института научно-практический журнал (Омск, №1 2017) «Повышения инвестиционных вложений в пчеловодство»; Monoqrafiya Palmarium academic publishing «Организация и управление пчеловодства в Азербайджане» 2017 стр.239; The efficiency of the ecological factors to the economical productivity the



Apiculture. №1, 2018, Australian Journal of Education and Science; “Müasir arıçılıq təsərrüfatlarının təşkilinin bəzi məsələləri” Kənd Təsərrüfatının İqtisadiyyatı Elmi-Tədqiqat İnstitutunun elmi əsərləri,. 2018. № 1; “Arıçılığın inkişafı və onun turizmə təsiri” Kənd təsərrüfatının iqtisadiyyatı №2(32), 2020.

**Name of the organization where the dissertation work is performed.** The research was carried out at the Beekeeping Center of the Azerbaijan Livestock Research Institute.

**The total volume of the dissertation with the indication of the volume of the structural units separately.** The dissertation consists of an introduction, four chapters and the outcomes. 156 books are mentioned in the bibliography. The contents of the dissertation consist of 229 pages of computer text, including introduction 11 pages – 22408 characters; Chapter I 41 pages 86678 characters, Chapter II 55 pages 110656 characters, Chapter III 49 pages 99693 characters, IV Chapter 50 pages 98751 characters, the outcomes 9 pages 20304 characters. There are 13 schemes, 2 pictures and 9 charts. The volume 229 pages of computer writing and the total volume 462350 characters (441659 characters excluding bibliography and appendices) comprise the dissertation.

## **THE MAIN CONTENTS OF THE DISSERTATION**

In the introductory part of the dissertation, the relevance of the topic is substantiated, purpose, objectives, theoretical and practical significance, scientific novelty, approbation, and use of research results are explained.

**The first chapter:** - "Theoretical and methodological foundations for improving the organization of beekeeping and management mechanisms of the economy in Azerbaijan" is devoted to the study of issues. The chapter examines the essence and content elements of ensuring sustainable development of the agricultural sector, development of beekeeping as an important issue in the agricultural sector and management of the development of regional infrastructure.

It is well known that in a market economy the agricultural sector is characterized by new content and functioning in important socio-

economic conditions.

Nowadays, special attention is paid to the development of the non-oil sector in our country in terms of ensuring food security, meeting the needs of the population for food products in the required quantity and quality.

Beekeeping is one of the most ancient forms of farming in Azerbaijan and is one of the most ecologically safe types of agriculture. Today, special attention is paid to the development of beekeeping in the world, including in our country, where food security is of global importance.

It is more expedient to carry out the formation and placement of beekeeping farms under the following conditions:

- placement of apiaries close to valuable plant resources;
- Proper selection of the area for the placement of hives;
- purchase and transportation of bees following norms and rules;
- organization of supply of beekeeping farms with beehives and beekeeping equipment.

The selection and placement of structures in the agricultural sector are important factors. If we pay attention to the characteristics of infrastructure in the agricultural sector, we can see that the structural policy in this area, tasks can be successfully implemented if special attention is paid to each of its constituent elements separately and interconnected with each other.

The tax policy pursued by the state in this area is a factor that gives a strong impetus to the development of production structures operating in the agricultural sector in current conditions. Thus, production structures working in agriculture are exempt from all other types of taxes and payments, except for land tax, which shows that they have more favorable conditions than before in terms of increasing financial capacity and large-scale reproduction.

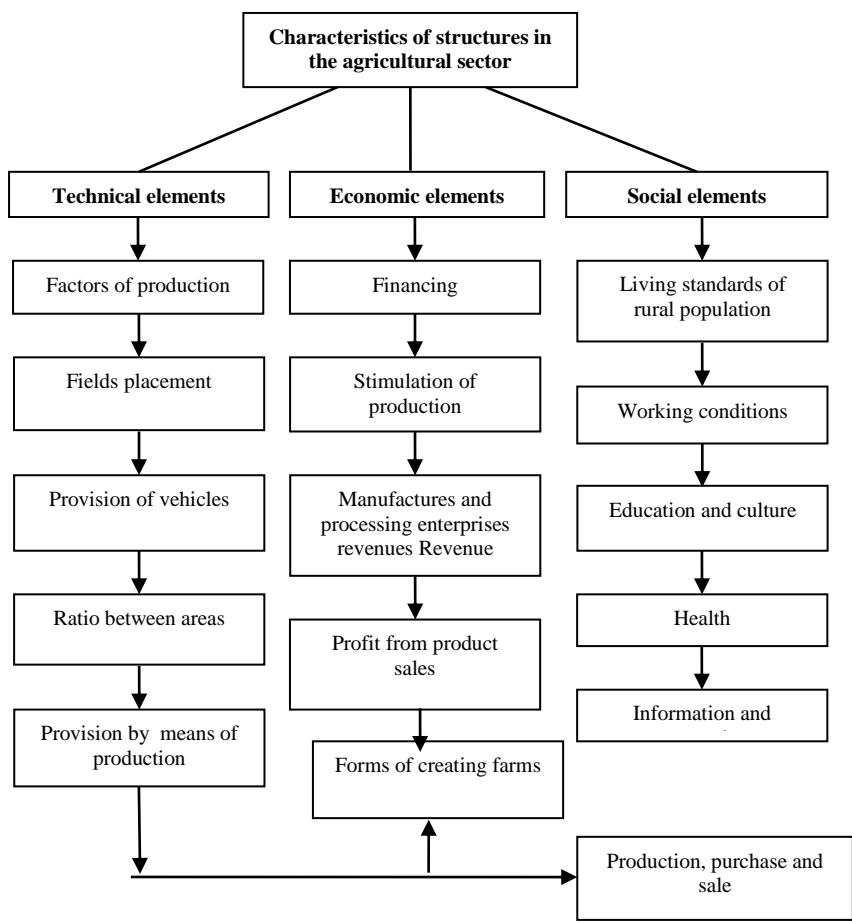
The law of value underlies the functioning of the economic elements of structural policy in the agricultural sector. Unfortunately, the requirements of this law are not observed in the agriculture of the national economy. Thus, the prices of agricultural products do not cover the socially necessary costs of their production and are not sufficient for large-scale reproduction.

At present, the agrarian structural policy pursued in our country is aimed at creating elements following the requirements of modern times, in this area, to eliminate the existing inconsistencies between the elements and to adapt them to the new socio-economic conditions.

The structural policy implemented in the agriculture of the country, taking into account the specific features of this sector, aims to achieve the following goals: modern logistics of the sector, providing the population with high quality and necessary food products, processing industry; creation of sustainable production conditions; supply and development of the agrarian market with goods; formation of opportunities for solving the living standards and socio-economic problems of the rural population, etc.

Taking into account the above, Scheme 1 presents a classification of the structures of the agricultural sector.

Weak sales and production infrastructure in the agricultural sector, lack of formation of the market of material and technical resources that meet the requirements of the specific features of this sector, etc. Families who have received land shares for various reasons prefer to unite in collective enterprises and engage in entrepreneurial activities. As the difficulties faced by the families who receive land shares during the production and sale process are eliminated, the production structures operating in the agrarian sector will also change and new technical elements will be formed that is adequate to the agricultural policy.



**Scheme 1. Elements that characterize structures (formed by the author)**

In the current context of ongoing reforms, the following tools may be considered appropriate to address the challenges of agrarian structural policy:

- structural changes that can ensure the diversification of the economy in the agricultural sector and the stimulation of the agriculture;
- to achieve coordination of farms of different organizational

and legal forms by further development of private entrepreneurship in the agriculture;

- to increase the incomes of employees in this field by increasing labor productivity in the agrarian sector and to bring the incomes of employees here to the level of incomes of other sectors;

- providing scientific advice to those engaged in the production of agricultural products and employees of enterprises processing these products;

- organization of marketing as a concept of production and sales process management in the agrarian sector and providing information about it;

- state support of financial support to local producers and protection of their interests to ensure economic security and food security as an integral part of it;

- implementation of improvement of social infrastructures of the agrarian sphere;

- formation of the agrarian market following modern requirements and increasing the competitiveness of producers;

- application of guaranteed prices for certain types of agricultural products (grain, cotton, tobacco, meat, etc.) and allocation of subsidies for the production of livestock products that play an irreplaceable role in ensuring food security of the population;

- development and implementation of state programs for efficient use of agricultural production potential. Such a program should also be considered for the development of agricultural engineering in our country, which can provide agricultural producers with modern agricultural machinery.

According to Professor B.H. Atashov, structural changes in the economy primarily serve the formation of a new system. The establishment of interactions between the elements that make up the system is assessed as the establishment of a new system. In my opinion, it is necessary to systematically build the infrastructure that will serve the development of beekeeping research.

The agricultural sector is more multi-sectoral than other sectors and mainly concentrates on the activities of the interrelated and

interacting sub-sectors of agriculture and industry, as well as the infrastructure that serves them.

**The second chapter** It is called "Analysis and assessment of the current state of beekeeping in Azerbaijan", which examines the current state of beekeeping, regional features of the organization of beekeeping in the country and the factors determining the organization and management of beekeeping.

Research shows that in 1960-80, the organization of specialized beekeeping state farms in the country, the provision of practical assistance to beekeeping by specialists has significantly improved. Initially, the existing small beekeeping farms were established under collective and state farms, and later developed and turned into large beekeeping farms.

According to our observations, in the spring-summer seasons of 2007-2011, 25-60% of bees perished annually in Azerbaijan, in the north-eastern plain zone of the Greater Caucasus. In the winter and spring of 2008, 30% of bees perished in the foothills of the Greater Caucasus, and 60% in the fall, and some apiaries lost 90% of their bee families.

Beekeeping is also a high-yield production that does not require large investments. Beekeeping proves itself in the form of a small farm business for 1.5-2 years, and if equipped with all kinds of infrastructure and certain technology, the field guarantees its own costs. Today, the development of beekeeping in our country can provide more than 6-8 thousand rural families with a good income. Let's take a look at the comparison of production potential, minimum demand and supply indicators of beekeeping products in our republic:

Table 1 presents the existing natural-climatic conditions and another potential for the development of beekeeping in our country that is not used effectively.

The percentage of potential opportunities for beekeeping production in our country is low. This is influenced by many objective and subjective factors. One of these factors is the long-occupied Karabakh region, which is especially important for the development of beekeeping due to its natural conditions and vegetation.

**Table 1. Comparison of potential, minimum demand and supply indicators**

№	Name of indicators	Country's potential	Country's minimum demand	Current situation in the country	Capacity utilization	Minimum demand satisfaction
1	2	3	4	5	6	7
1	Bee family, amount	600000	400000	240000	40,0	60,0
2	Female bee, amount	300000	70000	4000	1,3	5,7
3	Bee pack, amount	20000	10000	1000	5,0	10,0
4	Honey, t	15000	4500	1600	10,6	35,5
5	Pollen, t	250	180	0,5	0,2	0,27
6	Baramum, t	12	6	0,8	6,7	13,3
7	Honey milk, t	10	4,5	0,06	0,6	1,3

**Source:** *It has been compiled on the basis of existing natural-climatic conditions and other potential opportunities for the development of beekeeping in our republic and expert opinions and opinions in this field.*

In 2020, the Supreme Commander-in-Chief Ilham Aliyev the liberation of our occupied territories from the clutches of the enemy by our glorious army will contribute to the development of beekeeping in these areas and to the development of beekeeping in our country in general.

It is clear from the research that although certain measures are being taken in the field of beekeeping in our country, in my opinion, there are many problems in this area that need to be addressed:

In our republic in modern times

The problems of beekeeping can be classified as follows:

In general, the problems of beekeeping are systematically outlined in Scheme 2:

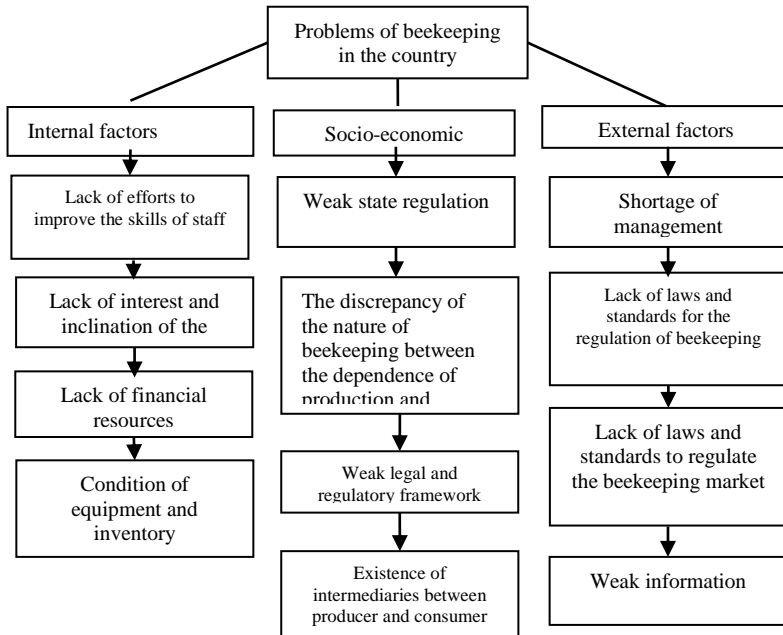
- Due to internal factors;
- Due to external factors.

Internal factors include:

Natural - restrictions on the use of honey potential, the critical state of the gene pool of honey bees;

- Lack of efforts to improve the skills of staff, lack of interest and inclination of young people in this field;

- weak financial resources, obsolete equipment and inventory and lack of modern equipment.



**Scheme 2. Problems of beekeeping in the country (author's research results).**

External factors are followings:

- management shortcomings in the organizational and management system;
- lack of laws and standards important for the regulation of enterprises and the market of beekeeping products;
- weak database.

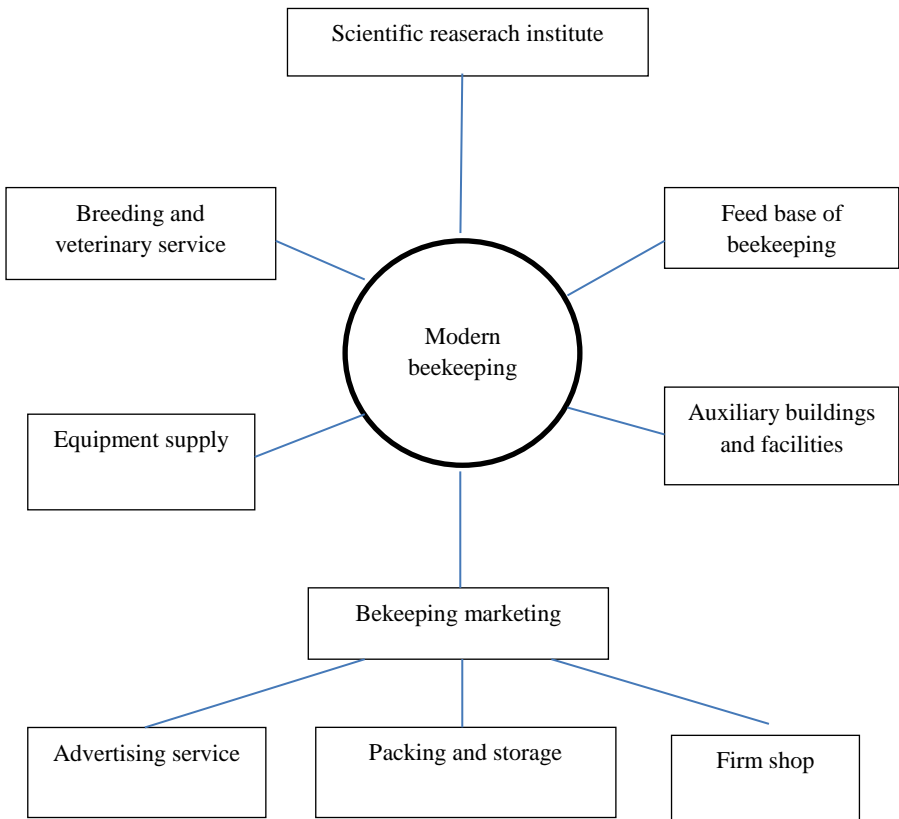
Internal factors of beekeeping have a high potential and can be developed, while external factors are characterized by relatively weak development and manifest themselves as retarded development.

The current crisis in beekeeping in our country can be characterized as a decline in beekeeping production and an increase in socio-economic problems. These problems are mainly:



- low level of government regulation;
- inconsistency of production and processing enterprises, the dependence of agriculture on nature;
- weak regulatory framework;
- the presence of a larger number of intermediaries between the producer and the consumer.

Scientific research centers have a special role in solving the problems of beekeeping in our country.



**Scheme 3. Formation and relations of modern beekeeping farms (compiled by the author).**

Scheme 3 presents the creation of modern beekeeping farms,

specialists in various fields must work together and have the infrastructure to serve the farms.

However, it is the creation of favorable conditions for the development of this field in our republic. We believe that to develop this field, scientists should develop their joint concepts and conduct research in the direction of creating modern beekeeping farms. Professionals from various fields must work together to create these types of farms:

- biologists discuss biological issues in this area;
- ecologists, environmental factors that will affect the field;
- republican and local executive authorities;
- economists, economic issues of the industry, etc.

The fact that work in the beekeeping industry is carried out in the open air does not allow to fully prevent the consequences of natural disasters.

The location, development, and production of beekeeping in the country directly depend on the vegetation in different regions and the nectar yield per hectare of vegetation in the area. The specific influence of crops on beekeeping development and the formation of bees has always been in focus.

As can be seen from Table 2, the number of bee families and their growth dynamics vary in different economic and botanical-geographical regions of the country due to the richness of plants and other features.

According to the State Statistics Committee, as of January 1, 2020, there are 542,800 bee families (units) in the country. The average annual productivity of a bee family in the territory of our republic is 10-12 kg in favorable years and 3-5 kg in unfavorable years. In 2019, about 5.8 thousand tons of honey was produced from each bee family with an average of 10.7 kg.

The process of industrialization of beekeeping is a complex and long-term process, requiring the strengthening of the material and technical base, the application of advanced methods of production technology.

**Table 2.** Dynamics of bee families in economic regions of Azerbaijan  
(family)

№	Economy Regions	Years							
		2010	2012	2014	2015	2016	2017	2018	2019
1	Absheron	849	980	1080	1051	1155	951	3010	2750
2	Ganja-Gazah	33434	34314	35431	37107	35000	39594	73754	78144
3	Sheki-Zakatala	31886	37716	39820	41625	44037	46211	101597	106044
4	Lankaran	24770	28059	30515	32483	33595	38218	69081	60774
5	Guba-Hachmaz	12215	13627	14677	15137	15120	16194	45806	45983
6	Aran	5464	6198	7083	7553	8068	8507	37015	41394
7	Upper Karabakh	5264	6786	8021	8136	8054	8407	25829	26341
8	Kelbajar-Lachin	11515	15946	18509	19414	19439	20591	37961	37888
9	Mountainous-Shirvan	15143	16542	17633	18331	21089	21943	42710	43741
10	Nakhchivan	52685	65183	69422	70396	70537	71068	72350	99798
	Total:	193225	225355	243046	251233	<b>260094</b>	<b>271682</b>	<b>500980</b>	<b>542817</b>

*Source: Compiled by the author using the data of Baku 2020, State Statistics Committee of Agriculture of Azerbaijan. pp.636-637.*

The use of inter-sectoral and inter-farm specialization in the transition of beekeeping to an industrial basis is of particular importance. It is more expedient to choose the following directions during such specialization:

- scoring;
- honey-pollinator;
- beekeeping.

As beekeeping, crop production and weather conditions are organically linked, it is necessary to specialize and make efficient use of natural resources and manpower in order to get the maximum yield with little effort and money.

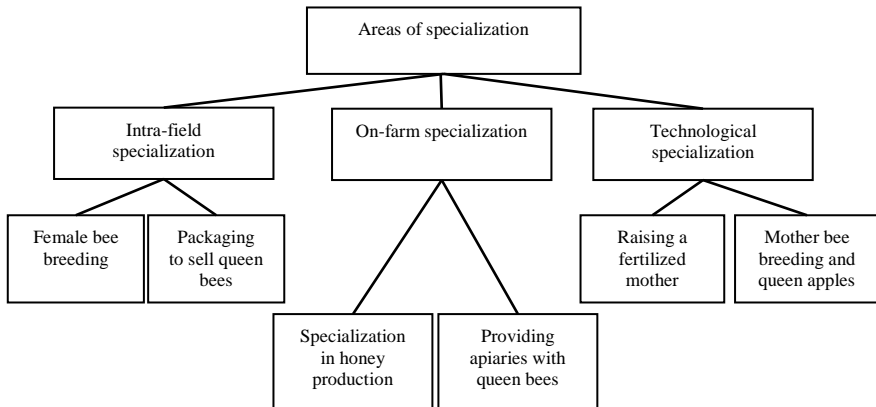
In modern conditions, specialization in beekeeping is carried out in several directions:

Inside the field specialization. This specialization applies only to the purchase of one type of product.

- In-farm specialization. Such specialization is carried out within the farm on a certain product.

- Technological specialization. In any beekeeping farm, the activity of the first production units, which carry out different production processes separately to obtain a certain type of product, is provided.

The specialization of beekeeping can be schematically grouped as follows:



**Scheme 4. Directions of specialization in beekeeping in modern conditions (compiled by the author).**

From Scheme 4. As can be seen, it is expedient to specialize in 3 directions. In general, taking into account the above, the organization and management of beekeeping in our country today attracts attention with its relevance.

Given the growing importance of corporate governance in the country's economy, it would be expedient to apply this form of economic activity in the establishment and management of beekeeping. It is known that investors strictly control the competitiveness and financial condition of companies, so the application of corporate governance has become more urgent. From this point of view, it is necessary to apply this system in beekeeping in modern conditions.

As an organizational and legal form of business, the main advantage of beekeeping, created in the form of a joint stock company, is the ability to attract financial resources of ordinary citizens. This allows people to engage in beekeeping, which is an area that does not require a large amount of capital, especially in the current situation. This is due to the fact that every citizen has the opportunity to benefit from these conditions created for business

development in our country.

In our opinion, the following features of the society, which distinguish it from other types of collective entrepreneurship, prove to us that it is reasonable to use it in the establishment of beekeeping in modern times.

**The third chapter** is entitled "Directions of organization and management of beekeeping in the agricultural sector in Azerbaijan." Reforms in the agrarian sector and economic management, state support and regulation of beekeeping entrepreneurship, the ways of organization and improvement of marketing of beekeeping products, organization of marketing in the production and sale of competitive beekeeping products are systematically and coherently studied here.

The model of economic development of the republic is based on the formation of a market economy based on the principles of ensuring the state independence of the republic, combining the economic, social and psychological interests of each production and economic entity - the territory in the geographical sense and the socio-economic sense of the people. It must reflect the main features of our future strategic goals of national, economic and social progress, managed by economic methods.

The model of economic development of our country covers basically all areas, and as a result of serious scientific research in the agricultural sector, which is one of these areas, it is necessary to modernize and improve the existing entities.

One of the main directions of economic reforms in the agrarian sector in our country is economic governance reform. Thus, the transition from the traditional, administrative system to market relations in the agricultural sector has a number of common tendencies in different countries, has created conditions for the formation of fundamental and reliable foundations for the formation of a new economic system and macroeconomic stability in the agricultural sector.

An analysis of the current situation in the agricultural sector suggests that the normal development of market relations in this area depends on the success of economic solutions in the economy. In modern times, the main goal is to improve economic management in

the agricultural sector, to ensure and protect the strategic interests of the state in this area, to ensure the benefit of the state support of the poor and all members with no commercial income.

Taking into account the natural-climatic, economic and social factors of the republic, the directions of development of the agrarian sector were determined, the state agrarian policy was formed in the near future, favorable conditions were created to stimulate entrepreneurship, apply advanced scientific achievements and improve the economic mechanism for scientifically based management.

Research shows that the interaction and management of agricultural production and processing enterprises will be effective only if the bilateral relations established between them must be sustainable until the final product, meeting their common interests. That is, processing enterprises should be interested in the development of all types of agricultural enterprises, and joint-stock companies, cooperatives, etc., based on cooperation in the presence of common interests and coordination mechanisms. should be implemented through the creation.

There is a need to develop innovation-oriented entrepreneurship in agriculture in our country. The development of our economy and its component agriculture is based on the transition to a new, better level of innovation development. In this regard, innovation management should be one of the main conditions.

Analysis of the current state of agriculture and prospects for development in a market economy shows that in order to further develop this sector and address the issue of food security in the country, it is necessary to pursue an innovative path of development and apply high-performance foreign technical and technological innovations.

Research shows that stimulating and improving entrepreneurial activity, and especially the use of investment, is an important issue in economic management.

Entrepreneurs operating in the agricultural sector must be able to sell their products in both domestic markets and export to foreign markets. Therefore, it is necessary for certain infrastructures to work

together.

Entrepreneurs operating in our country should try to establish cooperation with foreign entrepreneurs and be able to benefit from their experience. At the same time, state support for the technical and technological level of production should be strengthened, and entrepreneurial initiative engaged in intellectual forms of entrepreneurship should be increased in connection with the expansion of entrepreneurial activity in the field of production.

Engaged in production in order to stimulate the existing enterprises, they should be differentiated from commercial enterprises at the state level, they should be given wide opportunities and necessary privileges.

Summarizing the above, it can be argued that the development of entrepreneurship in the country depends directly on the business environment. The business environment means not only the interdependent activities of the parties involved in it, but also the existence of certain conditions in the economy that ensure the implementation of entrepreneurial functional relationships.

As a result of the research, it can be concluded that the following measures will be taken to ensure the development and effective management of business entities in the country:

- intensive development of the agrarian sector and strengthening the application of innovative technologies;
- merging of existing non-profit forms of economy in the form of joint-stock companies;
- establishment of new enterprises in the country to ensure short-term increase in agricultural production;
- achievement of directing foreign investments, technical means and new technologies to the development of agriculture, etc.

Analysis of the scientific and theoretical basis of the development of entrepreneurship in our country allows us to identify four stages from a practical point of view:

- initial capital accumulation stage, where risks prevail in the field of entrepreneurial activity;
- a stage characterized by the emphasis on the innovation factor in entrepreneurial activity;

- stage of activation of regulatory functions of the economic system;

- the stage of formation of business entities, the basis of which is management, economic, socio-psychological, legal methods.

Business entities are completely free to determine production, pricing products, choosing sales channels, distributing profits, as well as forming relations of cooperation and integration, and make decisions on their production and sales activities independently. The freedom gained by the agrarian sector in the conditions of market economic relations, the personal initiative and freedom of choice of those working in that field have led to the formation of a qualitatively new socio-economic system.

Entrepreneurship has been given a wide place in the country, the law “On Entrepreneurial Activity” has been adopted to protect the rights and responsibilities of entrepreneurs and enable them to establish their own activities, and favorable conditions have been created for individuals and legal entities engaged in entrepreneurship. In my opinion, the application of this law has created conditions for the regulation of the principles of entrepreneurship in the Republic of Azerbaijan, the rights and responsibilities of business entities, the forms and methods of its protection and recognition by the state, the relationship of entrepreneurs with government agencies.

Important areas such as the formation of entrepreneurial activity in the agricultural sector, including beekeeping, the formation of its content elements, the improvement of management in our country should be studied, relevant proposals and recommendations should be developed. In order to ensure the implementation of entrepreneurship in the field of beekeeping in modern conditions, the following areas should be taken into account:

- to create bases for formation of entrepreneurial activity in the field of beekeeping;

- creation and support of business environment in beekeeping;

- to determine the principles, functions and characteristics of entrepreneurship in beekeeping;

- to carry out state regulation of entrepreneurial activity in beekeeping farms in our republic;



- supporting the establishment of existing beekeeping cooperatives and joint stock companies with financial and credit mechanisms, etc.

Research shows that in addition to these or other areas, meeting the demand for investment resources of beekeeping is one of the most important issues. Insufficient satisfaction of this demand ultimately creates problems in the formation of agrarian market infrastructure. This is primarily reflected in the lack or shortage of facilities for the supply and storage of agricultural products.

If the investment needs of the agricultural sector are met, this infrastructure will allow the efficient functioning of the agricultural market, the reduction of imported products compared to special beekeeping products, the prevention of crop losses and increase the income of entrepreneurs. In our opinion, the supply of beekeeping products to consumers in the market, taking into account the specific features of the agricultural sector and. etc. It would be expedient for the state to provide organizational, technical and economic support for the development of related market infrastructure tours.

Investing in the formation of wholesale and retail markets for beekeeping products, the creation of new commodity exchanges and the improvement of existing ones will eliminate difficulties in the sale of products, prevent losses, better meet consumer demand for local products and as a result, it would allow entrepreneurs to increase their income.

In general, the support of reliable protection of entrepreneurship in the agricultural sector is conditioned not only by economic, but also by political and social factors, creating conditions for ensuring social and economic stability in the country. As a result, the country's agricultural sector as a whole ensures socio-political stability and a reliable social atmosphere. Increasing state support for beekeeping, which is one of the components of the agricultural sector in Azerbaijan, and creating the necessary conditions for the development of entrepreneurship is a necessary condition for economic development.

There are a large number of manufacturers and services operating in all areas of entrepreneurship, which at the stage of its

development have faced many problems that require scientific substantiation and solution. In this regard, the study of processes such as marketing activities - market management, finding new markets, ensuring the interaction between competition, production and consumption is relevant.

The main purpose of marketing is to organize the sale of manufactured products, to carry out a comprehensive market analysis, forecasting and production planning in order to adapt the quality, range and volume of products to the needs and tastes of consumers.

Marketing of innovation activity is a management process to meet the demand and supply of innovative products. Marketing focuses scientific, technical and other innovation activities on the production and consumption of innovative products that are really necessary and effective for society, and the producers of these products to produce products that are in demand in the market.

Research shows that the quality of honey imported to our country is often very low, and the price is correspondingly cheap. In order to prevent this, the installation of modern laboratory equipment for quality control at customs checkpoints is one of the important issues in the organization of quality control of honey imported to our country.

It should be noted that the planning of production volumes can be carried out, first of all, after determining the market of products to be produced, in other words, their consumers. Products whose consumer is not known in advance, but whose volume is planned and produced, are less likely to be sold, and there is a greater chance that they will be stored in the warehouse.

In order to effectively organize the agricultural sector, the activities in the field of sales market should be further expanded. This requires accelerating agro-marketing activities. In general, marketing, as a system of economic activity, means a thorough study of existing needs and requirements on the one hand, and the formation of needs by actively influencing the existing needs and requirements of the sales market on the other hand.

In the agricultural sector the main factors hindering the

marketing work are the low level of information and consulting services. Weak use of information-or-communication technologies in modern times makes it difficult to manage low-level marketing and does not provide the flexibility to achieve the set goals. Recently, with the help of new information technologies, especially the Internet, the existing difficulties are being overcome. The introduction of regional marketing via the Internet creates new opportunities. As a result, with access to world information resources, it is possible to expand the audience, create a fast and reliable connection, which increases the effectiveness of marketing policy in this area.

In the agricultural sector agro-marketing industry, commercial, banking, etc. completely different from the marketing of economic spheres. This is due to the objective characteristics of agriculture, especially the dependence of results on natural conditions, the diversity of forms of ownership, the mismatch of working and production periods, the diversity of organizational forms of farming, foreign economic relations, state participation in agricultural development.

Thus, one of the most important and widely used ways in the development of the agricultural sector in the world is the creation of modern, modern economic entities based on marketing research.

Modern agromarketing, or agricultural marketing, is a complex socio-economic phenomenon that can be considered as a set of four factors of activity with constant parameters of behavior in market conditions:

- as a system of business decisions that ensures the interaction and coordination of types of entrepreneurial activities;
- as a management concept;
- as a means of ensuring the advantages of agricultural producers in a competitive environment;
- as improvement of the efficiency of agricultural producers as a method of finding solutions.

Another important issue is the difficulty for farmers operating in the agricultural sector to find new markets, access to foreign markets, and, in general, to sell the products produced or grown by the farmer.

Of course, every small farm has limited access to both urban and foreign markets, as well as the lack of a favorable market, the remote location of consumer markets, and so on. issues do not allow every producer to enter market structures.

Intensive development of market processes leads to a direct link between the range, quality of manufactured or offered goods, the consumer properties of the product, the price of which meets the requirements of different consumer groups. Therefore, in modern conditions, marketing services should be focused mainly on customer demand, the solution of problems of supply-demand balance.

The task of marketing is to correctly determine the level of demand, the timing and nature of the emergence of this demand in such a way that it allows the enterprise to achieve its goals with high efficiency. Marketing activity is a factor that has a positive impact on the entire activity of the enterprise. Proper organization and management of marketing depends on the study of demand for products and services, planning and organization of measures to increase profits, management activities related to the implementation of audits and incentives, and so on.

It is considered necessary to provide the following conditions for the production of beekeeping products in the marketing service:

- reliable, accurate information about the market, the structure and dynamics of demand, the tastes and desires of producers;
- production of a range of beekeeping products that highly meets the identified current (daily) demand and perspective demand;
- influencing the market and market demand in order to create more favorable conditions for the sale of products;
- study of internal and external competitive environment of exporting enterprises.

The marketing system has its own functions, which include:

- comprehensive market research;
- product range planning;
- selection of pricing policy, exchange rate research;
- organization and stimulation of sales advertising;
- organization of sales and after-sales services.

In connection with the development of the agrarian market, there

is a need to determine the scope of marketing activities and study how it will change. the tool was used as a specific market policy. The expansion of foreign economic relations has led to the beginning of a new stage in the development of marketing. World experience shows that this aspect of marketing activities has prevailed in market relations in the newly former countries, including our republic.

**The fourth chapter** is called “improving management of the economic mechanisms of the beekeeping”. It deals with with aspects of improving the investment and financial mechanisms of beekeeping, improving the price mechanism to improve the financial situation of beekeeping producers, improving financial security in the management of the agricultural sector in a logical, systematic and coherent manner.

The economy in the republic as in all areas, investments in beekeeping, which is one of the components of the agricultural sector, play a very important role in the development of production. However, as it is known, investments in agriculture are slow and therefore it takes time to get a return on investment. Due to the fact that beekeeping demands less money and is a seasonal area, the risk factor is lower than in other areas.

State regulation of the investment process means a system of legislative, executive and supervisory measures implemented by the competent state structures to stimulate investment activity and economic growth on this basis.

Studies reveal that investments in beekeeping are a lot lower than in other areas. Shortcomings and deficiencies in the financing of capital investment in beekeeping are influenced by a number of factors.

One of these factors is the predominance of small producers in the country’s beekeeping. They mainly operate for the domestic market and have almost no access to new markets, provided with modern beekeeping technologies. They can’t use innovations, they can’t compete they are afraid to get loans.

Financing of investments in beekeeping also depends on investment activity. In order to increase this activity, it is necessary to conduct investment policy in beekeeping on the basis of the

following to conduct investment policy in beekeeping on the basis of the following principles:

- increase of funds allocated from the state budget for the development of beekeeping and reduction of interest rates to increase the efficiency of investment in the real sector of the economy;
- implementation of stimulating measures to increase the investment attractiveness of beekeeping farms and reduce risks;
- provision of beekeeping equipment, maintenance and organization work and other measures.

As it is well known, beekeeping being a special sector of the economy, differs from other sectors of the economy by its low investment attractiveness. In general, the factors that increase the investment attractiveness of beekeeping are as follows:

- use of the latest achievements of scientific and technical progress;
- manufacturing of products and increase of its efficiency due to the application of the latest technologies, etc.

In order to modernize beekeeping, it is important to increase the investment activity.

In order to increase the investment attractiveness of low-income sectors of the economy, including beekeeping, the state should strive to implement regulatory measures aimed at expanding investment processes. These measures include:

- implementation of capital investment in beekeeping on the basis of recommended planning;
- development and implementation of targeted public funding programs;
- identification of priority areas for investment in beekeeping;

In my opinion, the implementation of increasing the investment attractiveness of the beekeeping sector should be carried out in the following ways:

- improving the material and technical base of beekeeping using various sources of financing, improving the financial situation of producers;

- financing of beekeeping investments at the expense of funds allocated from the state budget and creation of a favorable environment to ensure sustainable, dynamic development in this field, etc.

Investment mainly creates conditions for the creation of new products, new production areas. This can be achieved by increasing the financial capacity of economic units engaged in beekeeping.

Entities regardless of the form of ownership, they face certain dangers during their operation. Improving the financial condition of enterprises and its sustainable development is conditioned by the availability of equipment, technology and personnel that meet the requirements of modern times.

Due to the fact that the technical means used in most beekeeping farms in our country are physically and morally obsolete, their modernization and application of new technologies require large financial resources, which is a great risk in production and economic activities.

On the whole, development of beekeeping according to the statistics of 2017, the National Fund for Entrepreneurship Support of the Ministry of Economy has provided AZN 4.7 million in soft loans to 390 entrepreneurs. Due to these loans, about 690 new jobs have been created.

As it is known, despite the predominance of private funds in the financing of beekeeping today, it would be good to attract state budget funds, loans from banks and non-bank organizations, local and foreign investments, and funds of international organizations.

In the agricultural area of the state the investment policy should be aimed at increasing the production of beekeeping products on an intensive basis. To this end, the implementation of the following measures can create conditions for achieving positive results:

- giving wide space to investments financed from the budget in beekeeping;
- rehabilitation of existing apiaries, organization of new ones in the territories, improvement of material and equipment supply of beekeeping;

- to take measures to stimulate more investment in the production, sale and processing of beekeeping products, to further strengthen state support in this area;
- development of a new state financial support mechanism aimed at stimulating the organization of apiaries in areas suitable for the development of beekeeping;
- expansion of work to protect the gene pool in beekeeping and improve the working conditions of bees.

Assessing the existing economic and financial conditions in the country, the possibility of using investment tools, we believe that the state regulatory policy in investment activities in beekeeping should be developed on the basis of the following financial mechanisms:

- bank loans;
- bank factoring;
- rural credit cooperation;
- establishment of specialized agricultural banks;
- leasing of equipment and machinery;
- budget financing;
- regulation of prices for beekeeping products by regulating the consumer demand of the population, etc.

As in all areas, reducing the cost of production in beekeeping is the basis for increasing the profitability of the farm. The cost of beekeeping products depends on a number of factors. The most important of these is the productivity of the bee family.

Let's review profitability of the field in the honey-commodity direction. According to statistics, in order to ensure profitability in beekeeping farms operating in this area, each bee family must receive at least 25 kg of honey during the season (this includes fodder for bees and honey for sale).

In addition to these factors, natural and climatic conditions, which are one of the factors affecting the cost of products in beekeeping, have a special role. Thus, the rainy and windy weather has a negative impact on the productive work of bees. This leads to a decrease in productivity in beekeeping, as well as in other areas of



agriculture. The cost of the product is rising, which leads to higher prices.

At present, it can be concluded that the formation of prices for beekeeping products is influenced by the following factors:

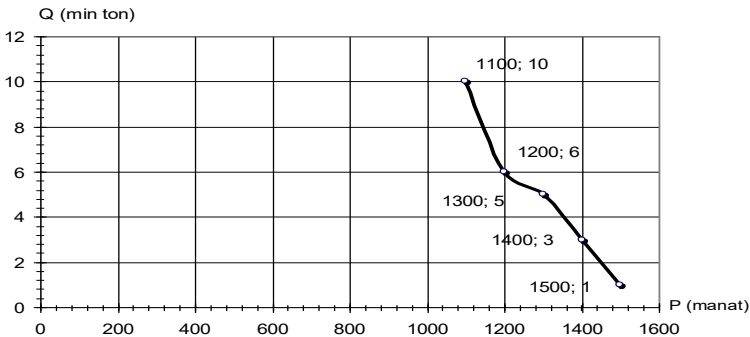
- level of supply and demand for beekeeping products;
- conditions of transportation of products and transport; amount of expenses;
- unit cost of production;
- level of market monopoly;
- current state of market structures;
- quality and nutrition of products;
- the existing competitive environment in the country;
- current level of prices in foreign markets.

Price for the supply and non-price factors have an impact. Non-price factors include the availability of substitute or complementary products in the market, the number of consumers, the diversity of tastes, income, and so on. However, it has been proven that the prices of goods have a special place among the factors affecting the student. The higher the prices, the fewer consumers of that product, and the lower the prices, the more buyers of those products.

If we explain the relationship between the price and the demand by the illustrative example, we see that the ratio between the price of a ton of honey sold in a month and the demand for it will be as follows (Table 3).

**Table 3. The relationship between the price of th honey and the demand for it**

Price of honey per ton (P man)	Demand level of the market for honey (Q thousand ton)
1500	1
1400	3
1300	5
1200	6
1100	10



**Picture 1. The relationship between the price and demand.**

In the economic literature, the "D" curve is called the demand curve. As can be seen from this curve, a fall in prices leads to an increase in demand, while a rise in prices leads to a decrease in demand. It can be concluded that an increase or decrease in demand leads to structural changes in beekeeping farms, and meeting demand can stimulate production growth and prevent price increases.

The offer is usually considered in terms of the reasonable price of the product. Every entrepreneur thinks about the cost of making a profit before starting production. In order to achieve the goal, the entrepreneur tries to set the highest price for the goods he puts on the market. This means that high prices encourage entrepreneurs to bring more products to market, i.e. increase supply.

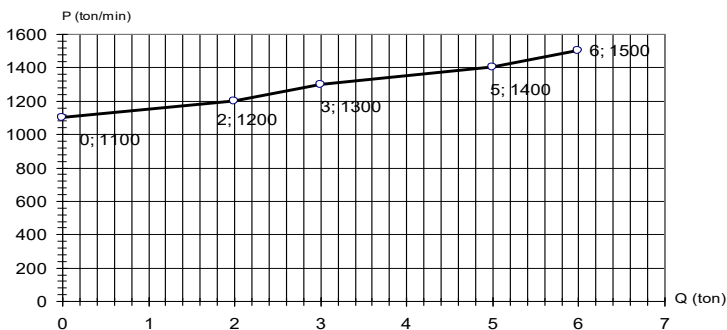
As you can see, the volume of the product offered by the manufacturer depends on the price level. Thus, while other conditions remain stable, the higher the prices, the higher the supply of the product, and vice versa.

In the above order, the supply curve can also be described graphically. Suppose a bee farm wants to sell its honey in the market. Take into account all the other factors that affect the level of supply, revealing the volume of supply by points at different prices. To do this, let's use the conditional data given in Table 6 below.

**Table 4. the relationship between the market prices of honey and supply**

Possible price for the honey (P-ton)	The amount of honey offered by producers (Q –a month, ton)
1500	6
1400	5
1300	3
1200	2
1100	0

If we describe the graph in the table, we will find the relationship between the price for the honey and the amount of honey offered. Y depicts the price of the honey (P) while X (Q) the amount of honey (Picture 2).



**Picture 2. Curve between the price for honey offered at markets and the amount of honey.**

The change in supply is frequently caused by a number of non-price factors. Non-price factors include the use of new techniques and technologies, changes in the cost of production due to changes in tax policy and prices of factors of production, natural production conditions, the goals set by entrepreneurs and etc.

Among the factors listed, production costs fall mainly when scientific and technical achievements and technologies are used in

beekeeping, and when the weather conditions are favorable. From this it can be concluded that the extent to which the product is wounded and important, and its ability to meet human needs, is reflected in prices.

The clear-out of agricultural producers from the beekeeping not only leads to a decrease in domestic production and rising prices in the domestic market, but also leads to the purchase of expensive beekeeping products by the population, on the other hand, to the import of cheap products into the country.

In the domestic food market, the import of products of this or that industry by a businessman from abroad creates conditions for a monopoly. As a result, there are difficulties in protecting the food market in the country. In this case, the state implements measures to prevent the tendency to disrupt market relations by fighting monopolies, and provides guaranteed assistance to producers.

Numerous producers of beekeeping products are characterized by a fundamentally free competitive market. Nevertheless, beekeeping producers need equipment for the organization of industrial apiaries, pesticides, packing machines, containers, etc. As a rule, they face a number of difficulties when buying such products.

According to statistics, if we take into account the annual import of beekeeping products and products made from them to our country, it becomes clearer to us how relevant this issue is. Today, our country is able to prevent the inflow of foreign currency by organizing the production of these products.

To do this, it is necessary to reduce part of the cost of production by paying for subsidies provided by the state. This rule is widely used in highly developed (economically) countries. In the United States, Canada, Finland, Norway, Japan and other countries, part of the cost of agricultural products is financed by government subsidies.

It should be noted that the share of funds allocated for the regulation of agricultural prices in the development of the agricultural sector is 28% in the United States, 40% in Canada, 35% in Australia, 71% in New Zealand and 70% in Japan. In general,

liberal economic policies in the United States and Japan are aimed at regulating agricultural prices, which not only plays an important role in the economic protection of farmers, but also has a significant impact on solving consumer problems.

In order to ensure the security and demand of the population for beekeeping products at the expense of domestic resources, the prices of beekeeping products should be regulated by the state. For this purpose, first of all, the price system in beekeeping must be correctly defined and scientifically substantiated. Only in this case it will be possible to stimulate the production of beekeeping products and ultimately to meet and protect the growing demand of the domestic food market for local production.

In this case, prices are set by the government. Target prices provide for parity in the prices of industrial and beekeeping products, pay taxes and other costs, interest on loans, bring the income of beekeepers to the average level of income in other sectors of the economy and re-production in beekeeping should serve to ensure the conduct of the event, to create conditions for profit.

According to leading experts, the following factors should be taken into account when determining target prices in beekeeping:

- reimburse the costs incurred by producers of products located in medium conditions in the areas where the main commodity products are produced;
- in case of shortage of products, additional assistance should be provided to producers operating in poor conditions through other channels of state support;
- should stimulate scientific and technical progress, reduce non-productive costs, improve product quality;
- specific conditions of product production, in other words, differentiation of zones;
- features of farms - seasonal nature of production, long duration of production and, accordingly, slow turnover of working capital.

Taking into account these principles, target prices can be determined as follows:

$$Q_m = (M_{\text{Дн}} + M_{\text{о h}} + Q_{\text{d m}}) \times \Theta_{\text{i d}} + M_y$$

where:

$Q_m$  - target price;

$M \Delta_n$  - normative cost per unit of product, man;

$M_{\text{sh}}$  - earnings from wages included in the cost (average ratio calculated for the country's economy);

$Q_{dm}$  - payments for the period of fixed assets in circulation;

$\Theta_{id}$  - coefficient of efficiency of consumption value;

$My$  - means the amount of profit calculated for the payment of taxes.

Payments for the period of turnover of fixed assets ( $Q_{dm}$ ) are determined by the following formula:

$$Q_{dm} = (\Delta_f + \Delta_o) \times (Afd + Nm_n)$$

where:  $\Delta_o$  - optimal turnover of fixed assets in the economy as a whole, years;

$\Delta_f$  - average actual turnover of fixed assets used in the production of the product, years;

$Nm_n$  - optimal rate of return on funds in the society during the year;

$Afd$  means the value of fixed assets.

Earnings per wage ( $Me$ ) included in cost are defined as follows:

$$M_{\text{sh}} = M_i \times \Theta_{hnf} / \Theta_{hi}$$

where:

$M_i$  - the amount of profit created in the economy last year;

$A_{hi}$  - wages in the economy last year;

$\Theta_{hnf}$  is the normative wage fund at the unit cost of production.

In addition to calculations, the target price can be determined by various empirical formulas.

One of the key factors in ensuring the improvement of the financial situation of beekeeping producers is to set lower and upper prices for their products. With its help, it is possible to regulate the price mechanism in the markets of beekeeping products, to determine the lowest and highest prices for products. This is done by setting the lowest price at which the seller agrees when selling the goods, or the highest possible price if the seller buys the goods.

In this case, the limit of the selling price is determined by the following formula:

$$Q_{n1} = (MD + Mm + Tx)$$

where:  $Q_{n1}$  - selling price limit;

MD - cost of the product;

$Mm$  - the minimum amount of profit in the worst segment of the market;

$Tx$  - means trade costs;

Supply (purchase) price limit is determined by the following formula:

$$Q_{n2} = (Q_m + Tx)$$

where:  $Q_m$  - means the lowest price in the markets of beekeeping products.

One of the valuation methods used to improve the financial security of beekeeping producers is collateral valuation. These prices protect beekeeping producers from negative changes in market conditions, the alienation of entrepreneurs from this area, bankruptcy, and have a positive impact on preventing the influx of rural population to cities.

Thus, summarizing the above, we can conclude that the essence of the role of the price mechanism in improving the financial situation of beekeeping producers is as follows:

- elimination of inequality between prices for industrial and agricultural products;
- ensuring that beekeeping producers receive equal income with economic entities in other sectors of the economy;
- stimulation of solvent demand of the population;
- periodic review and regulation of prices and tariffs for equipment sold and leased to beekeeping producers;
- periodic review of prices to improve the living standards of rural residents, etc. It is expedient for the state to take concrete measures.

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One of the solutions to these or other problems listed in the context of the relationships of the modern market is the implementation of insurance in the agricultural sector. Insurance in the agricultural sector serves to establish a certain system of economic relations aimed at increasing agricultural production, ensuring its stability and improving the living standards of the rural population.

It is important to take into account the natural climatic characteristics of individual regions when insuring and organizing production in the agricultural field. The performance of the insurance system is of great importance, as the outcome of economic entities operating in the agricultural sector depends on the natural and climatic conditions, various changes in nature and wildlife and diseases. Therefore, insurance of any type of activity in agriculture is the most effective method of protection against natural and other events.

In recent years, leasing in the agricultural sector is of particular importance as a mechanism for additional financing in the republic. Leasing is a complex system of relationships that combines elements of bank loans, property leases and investments. Leases are usually made by the lessor and the lessee as the subjects of the lease agreement. However, due to the recent development of leasing as an investment instrument, leasing relations have expanded to include banks and insurance companies as elements of leasing operations. This has made leasing more flexible and superior. With the help of leasing it is possible to modernize production and develop small business.

Unlike other types of financing, leasing offers inexpensive methods of financing businesses and competes directly with bank



loan products. In emerging economies, leasing allows businesses to access both leasing financing and additional bank financing without increasing mortgage debt. Leasing, in turn, creates conditions for increasing the total capital investment in the economy.

It will increase equipment sales by serving as an alternative form of financing that can replace and increase other forms of financing. It also offers local and foreign suppliers new mechanisms and new financing methods to increase customer markets.

In order to solve the above-mentioned problems and accelerate the development of the agricultural field, President Ilham Aliyev signed a special decree on the research of beekeeping farms, which I have chosen as the object of research. started to provide a subsidy of 10 man.

In my opinion, this order of the President of the country will increase the interest in beekeeping and create conditions for the transformation of quality Azerbaijani honey into a major export product. At present, honey production is provided in ABAD containers, which is one of the largest projects in the country. Of course, its packaging must be of the highest quality.

### **The outcomes**

1.The main directions of the economic reforms in agrarian sector of our republic are the ones in the field of the economic management and administration. Improving the mechanism of the economic management in the agricultural sector will create a key basis for sustainable development in this area.

2.There is necessity in reviewing the features of the forming beekeeping farms to develop a program of complex measures for their widespread application of the world's progressive forms and optimal structures in our country.

3.There are good reasons to place beekeeping farms by regions, taking into consideration the natural-climatic conditions and vegetation cover of the regions.

4.The organization of beekeeping products at sales fairs in Baku, the capital of the country, is of practical importance for selling of the beekeeping products. I suppose, sales fairs should regularly take

place.

5. Forming the infrastructure in beekeeping, creating beekeeping farms of different sizes and form of the ownership which serves the purpose.

5. Based on the research, it can be concluded that it would be more goal oriented to establish small-scale apiaries operating in the country in the form of a large specialized joint-stock company by pooling their funds.

6. Today's Azerbaijan Ministry of Agriculture Livestock, the "Beekeeping Center" operating under the Scientific Research Institute is a shining example of the joint activities of science and industry, and contributes to the development of beekeeping in the country. Increasing the number of these beekeeping farms would have a positive impact on the development of beekeeping and ensure the development of this field on a scientific basis.

7. The establishment of beekeeping farms in crop farms would create conditions for the development of both areas.

8. It is also very important to outline the directions of the direct state financial support and improvement of credit mechanisms to ensure the enhancement and rehabilitation of the financial situation of producers.

9. Improving the price mechanisms in beekeeping farm is one the important issues. Therefore, along with other tasks, the state should regulate the prices of beekeeping products to meet the needs of the population for the apiary products at the expense of the domestic resources.

10. To raise the living standards of the farmers who are engaged in apiary concrete measure should be taken by the government officials to establish beekeeping farms equipped with modern facilities.

11. "Electronic" registration of the beekeeping farms existign in the republic has not been conducted at the appropriate level. This has recently made it difficult to provide subsidies as state support. That is why it is important to register electronically as soon as possible.

## **Recommendations for application**

According to the results of the research, the following is recommended:

Theoretical knowledge gained during the research can be used in the teaching process and research work of scientific and pedagogical staff on beekeeping.

The practical significance of the results of the research was discussed and approved by the Union of Beekeepers of Azerbaijan, the Scientific and Technical Council of the "Beekeeping" Center of the Azerbaijan Livestock Research Institute and the application was considered expedient. (Protocol №5, 22 June 2016). In addition, the dissertation was approved by the North Caucasus Federal University, Stavropol, Russia.

**The main points of the dissertation are presented in the following articles:**

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The defense of the dissertation will be held on 23 February 2022 at 14:00 at the meeting of the Joint Dissertation Council of ED 2.42 of the Azerbaijan State Agricultural University and The Azerbaijan Cooperation University acting under the Azerbaijani State Agricultural University.

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