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**Economic problems in Agrarian Sector and its
Overcoming Prospects (on the example of Adjara)**

A b s t r a c t

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Introduction

Urgency of Research. In Georgia, as in an ancient agricultural country, agriculture has been
leading for millennia. The centuries-old historic hardship and the Soviet-era administrative
and command-line governance have severely damaged the Georgian village. After the

independence of the country, the reforms in the extreme situation of the country have further aggravated agriculture.

Currently Georgia's economy is in a severe crisis. Particularly acute crisis can be found in food production. This is mainly due to the fact that the production of goods is stopped in both, agriculture and industry, which puts the economy of the country as well as economies of regions, including the Autonomous Republic of Adjara, in a very difficult condition. In order to get out of the situation, it is necessary to work out the methods that will help to take over the crisis.

Approximately 17% of the country's national economy is directly dependent on the agricultural sector; the average yield is only 1/3 of the potential. Approximately 1/3 of arable land is not cultivated; import of food and agricultural products exceeds export with 43 per cent. Approximately 54% of the workforce is employed in agriculture; according to the data in 1990 it was only 25%.

Despite the huge efforts of the world's civil society, the food supply remains one of the major global problems. According to the data of the United Nations organization, one billion people are starving in the modern world.

The main attention in the work is drawn to the problems in the agrarian sector, the ways of improvement of the current situation in the whole the state including the Autonomous Republic of Adjara. An important condition for the elimination of the agriculture crisis is the sensible use of the existing resources in the agrarian sector, rational combination of the fields, also the analysis of the current state of agriculture in the Autonomous Republic of Adjara and the elaboration of future development forecasts for the nearest and distant periods; studying the situation in the agrarian sector of the Autonomous Republic of Adjara

and setting out tasks for better results, determining the situation in farming and cooperative farms and analyzing problems.

Depending on all these factors, it can be said that both the agricultural sector and its economic problems are relevant, as well as their theoretical and practical significance, which has led to the choice of the dissertation topic.

Research objective of the study is to identify the main trends and patterns in the agricultural sector at the present stage of the development of market relations in Georgia, assess the economic results of the restructuring of privatization in agriculture, and reveal the current problems in the agricultural sector of the Autonomous Republic of Adjara and work out the ways of solving the problems

Based on the research objectives, we set the following tasks:

- To analyze the importance of farming and cooperatives based on world experiences and define favorable conditions for their development;
- Reasoning the necessity of state strategy of consolidation of agricultural lands;
- To analyze the role of the state in the development of agrarian sector and to justify its maximum involvement in the development of the sector;
- To study the situation in the Agrarian sector of the Autonomous Republic of Adjara and set up activities to support its development;
- To analyze the economic efficiency of the agricultural sector of the Autonomous Republic of Adjara.

The research subject is the problems in the agrarian sector and the prospects of their development.

The research object is both the agrarian sector of Georgia and the Autonomous Republic of Adjara and the ongoing processes.

Methodological and theoretical basics of the research:

Theoretical and methodological basis of the thesis is the universally recognized principles and methods of economical and social development of the agricultural sector, as well as the scientific works of Georgian and foreign scientists.

Based on the issue, the work is based on the official data of state institutions, researches of governmental and non-governmental organizations operating in the Autonomous Republic of Adjara and Adjara, and the researches made by the authors of the represented thesis.

The state of studying the problem:

Foreign scientist-economists such as: F.Chadadi, P.Mavimbella, N.Selianinov, E.Snegovskaia, have their consideration on the peculiarities of the development of farming and cooperative farms in the agrarian sector. There are also remarkable opinions in the works of Georgian scientist-economists concerning the problems of development of Georgian agriculture and farming farms: V. Burkadze, O.Qeshelashvili, P. Koguashvili, O. Vashakidze, P. Gugushvili, H. Giorgadze, A. Grishikashvili, G. Shikhashvili, R. Manvelidze, V. Papunidze, r. Jabnidze, N. Chikhladze, M. Tsetskhladze and others. However, in our opinion, the mentioned issue is not properly studied on the background of problems in the Adjara region. Therefore, we have tried to solve this difficult problem as far as we can, and based on this, in the regional context, we have shown the ways to solve the economic problems of the agricultural sector and set up development prospects.

Research Scientific novelty:

- Economic problems of the agricultural sector of Georgia are presented and prospects of their overcoming based on land consolidation are proposed'
- Errors and shortcomings on the basis of analyzing the changes in the structure and production of the agriculture of Georgia and the specialization are revealed;

- The role of farming farms in the agricultural sector has been demonstrated, the views on this issue have been established and specific proposals have been offered;
- On the background of the study of the cooperatives existing in the Agrarian sector of the Autonomous Republic of Adjara, the advantages and disadvantages of their development are revealed and the ways of overcoming of existing problems are proposed.

Theoretical and practical meaning of the dissertation thesis: The regulations, conclusions and recommendations presented in the paper can be the substantial contribution to the development of agriculture in the Autonomous Republic of Adjara, especially in mountainous regions, its role is also important in the perfection of economic relations in the agricultural sector.

As far as the work is the scientific research related to the economical problems in the agricultural sector in the fields of the mountainous regions and the whole Autonomous Republic of Adjara, it can practically assist, together with the raise the level of the theoretical knowledge, the regions and agricultural zones with similar natural-economical conditions to choose and establish new progressive forms of farming, their organizational and legal arrangements and further development.

The dissertation work consists of 192 printed pages and is composed of four chapters, ten subchapters, conclusion, a literature list and an annex

The objectives, tasks and logic of problem solving have conditioned the following structure of the dissertation work:

Introduction

Chapter 1. The problems of development of the agrarian sector of Georgia

1.1. Economical problems of the agrarian sector in Georgia

1.2. Geographical, natural and ecological environment of the Autonomous Republic of Adjara

1.3. Technical-economical environment of the Autonomous Republic of Adjara

Chapter 2. The role of farming in the development of agrarian sector

2.1. Farming as the subject of studying

2.2. The priority directions of farming development in Georgia

2.3. Cooperating farmers and ways to increase economic outcomes

Chapter 3. State regulation and support as a mechanism for solving the problems of the region

3.1. The role of state regulation and support in solving problems of agrarian sector

3.2. The need for state regulation and support and world experience

Chapter 4. Conditions for agrarian sector development and economic efficiency

4.1. Development of agrarian sector in the framework of free trade with Europe

4.2. Ways of raising the economic effectiveness of the main sectors of the agricultural sector

Conclusion and proposals

Bibliography

Annexes

Main content of the work

The first chapter of the paper “**The problems of development of the agrarian sector of Georgia**” concerns to the economic problems of the agricultural sector of Georgia, the natural-ecological, technical-economical environment of the Autonomous Republic of Adjara

Agrarian sector is an exceptional field of the economy, the development of which is based on certain natural conditions. Basic components of natural conditions are: landform, soils, climate, surface waters, useful minerals, plant and animal world.

The importance of natural conditions in the process of scientific-technical revolution and the international division of labor has not been decreased and will not happen in the future.

Georgia is a small economy and developing country with 3 720.4 million inhabitants. Of these, 57.2% live in urban areas, 42.8% in rural areas. The territory of Georgia is 69,700 square kilometers or 7 million hectares. It is very diverse with its rich nature, physical-geographical, soil and climatic peculiarities. 1/3 of the country's territory is covered with forests. Only 40% of all the arable land for agriculture land is used, which is quite low and 0.16 hectares is figures out for per inhabitant.

Georgia is divided into 9 regions and 2 autonomous republics (Abkhazia, Adjara). There are 65 regions, 61 cities and 4488 villages in Georgia.

The agricultural sector in Georgia faces many problems and challenges. Productivity is very low. One of the reasons for the long-term, high level of poverty in the country is the collapse of the modernization of Georgian agriculture. The total number of arable land has decreased by 42%.

Almost indispensable condition of agricultural productivity is caused by GDP (See the table 1) for several reasons: Land splitting, lack of knowledge and technology transferring, high cost of agricultural products and expensive financial resources, lack of modern mechanization services, poor access to markets and generally degraded agricultural infrastructure.

Table 1

Dynamics of agriculture share in GDP

	2012	2013	2014	2015	2016	2017**
Agriculture	8.6	8.4	9.3	9.2	9.3	8,9

It is complied by us on the basis of Geostat data

** Data is not annual

The village is seriously dependent on subsistence sources from agriculture. The country is largely dependent on imports. There are several major problems facing the sector: reduction of investments, embargo announced by Russia, recession of world economy, limited access to credits(Only 1% of all loans on the sector), Lack of proper research, education and training system in agriculture, The unpleasant condition of irrigation systems and other infrastructure.

Discussing about the quantitative indicators of the plant and livestock products in last few years, it should be taken into consideration that the increase in agricultural production in the country is implemented mainly in an extensive way under the high risk conditions, as for the melioration, chemistry and other intensification factors of agricultural production, they are only used at a minimum level, that is why the yield of grain, potato, vegetable and other agricultural cultures is low in the country.

Individual regions, including the Autonomous Republic of Adjara make significant contribution in the development to the country's agrarian sector. Its geographical-territorial location, strong fragmented landform, great amplitude of height, climate, flora and fauna diversity and the exacerbation of natural conditions caused by this, determines the possibility of different fields of agriculture.

Autonomous Republic of Adjara occupies 2900 sq.km. There are mainly the following types of soil in the region: in the seaside hill zone - red lands; in the mountainous zone - yellow less fertile and thorny soils; in alpine zone – meadow grassy soils.

Autonomous Republic of Adjara is divided into five municipalities: Kobuleti, Khelvachauri, Keda, Shuakhevi and Khulo.

In the Autonomous Republic of Adjara major commercial agricultural products holds 40 per cents. The types of rural products are meat, milk and dairy products, eggs, wool, vegetables, cereals, honey and others. Analysis of agricultural sector development indicates that there is not any significant progress in this regard, and in some cases the indicator is characterized by decline.(See the table 2)

Table 2

Agricultural products (thousand tons), cattle (thousand), bee family (thousand)

Name	2009	2010	2011	2012	2013	2014	2015	2016
beans	2.1	0.5	0.4	0.4	0.5	0.4	0.4	0.4
potato	31.6	16.7	11.6	9	13.6	11.7	18.1	12.1
fruit	12.7	8.2	5.7	8.5	12.1	14.4	11.6	14
citrus	32.6	78.3	24.3	44.8	51.9	84.6	51.4	65.3
tea	0.5	0	1	0.7	1.1	1.1	0.2	0.9
milk	49.7	37.9	30.4	29.8	35.2	35.3	43.7	36.5
cattle	87.7	87.5	79.3	87.7	86.1	86.7	95	86.1
Bee family	9.1	21.2	37.4	49.3	55.2	61.9	56.1	40.3

It is complied by us on the basis of Geostat data

The sector occupies the second place by 36% of the industry. Main areas of this field are: processing of agricultural products, poultry meat and egg production, production of bread-cakes, production of mining-processing (construction materials), production of alcoholic and non-alcoholic drinks, etc. All other spheres (construction, trade, hotel and restaurants,

transport, communications, etc.) take 24% segment. There are small agricultural unions and entrepreneurial units in the Autonomous Republic of Adjara, which number consists of 516 entrepreneurial units according to the data from June 30, 2017 (See the table 3)

Table 3

**Entrepreneurial units registered in the Agrarian sector
of Adjara Autonomous Republic (data from June 30, 2017)**

	Cat tle- breed ing	Paul try- keepi ng	viticul ture	Bee Keep ing	Fish ing indust ry	Farm ing	Youn g plant farm	Green house farm	Seed ing plot
Batumi regional center									
LTD	8	2	12	28	3	22	4	3	-
I/E	11	3	20	50	5	32	6	3	-
Kobuleti									
LTD	4	2	4	4	-	6	2	3	1
I/E	6	10	1	8	-	60	5	1	-
Khelvachauri									
LTD	2	-	3	2	2	12	2	2	-
I/E	6	1	4	4	3	18	5	7	-
Keda									
LTD	2	-	3	1	1	3	1	1	-
I/E	2	1	10	3	2	6	2	2	-
Shuakhevi									
LTD	1	-	-	2	-	2	-	-	-
I/E	2	1	2	3	1	5	-	-	-
Khulo									
LTD	5	-	-	3	-	6	-	1	-
I/E	9	1	1	9	3	14	-	3	-

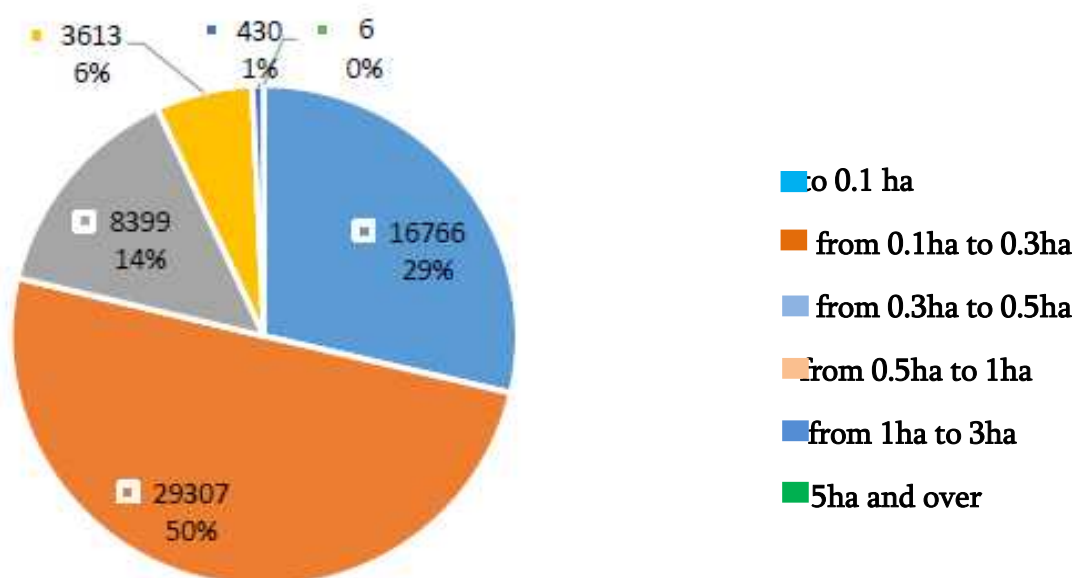
Total									
LTD	22	4	22	40	6	51	9	10	1
I/E	36	17	38	77	14	135	18	16	0

It is complied by us on the basis of Revenue Service requested

In the autonomous republic of Adjara there are mainly the forms of family farming, but their economy is not very profitable. The number of agricultural service providers and service centers is very small. The level of equipping them with relevant materials and technology is not satisfactory. Land fragmentation is a significant problem. (See diagram 1)

Diagram 1

**Figures of fragmentation of agricultural arable land
registered on individuals in the Adjarian region**



Source: according to the “amendments of description of land resources and soil, types of their protection, erosion, degradation and productivity, A.R. Adjara”, 2013

Agriculture is developed mainly as family farms and accordingly technological innovations in their activities are not observed or outdated. The methods of receiving raw materials, recycling and warehousing are out of date. For example, the use of modern technologies for harvesting and sowing, nursing fertilizers on plots, meeting the agrarian dates and other necessary activities are not carried out in the plant farming. The improvement of herd species in cattle-breeding, rising of milk quality and quantity suffer lack of proper attention. There are also no new technologies in the production, maintenance and storage of cattle feed, getting, processing, and storage of milk. Accordingly, the manufactured products are unvaried.

The most important peculiarity of agriculture of the Autonomous Republic of Adjara is that three out of five municipalities - Keda, Shuakhevi and Khulo represent high mountainous regions that require special approaches to agriculture development.

Kobuleti municipality is one of the major municipalities, which owns 27% of agricultural land in Adjara, totally 19 552 hectares. But only including 2 229 hectares is the arable land. On average, a family cultivates one 0,96 hectare of land. But only including 0.11 hectares of arable land. By calculating for a single individual owns the total amount of 0,21 hectares of land, including 0,02 hectares of arable land.

At present, the index of local population satisfaction with vegetables is only from 10 to 15 per cent. Citrus and tea growing are the developed fields in the municipality. The lack of development is painfully reflected in of the processing industry, in the traditional strategic fields such as citrus and tea growing. The volume indicators of the processing of raw citrus

product as a trademark of quality fruit as well as of non-standard part have been reduced and this trend will not be expected to improve in the nearest future. There are seasonally operating citrus fruits packing workshops in Kobuleti municipality: 3 – in Chakvi, 1 – in Bobokvati, 1 – in Khutsubani, 1 – in Legva, 1 – in Kakuti. These workshops are distinguished by the small capacity and low level of technical equipment. There are no enterprises processing the citrus fruit with the modern technology (paraffin, packaging, etc.) that causes the reduction of the length of keeping the quality of citrus fruit. There are no refrigerators and warehouses. The newly built citrus processing factory responds to modern standards in terms of technical and technological equipment, but the factory is not sufficient for the entire processing of citrus. In addition, it works incompletely, which causes non-use of non-standard fruit.

In Kobuleti municipality there are some positive results in the tea processing industry, but the existing potential does not respond to the use of possible resources. Presently, processing plants with various power are operating in the village of Kvirike, Chakvi, Kobuleti. Mainly black tea, green tea, brick tea, etc. are being processed. Besides seeking market and competition with foreign suppliers, one of the main problems is the difficulty of producing tea leaves. Tea entrepreneurs do not have their own tea plantations and are oriented on casual suppliers. Investments in tea production are carried out using local and foreign resources but in inadequate amounts.

The economic spectrum of **Khelvachauri** municipality is largely tied to agriculture. The other fields of the economy are less common in the economic profile of the municipality. The economic analysis of recent years indicates that the Khelvachauri municipality has constantly suffered the difficulties from the point of view of increasing the commercialization potential. Practically, the fruit and vegetable processing is not presented

in the territory of the municipality. There is no commercial processing of livestock products in the business sector either. The situation is complicated by the fact that in the neighboring municipalities of Khelvachauri there is no secondary manufacturing sector developed.

Khelvachauri region is an agricultural municipality of the Autonomous Republic of Adjara, which is quite small and owns 7% of agricultural land in Adjara, which is totally 5 093 hectares. But in Khelvachauri the arable land is only 2 466 hectares. On average, a family cultivates one hectare of land, including 0.29 hectares of arable land, including 0,14 hectares of arable land. By calculating for a single individual owns the total amount of 0,08 hectares of land, including 0,03 hectares of arable land.

The economic spectrum of **Keda** municipality is largely tied to agriculture like Khelvachauri. The other fields of the economy are not clearly distinguished in the whole economic profile of the municipality. The industry is in a better position the development contours of which are better seen in the background of other high mountain municipalities. Several commercial enterprises are active in certain segments of the sector, which operate more steadily in the spectrum of relative advantage on the market. On the mineral waters market the companies “Kokotauri” and “Akavreta” are operating.

Keda is a small-scale agricultural municipality, concentrating 6.9% of agricultural land in Adjara, totally 5 016 hectares. But only 2 389 hectares is the arable land. On average, a family cultivates one 1,2 hectare of land, including 0.59 hectares of arable land. By calculating for a single individual owns the total amount of 0,24 hectares of land, including 0,11 hectares of arable land.

The arable land of the municipality is in quite a risky line. In order to get a guaranteed harvest, watering is necessary. Erosion processes are also too high. Accordingly, the topsoil layers of the productive land are actively washed out.

At this stage no enterprise processing of agricultural products is functioning in the municipality. In the Keda municipality the farming is one of the main branches of agriculture. There is a great potential for the development of viticulture because of the rare and unique varieties of vine. According to the general tendency in the analytical period practically all cultures, as well as sowed areas and yield indexes, have a tendency to be more or less decreasing trends. Research observing describes the fluctuation with higher amplitude than an official statistic base does. Most of these are related to yield. However, it extends to the area of cultivation and yield indexes.

Economy of **Shuakhevi** municipality depends largely on agriculture. Economic analysis indicates that the municipality is increasingly suffers the difficulties in terms of increasing the potential of commercialization. There are practically no fruit and vegetable processing industry in the territory of the municipality. There is no commercial processing of livestock products in the business sector (Small scale enterprise Ango XXI works on recycling of livestock production, which does not affect the overall background). The situation is complicated by the fact that in the neighboring municipalities of Shuakhevi there is no secondary manufacturing sector developed.

Shuakhevi is a mountainous region of Adjara, which is quite small and owns less than 20% of agricultural land in Adjara, which totally is 14 480 hectares. But the arable land is only 1 643 hectares. On average, a family cultivates 3.23 hectares of land, including 0.36 of arable land. A single individual cultivates 0.63 hectares of arable land, including 0.07 hectares of arable land. With the exception of agriculture, Shuakhevi municipality's participation rate in the economic development of Adjara and the country is too small.

The economic spectrum of the **Khulo** municipality is mainly based on agriculture. Khulo municipality is land-poor and owns 32.6% of agricultural land in Adjara, which is totally 23

700 hectares. But here the arable land is only 2 463 hectares. On average, a family cultivates 3.16 hectares of land, including 0.33 of arable land. A single individual cultivates 0.66 hectares, including 0.07 hectares of arable land.

The municipality is in the risk zone for land cultivation. In order to get a guaranteed harvest, along with watering, some areas are required to carry out works of land drying. Erosion processes are also high. Accordingly, the topsoil layers of the productive land are actively washed out.

Economic analysis indicates that the municipality is increasingly suffers the difficulties in terms of increasing the potential of commercialization. There are practically no fruit and vegetable processing industry in the territory of the municipality (even the primary). There is no commercial processing of livestock products (there is the only dairy receiving enterprise). The situation is complicated by the fact that in the neighboring municipalities of Khulo there is no secondary manufacturing sector developed. The only dairy processing plant in the village of Diocnisi was set up in 2015 and produces the products such as: cheese, noodles, homemade sour cream. The enterprise is oriented only on the market of the Autonomous Republic of Adjara.

The researches carried out by us in the Autonomous Republic of Adjara have shown that the issues of research-educational institutions, which can support to introduce technological innovations, are still unsolved. Agricultural exhibitions, which will also positively influence on the process of introduction of various technological innovations, are rarely held.

Analysis of the research carried out in the area of individual municipality shows that the majority of respondents consider perspective the use of unused resources in the future. In the municipalities where the issues need attention, the answer is the same: product sales,

vegetable processing, fruit processing, meat production, availability of credit, information ensuring. (See the table 4)

Table 4

Farmers and entrepreneurs (across the Autonomous Republic of Adjara)					
	Kobuleti	Khelvachauri	Keda	Shuakhevi	Khulo
	%	%	%	%	%
Product sale	40	30	30	30	30
Fruit processing	10	15	5	5	5
Vegetable processing	10	5	15	5	5
Meat production	10	15	20	20	25
credits	15	15	10	20	15
Information ensuring	15	20	20	20	20

Source: Studies conducted by us

It is noteworthy, that lately significant shifts are observed in terms of information provision. of creating so-called "Agro-pedia" on 31 August 2017 in Keda. Agro-pedia is an agro-library where there are almost a thousand articles and materials about various agro events or services. This is a pilot-demonstration project.

The second chapter of the work "**The Role of Farmers in Agricultural Agrarian Sector Development**" focuses on farming farms, priorities of their development in Georgia, ways of increasing farmers' co-operation and their economic outcomes.

In the agrarian sphere, the complex process of organizational and economic change has been carried out such as synthesis of industrial production as agribusiness, where the leading parts are of the branches of food and processing industries, farms and co-operative associations.

Georgia was an agricultural country from the very beginning. Together with the economic activity the Georgian man was formed as a person in the Stone Age. He starts obtaining raw materials, land extraction, iron processing and industrial activities. All his activities are directly related to the development of agriculture. A clear example of this is the way that has passed since then. He created and brought wheat, maize, vines, fruit, livestock, poultry, bee and many other aboriginal and unique varieties.

Analysis shows that farmers in Georgia are in the initial stage of development. They are not yet the perfect sign of market relations. Participation of the world leading countries is essential for the development of the field, taking into consideration the specific nature of the existing environmental conditions and traditions based on the centuries-old experience of agricultural farming.

If we compare the agricultural sector and structural indicators of farming and data in the United States and countries of euro union, we will get the following picture: one food farming industry of the United States provides an average 126 people. An average of 144 people living in Germany. 51 living in the EU countries, while in Georgia, even the average employee can not feed himself, and not the other agrarian activities, rural hunger would prevail.

In the United States, the average agricultural land area of 190.2 ha is used by one farmer, 30.3 ha in Germany, 174 ha in the EU countries, 1 in Georgia, 5 ha.

The number of people employed in agriculture in the United States is 2.9 million. The number of people employed is 1,6%, in Germany - 2.9%, in EU countries - 5.0% and in Georgia - 54%.

In the United States, a small number of farmers use 0.2% of the farmland, in Germany - 31.7%, in the European Union - 56, in the United States, 4% and in Georgia - 98.4%.

In the United States, farmers use 60,4% of farmland, 55.7% in Germany, 35.7% in EU countries and 1,5% in Georgia.

More than 50 hectares of agricultural land in the USA are used by 39,4% of farmers. 12,6% in Germany, 7,9% in EU countries and only 0.1% in Georgia.

If the farmers and farming development of Georgia are to be adopted by the structural indicators of the EU farmers and farms (as these countries are more or less similar in natural-climatic conditions and agrarian relations than in the United States of America), the farm in Georgia and the process of further development of farming area should be focused on emphasizing the importance of co-perennial farming and reintegration, creation of a civilized market and acquisition of lands in the use of farming, intensification and farming Introduction.

Farmers and peasants are often identified with one another, which we think is unjustified, because these concepts in the theory and practice of modern economics incorporate different types of agricultural production and our view is the following:

The peasant farm is a more traditional organizational form of agricultural production, which has evolved over a long historical period compared to farming. The peasant farms existed even before the early philosophy, but it was more typical for the epoch of feudalism. It is essentially natural or semi-natural. The owners of peasant farms are, as a rule, the representatives of the farmers of the village peasant farms, whereas farmers can often be the representatives of various social strata of the city. In this case, farmers of peasant and farming farms are absolutely possible to have the different aims.

The key to the distinctive peculiarity of peasant and farming industries is also the level of production of the produce. Namely, the agricultural activities of the farmers are oriented on the satisfaction of personal needs of its members by agricultural products, i.e. Peasant farms have consumer-partial commodity direction, while farming farms are fully oriented on commodity production.

Farmers and farms differ from each other by the nature of the use of force. The peasant farm is employed by employed labor as a rule, usually using a small portion of agricultural work, temporarily, seasonally. The main and permanent participants in the peasant farm are the owners of the farm and the members of his family. who represent peasants. The Farming 'farms are employed in the process of employing more and more permanently, as well as farmers' owners owning the management and organization of production, as they are often employed by professional managers.

Farming farms differ from peasants' farms with the level of specialization. Peasants' farms differ from farmers' farms, as their main goal is to meet the needs of farmers on agricultural products. The farmers focus on the production of commodity products, the use of more comprehensive tools for complex mechanical mechanization, the sustainable growth of labor

productivity, the introduction of scientific-technical progress in the development of achievements, which further deepens their differences in comparison with peasant farms.

Due to a number of advantages and timing requirements, the functioning of farming farms in Georgia should become the main and strategic direction of the organization and development of agricultural production. Moreover, such a farm is a fairly effective form of rational use, which is of great importance for a small-scale Georgia.

It is also important to unite farmers with small farmlands as a cooperative in terms of enhancing crop productivity and realization issues. The high value of cooperatives indicates the data in the developed European countries. In one of the highly developed countries, Denmark has the following cooperative: there is a starch producing cooperatives, where 85% of potato starch is exported and sold for more than 40,000 countries in 170,000 t. per year. Potato starch is produced by 5 enterprises belonging to cooperative and unites more than 3000 farmers. The cooperative is operated by the following basic principles: the farmer is the owner of the shares. Each action gives the right and at the same times an obligation of 100 kg. On potato delivery (10 shareholders have the right and obligation to hand over $10 \times 100 = 1000$ kg of potatoes). The order of potato is determined by the enterprise and the minimum cost of the product is paid on the spot. The profit received after the sale of starch is distributed according to the number of shares. Selling or selling of shares is allowed. The price of the action is determined by the price of potato at the moment of sale. The cooperative is managed by a congregation that selects the managing director of the enterprise from the cooperative members. The cooperative member has only one vote and it does not depend on the number of shares.

The Law on Agricultural Cooperatives in Georgia was adopted on 12 July 2013 on its basis 1586 cooperatives were registered at 31 December 2016: Adjara - 153, Samtskhe-Javakheti 360, Kvemo Kartli - 221, Kakheti - 165, Racha-Lechkhumi - 137, Imereti - 134, Samegrelo - Zemo Svaneti - 123, Shida Kartli - 112, Mtskheta - Mtianeti - 84, Guria - 49, Tbilisi - 48. Cooperative status cooperatives were granted to 484, in 2016.

The working style of cooperatives is more or less flexible and adequate for today's needs. These results are proved by the results of the research which were got by us. The survey carried out by the Adjara Autonomous Republic in cooperation with the cooperatives clearly showed that cooperatives are the best way to implement agrarian activities and reduce the problems in the field of employment and create opportunities for greater benefit. Subjects with surveyed cooperatives unanimously recognize the positive sides of the cooperative and have difficulties to name the shortcomings.

Analysis of research data shows that the existing reality is much more difficult than it is presented. There are many problems that need to be overcome, because they have a massive character.

One of the objectives of the survey was the question of the problems in the production of agricultural products and whether or not the existing problems have been created as a result of cooperatives.

Almost 90% of respondents indicate that the problems can be relieved on the basis of existing promotion, but they do not have much to do.

One of the most important problems is the fragmentation of land that creates a problem in terms of activity, as well as in attracting finances.

When asked whether the loans are available for agriculture, 99% of respondents do not respond to their own activities, which are scarce for agricultural activities, as they need equipment, fertilizers and other means.(See the table 5)

Table 5

Results of Agricultural Cooperative Survey (in the Adjara Autonomous Republic)

Nº	question	answer	Results in %
1.	What was the basis for forming a cooperative?	Support	95
		Joint work	5
2.	How would you characterize co-operation?	Positively	98
		Negatively	2
3.	Is there a difference between the current and current problems?	Yes	90
		No	10
4.	Are Loans Available?	Yes	1
		No	99
5.	Do you think cooperatives are the best way to develop the agricultural sector in the country?	Yes	100
		No	0

Source: Result of own research

The rich experience in foreign countries is the development of farming farms and cooperatives. It is necessary to take into account these experiences, the ability to use a lot depends on how scientifically reasonable program we are in this direction. It is especially important how we use it and we will implement it practically. Only in this way we can achieve the desired results of agricultural farming and cooperative development in the agrarian sector.

The third chapter of the work "**State regulation and support as a mechanism for solving the problems of economic efficiency**" deals with the role of state regulation and support in the solution of the agrarian sector, and the need to share the world experience.

The state support of the agricultural sector of the economy represents an integral part of the agrarian policy of the country and makes it possible to mitigate the consequences of non-negativity of goods between the agrarian sector and other sectors of the economy significantly. It ensures the efficiency of the agrarian sector in the country.

State regulation of agrarian production is a complex and multifaceted system. Its implementation in Georgia is mainly available in two directions:

1. Formation of agricultural raw materials and product market
2. Protection of interests of local producers.

The first direction consists of a complex set of events related to the establishment of a market area, the central place in which the product of the products of the product and the price regulation of their products.

The second direction involves the protection of the protectionist policy by the state in which the domestic market is protected. The factors that impede state support in the agricultural sector of our country are that there is no optimal ratio of self-regulation market and state impact mechanisms, as well as a long-term scientific concept of state regulation.

In the Georgian agricultural sector, it is necessary to pay attention to the elaboration of flexible targeted programs of agriculture in which the priority directions of local production will be considered.

Qualitative development of the agrarian sector is impossible without multilateral state support and regulation, without proper sectorial policy. The key issues of this policy are the approach of the government towards agricultural lands. In general, it is known that in the developed world, including in Europe and Japan, agricultural land is recognized as a national wealth, the reasonable management of which is a state of well-being. Therefore, the government is actively interfering with the management of the land market, as well as in the exploitation of the land. The marginal minimum and maximum of lands (according to regional peculiarities and production specifications) are set. Such an approach prevents fragmentation and division of the lands, as well as their wrong enlargening. The state controls those who purchase the land, it is forbidden to sell it to legal entities, foreign citizens cannot buy land etc. All this contributes to the creation of optimal conditions for the production and the protection of vital rights of rural people, serving the maintenance and development of rural communities.

The current agrarian policy in Georgia is inadequate for the tasks and goals facing this sector. On the contrary, the mistakes made in the implementation of the reforms significantly weakened the material-technical base of the agricultural sector and the productivity, which, together with other reasons, became one of the serious causes of economic crisis in the country.

The peculiarities of our country (regional diversity, their peculiarities, the situation of the transition economy, etc.) require more active actions from the state to eradicate disproportions in the economic sphere, to solve difficult regional problems, to create conditions for sustainable development of the regions of the country.

Particular attention should be given to the regions with difficult climatic conditions (mountain regions), which are represented by the agricultural sector in the field of economy with a large share and complex social background. These include 90% of the regions of Georgia, including the Autonomous Republic of Adjara.

In 2012 the Agricultural Projects Management Agency (ARMA) was founded to support the development of agriculture in Georgia, which is implemented by the Ministry of Agriculture and managed by various subordinated agricultural and processing enterprises. Its mission is to support the development of agriculture of Georgia and main functions:

- A) Planning and management of projects initiated by the Ministry of Agriculture;
- B) Management of subordinated agricultural and processing enterprises.

Within the framework of the Agency State project "Produce Georgia - Quick Development", the following projects are implemented by:

1. Start the future;
2. Tea Plantation Rehabilitation Program;
3. Agro-Production Support Program;
4. Preferential agro credit;
5. Co-financing Project for Processing and Savings Enterprises;
6. Agribusiness;
7. Produce in Georgia;

8. Seasonal projects.

In 2016, 259 beneficiaries used the project "Start the Future", the researcher, only one beneficiary from the Autonomous Republic of Adjara, with co-finance of 61.361 GEL.

Only 1699 beneficiaries benefited from the preferential agro-credit program, only 14 beneficiaries in the Autonomous Republic of Adjara, 4 of which received a loan of 190.000 GEL and 10 beneficiaries within 652.700 USD.

31 beneficiaries around the country, only 1 beneficiary across the Autonomous Republic of Adjara, use the project "Coverage of Agricultural Production and Saving Enterprises". Project financing is about 1 million.GEL.

The number of beneficiaries benefiting from the Project "Agro Insurance Program" consists of 18.795 and 5.790 beneficiaries in the Autonomous Republic of Adjara, whose insurance premium is 1.509.298 GEL.

According to the 2017 budget project, agriculture financing is 57 million. In comparison with 2016, which is 321.350 million GEL. According to the Ministry of Agriculture, this reduction is associated with the abolition of a small farmers' promotion program. Analysis showed that countries where high levels of living and income of the population are distinguished by the large amount of money to support agricultural producers. For example, in the US it is equal to \$ 46.5 billion (1% of gross domestic product), in EU countries - 121.4 billion US dollars (1,3%), and Japan - \$ 48.7 billion (1 Gross Domestic Product) 4%).

Incompatibility with the aims of the country comes from the decision of the Government of the country on January 1, 2017 to abolish the support of small, family farming farms, which

resulted in abolition of "agricultural cards". This card gave the farmer the opportunity to buy agricultural goods within two hundred GELs, which was a certain benefit for him.

Projects implemented by the state should contribute to long-term sustainable development of agriculture. Creation of an entrepreneurial environment that will result in quantitative and qualitative growth of agro products produced in the country. Competitive, high quality products output, high level of food security and export growth. However, the existing reality shows that these projects do not give real results. The reason for this is the lack of access to each project.

The economic success of the agrarian sector must be founded through the consolidation of the land. The main responsible authority for the consolidation projects in land consolidation is the Ministry of Agriculture and the consolidation tools are mainly involved in the development of rural development strategies and programs.

As a result of implementation of these programs, it is possible to step up gradual land and increase the average size of the parcels. Extended plots will allow their owners to increase the scale of farming and consequently, effectiveness. Which will play an important role in raising the tenacity of the sector and accelerating the modernization of agriculture?

In the fourth chapter of the work **“Conditions for agrarian sector development and economic efficiency”** the main aspects of agricultural sector development are discussed in the framework of free trade with Europe, ways of raising economic efficiency of the main sectors of the agricultural sector.

Georgia's foreign trade turnover has increased 6 times in recent years. This is due to the liberal trade regime introduced by the Government of Georgia: low tariffs on import, small quantities of licenses and permissions on export / import, the absence of quantitative restrictions

on import/ export, the absence of customs tariffs on export / re-export, the absence of Value Added Tax on export and simplification of trade procedures. However, as a result, the liberal trade regime has led to an increase in imports, which in turn led to a growing record deficit in the balance of the trade and made the people responsible for the policy elaboration think over the problem. It should be noted that the difference between imports and export, on the background of their growing indicators, is gradually decreasing over the last few years. By 2017, exports amounted to 36% of total foreign trade turnover.

Georgia is on the path of integration into the world economic space. Since 1997, after the joining the World Trade Organization, the use of the Generalized Preferences System (GSP) in the trade with developed countries, which later added GSP + trade regimes, made it more favorable for Georgia to promote foreign trade and encourage export growth. After launching the Eastern Partnership Initiative, in 2009, relations between Georgia and the European Union entered into a new phase. The Eastern Partnership Initiative envisages the deepening of relations in three main directions - Association Agreement (AA), which also includes an agreement on Deep and Comprehensive Free Trade Area (DCFTA) and Visa Facilitation and Readmission Agreements.

The European Union is one of the largest trade partners for Georgia and its share is 30% of the total volume of imports, but exports consist only 20%, which constitutes a continuous negative trade balance. In contrast to other countries (mainly the member states of the Commonwealth of Independent States), there are some hindering factors for trade, especially for the agricultural products: high tariffs, obstacles due to non-tariff measures. In this context, in November 2013, the Association Agreement initial, as first step for the ratification of the agreement between the EU and Georgia, and on the other hand, the agreement on deep and comprehensive free trade area as a part of the agreement, reduced trade barriers and export of

Georgian products to create new opportunities, from the point of view of further diversifying for foreign trade and development, as well as increasing the benefits from trade.

In order to increase and diversify export of Georgian agricultural products, it is necessary to focus on the following issues:

- Implementation of General Promotion Program in support of Georgia Agroexport in high-income countries such as the European Union;
- Renew Georgia's agrarian education and research capacity;
- Improve the training of the workers and managers in the agricultural and food production plants;
- Investments in the internal transport infrastructure.

Agro-export growth requires a relevant trade policy environment. Trading agreements with current and potential trading partners may increase legitimate belief for investors and merchants and increase access to foreign markets.

Deep and Comprehensive Free Trade Agreement (DCFTA) between Georgia and the European Union, which was signed in June 2014, is the very case of the proper trade policy environment. The benefit of this agreement greatly depends on Georgia's ability to increase the quality of food production to the level of European Union standards. The Agreement will not only increase export of Georgian agricultural products to the EU market, but also open other markets that gradually develop similar standards. This will also strengthen internal farming and production.

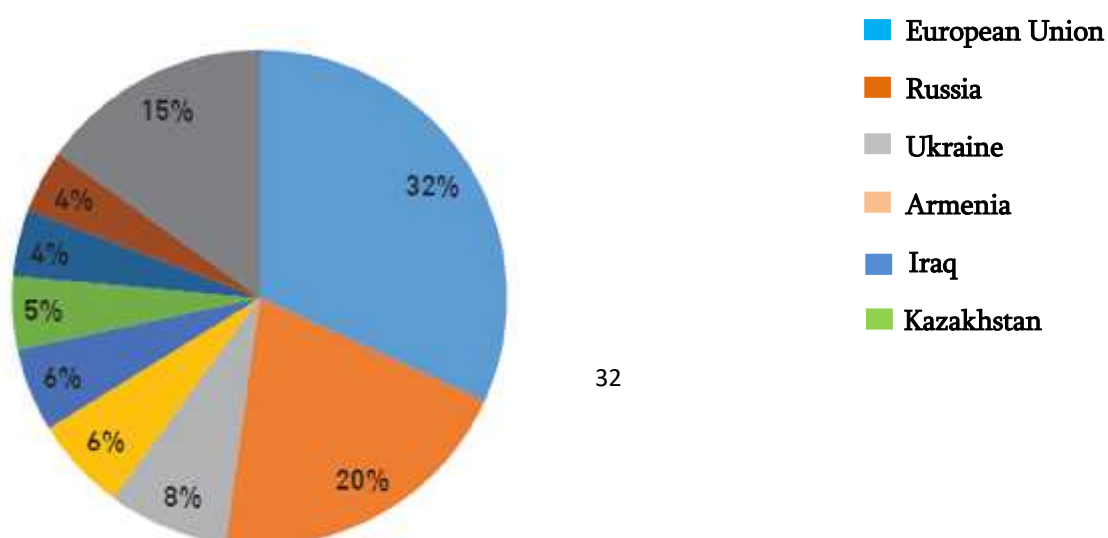
According to the data of 2016, Georgia exported the agro products worth of 692.2 million US dollars that is higher than the same data with 13.1% in 2015 and exceeds with 35.6% for 2012. In this period, the share of agricultural products in the country's total exports constitutes 33%. The export mainly concerns to: nuts (26%), wine (16%), alcoholic beverages (13%),

mineral and freshwater (12%), cattle (5%), fish (2%), non-alcoholic beverages (2) %), Citrus (2%) and others.

In 2016 the export of Georgian agricultural products was carried out in 88 countries. Deep and Comprehensive Free Trade Area Agreement promotes trade development with European Union countries and diversification of export markets. The value of agricultural products exported in the EU in 2016 is worth of 221 million USD and is 2 times higher than the data of 2012. According to the data of 2016, Georgia imported agro products worth of 1.1 billion US dollars, which is 4% less than the previous year. The total share of agricultural products in the country's total imports is 14.7-per cents. The import mainly concerns to: tobacco (10%), wheat (8%), sugar (6%), poultry meat (5%), chocolate products (5%), vegetable oil (4%), flour confectionery (3%). In 2016, import of agro products in Georgia was carried out from 105 countries. According to foreign trade data, negative trade balance decreased by 25%. (See diagrams 2 and 3).

Diagram 2

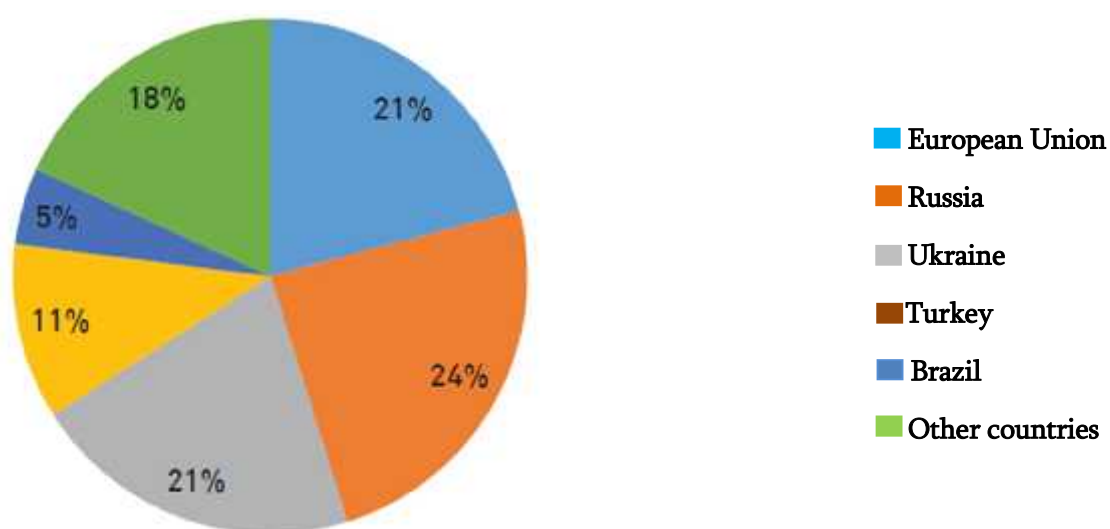
**Main export markets of agro products of Georgia
(2016)**



- Azerbaijan
- Turkey
- Other countries

Diagram 3

Main importers of agro-food products
(2016)



Source: Ministry of Agriculture of Georgia Annual Report, 2016

Georgia is so called a net importing country. This implies that the supply of more shares (about 80%) on food products is being imported. An analysis of imported goods shows that Georgia depends on the following imported products: wheat, tobacco, meat and vegetable oils, as well as nutritional products obtained by grain processing. The above mentioned products require large land resources and high level of mechanization, in which Georgia has no competitive advantage.

Dynamic analysis of 10 leading groups of exported goods (2013-2016) is encouraging, but it should also be taken into consideration that despite the fact that the nut is the leading product of export from Georgia in recent years, its sustainable success will largely depend on the price dynamics, the land, and the workers in the near future forecasting. In the rest of the five leading categories of other countries (excluding the EU) there has been drastic change in its export. After the opening of the Russian market for Georgia the export of wine from natural grape has been increased by 50% compared of that in 2012, and the export of mineral waters has risen by 55%. Thus, recent developments and new opportunities have changed the export intensiveness of agricultural products to Georgian producers. (See the table 6)

Table 6

Dynamics of major export products

Export of products, mln. USD	2012	2013	2014	2015	2016	average
Nuts, walnuts, fresh or dried	69.956	75.13	130.08	83.659	166.712	105.109
Indetured ether spirit, spirit liquids	54.019	55.705	67.852	80.027	99.925	71.506
Natural grape wines	31.99	41.138	54.103	64.87	127.85	63.992
Waters, natural or mineral	24.675	36.91	47.607	59.341	106.88	55.085
wheat	3.248	7.242	6.169	52.062	47.743	23.293
beef	16.90	19.310	28.21	39.267	47.630	30.265

Mineral waters and soda	10.684	14.666	15.051	20.888	17.441	15.746
lamb	17.05	13.42	14.944	18.162	15.54	15.82
Fruit and vegetable juices	2.883	6.201	6.312	12.53	7.358	7.058
corn	1.097	2.650	9.95	7.678	12.581	5.000
Citrus fresh or dried	15.70	12.143	5.263	7.670	20.18	12.193

Source: National Statistics Office of Georgia, 2017

The export of agricultural products of Georgia is not distinguished by its diversity and large volume, so it is characterized by low competitiveness on the world market.

Increase of export potential in agriculture is limited because of fragmentation of farmers and land plots. The satisfaction of EU standards and certification requirements for individual farmers will be complicated by comparison with cooperatives, as well as risks will be significantly complicated in terms of entering new markets and exporting their product, taking into consideration the EU's highly competitive markets. Currently, in the agricultural sector of Georgia, primary production products are dominated; farmers produce the goods mainly for the domestic market, only the parts of it are exported abroad. However, without the complex value chain, DCFTA's potential benefits will not be fully utilized.

From the economic point of view, the efficiency of production is of great importance, which implies the outcome of the production process. Relationship between the achieved results and the cost of current and done work is reflected in the quality of production resources and their efficient use. Solving the problem successfully, which is facing each agricultural enterprise (company), can also be based on economic efficiency.

Today it is necessary to utilize agricultural resources, both food and commercial opportunities and potential in the whole country as well as in the Autonomous Republic of Adjara. Practice shows that diversified production has been successfully developed, which has its own processing mechanism and guaranteed marketing. The interests of the development of agrarian fields are strictly demanding to process, promote and improve their effectiveness on the basis of science. Such a concept should maximize scientific achievements and advanced practices, state regulation, industrial ties, optimization of tax, credit and finance policies should be established, land and domestic economic relations should be improved, also production structure should be changed taking into consideration the current situation of the market, ecology of nature and economic conditions, as well as production should be improved, development of co-operation and agro-industrial integration on the basis of scientific-technical progress should be achieved. It is necessary to mobilize all areas, take measures to protect the local goods from the export expansion on the consumer market.

Key conclusions and recommendations:

✓ For dynamic implementation of current reforms in the agricultural sector, for the establishment of civilized economic relations in our country making deep scientific analysis, accurate assessment and economic efficiency of development is very important, particularly in the Autonomous Republic of Adjara;

✓ Three of the five municipalities in Adjara such as: Keda, Shuakhevi and Khulo are mostly mountainous, which are characterized by difficult relief and zonal-climatic diversity, which has led to the formation of traditional farming fields. Namely, in the mountain zone is mainly breeding, and in the lowland there is privilege of planting.

✓ The main source of food for rural population is the agricultural products presented on their land that are not sufficient to satisfy their needs. In order to overcome this problem, it is necessary to involve people in cooperatives and maximize the ability to get more revenue;

✓ Currently 43% of Georgian population lives in rural areas. In the agricultural sector more than 54% of the country's economically active population is employed. Unfortunately, the volume of production produced in the agricultural sector in recent years and its share in the country's gross domestic product is almost unchanged. In 1996, the share of the products produced in the agricultural sector amounted to more than 33% of GDP now it has been reduced four times and is not about more than 9,3%, it provides only 14% of the domestic market demand;

✓ The cornerstone of the agricultural policy of the country and one of the main issues is agricultural problems and problems in land using. The land reform, which has been implemented in Georgia, is far from advanced world experiences and is one of the main reasons for the deep crisis that has affected on the country's agriculture. The situation is complicated by the fact that even a small size of land is not often in the whole boundaries. It is divided into two or more plots, which negatively affects the productivity of labor;

✓ In our opinion, it would be better to develop a specific strategy for agricultural development directly by the municipalities and act on this strategy. It is necessary to establish a multi-year plan to promote the right direction of the Georgian village. Otherwise, there will be a natural

and unverified policy in this area, which will bring even more negative results in the longer term;

✓ Based on our studies we can conclude that the municipalities should pay special attention to the provision of information. Considering the soil-climatic conditions and the proper usage of agrotechnics productivity is due to be increased;

✓ The study showed that in the unique micro-climatic zone of viticulture of Keda municipality gives high-performance sparkling winemaking materials. Vine varieties such as Chkhaveri, Tsolikauri, Ozheli, Aladasturi, and Extractor are cultivated here. Of course, the scale of production cannot be voluminous, but the emphasis should be made on high quality and the production of expensive wines on the market;

✓ In respondents' opinion, in the municipalities of Keda, Shuakhevi and Khulo the primary task should be to restore livestock first and revive it in the region will help the raise the living level of the population, as it is a series of valuable products;

✓ According to the survey, most of the respondents consider the sale of produced products. They unanimously recognize the necessity of cooperatives, which, on the basis of the contract, provides the purchase, transportation, reproduction, selling the products from family farms;

✓ Farmers' farming in Georgia should be divided into three types of farming:

- Internal (small family) farm - which is not oriented on economic profits, directly is engaged in activities and uses products only for its own use.

- The peasant (family) farm - where family members are involved in the production of more agricultural products than their own consumption, they are engaged in economic activity, but are not registered as entrepreneurial subjects.
 - Farmers' Farm - which is registered as an entrepreneur, has hired workers, produces agricultural products and is focused on receiving profits.
- ✓ Georgia's ecologically pure agricultural products can achieve success and establishment on the European market. Depending on its small earthliness, the emphasis should be made not on the scale and quantity of production but on the safety and quality indicators of food products;
 - ✓ Currently 153 cooperatives operate in the Autonomous Republic of Adjara. This number should increase, cooperative makes small goods producers to unite and produce more and better products;
 - ✓ Political decision should be taken and the land will be declared a priority, which should be logically followed to develop strategic vision of consolidation of agricultural lands and a long-term plan;
 - ✓ It is necessary to develop medium and long-term strategies for the agricultural sector directly by the municipalities and to determine the segments that may have a competitive advantage.

Based on the research, the following practical recommendations may be made, in particular:

- Develop a flexible strategy and action plan for the development of agrarian sector in the Autonomous Republic of Adjara directly by municipalities;

- Studying the important issues for the development of agrarian sector and existing problems, analyzing and implementation of efficient measures.
- Unification and coordination of all stakeholders.
- Improvement of current legal framework for cooperative development, enhancement of co-financing and assistance.
- Accessibility and flexibility of programs implemented by the state.

We believe that the results of the survey will help to overcome the existing problems in the agricultural sector. Developed conclusions and recommendations will provide a solid foundation for the development of all sectors of the agricultural sector, to increase its efficiency gradually. All this will contribute to the improvement of the economic situation of the country as well as the agricultural sector of the Autonomous Republic of Adjara.

Results from the Doctoral Thesis are reflected in the following scientific articles:

1. **Jakhaya L.** "Regulation of State Authority and Support for Development of Agricultural Agrarian Sector", Journal "Economic Profile", N16, 4-10, Kutaisi, 2016.
2. **Jakhaya L.** "Effective Functioning of the Agrarian Sector of the Region", Journal, "Economics", N1, 90-105, Tbilisi, 2017.
3. **Jakhaya L.** "Development of Farmers' Farming in the Agrarian Sector in Georgia", Journal "Economics", N9-10,21-36, Tbilisi, 2017.
4. **Jakhaya L.** «Development of Cooperatives in Georgia", Journal "Innovative Economics and Management", N1, 60-66, Batumi, 2017.
5. **Jakhaya L.** "Land Consolidation - The Most Important Instrument for Agriculture Development", Journal "Innovative Economics and Management", N3, 90-95, Batumi, 2017.