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**AGRIBUSINESS DEVELOPMENT TRENDS IN  
GEORGIA: MODERN CHALLENGES AND  
SOLUTIONS**

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**Introduction.** The article substantiates the importance of agribusiness development in solving the problem of food security and food security of the population. Economic indicators of agribusiness development in Georgia and Adjara region are analyzed, the role of determining agribusiness development trends and perspective directions in strengthening the rural community, especially in terms of rural community involvement in business is assessed. Therefore, in order to overcome the problem of agribusiness development, it is of special importance to study the development trends of agribusiness, to identify the current challenges in this field and to develop perspective directions of development.

**Aim and tasks.** The aim of the research is to identify modern challenges based on the study of agribusiness development trends and to make recommendations on promising development directions.

**Results.** The paper analyzes the views of researchers on alternative models of development in the field of agribusiness, focusing on the components of the agribusiness sector as a model. The article presents the conclusions and develops recommendations on overcoming the factors hindering the development of agribusiness and ways of future development. The development of the cooperation process is also important for the growth of scale and its place in international markets. Quantitative research has shown that 86% of farmers are not united in cooperatives. Even those who are united from year to year with less turnover of financial and material resources are recorded in the respective organizations, indicating their less life skills.

**Conclusions.** Quantitative and qualitative research on the example of Adjara region (Georgia) has been conducted to identify the trends and characteristics of agribusiness development and to determine future directions. A questionnaire has been developed for the quantitative research and beneficiaries have been selected from the database of employees in the field of agribusiness, while for the qualitative research a group of experts has been identified and focus groups have been formed from these groups to clarify some problems. Quantitative research has identified the current challenges of agribusiness development, while qualitative research has identified the specific causes of the problems and the characteristics that will determine the future priorities of agribusiness development in the Adjara region.

**Keywords:** agribusiness, development trend, impediments, Adjara region.

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## ТЕНДЕНЦІЇ РОЗВИТКУ АГРОБІЗНЕСУ В ГРУЗІЇ: СУЧАСНІ ВИКЛИКИ ТА РІШЕННЯ

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**Вступ.** У статті обґрунтовано значення розвитку агробізнесу у вирішенні проблеми продовольчої безпеки та продовольчої безпеки населення. Проаналізовано економічні показники розвитку агробізнесу в Грузії та Аджарському регіоні, оцінено роль визначення тенденцій розвитку агробізнесу та перспективних напрямів у зміцненні сільської громади, особливо в частині залучення сільської громади до бізнесу. Тому для подолання проблеми розвитку агробізнесу особливе значення набуває вивчення тенденцій розвитку агробізнесу, визначення актуальних завдань у цій сфері та розробка перспективних напрямів розвитку.

**Мета і завдання.** Метою дослідження є визначення сучасних викликів на основі вивчення тенденцій розвитку агробізнесу та вироблення рекомендацій щодо перспективних напрямків розвитку.

**Результати.** У роботі аналізуються погляди дослідників на альтернативні моделі розвитку агробізнесу, акцентуючи увагу на складових агробізнесу як моделі. У статті наведено висновки та розроблено рекомендації щодо подолання факторів, що гальмують розвиток агробізнесу, та шляхів подальшого розвитку. Розвиток процесу співробітництва також важливий для зростання масштабів і його місця на міжнародних ринках. Кількісні дослідження показали, що 86% фермерів не об'єднані в кооперативи. Навіть ті, хто з року в рік об'єднується з меншим оборотом фінансових і матеріальних ресурсів, реєструються у відповідних організаціях, що свідчить про їх меншу життєву кваліфікацію.

**Висновки.** Для визначення тенденцій та особливостей розвитку агробізнесу та визначення напрямків на майбутнє проведено кількісне та якісне дослідження на прикладі Аджарського регіону (Грузія). Для кількісного дослідження розроблено анкету та обрано бенефіціарів із бази даних працівників у сфері агробізнесу, а для якісного дослідження визначено групу експертів та сформовано фокус-групи з цих груп для з'ясування деяких проблем. Кількісні дослідження визначили сучасні виклики розвитку агробізнесу, а якісні – конкретні причини проблем та особливості, які визначають майбутні пріоритети розвитку агробізнесу в Аджарському регіоні.

**Ключові слова:** агробізнес, тенденція розвитку, бар'єри, Аджарія.

**Introduction.** Georgia has agriculture with rich traditions. It has evolved since time immemorial and is characterized by versatile, unique features. Physico-geographical features of the territory of Georgia give a specific character to its separate regions and create typical, different physical-geographical regions and micro-regions. The provision of food to the population is one of the global problems and its solution is the basis for the development of the national economy of any country. At the present stage, the Georgian economy is in crisis, which has been greatly affected by the global epidemic situation, the severe crisis in the Georgian economy is particularly acute in food production. 17% of the country's national economy is directly dependent on the agricultural sector [1].

Imports of food and agricultural products are three times more than exports [2]. Despite the efforts of the world's civilized society, providing food to the population remains one of the global challenges and problems. In order to escape from the crisis created in agriculture in Georgia, it is necessary to develop effective mechanisms for the development of agribusiness.

Georgia today maintains a low rate of development of agribusiness, which insufficient pace of development creates many objective and subjective difficulties in both food production and a number of related sectors [3]. However, there is no unified systematic approach to the prospects for the development of this field. Therefore, in order to overcome the problem, it is of special importance to study the development trends of agribusiness, to identify the current challenges in this field and to develop perspective directions of development based on the identification of problems.

**Aim and tasks.** The aim of the research is to identify modern challenges based on the study of agribusiness development trends and to make recommendations on promising development directions.

**Methods.** The study used the following methods:

- Collection and comparison methods are used to determine the accuracy of the data;
- Agribusiness development indicators are calculated through statistical methods, characteristic trends are established;

- Household survey database is used to determine the patterns between analytical and statistical assessments, as well as publications of the National Statistics Office of Georgia, statistical data are studied;

- Impact-urgency matrix identifies factors hindering the development of agribusiness;

- Quantitative and qualitative research has been conducted to determine quantitative and qualitative indicators;

- "Priority scheme" sets the priorities for the development of agribusiness.

- Quantitative (questionnaire survey) and qualitative research (semi-structured in-depth interviews and focus group meetings) were conducted.

**Literature analysis.** In the context of globalization, one of the main problems of the economy is the provision of food to the population, which is especially relevant in developing countries. The main way to solve the problem is to develop agribusiness,

The agri-food sector has always played a crucial role in providing food and welfare to the population. Georgia's agri-food sector has faced new challenges in a pandemic, especially in terms of food security problems.

The trend is still maintained in Georgia, when a large number of rural employees create small-scale products and low levels of productivity have a negative impact on food security, as well as food export-import figures and the development of markets in general. According to the data of 2020, the volume of the gross domestic product is 49.4 billion GEL, of which the share of processing industry is 10.2%, trade – 13.9%, transport and warehousing – 6.3%, agriculture, forestry and fisheries – 7.8%. While the volume of exports of agri-food products lags significantly in the amount of imports. For the efficient use of resources, first of all, it is important to develop conceptual approaches to agribusiness, according to which the main driving force will be business and not specifically agriculture.

Such a concept will ensure the efficient functioning of all its components. The current system in the field of agribusiness is inefficient, for example, one of the weak links in this field is the supply chain. Improving the supply chain will substantially improve the demand for food,

lead to the formation of new relationships between food reserves and society [4]. Due to supply chain problems, large quantities of products are not delivered to customers in agri-food markets [5].

In order to solve the problem of food security of the country, it is important to evaluate the development trends of agribusiness on the basis of scientific research and to identify the existing problems [6]. This problem will solve the problem of local production [7] and the development of local food markets [8].

In the context of globalization, it is especially important to note that every country, any economy, needs an economic model tailored to it, and the adaptation of global theories to every country or situation is incorrect [11]. In addition, every country has its share of obligation to contribute to the provision of the World Food Program.

The identification of factors hindering the development of agribusiness plays a major role in the growth of food production and its justified territorial displacement [12]. The trend and perspective directions of agribusiness development should be in line with the concept of rural development [13].

Given the above, alternatives for the prospective development of agribusiness may be different. One group of scholars believes that it is important to harmonize national and international structures, as well as, no less necessary to take into account urban problems. In the concept of agribusiness development, researchers consider both international and national features [14]. It is great to assess the development trends of agribusiness and to determine the role of perspective directions in strengthening the rural community, especially in terms of involvement of the rural community in business.

Part of the science focuses on the components of the agribusiness sector as a model. An optimally selected agribusiness model is a key factor in the commercialization of agriculture. It facilitates the opening of single windows and retail stores in rural areas, the establishment of a processing industry, and so on. Feedback will be significantly developed; employment opportunities will be expanded. A successful agribusiness model will also develop cooperatives. It is considered that the

agribusiness project can be implemented by both public and private individuals in a public-private partnership [15]. With the existence of such models, a better agricultural value chain is created [16].

In developing inclusive business models, researchers believe that a conceptual framework needs to be defined. It is necessary to consider the factors contributing to inclusive business models [17].

Scientists predict that food demand will continue to grow in the short and long term, [18] however, the number of direct sales of agri-food products will increase significantly, and special emphasis will be placed on improving the supply chain [19]. In the conditions of increased demand for food it is necessary to assess the development trends of production, no less important is to increase productivity in the agri-food sector, especially in developing countries [20].

Developing countries play an important role in the supply of agri-food products to food markets, and this trend will be maintained for some time [21]. Stable food supply is highly dependent on price volatility [22]. The impact of food prices is particularly strong in middle-income countries [23].

The pandemic has caused some destabilization in the food supply chain, thus limiting access to food in many countries. Given that countries are currently pursuing restrictive export policies, it is clear that the problem is expected to escalate further. In such conditions, the need to increase access to food at the national level becomes urgent. Therefore, clear policy goals for the agro-food sector should be established for the countries, including Georgia, and urgent actions should be developed for their implementation.

The global coronavirus pandemic situation may lead to global food shortages [24].

Governments have already introduced anti-free trade measures, which in turn has significantly restricted the movement of food flows between countries. It is clear that the coronavirus pandemic will inevitably lead to a food crisis [25]. Scholars have already argued that due to the growing wave of export restrictions, there will undoubtedly be a global crisis in food production and supply [26].

It is especially important today to find ways to solve the problem in the light of modern realities in the world, especially in the context of health and economic relations, especially since food security is considered at the border of these two areas [27].

Therefore, the global food crisis will be imminent, and the search for a way out of this crisis must begin, first and foremost, by increasing the production and supply of sufficient and affordable food. The questions will be answered: What impact will the pandemic have on food production? What factors hinder the supply of food? How will the food supply chain change? What will be the costs of food production? How will the crisis period affect food shortages? What will be the food supply indicators? What will be the indicators of food safety level in the post-coronavirus period, etc. Answering these questions is also relevant for Georgia. Thus, it is important to identify the challenges that hinder the achievement of the level of food security in the country, as well as to assess the expected scenarios for the development of the agribusiness sector in the post-coronavirus period.

**Results.** Quantitative and qualitative research was conducted on the example of Adjara region (Georgia) to identify the trends and characteristics of agribusiness development and to determine future directions. A questionnaire was developed for the quantitative research and beneficiaries were selected from the database of employees in the field of agribusiness, while a qualitative group of experts was identified for the qualitative research and focus groups were formed from these groups to clarify some problems.

The purpose of the quantitative research was to identify the current challenges in the development trends and characteristics of agribusiness and to develop recommendations to address them accordingly. Qualitative research aimed to determine the specific causes of the problems and the characteristics that determine the priorities for the development of agribusiness in Adjara.

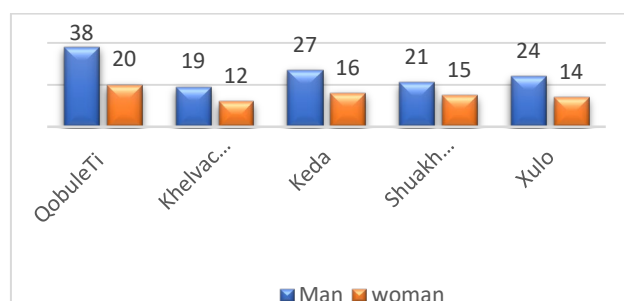
The survey was conducted in April-May 2021. A total of 206 respondents were interviewed, both online and on-site, based on the completion of the questionnaire.

The results were sorted according to the homogeneity of the proposed ways of solving the problems. The questionnaire included both closed and open-ended questions.

Representatives of the following farms producing annual and perennial crops involved in the agribusiness of Adjara region participated in the study: citrus growers, blueberry plantation owners, walnut (chandler) producers, tobacco, vegetables, potato and tea producers.

Quantitative survey data allowed us to perform descriptive analysis. The type of questions asked was structured. The representative number of respondents is presented in the survey process. The results are processed by statistical analysis methods and SPSS program. Summarized data are used to assess agribusiness development priorities, as well as to draw conclusions and recommendations, the reliability level was 94.5%, the selection error rate ranged from 2 to 3%.

Farmers were interviewed in proportion to the population in the five municipalities of the Autonomous Republic of Adjara. The number of farmers surveyed and the sex gap vary by municipality (Figure 1).

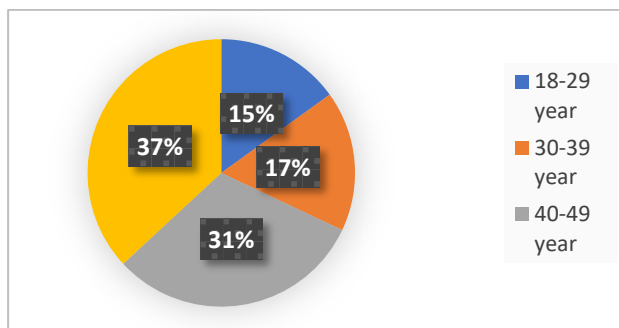


**Fig.1. Number and sex of farmers by municipalities of the Autonomous Republic of Adjara.**

The analysis of the results showed that the total number of respondents in all five municipalities exceeds the number of men, with the share of women being 35.9%.

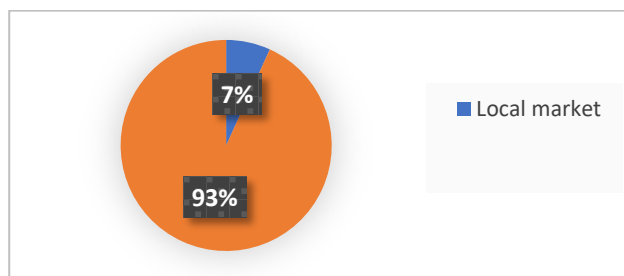
Differences were also observed according to the age of the respondents, in particular, the study participants were distributed by age as follows: 37% of the 506 farmers over the age of 50, 31% of the 40-49 years, 17% of the 30-39 years and 15% of the 18-29 years.

The data show that as the age decreased, its incidence decreased as a percentage. The number of young farmers involved in agribusiness is therefore small compared to other age groups (Figure 2).



**Fig.2. Age cut of surveyed farmers**

To the question, "For which market did you produce agri-food products?" The vast majority of farmers (93%) answered that they produce the product for the local market. Only 7% of farmers have the opportunity to export their produce (Figure 3).



**Fig. 3. Production of agri-food products for local and international markets**

As the bibliographic research process has shown, the formation of cooperatives is crucial in the face of limited land and other resource potential.

Creating and expanding cooperatives is also essential to ensure the sustainable development of agribusiness. The attitude of farmers towards the cooperation process has been studied in Georgia, based on the analysis of farmers' behavior, the positive and negative results of this process have been identified [28].

The development of the cooperation process is also important for the growth of scale and its place in international markets. Quantitative research has shown that 86% of farmers are not united in cooperatives. Even those who are united from year to year with less

turnover of financial and material resources are recorded in the respective organizations, indicating their less life skills.

In order to develop agribusiness and enter the international market, it is important to analyze the scale of production, primarily the distribution of land resources of the main factor of production among producers.

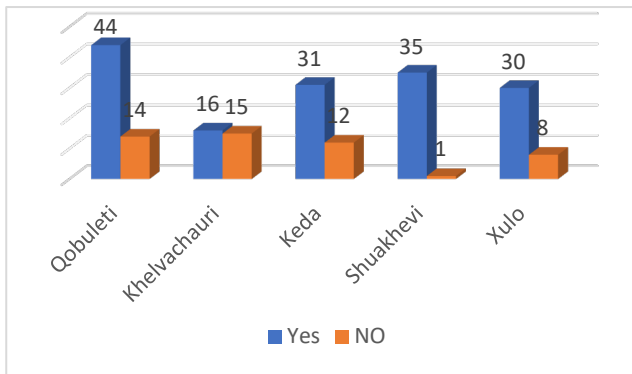
Analysis of land distribution in the Autonomous Republic of Adjara showed that most of the land used for agricultural production is small, namely, 0-0.5 hectares of land is owned by most of the surveyed farmers (37%), 0.5-1.0 hectares are owned by 30% of farmers, 1.0-3.0% of farmers A hectare of land is owned by 32% of farmers, while only 1% own more than 3.0 hectares of land.

In the process of the research, we asked the farmers, "What problems do you have in the field of production?" Less access, lack of cheap agro-credits, underdeveloped infrastructure, lack of processing enterprises and more. Due to these problems, it is important for the development of agribusiness to provide farmers with access to various state programs and grants. To this end, we examined the extent to which farmers are aware of the programs and sources of funding available in their areas of activity.

Knowledge of state programs and sources of funding in the field of agribusiness in the Autonomous Republic of Adjara varies from municipality to municipality. Low levels of information were revealed on agribusiness development programs. The program of promoting cooperatives is the most alarming in terms of the level of information of farmers, while among the municipalities, farmers in Kobuleti and Kedaai municipalities have low rates in this regard.

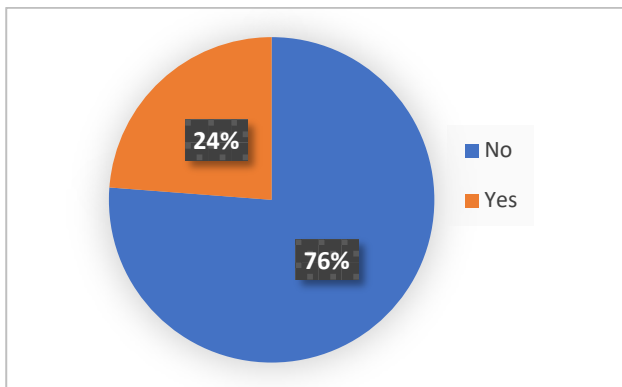
27% of the surveyed farmers state that they know the program "Produce in Georgia", 20% know the program "Rural Entrepreneurship Development", 18% - "Introduce the Future", 11% the program of cheap agro-credits, 8% the program of supporting cooperatives, and 16 % Is not at all familiar with programs and funding sources to help farmers.

Information on farmers' programs and funding sources does not imply the use of these programs, so we have studied the types and quantities of aid received from farmers from the state (Figure 4).



**Fig. 4. Number of farmers who received assistance from the state**

The answers to the question "What assistance did you receive from the state?" Were distributed as follows: 14 farmers in Kobuleti municipality received assistance from the state, 1 in Shuakhevi, 12 in Keda, 8 in Khulo, 15 in Khelvachauri. The grouping of indicators showed that 76% of the surveyed farmers did not receive any state assistance at all. (Figure 5).



**Fig. 5. Share of farmers who received assistance from the state**

Recently, the culture of agro-insurance has improved in the field of agribusiness. To determine the level of use of agro-insurance services, we interviewed farmers, and as a result, we found that more farmers in Kobuleti and Keda municipalities use agro-insurance than in Khelvachauri and Khulo. Nobody uses this service in Shuakhevi municipality. Quite a large number of farmers have no information at all about the named service.

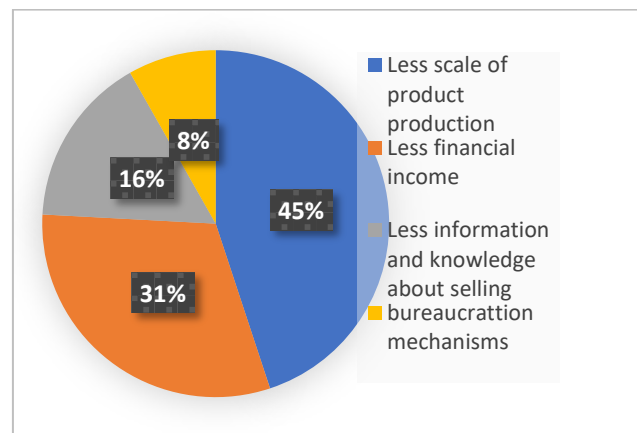
Due to the small scale of production and the small size of the plots, it is not possible to export agri-food products to international markets, and there are also some problems in terms of competition with imported products in the local market.

A study conducted by farmers and entrepreneurs involved in agribusiness in the Autonomous Republic of Adjara on the interest and challenges of exporting products showed that the desire and interest to export products to the international market is an exception.

36% of producers in the agro-sphere of the Autonomous Republic of Adjara are interested in exporting agro-food products, but do not have the necessary information about this. 9% of manufacturers express interest in this process, seem to have relevant information and are preparing to export. Only 3% of manufacturers are not interested in exporting the product and prefer to sell it in the local market.

One of the aims of the study was to identify the factors that hinder the implementation of exports. The answers to the question, "What factors prevent you from exporting?" Were distributed as follows (Figure 6).

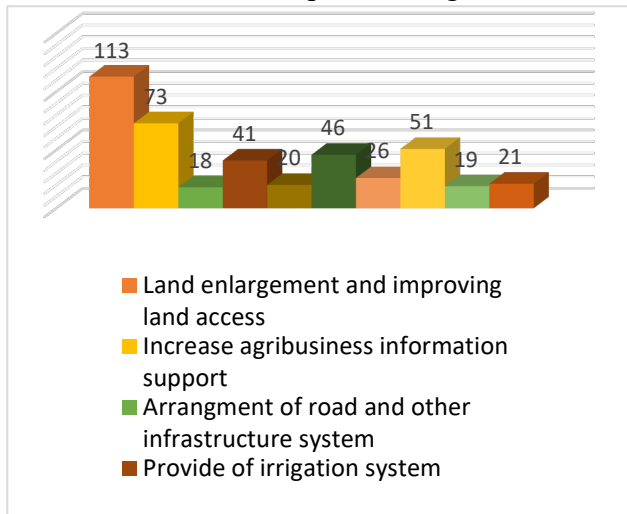
Most producers, in particular 45%, believe that small-scale production is the main obstacle to agri-food exports, with 31% citing low financial income, 16% lacking information and knowledge about key markets, and 8% bureaucracy. Mechanisms.



**Fig. 6. Export hindrance factors in the Autonomous Republic of Adjara, %**

In order to clarify the directions and hypotheses formed during the development of priority schemes for the development of agribusiness, we asked the producers, "What priority activities are needed for the development of agribusiness?" The answers to this question were distributed as follows (Figure 7).

Most of the respondents (113 producers) consider the expansion of land plots and the increase of production scale among the priority activities for the development of agribusiness.



**Fig. 7. In your opinion, what priority activities are needed for the development of agribusiness?**

Increasing the information support of agribusiness is considered necessary by 73 producers, 51 producers consider it necessary to increase the availability of cheap agro-credits, also, most of the producers consider it important to promote the establishment of processing enterprises.

In order to identify the problems caused by the coronavirus, we asked the manufacturers: What additional problems did you face with the spread of the coronavirus? The answers to this question were distributed as follows (see Figure 8).



**Fig. 8. What additional problems did you face with the spread of the coronavirus?**

56% of the respondents think that the export of the product to the local market has been restricted, 35% have not created any restrictions, 8% have restricted the export of the product to the international market.

### Conclusions and recommendations

The low rates of agribusiness development in Georgia are due to the following main factors:

- ✓ Less scale of production and low level of productivity, especially in the field of raw material production;
- ✓ Less of storage facilities for raw material processing enterprises and products;
- ✓ Limited access to technical means and modern technologies;
- ✓ Limited financial resources, including low levels of access to cheap credit;
- ✓ Less of information on domestic and international food markets, resources;
- ✓ Low level of knowledge about modern challenges in the field of agribusiness;
- ✓ Incomplete and sometimes vague legal framework, etc.

The process of cooperation in the field of agribusiness in Georgia, including the Adjara region, is at an early stage of development. The development of this process on a small scale of production requires the formation of modern ideas for the concept of cooperation and the provision of relevant information to manufacturers. It is also advisable to stimulate the cooperation process, to provide relevant knowledge tailored to the needs of producers in effective forms:

- ✓ Most of the employees in the agribusiness sector (almost 97%) produce products for the local market. It is necessary to implement support measures and create appropriate information systems to export agri-food products to international markets;
- ✓ 86% of the total number of employees in the agribusiness sector are not united in cooperatives, while they have scarce, including small financial resources. Under this indicator, it will be difficult to carry out the process of increasing productivity and scale, to enter international markets. It is necessary to provide information systems to manufacturers on the role and importance of cooperation, it is necessary to improve the legal framework in this regard, etc.



✓ A large proportion of farmers (65%) do not use agro-insurance services, only 21% of surveyed farmers say they use agro-insurance, while 14% have never heard of this service at all. Among the priority areas for the development of agribusiness should be the diversity of agro-insurance products and the development of effective delivery mechanisms.

✓ 36% of producers in the Autonomous Republic of Adjara are interested in exporting agri-food products, but do not have the necessary information about it. 9% of manufacturers express interest in this process, seem to have relevant information and are preparing to export. Only 3% of manufacturers are not interested in exporting the product and prefer to sell it in the local market. Obstructing the implementation of exports: small scale of production, small financial income, lack of information and knowledge about key markets, bureaucratic mechanisms.

The future ways of agribusiness development in Georgia are:

- 1) promoting the growth of production and the development of the land market;
- 2) Establishment of storage facilities for processing enterprises and products;
- 3) stimulating machinery and technology delivery mechanisms;
- 4) attracting sources of financing in the field of agribusiness, providing cheap long-term loans;
- 5) Establishment of information systems on land fund, food markets and resources;
- 6) providing knowledge and training programs in the field of agribusiness;
- 7) Improving the legal framework and harmonizing it with international law.

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